THE RELATIONSHIP BETWEEN FUNDING STRUCTURE AND FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS IN KENYA

BY

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DECLARATION

I declare that this research project is my original work and that it has not been presented in any other University or Institution.

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D61/64538/2013

Signature.....

Date.....

This project has been submitted for examination with my approval as university supervisor.

Signature.....

Date.....

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DEDICATION

The research project is dedicated to my dear parents Mr. James Washington and Mrs. Careen Omondi who have been a great source of inspiration and encouragement in my entire life. May God bless you.

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LIST OF ABBREVIATIONS

AMFI-Association of Microfinance Institutions

DTM-Deposit Taking Microfinance Institution

FSD-Financial Sector Deepening

FSS-Financial Self Sustainance

MFI-Microfinance Institution

OSS-Operational Self Sustenance

ABSTRACT

This study was carried out with the purpose of establishing the relationship between funding structure and financial performance of Microfinance institutions in Kenya. According to Hartarska (2005) microfinance is the provision of small scale financial services to low income or unbanked people while funding structure is the mix between equity and debt and it attempts to explain the mix of securities and financing sources used by corporations to finance real investment (Myers, 2006). MFIs in Kenya are registered into three different tiers; deposit taking institutions such as banks, credit only non deposit taking institutions and informal organizations supervised by an external agency other than the government. The objective of the study was to determine the relationship between funding structure and financial performance of microfinance institutions in Kenya. To carry out the study, the researcher adopted a descriptive research design. The target population in the research was 56 microfinance institutions registered and operating in Kenya. A sample of 25 was obtained from this population as a representative of the whole population. Secondary data obtained from the MIX market and annual report of the sampled microfinance institutions was used. The study was done over a period of 5 years i.e. between 2009 and 2013. Data analysis was done using SPSS and data findings presented using figures and tables. Multiple correlation analysis was used to determine the relationship between the variables under study. The study established that the funding structure employed by microfinance institutions affects the financial performance of the firm. Debt to equity ratio has a negative correlation with financial performance meaning the more debt a firm employs in financing its operations the inferior financial performance it registers. Deposits to assets ratio has a positive correlation with financial performance implying that the more deposits a microfinance institution accepts the higher the financial performance. Loan portfolio has a strong positive correlation with financial performance meaning, a small increase in loan portfolio will lead to a higher increase in the financial performance.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In its early days, the microfinance sector was essentially driven by non-profit organizations and official development agencies. Over the last few years, these institutions, together with a few new entrants in the sector, have set up an increasing number of investment structures to fund MFIs (Goodman, 2005). The microfinance community has recognized the limitations of donor and government subsidies in reaching a significant scale and scope of operations.

As many microcredit programs apply the so-called graduation principle in their lending operations, increasing the size of repeat loans according to their repayment record of previous loans, it is essential to raise/attract sufficient funds to sustain this process. (David Fehr and Gaama, 2004) Thus, many MFI's are moving away from donor funding into the more traditional sources of capital financing that typical corporations use.

According to Bogan et al (2007) Millions of people in developing countries have been given access to formal financial services through microfinance programs. Nevertheless, millions of potential clients still remain unserved and the demand for financial services far exceeds the currently available supply. Given significant capital constraints, expansion of microfinance programs remains a formidable challenge facing the microfinance industry.

1.1.1 Funding Structure

Funding structure attempts to explain the mix of securities and financing sources used by corporations to finance real investment (Myers, 2006). According to Welch (2009), Funding structure is the sum total of all claims on the assets of the firm. Together, the claims represent the rights that own all the firm's assets. Funding structure is generally a combination of various sources of funds where we can include two main sources i.e. debt and equity.

The funding structure is how a firm finances its overall operations and growth by using different sources of fund. Titman and Wessels (1988) gives the attributes that may affect the firm's debt-equity choice as denoted asset structure, non-debt tax shields, growth, uniqueness, industry classification, size, earnings volatility, and profitability. As much as it is theorized that capital structure affects the performance of a company, the reverse also tend to be true where the financial performance of a company may affect its choice of funding.

1.1.2 Financial Performance

This is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. A firm's financial performance, in the view of the shareholder, is measured by how better off the shareholder is at the end of a period, than he was at the beginning and this can be determined using ratios derived from financial statements; mainly the balance sheet and income statement, or using data on stock market prices (Berger and Patti, 2002). Charreaux (1997) in Severin (2002), states that an adequate performance measure ought to give an account of all the consequences of investments, on the wealth of shareholders. The main objective of shareholders in investing in a business, is to increase their wealth. Thus the measurement of performance of the business must give an indication of how wealthier the shareholder, has become as a result of the investment over a specific time. According to Brockington (1990), measures of financial performance include; Profitability, Liquidity, Solvency, Financial efficiency, Repayment capacity and Return On Assets (ROA). The ratio of profits of the company over shareholder capital employed measures the use of the owners' funds in producing the overall profit of the firm.

According to Bogan (2007), operational self-sufficiency is typically used as the standard measure of MFI performance. However, as with general lending institutions, there are other metrics by which performance and institutional health are measured. Microfinance performance has attracted significant interest in recent years, both from policy makers and in the academia. MFIs face unique challenges because they must achieve a double bottom line-that of providing financial services to the poor (outreach) and covering their costs (sustainability). MFIs are therefore a hybrid but some are also similar to banks because they are regulated or supervised and because they mobilize deposits. This organizational diversity makes any empirical analysis of their performance difficult (Cull, 2009).

This project will make use of the Return on Assets ratio (ROA), also called return on investment which is a very important profitability ratio since it measures the efficiency with which the company is managing its investment in assets and using them to generate profit. It measures the amount of profit earned relative to the firm's level of investment in total assets. The return on assets ratio is related to the asset management category of financial ratios. The calculation for the ROA ratio is Net Income/Total assets. (Brealey et al., 2008)

1.1.3 Funding Structure and Financial Performance

Prior research examining the relationship between funding structure and firm performance has revealed that funding structure influences firm performance. The funding structure decision affects financial risk of a firm. While there is a considerable amount of literature with respect to the optimal funding structure of corporate firms, the application of the Modigliani-Miller (MM) theorem and other corporate finance theorems to lending institutions is less straight-forward. The basic MM principles are applicable to lending institutions, but only after accounting for the fundamental differences in how lenders and corporations operate (Cohen, 2003). With the application of MM to a corporate firm, one can point to an optimal funding structure in terms of the firm's value.

At the micro level, profitability is a prerequisite to a competitive microfinance industry and the cheapest source of capital, without which no firm would attract external capital (Gitman, 2007:65). Historically, MFIs were largely funded through donations/grants and government subsidies. In recent years, new sources of funds have emerged that are often described as having a focus on profitability (Ghosh and Tassel, 2011).

MFIs with access to donor funds may not operate efficiently or may deliberately choose outreach over profitability (Armendáriz and Morduch, 2010). Cheap external funding may attract an inefficient MFI, which relies on the implicit subsidy to cover its high operating costs (Ghosh and Tassel, 2011). Although Galema, and Spierdijk (2011), finds that investing in microfinance may be attractive to investors seeking a better risk–return profile, their analysis suggests that investing in MFIs from Africa to a portfolio of international assets is not beneficial for a mean-variance investor. It might also be the case that firms located in economies with less developed financial markets will not only take different quantities of investment, but will also take different kinds of investment that are perhaps safer, short-term and potentially less profitable (Almeida, et al. 2011)

Various financial scholars have held different opinions regarding the relationship of funding structure and financial performance. Others have held that funding structure has a direct relationship with a firm's financial performance while others believe that the structure actually does not matter. In a perfect capital market where there are no transaction or bankruptcy costs and there exists perfect information, firms and individuals can borrow at the same interest rate; no taxes; and investment returns are not affected by financial uncertainty.

Modigliani and Miller (1958) analysis was extended to include the effect of taxes and risky debt. Under a classical tax system, the tax deductibility of interest makes debt financing valuable; that is, the cost of capital decreases as the proportion of debt in the funding structure increases. The optimal structure then would be to have virtually no equity at all, i.e. a funding structure consisting of 99.99% debt.

1.1.4 Microfinance Institutions in Kenya

Fundamental services provided by MFIs are the same that conventional financial institutions offer to their customers and this is also true in Kenya. What creates the difference is the scale and method of service delivery. Previous studies have shown that microfinance institutions play a vital role in the economic development of many developing countries through the provision of a wide range of financial products and services to the poor, low-income households and micro and small enterprises. They offer loans and/or technical assistance in business development to low-income community in developing countries (Hartungi, 2007).

The Kenyan Microfinance sector consists of a large number of competing institutions which vary in formality, commercial orientation, professionalism, visibility, size, geographical coverage. Etc. These institutions range from informal organizations e.g. Rotating Savings and Credit Associations (ROSCAs), Financial Services Associations (FSAs), savings and credit Cooperative Societies(SACCOs), Microfinance NGOs, to commercial banks. (AMFI, 2012)

Kenya's microfinance sector comprises of nearly 250 MFIs, with only 56 of these being registered with the Association of Microfinance Institutions an umbrella body. Forty four of these deal in credit-only facilities (non-depository), whereas only six are licensed as deposit-taking institutions. The remaining institutions are unregulated by the Central Bank and offer microfinance services in combination with other social services. (Mix market, 2012)

According to AMFI (2012) for DTMs and credit only microfinance institutions the main source of funding is borrowings, which account for 54.2% of the balance sheet in Dec 2011. Compulsory deposits account for 22.5% of the structure; however they are on a downward trend from 28.8% as of Dec 2009, as voluntary deposits (sight and term) increased their share from 0.33% in 2009 to 6.32% in 2011. The Kenyan microfinance sector displays positive growth, strategic developments, and appears to be driven by product innovation. Portfolio shows sustained growth rates throughout the period. Omimo (2005) puts emphasis on sound development of MFIs as vital ingredients for investment, employment and to spur the economic growth.

1.2 Research Problem

Microfinance institutions have proved to be very important in the economic growth of any country. Improved performance of MFIs enhance financial deepening in an economy thereby contributing a great deal to an economy's development through the provision of major and basic financial services. Microfinance Institutions (MFIs) have risen to the forefront as invaluable institutions in the development process.

Since its birth in the 1970s, microfinance has endeavored to develop sustainable enterprises and its innovations. (Stauffenberg, 2001;Rhyne, 2001; Labie, 2001). Through MFIs, many entrepreneurs with few assets have been able to establish small scale businesses which helps in creating employment with significance input to economic growth. According to Bogan (2008) MFIs have expanded the frontiers of institutional finance and have brought the poor into the formal financial system.

According to various scholars, funding structure affects the value of MFIs which ultimately has a direct relationship with a firm's financial performance. A vast and growing literature posits that for MFIs to achieve full potential they must become financially sustainable (Brau and Woller, 2004). Bogan (2008) established a link between funding structure and key measures of MFI success. According to Bogan (2008) the size of an MFI's assets and an MFI's funding structure are associated with performance.

Bogan (2007) while investigating the optimal funding structure for MFIs, utilized a panel data on MFIs in Africa, East Asia, Eastern Europe, Latin America, the Middle East and South Asia between 2003 and 2006. Using descriptive statistics and simple regression models concluded that the source of funding MFIs affects the financial performance of the institutions. Using data on outreach and default rate as the dependent variables, Coleman (2007) investigate the impact of capital structure on the performance of microfinance institutions by estimating a random and fixed effects linear model. Several key trends have emerged; the tendency towards increased leveraging of capital, the rise in mobilizing public deposits as more MFIs get regulated and a shift away from subsidized donor funds towards commercial funding (Armendáriz & Morduch, 2010).

Kiogora (2000) did a study testing for variations in the funding structure at the NSE, he found out that the companies listed at the NSE adopted various capital structure which were dependent on the industry category, size of the firm and the profitability of the firm. A study comprising of the 47 companies listed on the Nairobi Stock Exchange and seven companies listed on the Uganda Securities Exchange by Kasenene indicated that increase in debt does not always lead to improved performance and that each company may behave in a different way. Although a number of studies have been done to establish the link between capital structure and financial performance of non financial institutions, there are no enough data to enable us confidently generalize the relationship between funding structure and financial performance of financial firms. In adequate studies have been done on financial institutions regarding the optimum funding structure.

1.3 Research Objectives

The objective of the study is to determine the relationship between funding structure and financial performance of MFIs in Kenya.

1.4 Value of Study

This study would benefit a number of groups among them managers of MFIs who would use the study to gain an insight in the impact of funding structure on the revenue growth of their institutions and how this would in turn help them structure their capital and funding in a way which brings more benefit to the shareholders. The study will enable financial consultants offer prudent services to their clients as to the best funding structure where financing is stable and the firm remains financially sound.

The government would also benefit from the study to formulate appropriate policies which would ensure the MFIs thrive in the economy and in turn contribute to the economic growth. Moreover, microfinance strategists, policy makers, aspiring microfinance researchers, university students pursuing a career in finance are likely to benefit. Scholars interested in carrying out further studies in the same area will find the results of this study s useful.

CHAPTER TWO:

LITERATURE REVIEW

2.1 Introduction

In this section we discuss the theories of funding structure, recognize other factors which may affect the financial performance of MFIs and later on in the chapter identify studies that have been done by various scholars in the line of funding structure and financial performance.

2.2 Theoretical Review

In the following section the theoretical background necessary to understand the concept of microfinance is explained.

While there is a vast literature on the optimal capital structure of corporate firms, the application of the Modigliani and Miller (1958) theorem and other corporate finance theorems to microfinance institutions is not straight-forward. Modigliani and Miller theorem posits that financing decisions do not matter in a world without taxes, transaction costs, or other market imperfections. They argue that a firm cannot change the total value of its securities by splitting its cash flows into different streams and therefore value is determined by its real assets. Thus, capital structure does not matter as long as the firm's decisions are endogenously determined.

2.2.1 Life Cycle Theory

Existing research places the evolution of MFI funding sources within the context of an institutional life cycle theory of MFI development (de Sousa-Shields, 2004). According to this framework of analysis, most MFIs start out as NGOs with a social vision, funding operations with grants and concessional loans from donors and international financial institutions that effectively serve as the primary sources of risk capital for the microfinance sector.

Thus, the literature on microfinance devotes considerable attention to this process of "NGO transformation" as a life cycle model outlining the evolution of a microfinance institution (Helms, 2006). Generally, the life cycle theory posits that the sources of financing are linked to the stages of MFI development. Donor grants and "soft loans" comprise the majority of the funding in the formative stages of the organization. As the MFI matures, private debt capital becomes available. In the last stage of MFI evolution, traditional equity financing becomes available (Fehr & Hishigsuren, 2004). Farrington and Abrams (2002) provide evidence that supports the life cycle theory, noting an increase in competition in MFIs as they increase in number and documenting a spread in regulation facilitating a change in the capital structure of the industry.

2.2.2 Agency Theory

The interests of MFIs management and those of social investors may not be aligned. Jensen and Meckling (1976) contend that agency costs could also arise from conflicts between equity and debt holders when there is a risk of default. The risk of any default may lead to underinvestment (Myers, 1977). In this case, debt will have a negative effect on the value of the firm.

It could also be a scenario where managers have for instance incentives to take excessive risks as part of shifting investment strategies (Jensen and Meckling, 1976; Williams, 1987). This is where higher leverage becomes useful as a governance mechanism to reduce wasteful cash flow by a threat of liquidation (Grossman and Hart, 1982; Williams, 1987). This may also lead to higher pressure on the part of the management to generate cash flow to pay interest expenses on the part of the debt (Jensen, 1986). Some MFIs have continuously received grants and subsidized loans from development agencies to finance the transition into deposit mobilization. Grant financing may for example create moral hazard or incentive issues with respect to MFI operations and subsequently profitability. Donors and social investors have vested goals all aimed at boosting outreach while MFI management may be profit motivated. Agency costs may be particularly large in microfinance industry because MFIs are by their very nature informational opaque—where they hold private information on the borrowers.

Regulators in the case of MFIs that are formally constituted may set minimums for equity capital in order to deter excessive risk taking which may affect agency costs directly and alter MFIs' financing choice with consequences on the profitability of MFI. In addition, MFIs access to grant funding and other safety net protections may increase incentives for risk shifting or lax risk management.

2.2.3 Grameen Model

The Grameen model was invented in 1976 by Professor Muhammad Yunus, the founder and managing director of Grameen Bank. The model proved to be successful and today is practiced in more than 250 outlets of Grameen Bank in more than 100 countries (Yunus, 1999). The Grameen model was copied and modified many times according to the respective needs of regional markets and clients. Therefore many other models are extensions of, or derived from, the Grameen Model.

Basically a new branch of the MFI is set up in a village with a field officer and some qualified workers, who have already done research on the population there in advance and made their choice according to its potential demand and its need of financial support. These employees of the MFI support then up to 15 to 20 villages in the surrounding and are strive to make the local, poor people aware of the microfinance possibilities through word of mouth and personal advisory. The lending process is similar to the solidarity group approach. Groups of five are created.

In the beginning only two members of the group receive a loan and are monitored for one month. The credibility of the group will then be based on the repayment performance of the first two individuals (Hazeltine and Bull, 2003). If they are reliable and could pay back their loan, the remaining members qualify for a loan as well, since the group is jointly and severally liable for the single members. Armendáriz de Aghion and Morduch say that loans go first to two members of the group, then to another two, and then to the fifth group member. Given that loans are being correctly and timely repaid, the cycle of lending continues (Armendáriz and Morduch, 2005).

2.2.4 Joint Liability

Gangopadhyay and Lensink (2009), build on previous work on joint liability borrowing to show that unlike standard debt contract, group lending can mitigate this adverse selection. They conclude that by harnessing local information, joint liability lending can improve efficiency and microfinance performance compared to standard debt contracts in the presence of asymmetric information about borrower types. Along the same vein, Bhole and Ogden (2010) show why group lending is feasible for a greater range of opportunity cost of capital than any other form of lending technology. Madajewicz (2011) further demonstrates that borrowers are able to monitor each other when liability is joint, while MFIs monitors borrowers on standard debt contract. Joint liability therefore offers poorer borrowers larger loans with less monitoring effort than would have been exerted by the lender. Less monitoring on the part of the MFI and larger loan sizes is likely to enhance MFI performance. Along the same vein, Becchetti and Conzo (2011) and Jeon and Menicucci (2010) shows that group lending dominates individual lending either by providing more insurance or by saving audit costs. All these merits of group lending therefore have implications on MFIs profitability.

2.2.5 The Modigliani-Miller Theorem

While there is a considerable amount of literature with respect to the optimal capital structure of corporate firms, the application of the Modigliani-Miller (MM) theorem and other corporate finance theorems to lending institutions is less straight-forward. The basic MM principles are applicable to lending institutions, but only after accounting for the fundamental differences in how lenders and corporations operate (Cohen, 2003).

Modigliani and Miller (1958) start by assuming that the firm has a particular set of expected cash flows. When the firm chooses a certain proportion of debt and equity to finance its assets, all that it does is to divide up the cash flows among investors. Investors and firms are assumed to have equal access to financial markets, which allows for homemade leverage. The investor can create any leverage that was wanted but not offered, or the investor can get rid of any leverage that the firm took on but was not wanted. As a result, the leverage of the firm has no effect on the market value of the firm.

In addition to the original Modigliani and Miller paper, important contributions include papers by Hirshleifer (1966) and Stiglitz (1969). The second irrelevance proposition concludes that "given a firm's investment policy, the dividend payout it chooses to follow will affect neither the current price of its shares nor the total return to its shareholders" (Miller and Modigliani, 1961). In other words, in perfect markets, neither capital structure choices nor dividend policy decisions matter.

The 1958 paper stimulated serious research devoted to disproving irrelevance as a matter of theory or as an empirical matter. This research has shown that the Modigliani-Miller theorem fails under a variety of circumstances. The most commonly used elements include consideration of taxes, transaction costs, bankruptcy costs, agency conflicts, adverse selection, lack of separability between financing and operations, time-varying financial market opportunities, and investor clientele effects. Alternative models use differing elements from this list. Given that so many different ingredients are available, it is not surprising that many different theories have been proposed. Harris and Raviv (1991) provided a survey of the development of this theory as of 1991.

2.2.6 The Trade-Off Theory

According to Myers (1984) the tradeoff theory justifies moderate debt ratios. It says that the firm will borrow up to the point where the marginal value of tax shields on additional debt is just offset by the increase in the present value of possible costs of financial distress. Financial distress refers to the costs of bankruptcy or reorganization, and also to the agency costs that arise when the firm's creditworthiness is in doubt.

The original version of the trade-off theory grew out of the debate over the Modigliani-Miller theorem. When corporate income tax was added to the original irrelevance, this created a benefit for debt in that it served to shield earnings from taxes. Since the firm's objective function is linear, and there is no offsetting cost of debt, this implied 100% debt financing. Several aspects of Myers (1984) definition of the trade-off merit discussion.

First, the target is not directly observable. It may be imputed from evidence, but that depends on adding a structure. Second, the tax code is much more complex than that assumed by the theory. Graham (2003) provides a useful review of the literature on the tax effects. Third, bankruptcy costs must be deadweight costs rather than transfers from one claimant to another. The nature of these costs is important too. Haugen and Senbet (1978) provide a useful discussion of bankruptcy costs. Fourth, transaction costs must take a specific form for the analysis to work. For the adjustment to be gradual rather than abrupt, the marginal cost of adjusting must increase when the adjustment is larger. Leary and Roberts (2005) describe the implications of alternative adjustment cost assumptions.

2.3 Determinants of Financial Performance of MFIs

Here we discuss other factors which may affect the financial performance of Microfinance Institutions.

2.3.1 Macro-economic Indicators

Country's Level of Macro-economic indicators such as inflation and GDP. Bogan (2007) identified a relationship between a country's development level and financial performance of the MFIs within the economic jurisdiction. When Bogan broke down his statistics by region, he observed some interesting regional differences-Africa had the highest percentage of financially

unsustainable MFIs at 37.70%. With this Bogan clearly proved that a country's level of macroeconomic factors have a big role to play in the financial performance of the MFIs operating in the economy.

2.3.2 Age of MFIs

Several earlier studies (Batra, 1999) argued that firm age has an influence on its performance. Sorensen & Stuart (1999) argued that organizational inertia operating in old firms tend to make them inflexible and unable to appreciate changes in the environment. Newer and smaller firms, as a result, take away market share in spite of disadvantages like lack of capital, brand names and corporate reputation with older firms.

2.3.3 Size of MFIs

Size is expected to be an important determinant of firm performance. Size can have a positive effect on firm performance, since larger firms can leverage their size to obtain better deals in financial as well as product or other factor markets (Mathur & Kenyon, 1998). Large organizations often get access to cheaper financial resources, as well. These effects are more pervasive in institutional contexts of incomplete or imperfect markets that are more likely to be the case in developing economies such as India. On the other hand, Singh & Whittington (1968), and Banz (1981) argued that size had a negative effect on firm performance as firm size grows it becomes more difficult for it to sustain impressive financial performance.

2.3.4 Institutional Factors

Institutional factors such as corruption eradication, rule of law and accountability and political stability improve MFIs financial performance. (Adit et al. 2010).Politically stable economies

which driven through the rule of law and with high level of accountability and transparency generally record higher ROA among it firms as compared to economies where corruption is rampant and is not governable due to political instability.

2.3.5 Industry Effects

Porter (1980) argued that the industry of operation of a firm has a significant effect on the financial performance of a firm. Empirical analysis of firm performance in other countries, particularly in United States, (Schmalensee, 1985) show that industry fixed effects exist and are important in determining firm performance. The primary industry in which a firm operates being its industry affiliation.

2.3.6 Marketing Expenditure

The intensity of marketing expenses often influences the financial performance of a firm. Marketing expenses allow a firm to create entry barriers for its competitors by building intangible assets (say, brands) leading to higher profitability for the firm (Aaker, 1984). Marketing expenses in building brands can also help firms get over difficult years and protect their market share and sales volume, and defy industry trends (Mathur & Kenyon, 1998).

2.4 Empirical Studies

Empirical evidence suggests that the funding structure is one of the factors that has impact on firm performance along with many other factors including macroeconomic conditions of a country(Rajan and Zingales, 1995). Bogan (2007) while investigating the optimal funding structure for MFIs, utilized a panel data on MFIs in Africa, East Asia, Eastern Europe, Latin America, the Middle East and South Asia between 2003 and 2006.Using descriptive statistics and simple regression models concluded that the source of funding MFIs affects the financial

performance of the institutions. Subsidized funding rather than having a positive impact on operational self-sufficiency has a negative effect. Share capital as a percent of assets also is significant at the 1% level and negatively related to operational self-sufficiency in each version of the main regression.

Using data on outreach and default rate as the dependent variables, Coleman (2007) investigate the impact of capital structure on the performance of microfinance institutions by estimating a random and fixed effects linear model. Here no attempt has been made to control for reverse causality from performance to capital structure or to employ a variant of other capital structure measures such as gearing, deposits and portfolio-asset ratio that may explain performance. MFIs have two broad funding options beyond debt which include deposits and equity. Several key trends have emerged; the tendency towards increased leveraging of capital, the rise in mobilizing public deposits as more MFIs get regulated and a shift away from subsidized donor funds towards commercial funding (Armendáriz & Morduch, 2010; Hartarska &Nadolnyak, 2008).

Mustafa (2006) conducted a study to investigate the effect of funding structure on the performance of the public Jordanian firms listed in Amman stock market. The study used multiple regression model represented by ordinary least squares (OLS) as a technique to examine what is the effect of funding structure on the performance by applying on 76 firms (53 industrial firms and 23 service corporation) for the period (2001-2006). The results of the study concluded that funding structure associated negatively and statistically with firm performance on the study sample generally.

The study by Han-Suck Song (2005) investigates funding structure determinants of Swedish firms based on a panel data set from 1992 to 2000 comprising about 6000 companies. Swedish firms are on average very highly leveraged, and furthermore, short-term debt comprises a considerable part of Swedish firms' total debt. An analysis of determinants of leverage based on total debt ratios may mask significant differences in the determinants of long and short-term forms of debt. Therefore, this paper studies determinants of total debt ratios as well as determinants of short-term and long-term debt ratios. The results indicate that most of the determinants of funding structure suggested by funding structure theories appear to be relevant for Swedish firms. But we also find significant differences in the determinants of long and short-term forms of debt.

Wippern (1966) investigated the relationship between financial leverage and firm value on some industries which marked on high degree in difference characteristics from where growth cost and demand. The study used debt to equity ratio as financial leverage indicator and earnings to market value of common stock as performance indicator. Results revealed that leverage effect positively on firm value and this traditional evidence which said that shareholders wealth can enhance by using outside financing.

Holz (2002) found that funding structure related positively with the firm performance, the result ascribes to the willing of firms managers to finance their projects by borrowing and then use these money optimally to maximize the performance. Accordingly to this result, if the banks want to lend money, it shall carefully study the feasibility of the projects that want to finance its accurately before offer loans until that the firms can achieve required returns to meet their

obligations.

Using a dataset of 124 MFIs across 49 countries, (Cull et al., 2007) examine financial performance and outreach in a large comparative study. They use pooled regression to estimate the model. Where FSS represents financial self-sufficiency ratio. They find that the impact of various MFI-specific factors on performance depends on an institution's lending methodology. Although they pioneered the use of cross-country, cross-MFI data in statistical tests and provide a new dimension to the existing literature on MFIs performance, their pooled regression model omits fixed effects, and omitting fixed effects risks omitted variables bias. Rather than estimate different intercepts for each unit and/or time point, pooled regression estimates just a single intercept (Baltagi, 2008).

Using data on 217 MFIs across 101 countries distributed by region and type of MFIs over the period 1998-2006, Ayayi and Sene (2010) estimated a pooled regression model. Where FSS represents financial self-sufficiency. Their results show that the quality of the loan portfolio is the main determining factor of MFI financial sustainability. They further show that outreach, the age of MFIs and the percentage of women among the clientele do not significantly influence the MFIs' financial sustainability. Consistent with Cull et al., (2007) this study suffers from the same methodological weaknesses, thus their results may not be convincing.

Bogan (2009) investigates the impact of existing sources of funding on the efficiency and OSS of MFIs. He finds causal evidence to the effect that an increased use of grants by MFIs decreases OSS. Crabb (2008) models OSS as a function of both firm level and environmental factors.

Using MIX dataset from 2000 to 2004 to estimate a fixed-effects panel data model, Crabb finds that portfolio at risk and outreach breadth are significant. Further evidence on OSS is presented by de Crombrugghe, et al (2008) who use regression analysis to study the determinants of self-sustainability of a sample of MFIs in India. They investigated sustainability as regards to; cost coverage by revenue, repayment of loans and cost-control and conclude that MFIs can cover costs on small and partly uncollateralized loans without necessarily increasing loan size or raising monitoring cost.

Hartarska and Nadolnyak (2007) further examine the determinants of MFIs OSS and find positive significant impact from MFI size and capital ratios. Using OSS Makame and Murinde (2007) estimate a linear random effects model where average loan is treated as a proxy for outreach depth and regressed against sustainability exogenous variables proxied by operational efficiency and profitability (measured as return on assets and return on capital employed).

Maina & Ondongo (2013) conducted a study to establish, the effect of capital structure on financial performance of firms listed at the Nairobi Securities exchange. The population of interest of this study was the firms quoted at the Nairobi securities exchange, and a census of all firms listed at the Nairobi Security Exchange from year 2002-2011 was the sample. Secondary data was collected from the financial statements of the firms listed at the NSE. The study used Causal research design and Gretl statistical software to perform the panel Regression analysis. The study concluded that debt and equity are major determinants of financial performance of firms listed at the Nairobi Securities exchange. The study provided evidence of a negative and significant relationship between capital structure (DE) and all measures of performance.

Bitok (2011) discussed the determinants of leverage at the Nairobi Securities Exchange in Kenya. In the study of 54 firms listed in the NSE were considered. The study considered three leading theories of capital structure-static trade off theory, pecking order theory and agency cost theory. It was found that the static trade off theory which suggests that optimal capital structure exists provides the most robust explanation of leverage for Kenyan listed firms for the period 2003 to 2008. It was found that firms with more tangible assets are in a position to provide collateral for debts so they raise more debt. The findings generally pointed out to the fact that firm leverage is positively associated with both tangibility, profit, macro-economic and size and negatively associated with firm-level profitability.

Nyanamba et al. (2003) conducted a research to determine the factors which influence the capital structure among microenterprises. The objectives of the study were to identify the factors affecting capital structure of micro-enterprises, to establish the extent to which the factors affect capital structure of micro-enterprises and to analyze the extent to which micro-enterprises have used external finances. The results identified the major determinants of the capital structure of microenterprises as being access to capital markets, size of the business, profitability of the business and lender's attitude towards the firm. The study concluded that there are a number of factors affecting the capital structure of micro-enterprises and this affects the capital structure of the micro-enterprises prefer borrowing from various external sources and this affects the capital structure of the micro-enterprises.

Ager (2009) carried out an empirical analysis of capital structure rebalancing by firms listed at Nairobi Stock Exchange to establish whether firms actively try to rebalance their capital structure when optimality is thrown off balance. The study findings showed that in some instances there were attempts at capital structure rebalancing but the evidence was weak and this can be attributed to inertia in capital adjustment by the listed firms. This concurs with Myers (1984) assertion that the cost of such adjustment outweighs the benefits.

Maina & Ishmail (2014) did a study to establishing, the effect of capital structure on financial performance of firms listed at the NSE. The population of interest of this study was the firms quoted at the NSE, and a census of all firms listed at the NSE from year 2002-2011 was the sample. Secondary data was collected from the financial statements of the firms listed at the NSE. The study used Causal research design and Gretl statistical software to perform the panel Regression analysis. The study concluded that debt and equity are major determinants of financial performance of firms listed at the NSE. There was evidence of a negative and significant relationship between capital structure (DE) and all measures of performance. This implies that the more debt the firms used as a source of finance they experienced low performance.

Other empirical studies done locally include ; Kiogora (2000) did a study testing for variations in the capital structure at the NSE, an empirical study, he found that that various firms listed at the NSE adopted various capital structure which were dependent on the industry category, Size of the firm and the profitability of the firm. Kyalo (2002), capital allocation and efficiency of banking institutions in Kenya, a case of quoted banks at NSE, the study found that there was efficiency in the capital allocation by commercial banks in Kenya owing to their regulated capital structure by central banks.

Lutomia (2002) did a study on the relationship between the firm's capital structure and the systematic risk of common stocks, an empirical study of Cross Quoted Stocks quoted on the NSE, where he revealed that there was a negative relationship between capital structure and the systematic risk of common stocks among firms listed in the NSE and Gachoki (2005) conducted a study capital structure choice, an empirical testing of the pecking order theory among firms quoted on the NSE, he established that firm listed in the NSE did not follow the pecking hypothesis in their financing decision.

2.5 Summary of Literature Review

The relationship between funding structure and financial performance of MFIs is not very clear. While there is a considerable amount of literature with respect to the optimal funding structure of corporate firms, the application of the Modigliani-Miller (MM) theorem and other corporate finance theorems to lending institutions is less straight-forward (Modigliani and Miller 1958) The basic MM principles are applicable to lending institutions, but only after accounting for the fundamental differences in how lenders and corporations operate (Cohen, 2003).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the study design adopted, study population, sample selection and research instruments used in the study. It will also identify the data collection and analysis techniques to be employed in the study.

3.2 Research Design

Research design is a comprehensive plan that involves highlighting all other methods that was utilized in the collection and analysis of data. (Leedy and Ormrod, 2005).In order to meet the objectives of the study, descriptive study design will be used in the project. Descriptive research suggests descriptive linkages between variables by observing existing phenomena and then searching back through available data in order to identify plausible causal relationship.

According to Kothari (2004) research design is concerned with determining cause and effect relationship and to understand dependent and independent variables. It aimed to explore the relationship between funding structure and financial performance of microfinance institutions explaining the empirical evidences that help address the research objectives which should clearly be stated in a research proposal.

3.3 Target Population

Population is the entire groups or individuals, events, events or objects having common characteristics which the researcher wishes to investigate. When the target population is similar the researcher has more confidence making generalization. The target population for this study
constitutes all of the registered MFIs from the Association of Microfinance Institutions (AMFI). The target population was then considered and a sample obtained from it. There are 56 registered microfinance institutions operating in Kenya and this is the group of interest.

3.4 Sampling Design

Due to time and resource limitations, I will not cover all the MFIs in the entire population but instead pick a few of them to represent the entire population. The benchmark for selecting the MFIs was based on the accessibility and the value of data in question. The data was obtained from the "Mix Market" web site also known as the Microfinance Information Exchange (MIX). The sample procedure is done in way that ensures objectivity. International statistics indicate the likelihood that what is true of a sample is also true from the population from which it is drawn. The study uses probability sampling techniques to create a sampling frame for the entire MFIs in Kenya. The study will use a sample of 25 MFIs in Kenya out of the registered 56.

3.5 Data Collection

The research will concentrate on secondary data using annual reports of the relevant MFIs. Secondary data from financial statements of the selected MFIs will be collected from MFI's records and publications. This will be used to specifically help in identifying the financial performance of the institutions. Data from the annual reports will be collected over a period of 5years to ensure objectivity. This secondary analysis may involve the combination of one data set with another, address new questions or use new analytical methods for evaluation. (Szabo & Strang, 1997).The research comprehensively relies on the data gathered from MIX market database. Data from the MIX market are dependable and has been used by numerous researchers interested in the field of microfinance. The MIX market appraises data of MFIs for consistency and coherence.

3.6 Data Analysis

Analytical method involves utilization of the right analytical tools to address each objective in the study. Care is taken as a choice of wrong analytical technique could lead to wrong conclusion. The study involved an assessment of funding structure and MFI financial performance of the selected MFIs. Data collected from the survey will be sorted, edited and recorded to have the required quality and accuracy levels. It will then be entered into SPSS for generation of frequency tables, charts, correlations and regressions. Multiple linear regression analysis was used to examine the magnitude of influence of the independent variable on the respective dependent variables. The regression model is a multivariate model stating the MFI's ROA as a function of the selected indebtedness, deposits to assets ratio and loan portfolio to assets ratio.

3.6.1 Analytical Model

The regression function that includes the dependent and independent variables as adapted from Bogan (2009) can be written as;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + C$$

Where;

Y ROA of the MFIs which is a profitability measure-return on shareholders' funding

- α Constant term
- $\beta_1 \beta_3$ Model coefficient parameters
- X₁ Indebtedness i.e. debt to equity ratio
- X₂ Deposits to assets ratio
- X₃ Loans portfolio to assets ratio
- € Error term

We analyze the impact of different sources of funding on MFIs profitability which include deposits relative to assets ratio, loans relative to assets ratio and debt to equity ratio (gearing). Deposits to assets ratio measures the relative portion of the MFI's total assets that is funded by deposits and gives an informed analysis of the role of deposits as a source of funding. X_2 and X_3 i.e. deposits to assets ratio and loans portfolio to assets ratio are used as control variables in the model.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This Chapter is a presentation of results and findings obtained from the collected data, analysis of the data and discussion of the results obtained. The objective of the study was to examine the relationship between funding structure and financial performance of MFIs in Kenya. The study targeted 25 registered microfinance institutions operating in Kenya where the study used descriptive and inferential analytical techniques to analyze the data obtained. The study used Ordinary Least Squares (OLS) regression models. However, before running the regressions, descriptive statistics and correlation analysis were calculated. Correlation analysis shows the relationships between the different variables considered in the study. The correlation matrix presented simple bivariate correlations not taking into account other variables that may influence the results.

4.2 Response Rate

The study targeted 25 MFIs in Kenya. From the study, 19 MFIs had all the relevant data required i.e. debt to equity ratio, deposits and loans portfolio. This gives a response rate of 76%. According to Mugenda and Mugenda (2003) a 50% response rate is adequate, 60% good and above 70% rated very good. Kothari (2004) shares the same sentiments with assertion that a response rate of 50% is adequate, while response rate greater than 70% is very good. Based on these sentiments, our response rate of 76% was excellent.

4.3 Data Validity

The validity of the secondary data used was determined through ascertaining the validity and reliability of MFIs' annual reports gathered and the MIX market data. The validity was computed by determining the degree of consistency of the values generated from the MIX market and the respective MFI's annual report and media reports. The fact that the MIX market data has been used by a number of scholars carrying out studies on MFIs, gave a considerable amount of assurance on data validity and reliability.

4.4 Descriptive statistics

This summarizes the sample characteristics of the relationship between funding structure variables and financial performance of microfinance institutions in Kenya. Table 4.1 presents the descriptive statics and the distribution of the variables considered in this research: Return on assets, indebtedness, Deposits to assets ratio and loan portfolio. The descriptive statistic considered were minimum, maximum, mean, standard deviation.

Table 4.1 shows that the return on assets for the sample of 25 MFIs had a mean of 0.28514. That is, financial performance, on average, 28.51% during the study period. However, the value went as high as 37.08% and as low a negative returns on asset of 0.0858. The average debt to equity ratio for the 25 MFIs was 0.35108. From the study summary it was established that the average loans portfolio to asset ratio for MFIs was 0.26474 with standard deviation of 0.051871. Loan portfolio ration recoded a high of 0.2365 with lower ratio at 0.0681.

Variable	Mean	Std.Dev		Min	Max
ROA	0.28514	0.0387101	-0.0858		0.3708
INDBTD	0.35108	0.076691	0.2351		0.5814
DEP RATIO	0.25414	0.217415	0.0105		0.8247
LOAN PORTFO	0.26474	0.051871	0.0681		0.2365

Table 4.1Descriptive Statistics

Source: Research Data

4.5 Correlation Analysis

The study sought to establish the relationship between funding structure and financial performance of MFIs in Kenya. Pearson Correlation analysis was used to achieve this end at 99%, 95% and 90% confidence levels. The result in table 4.2 below shows that ROA has a negative correlation (R=-0.7850) indebtedness. This implies that an increase in debt to equity ratio reduces the financial performance of MFIs. Deposits to equity ratio has a positive relationship with financial performance of MFIs (R=0.5814) which indicates that an increase in deposits to equity ratio increases the profitability of MFIs. Loan portfolio to asset ratio has strong positive association (R=0.95710) with return on assets of MFIs. Increasing loan advancement to customers will result to an increase in the financial performance of MFIs.

 Table 4.2 Correlation results

				LOAN
	ROA	INDBTD	DEP RATIO	PORTFOLIO
ROA	1			
INDBTD	-0.7850	1		
DEP RATIO	0.5814	0.9533	1	
LOAN PORTFO	0.95710	-0.9814	-0.8798	1

Source: Research Data

4.6 Regression Analysis and Hypothesis Testing

4.6.1 Analysis of Variance

Analysis of Variance's (ANOVA) F-test was used to make simultaneous comparisons between two or more means; thus, testing whether a significant relation exists between variables (dependent and independent variables); thus, helping in bringing out the significance of the regression model. Since the value (p=0.0491) was below 0.05, it can be concluded that the regression model was significant and fit for estimation.

of df F Model Mean Sum p. Squares Square .038117 17 .018914 0.0509 .0491 Regression Residual 107 .0337814 .025146 1 Total .063263 124

 Table 4.3 Analysis of Variance

Source: Research Data

4.6.2 Model Summary

Table 4.4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.544801	.296808	.9351	.014154	1.9267

Source: Research Data

R-square values present proportion of the variation in non-performing loans that is attributed to the changes in the explanatory variables. From the adjusted determination coefficients, generally moderately strong linear relationships were established between dependent and independent variables. Their R-squared value of 95.04% was established and this implies that 95.04% of the variation in financial performance of MFIs is attributed to the changes in the explanatory variables.

The study also used Durbin Watson (DW) test to check that the residuals of the models were not auto correlated since independence of the residuals is one of the basic hypotheses of regression analysis. Being that the DW statistic (1.9267) was close to the prescribed value of 2.0 for residual independence, it can be concluded that there was no autocorrelation.

ROA	Coef.	Std.Err	t	P> t
INDBTD	-5.6871	1.22871	-1.9	0.017
DEP RATIO	.78014	0.033684	1.38	0.269
LOAN PORTFO	10.5874	1.26871	-1.36	0.024
_cons	.258105	0.21784	-0.81	0.0409

	4.6.3	Regression	Coefficients
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Source: Research Data

a. Dependent Variable: ROA

b. Independent Variable: INDEBTD, DEP RATIO, LOAN PORTFO

All the explanatory variables are statistically significant at 5% level of significance in explaining the variation in financial performance of MFIs in Kenya. The estimated model result now becomes:

ROA = 0.2581 - 5.6871INDBT + 0.78014 DEP RATIO + 10.5874 LOAN PORTFO

I.e. Y=0.2581-5.6871X₁+0.78014X₂+10.5874X₃

4.7 Discussion of Research findings

The main objective of the study was to examine the relationship between funding structure and financial performance of MFIs in Kenya. The study used Ordinary Least Squares (OLS) regression models. However, before running the regressions, descriptive statistics and correlation analysis were calculated. Correlation analysis shows the relationships between the different variables considered in the study. The correlation matrix presented simple bivariate correlations not taking into account other variables that may influence the results.

The study findings show that the return on assets for the sample of 25 MIFs had a mean of 0.28514. That is, financial performance, on average, 28.51% during the study period. However, the value went as high as 37.08% and as low a negative returns on asset of 0.0858. The average debt to equity ratio for the 25 MFIs was 0.35108. From the study summary it was established that the average loans portfolio to asset ratio for MFIs was 0.26474 with standard deviation of 0.051871. Loan portfolio ration recoded a high of 0.2365 with lower ratio at 0.0681.

All factors held constant, MFIs will register an average of 0.2581 units on return on assets if the explanatory variables are considered in the estimation model. All the explanatory variables are statistically significant at 5% level of significance in explaining the variation in the profitability of the MFIs. Indebtedness is negatively related with financial performance of MFIs. A unit increase in debt to equity ratio will lead to 5.6871 units decrease in the financial performance of MFIs.

Deposits to asset ratio are positively related to return on assets of MFIs. A unit increase in deposits taken by MFIs will lead to 0.78014 units increase in profitability of the MFIs. Loan portfolio to assets ratio has a positive association with financial performance of MFIs. A unit increase in loans portfolio to assets ratio will lead to 10.5874 units increase in the financial performance of MIFs in Kenya.

F-test was used to make simultaneous comparisons between two or more means; thus, testing whether a significant relation exists between variables (dependent and independent variables); thus, helping in bringing out the significance of the regression model. Since the value (p=0.0491) was below 0.05, it can be concluded that the regression model was significant and fit for estimation.

From the analysis done, it is clear that there is a significant relationship between funding structure and financial performance of microfinance institutions in Kenya. The mix of debt to equity in the funding structure is a key element in financial performance which should be monitored by firms. From the regression model, debt to equity ratio negatively affects the financial performance of microfinance institutions. Therefore more debt in the funding structure leads to reduced financial performance of MFIs in Kenya.

Deposits to equity ratio have a positive relationship between funding structure and financial performance of microfinance institutions in Kenya. From the results therefore MFIs which takes deposits will have superior financial performance compared to those that do not accept deposits. Deposit taking microfinance institutions with high deposits to equity ratio performs better than

those with low deposit to equity ratio. Loan portfolio has a strong positive relationship with the financial performance of microfinance institutions in Kenya. MFIs with high loan portfolio were found to perform better as indicated by the regression model. Therefore MFIs are better off increasing their loan portfolio as this effectively increases their financial performance. From the equation, it is clear that this element has the highest influence in the financial performance of MFIs in Kenya among the variables studied.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of data findings, conclusions drawn from the findings highlighted and policy recommendations that were made. The conclusions and recommendations drawn were in quest of addressing research objectives of establishing the relationship between funding structure and financial performance of microfinance institutions in Kenya.

5.2 Summary of Findings

The objective of the study was to establish the relationship between funding structure and financial performance of microfinance institutions in Kenya. The study targeted microfinance institutions registered and operating in Kenya. The research design used in the study was descriptive research design and secondary data was used for analysis. Analysis was done using SPSS. To establish the relationship between return on assets and the independent variable under study, a regression model was used.

The study findings established that there is a relationship between funding structure and financial performance of MFIs in Kenya. To this extent therefore, the funding decision is as good as the investment decision. This is in line to a study done by Bogan (2007) which concluded that the source of funding MFIs affects the financial performance of the institutions. According to the findings, there is a negative correlation between the indebtedness i.e. debt to equity ratio and financial performance of MFIs in Kenya. This shows that the more debt to equity ratio a firm employs in its funding structure the inferior the financial performance. This implies that financial

firms are better of financing their operations with less debt. From the findings, a unit increase in debt to equity ratio will result in 5.6871 units decrease in the financial performance of MFIs in Kenya.

These findings goes against the study of Wippern (1966) who concluded that leverage effect positively on firm value and this traditional evidence which said that shareholders wealth can be enhance by using outside financing. It is however important to note that Wippern's study excluded financial institutions. The findings tend to support Maina & Ishmail (2014) who concluded that there is a negative and significant relationship between capital structure (DE) and all measures of performance. This implies that the more debt the firms used as a source of finance the more they experienced low performance.

As far as the other variables under study are concerned, it was evident from the findings that deposit to assets ratio positively influences performance. From the study it was established that deposits to asset ratio is positively related to return on assets of MFIs. A unit increase in deposits taken by MFIs will lead to 0.78014 units increase in profitability of the MFIs, i.e. the more deposits a MFI has the more superior financial performance registered. To this end, other factors held constant, deposit taking microfinance institutions tend to perform better than non deposit taking institutions. From the finding therefore, it is expected that MFIs with high deposits will perform better than those with low deposits.

Loan portfolio was established as the variable with the strongest effect on the financial performance. Loan portfolio to asset ratio was found to have a strong positive correlation with financial performance of MFIs. A unit increase in loans portfolio to assets ratio will lead to 10.5874 units increase in the financial performance of MFIs in Kenya. This variable clearly portrays the potential of loan facility on ROA.

5.3 Conclusion

The study concludes that funding structure have an impact on the financial performance of MFIs in Kenya. To this extent therefore we conclude that the choice of funding structure is very important to any financial institution especially MFIs in Kenya. In order to record superior performance, MFIs should have very low debt to equity ratio, endeavor to increase the deposits they take and increase their loan portfolio to the maximum since it has a great positive influence on the financial performance of MFIs in Kenya.

From the study therefore, it is clear that the choice of the funding decision is as important as the investment decision. Once one has identified an area to invest in, it is important to consider the funding structure to employ. The funding structure should be one which leads to a good and superior financial performance to ensure that the firm is able to run smoothly and meet its obligations promptly.

Considering the contribution of MFIs in the economic growth and development of the country, the investors should be cautions on the funding structure chosen since it has been found that the funding structure should be carefully considered. Investors should ensure that the funding structure has a small debt as possible with considerable big equity.

The importance of loan portfolio in the financial performance of MFIs can no longer be underestimated. For superior financial performance, MFIs should endeavor to increase their loan portfolio by giving out as much loan as possible while at the same time putting emphasis on repayment plan and security for the loans advanced to ensure that the process is both effective and efficient.

5.4 Policy Recommendations

While there have been a lot of studies on MFIs, studies on the optimum funding structure among the microfinance institutions have been limited hence this study effectively address the existing gap hence the industry players in Kenya will be able to draw important insights from the study. The study provides important information on the funding structure which can help propel the industry to another level.

Due to the fact that the financial sector is heavily regulated, the regulator or policy makers should be able to appreciate the importance of funding source and come up with optimum funding structure to ensure that the industry reaches its full potential. First, the regulator should formulate policies which will regulate debt to equity ratio in a firm to ensure that indebtedness is maintained at some level or as low as possible to ensure superior financial performance in the industry. The regulator should put a sealing as to the debt amount an MFI can use in its funding structure depending on its equity.

Secondly, while appreciating the importance of deposits on the financial performance of MFIs, Central Bank of Kenya (CBK) who regulates the DTM in Kenya, should relax the rules on deposit taking by MFIs to ensure that the process of registering is made as smooth and easy as possible to ensure more MFIs are allowed to take deposits since this will improve their financial performance.

Lastly, MFIs should focus on increasing their loan portfolio as this is clearly another element which contributes to superior financial performance. MFIs' management should employ competent people in this department and invest appropriately in the section to ensure its effectiveness. Considering related risks involved, caution should be taken to ensure that the desire to increase the loan portfolio does not hurt the firm.

5.5 Limitations of the Study

The duration of the study was limited hence exhaustive and comprehensive research could not be carried out on the effects of the independent variables on return on assets ratio. Data collection had to be limited and verification of the collected data being nearly impossible since the reliability of the data depend on the source. Moreover, the data used in this study comprised of secondary data collected for other purposes and may not have contained enough details for an exhaustive research in the area of funding structure. More over the use of secondary sources raises reliability issues on the data. Relying on the secondary data means that any error in the source will also be reflected in the research, i.e. errors and assumptions not disclosed in the source documents will also reoccur in the research.

A fundamental limitation is that the findings indicate norms and not standards. The study give past trends and does not give indicators on what to improve on. The research design is essentially static whereas the data may be dynamic and this cannot be captured in the study. Correlation research used in the study are generalized to the population and do not reflect the specific operations of various distinct MFIs in the population.

5.6 Suggestions for Further Research

Due to the critical role played by the financial institutions in the development of the Kenyan economy, the study recommends further studies to be done on the effects of funding structure on the financial performance of other financial institutions other than microfinance institutions such as commercial banks. Studies should also be carried out to identify the effects of political environment on the performance of microfinance institutions in Kenya.

During the research process, the importance of working capital management clearly came out hence the researcher further suggests that a study be carried out identify the relationship between working capital management and financial performance of microfinance institutions in Kenya. Considering that the financial sector is a fast growing area in the Kenyan economy, it is important to establish the effect of various governmental policies on the financial performance of microfinance institutions in various parts of the world and determine if best practices can be modeled in Kenya. With the appreciation that there exist other factors which affect the financial performance of microfinance institutions, further studies should be carried out to establish the impact of these factors on the financial performance of MFIs in Kenya. It will be important to identify the intensity of these factors on the financial performance of financial institutions since this will be important in policy formulation by various authorities.

REFERENCES

- Adit, G. & Kobina, S. (2011). Performance of Microfinance Institutions: A macroeconomic and institutional Perspective. *Discussion Paper Series*
- Ager, J. (2009). An empirical analysis of capital structure rebalancing by firms listed at the Nairobi stock Exchange, *Unpublished MBA project, University of Nairobi*.
- Almeida, H., Campello, M., & Weisbach, M. S. (2011). Corporate financial and investment policies when future financing is not frictionless. *Journal of Corporate Finance*.
- Armendáriz , B. & Morduch, J. (2010). The Economics of Microfinance, second edition MIT Press, Cambridge, Massachusetts.
- Ayayi, A. & Sene, M. (2010). What drives microfinance institution's financial sustainability? *The Journal of Developing Areas, 44:303-324.*
- Baltagi, H. (2008). Econometric analysis of panel data, 4th Ed.
- Banerjee, S., Heshmati, A. & Wihlborg, C. (2000). The Dynamics of Capital Structure, SSE/EFI Working Paper Series in Economics and Finance.
- Banz, R. (1981). The relationship between return and the market value for common stocks; Journal of Financial Economics.
- Batra,G.(1999). Job Reallocation, the Export Market, and Firm Performance: Microeconomic
 Evidence; World Bank Policy and Research; *Business Environment Unit; Ref. 683-26; Vol. 10(1)*
- Baumol, J. (1965). The Stock Market and Economic Efficiency. New York: Fordham University Press
- Becchetti, L. & Conzo, P. (2011). Enhancing capabilities through credit access: creditworthiness

as a signal of trustworthiness under asymmetric information. *Journal of Public Economics*, 95:265-278.

Berger, A. & Patti, E. (2002).Capital Structure and Firm Performance:

A new approach to testing agency theory and an application to the Banking Industry. *Retrieved from www. federalreserve. Gov /pubs/ feds/2002 /200254 /200254pap*

- Bevan, A. & Daubolt, J. (2001). Testing for Inconsistencies in the Estimation of UK Capital Structure Determinants, Working Paper, no. 2001/4, Department of Accounting and Finance, University of Glasgow, Glasgow G 12 LE.
- Bhole, B. & Ogden, S. (2010). Group lending and individual lending with strategic default, Journal of Development Economics, 91:348-363.
- Bitok, J. (2011). The Determinants of Leverage at the Nairobi Stock Exchange, Kenya. *The Asian Business and Management conference official conference proceedings*, 1-21
- Bogan, V. (2008). Micro Finance Institutions: Does Capital Structure Matter. New York. *Cornell University Press.*
- Bogan, V. (2009). Capital structure and sustainability: An empirical study of microfinance institutions, mimeo.
- Bogan ,V. (2007).Does Capital Structure affect the financial sustainability of MicroFinance Institutions?New York.Cornell University Press
- Brau, J & Woller, G. (2004). Microfinance: A comprehensive review of the existing literature, Journal of Entrepreneurial Finance and Business Ventures, 9:1-26
- Brealey, A. Myers, C. & Allan, F. (2008). Principles of corporate finance (9th edition ed) McGraw-Hill
- Brockington, R. (1990). Financial Management, 1992 Edition, ELBS, London, UK

Chebii, E., Kipchumba, S. & Wasike, E. (2011) Relationship between Firms capital structure and Dividend payout ratio: companies listed at the Nairobi Stock exchange. *Kabarak First International Conference* 12th -14th Oct.2011

Cohen, R. (2003). The Optimal Capital Structure of Depository Institutions. WILMOTT

- Crabb, P. (2008). Economic freedom and the success of microfinance institutions. *Journal of Developmental Entrepreneurship*, (13)205-219.
- Cull, R., Demirgüc-Kunt, A. & Morduch, J. (2007). Financial performance and outreach: a global analysis of leading microbanks, *Economic Journal*, *117:F107-F133*.
- Cull, R., Demirgüc-Kunt, A. & Morduch, J. (2009). Microfinance meets the market *Journal of Economic Perspectives*, 23:167-192.
- de Crombrugghe, A., Tenikue, M., and Sureda, J. (2008). Performance analysis for a sample of microfinance institutions in India. *Annals of Public and Cooperative Economics*, 79:269-299.
- de Sousa-Shields, M. (2004). Financing Microfinance Institutions. *MicroNote No.* 8 Accelerated Microenterprise Advancement Project - USAID
- Donaldson, G. (1961). Corporate debt capacity: a study of corporate debt policy and the determination of corporate debt capacity. *Harvard Graduate School of Business Administration, Division of Research, Harvard University, Boston, MA*.
- Farrington, T., & Abrams, J. (2002). The Evolving Capital Structure of Microfinance Institutions. Micro-Enterprise Development Review, Washington D.C. (Inter-American Development Bank Working Paper)

Fehr, D., & Hishigsuren, G. (2004). Raising Capital For Microfinance: Sources of Funding and

Opportunities For Equity Financing. (Southern New Hampshire University, Working Paper No. 2004-01)

- Felder, N. (2005). Making Sense-Mikrofinanzierung und Mikrofinanzinvestitionen, Hamburg, Murmann Publisher GmbH
- FSD Kenya. (2012). Transforming Microfinance in Kenya: The experience of Faulu Kenya and Kenya Women Finance Trust. *The Journal of FSD Kenya*
- Gachoki, M. (2005), Capital Structure Choice. An Empirical Testing of the Pecking Order Theory Among Firms Quoted On The NSE, Unpublished Project, and University Of Nairobi.
- Galemaa, R., Lensink, R. & Spierdijka, L. (2011). International diversification and microfinance. *Journal of International Money and Finance*, *30:507-515*.
- Ghosh, S. & Tassel, V. (2011). Microfinance and competition for external funding, *Economics Letters*, *112:168-170*.
- Gitman, J. (2007). Principles of managerial finance (Twelfth Edition). Boston, MA: Pearson Education, Inc.
- Goldstein, R. & Leland, H. (2001). An ebit-based model of dynamic capital structure, Journal of Business 74, 483-512.
- Goodman, P. (2005). Raising MFIs Equity Through Microfinance Investment Funds. *journal of finance*
- Grossman, S. & Hart, O. (1982). Corporate financial structure and managerial incentives, in: the economics of information and uncertainty. Ed. by J. J. McCall. Chicago: *The University of Chicago Press*, 123-155.

Gupta, S. (2008). Microfinance in Africa: Harnessing the Potential of a Continent.

Microfinance Insight. An Intellecap Publication.

- Harris, M. & Raviv, A. (1991). The theory of capital structur. *Journal of Finance* 46, 297-356
- Hartarska, V. & Nadolnyak, D. (2007). Do regulated microfinance institutions achieve better sustainability and outreach? *Cross-country evidence*, *39:1207-122*.
- Hartungi, R. (2007). Understanding the success factors of microfinance institution in a developing . *International Journal of Social Economics*, *34*(6), *388-401*.
- Haugen, R. &Senbet, W. (1978). The insignificance of bankruptcy costs to the theory of optimal capital structure. *Journal of Finance 33, 383-393*.
- Hazeltine, B. & Bull, C. (2003).Field guide to appropriate technology, Academic Press
- Helms, B. (2006). Access for All: Building Inclusive Financial Systems. Washington, D.C.:
 International Bank for Reconstruction and Development. The Consultative Group to
 Assist the Poor
- Hermes, N & Lensink, R. (2011). Microfinance: its impact, outreach and sustainability. *World Development*, 39:875-881.
- Hirshleifer, J. (1966) Investment decision under uncertainty: Applications of the state preference approach, *Quarterly Journal of Economics 80, 252-277.*
- Holz, C. (2002). The Impact of The Liability-Asset Ratio on Profitability in China's Industrial State-Owned Enterprises , *China Economic Review*, *13: 1-26*.
- Hoque, M. & Chisty, M. (2011). Commercialization and changes in capital structure in microfinance institutions. An innovation or wrong turn, *Journal of Managerial Finance*, 37(5), 414-425.

- Jensen, M. & Meckling, M. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure, *Journal of Financial Economics 3, 305-360*.
- Jensen, M. (1986). Agency costs of free cash flow, corporate finance and takeovers, *American Economic Review*, 76:323-339.
- Jeon, D. & Menicucci, D. (2010). When is the optimal lending contract in microfinance state non-contingent? *European Economic Review*, 55:720-731.
- Kiogora, G. (2000). Testing For Variations in the Capital Structure at the NSE an Empirical Study, *unpublished MBA Project, University of Nairobi*.
- Kothari, C. (2004).Research Methodology: Methods and techniques (1st Ed), New Age International Publishers.
- Kyalo, J. (2002). Capital Allocation and Efficiency of Banking Institutions in Kenya, the Case of Quoted Banks at NSE, *MBA*, *Project*, *University of Nairobi*
- Labie, M. (2001). Corporate governance in Microfinance organizations: *a long and winding road. Management Decisions, 39(4).*
- Ledgerwood, J. (1999). Sustainable banking with the poor. Microfinance handbook, World Bank, Washington D.C.
- Madajewicz, M. (2011). Joint liability versus individual liability in credit contracts. *Journal of Economic Behaviour and Organization*, 77:107–123.
- Maina, L. & Ishmail, M. (2014). Capital structure and financial performance in Kenya: Evidence from firms listed at the Nairobi Securities Exchange. *International Journal of Social Sciences and Entrepreneurship, 1* (11), 209-223.
- Maina, L. & Ondongo, K. (2003) Capital Structure and Financial Performance in Kenya: Evidence From Firms Listed at The Nairobi Securities Exchange

- Mathur, S. & Kenyon ,A. (1998).Creating Value: Shaping Tomorrow's Business; Butterworth Heinemann.Oxford
- Modigliani, F., & Miller, M. (1958). The Cost of Capital, Corporate Finance and the Theory of Investment. *The American Economic Review*, 48 (3), 261-297.
- Modigliani, F. & Miller, M. (1963).Corporate income taxes and the cost of capital: A correction, *American Economic Review 53, 433-443*.
- Morduch, J. (2005). Smart subsidies for sustainable microfinance. Finance for the Poor: *ADB Quarterly Newsletter of the Focal Point for Microfinance*, 6:1-7.
- Mustafa, M. (2006). Capital structure and corporate performance empirical study on the public Jordanian Shareholdings firms listed in the Amman stock Market. *Applied University, Jordan*
- Myers, S. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, **5**:147-75.
- Myers, S. & Majluf, N. (1984).Corporate financing and investment decisions when firms have information that investors do not have, *Journal of Financial Economics 13*, 187-221.
- Myers, C. (1984). The Capital Structure Puzzle. *Journal of Finance. July, 39:3, pp.* 575–92.
- Myers, C. (2006). Capital structure. Journal of Economics Perspective-volume 15
- Nyanamba, S., Nyangweso, G. & Omari, S. (2003). Factors that Determine the Capital Structure among Micro-Enterprises: A Case Study of Micro-Enterprises In Kisii Town, Kenya. *Journal of Contemporary Research Vol. 3 No. 7; July 2013*

O'Brien, J., David, P., Yoshikawa, T. & Delios, A. (2013). How capital structure

influences diversification performance: A transaction cost perspective. Strategic Management *Journal, Early View, doi: 10.1002/smj.2144*

- Omino, G. (2005). Regulation and supervision of Microfinance Institutions in Kenya. Central bank of Kenya.
- Pfaffermayr, M., Stöckl, M. & Winner, H. (2013). Capital Structure, Corporate Taxation and Firm Age. Fiscal Studies, *The Journal of Applied Public Economics 34(1), 109–* 135.
- Porter, M. (1980). Competitive Strategy: Techniques for Analyzing Industries and Competitors; New York: Free Press;
- Rajan, R. & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, Vol. 50, pp.1421-60.
- Reillie, X. & Forster, S. (2008). Foreign capital investment in microfinance: balancing social and financial returns. *CGAP Focus Note 44*.
- Rhyne, E. (2001). Microfinance Institutions in Competitive Conditions. Working Draft Study.
 Microenterprise Best practices (MBP), Development Alternatives, *Inc., USAID project, Bethesda.MD*
- Salawu, R. (2006). The Determinants of the Capital Structure of Financial firms in Nigeria:
 The Financial Managers' Perspectives', Proceeding of the 2006 Global Conference on
 Business and Finance, organized by the *Institute for Business and Finance Research between 31 May and 3 June, at Costa Rica, p. 74-77.*
- Severin, E. (2002). Ownership Structure and the Performance of firms: Evidence from France, *European Journal of Economic and Social Systems 15 No. 2 (2001) pg 85-107.*

Singh, A. &Whittington, G. (1968).Growth, Profitability and Valuation: A Study of United

Kingdom Quoted Companies; Cambridge University Press

- Sørensen, B. &Toby, E. (1999).Obsolescence and organizational innovation; GSB Chicago; Fall Issue
- Stauffenberg, D. (2001). How Microfinance Evolves: What Bolivia can teach us. Microenterprise Development Review, 4(1), Inter-American Development Bank, New York.
- Stiglitz, J. (1969). A re-examination of the modigliani-miller theorem, *American Economic Review 59, 784-793.*
- Szabo, V. & Strang, V. (1997). Secondary Analysis of Qualitative Data. Advances in Nursing Science, 20(2), 66-67
- Titman, S. & Wessels, T. (1988). The determinants of Capital Structure Choice. *The Journal of Finance vol.43 No.1*
- Wald, J. (1999). How Firm Characteristics Affect Capital Structure: An International Comparison. Journal of Financial Research. Summer, 22:2, pp. 161–87.
- Welch, I. (2009). Corporate Finance-An Introduction. Boston. Pearson Education International
- Williams, J. (1987). Perquisites, risk and capital structure. Journal of Finance, 42:29-49.
- Wippern, R. (1966).Financial Structure and The Value of The Firm, *The Journal of Finance*,21(4):615-633.
- Yunus, M. (1999).Banker to the poor-micro-lending and the battle against world poverty, *New York, Public Affairs*

APPENDICES

APPENDIX I: RESEARCH POPULATION

- 1. AAR Credit Services
- 2. ADOK TIMO
- 3. Agakhan Foundation Microcredit Programme
- 4. Biashara Factors
- 5. BIMAS
- 6. Blue Limited
- 7. Canyon Rural Credit Ltd
- 8. Century DTM Ltd
- 9. Co-operative Bank
- 10. ECLOF Kenya
- 11. Equity Bank
- 12. Faulu Kenya DTM
- 13. Focus Capital Limited
- 14. Fort Credit Limited
- 15. Fountain Credit Services Ltd
- 16. Fusion Capital Ltd
- 17. Greenland Fedha Ltd
- 18. Indo Africa Finance
- 19. Jamii Bora Bank
- 20. Jitegemea Credit Scheme
- 21. Juhudi Kilimo Co.Ltd
- 22. Kenya Agency for the Development of Enterprise and Technology (KADET)
- 23. Kenya Entrepreneurship Empowerment Foundation (KEEF)
- 24. Kenya Post Office Savings Bank (Postbank)
- 25. K-REP Bank
- 26. Kenya Women Finance Trust Limited (KWFT)
- 27. K-rep Development Agency

- 28. Micro Africa Kenya Ltd
- 29. Milango Financial services
- 30. Mini Savings & Loans Ltd
- 31. Molyn Credit Ltd
- 32. Musoni Kenya Ltd
- 33. Nationwide Credit Kenya Ltd
- 34. Ngao Credit Ltd
- 35. OIKOCREDIT
- 36. One Africa Capital Ltd
- 37. Opportunity Kenya
- 38. Pamoja Women Development Programme (PAWDEP)
- 39. Platinum Credit Limited
- 40. Rafiki DTM Limited
- 41. Remu DTM Limited
- 42. Renewable Energy Technology Assistance Programme(RETAP)
- 43. Rupia Ltd
- 44. Samchi Credit Limited
- 45. Select Management Services Ltd
- 46. SISDO
- 47. SMEP DTM
- 48. Springboard Capital
- 50. SUMAC DTM Limited
- 51. Taifa Option Microfinance Limited
- 52. U & I Microfinance Ltd
- 53. UWEZO DTM
- 54. Women Enterprise Fund
- 55. Women Enterprise Solutions
- 56. Yehu Microfinance Trust
- 57. Youth Initiatives-Kenya (YIKE)

MFI Name	Currency	Fiscal Year	Assets	Debt to equity ratio	Borrowings
ACDF	KES	2010			
ACDF	KES	2011			
ACDF	KES	2012	7428353	0.4	
Adok Timo	KES	2009	80983967		13915633
Adok Timo	KES	2010	92231533		24839719
Adok Timo	KES	2011			
BIMAS	KES	2009	413012853	1.65	60000000
BIMAS	KES	2010	402797101	1.39	41780463
BIMAS	KES	2011	537943400	1.9	101200928
BIMAS	KES	2012	627696390	0.55	120851489
Century MFB	KES	2011	88765180	0.03	
Century MFB	KES	2012	93590990	0.26	879966
Century MFB	KES	2013	163608000	0.81	135000
ECLOF - KEN	KES	2009	589942390	2.46	191594608
ECLOF - KEN	KES	2010	728396802	2.56	234951335
ECLOF - KEN	KES	2011			
ECLOF - KEN	KES	2012	824361534	3.38	247899827
Equity Bank	KES	2009	96512000000	3.14	6114000000
Equity Bank	KES	2010	1.3389E+11	3.73	7464000000
Equity Bank	KES	2011	1.76911E+11	4.05	13769000000
Equity Bank	KES	2012	2.15829E+11	4.06	25755000000
Equity Bank	KES	2013	2.38194E+11	3.7	16793161000
Family Bank	KES	2011	26001753000		527264000
Faulu MFB	KES	2009	4307180000	5.6	1599017000
Faulu MFB	KES	2010	4390079000	7.29	1926621000
Faulu MFB	KES	2011	5140576000	8.24	2426294000
Faulu MFB	KES	2012	7637676000	11.43	2161910000
Greenland Fedha	KES	2010	238676000	0.49	56463000
Greenland Fedha	KES	2011	539917000	2.24	335267000
Jamii Bora	KES	2009			
Juhudi Kilimo	KES	2009	121457899	3.66	27385296
Juhudi Kilimo	KES	2010	174544647	6.68	75939621
Juhudi Kilimo	KES	2011	265280292	48.28	186700570
K-Rep	KES	2009	7136327000	5.45	1381707000
K-Rep	KES	2010	7670049000	5.63	909603000

K-Rep	KES	2011	9318715000		1224671000
K-Rep	KES	2012	9542816045		896614688
KEEF	KES	2012	99676843		27965888
KPOSB	KES	2009	15353585068	9.97	0
KPOSB	KES	2010			
KPOSB	KES	2011			
KPOSB	KES	2012	25677495260	8.18	0
KWFT MFB	KES	2009	14749566000	4.39	7196813000
KWFT MFB	KES	2010	18958394000	10.69	10273302000
KWFT MFB	KES	2011	17035784989	7.85	7187403629
KWFT MFB	KES	2012	20384438000	7.85	7868876000
KWFT MFB	KES	2013	21739116191	6.5	4390153697
Letshego	KES	2009	507309000	0.73	173315000
Letshego	KES	2010	675849000	0.89	251452000
Letshego	KES	2011			
Letshego	KES	2012	1281660000	2.89	692935000
MCL	KES	2009	185241523	1.47	79535309
MCL	KES	2010	234046326	1.6	97752960
MCL	KES	2011	265493283	1.58	123250346
Makao Mashinani	KES	2010	35102864	1.1	8590910
Makao Mashinani	KES	2011			
Musoni	KES	2010	70966639	-10.45	0
Musoni	KES	2011	89107894	-7.22	0
Musoni	KES	2012	280476793		48312942
Musoni	KES	2013	548836664	0.75	93719807
Opportunity Kenya	KES	2009	358005322	-6.45	251982269
Opportunity Kenya	KES	2010	394829373	-13.23	263493750
Opportunity Kenya	KES	2011	604096000	3.68	246304000
Opportunity Kenya	KES	2012	715936000		338501000
Opportunity Kenya	KES	2013			
PAWDEP	KES	2009	659537847	38.98	156166757
PAWDEP	KES	2010			
PAWDEP	KES	2012			
Platinum Credit	KES	2012			
RAFODE	KES	2009	35673000		0
RAFODE	KES	2010	48536640		450000
RAFODE	KES	2011	48369520	0.19	
Rafiki MFB	KES	2011	440661000	2.27	0

Rafiki MFB	KES	2013	3678751000	6.47	753555000
Real People	KES	2013	2514874206	1.99	1510862942
Remu	KES	2009	0		0
Remu	KES	2010	0		0
Remu	KES	2011			
Riverbank	KES	2009	3319550	0.48	0
SISDO	KES	2012			
SMEP MFB	KES	2009	1326317334	3.6	487110595
SMEP MFB	KES	2010	1789564405	6.75	926107558
SMEP MFB	KES	2011	1998220000	6.78	908625000
SMEP MFB	KES	2012	2289511000	2.69	617220000
Sumac MFB	KES	2009	107975724		0
Sumac MFB	KES	2010	113451674		26220178
Sumac MFB	KES	2011			
Sumac MFB	KES	2012	198676000		15242996
Taifa	KES	2010	20726000		
Taifa	KES	2011	29844000		
Taifa	KES	2012			
UBK	KES	2009	7300442	0.82	3299880
UBK	KES	2010	12713829	0.61	4823597
Uwezo MFB	KES	2011	58668791	0.25	0
Uwezo MFB	KES	2012	81224419		0
VisionFund Kenya	KES	2009	794237414	2.48	255806984
VisionFund Kenya	KES	2010	871640000	2.97	299201000
VisionFund Kenya	KES	2011	794348000	4.15	307136000
VisionFund Kenya	KES	2012			
VisionFund Kenya	KES	2013			
VisionFund Kenya	KES	2013	906491447	2.44	276968050
YIKE	KES	2010	11771424	0.01	
YIKE	KES	2011	6167011		
YIKE	KES	2012	5884352		
Yehu	KES	2012	486688530		210097425

MFI Name	Currency	Fiscal Year	Capital /asset ratio	Assets	Debt to equity ratio	Borrowings	Deposits to loans	Deposits	Deposits to total assets	Equity	Return on assets
ACDF	USD	2010					0.8421	11787.58			
ACDF	USD	2011					0.8507	13267.22			
ACDF	USD	2012	0.7136	86275.88	0.4		0.3478	23351.67	0.2707	61566.48	
Adok Timo	USD	2009	0.6253	1067686		183462.53	0.2034	177070.06	0.1658	667649.85	
Adok Timo	USD	2010	0.5838	1142894		307803.21	0.2153	199946.59	0.1749	667225.11	
Adok Timo	USD	2011					0.3416	349669.22			
BIMAS	USD	2009	0.3774	5445127	1.65	791034.94	0.8611	2266283.6	0.4162	2055176.15	-0.0264
BIMAS	USD	2010	0.4186	4991290	1.39	517725.69	0.6073	1980864.55	0.3969	2089412.47	0.0308
BIMAS	USD	2011	0.3418	6332471	1.93	1191299.92	0.5041	2377894.15	0.3755	2164682.3	0.0304
BIMAS	USD	2012	0.3472	7290318	0.55	1403617.76	0.4956	2303900.95	0.316	2531120.24	
Century MFB	USD	2011	0.968	1044911	0.03		0.627	10946.34	0.0105	1011467.82	
Century MFB	USD	2012	0.7941	1087003	0.26	10220.28	0.5193	156901.57	0.1443	863217.99	-0.2125
Century MFB	USD	2013	0.5524	1892516	0.81	1561.6	0.746	763516.48	0.4034	1045494.51	-0.2156
ECLOF - KEN	USD	2009	0.2894	7777751	2.46	2525967.15	0.5677	2471120.44	0.3177	2251046.55	0.0342
ECLOF - KEN	USD	2010	0.2812	9025983	2.56	2911416.79	0.5814	2709098.35	0.3001	2538402.08	0.0138
ECLOF - KEN	USD	2011					0.6114	3247932.4			
ECLOF - KEN	USD	2012	0.2281	9574466	3.38	2879208.21	0.6684	3651886.13	0.3814	2183978	0.0128
Equity Bank	USD	2009	0.2418	1.27E+09	3.14	8.06E+07	1.0608	8.68E+08	0.682	3.08E+08	0.0523
Equity Bank	USD	2010	0.2114	1.66E+09	3.73	9.25E+07	1.2754	1.18E+09	0.7111	3.51E+08	0.0643
Equity Bank	USD	2011	0.1981	2.08E+09	4.05	1.62E+08	1.1537	1.48E+09	0.7094	4.13E+08	0.0619
Equity Bank	USD	2012	0.1977	2.51E+09	4.06	2.99E+08	1.1253	1653728223	0.6597	4.96E+08	0.0565
Equity Bank	USD	2013	0.2128	2.76E+09	3.7	1.94E+08	1.009	1.84E+09	0.6665	5.86E+08	0.0553
Family Bank	USD	2011	0.1278	3.06E+08	6.82	6206756.92	1.228	2.52E+08	0.8247	3.91E+07	0.015
Faulu MFB	USD	2009	0.1514	5.68E+07	5.6	2.11E+07	0.6636	2.63E+07	0.4633	8600145.02	-0.0176
Faulu MFB	USD	2010	0.1207	5.44E+07	7.29	2.39E+07	0.6927	2.30E+07	0.4225	6564089.22	-0.0338
Faulu MFB	USD	2011	0.1082	6.05E+07	8.24	2.86E+07	0.5939	2.31E+07	0.3823	6548628.61	-0.0047

Faulu MFB	USD	2012	0.0805	8.87E+07	11.43	2.51E+07	0.8836	5.19E+07	0.5845	7138211.38	0.0052
Greenland Fedha	USD	2010	0.671	2919584	0.49	690678.9	0	0	0	1959082.57	
Greenland Fedha	USD	2011	0.309	6044749	2.24	3753549.04	0	0	0	1867823.56	0.0119
Jamii Bora	USD	2009					0.5992	5733641.28			
Juhudi Kilimo	USD	2009	0.2144	1601291	3.66	361045.43	0.4595	451855.85	0.2822	343349.1	
Juhudi Kilimo	USD	2010	0.1303	2162883	6.68	941011.41	0	0	0	281765.42	-0.1386
Juhudi Kilimo	USD	2011	0.0203	3122782	48.28	2197770.1	0	0	0	63363.44	-0.0801
K-Rep	USD	2009	0.1551	9.41E+07	5.45	1.82E+07	0.8222	5.85E+07	0.6216	1.46E+07	-0.0272
K-Rep	USD	2010	0.1509	9.50E+07	5.63	1.13E+07	0.9111	6.76E+07	0.7111	1.43E+07	0.0068
K-Rep	USD	2011	0.1428	1.10E+08	6	1.44E+07		7.59E+07	0.6917	1.57E+07	0.0204
K-Rep	USD	2012	0.1625	1.11E+08		1.04E+07	0.8808	7.73E+07	0.6974	1.80E+07	
KEEF	USD	2012	0.7194	1157687		324807.06				832879.85	
KPOSB	USD	2009	0.0912	2.02E+08	9.97	0		1.38E+08	0.6815	1.85E+07	-0.0421
KPOSB	USD	2010						1.73E+08			
KPOSB	USD	2011						2.09E+08			
KPOSB	USD	2012	0.109	2.98E+08	8.18	0		2.31E+08	0.7754	3.25E+07	
KWFT MFB	USD	2009	0.1854	1.94E+08	4.39	9.49E+07	0.4206	5.65E+07	0.2904	3.61E+07	0.0524
KWFT MFB	USD	2010	0.0856	2.35E+08	10.69	1.27E+08	0.502	7.64E+07	0.3251	2.01E+07	0.016
KWFT MFB	USD	2011	0.113	2.01E+08	7.85	8.46E+07	0.6177	8.33E+07	0.4154	2.27E+07	0.012
KWFT MFB	USD	2012	0.113	2.37E+08	7.85	9.14E+07	0.7103	1.09E+08	0.4589	2.67E+07	0.0093
KWFT MFB	USD	2013	0.1333	2.51E+08	6.5	5.08E+07	0.8675	1.50E+08	0.5959	3.35E+07	0.0171
Letshego	USD	2009	0.5786	6688319	0.73	2284970.34	0	0	0	3869795.65	-0.0093
Letshego	USD	2010	0.5305	8374833	0.89	3115886	0.1952	597819.08	0.0714	4442726.15	0.0402
Letshego	USD	2011					0.2714	1409889.98			
Letshego	USD	2012	0.257	1.49E+07	2.89	8048025.55	0.2655	2316864.11	0.1556	3826283.39	-0.0214
MCL	USD	2009	0.4053	2442209	1.47	1048586.8	0.193	329597.89	0.135	989934.05	0.0729
MCL	USD	2010	0.385	2900202	1.6	1211313.01	0.23	482280.05	0.1663	1116574.8	0.071
MCL	USD	2011	0.3823	3125289	1.62	1450857.52	0.1468	328021.55	0.105	1194687.16	0.0426

Makao Mashinani	USD	2010	0.4753	434979.7	1.1	106454.89	0.6016	121793.33	0.28	206731.5	
Makao Mashinani	USD	2011					0 5 4 9 7	226250.74			
Masiman		2011	0 1058	970299 2	10.45	0	0.3487	220230.74	0	02048.6	
Musoni		2010	-0.1038	1048045	-10.45	0	0	0	0	-95048.0	0.0706
Iviusoini	USD	2011	-0.1007	1046945	-1.22	0	0	0	0	-108390.37	-0.0790
Musoni	USD	2012	0.7567	3257570		561125.92				2464929.14	
Musoni	USD	2013	0.5712	6348602	0.75	1084092.62	0.5342	1483318.18	0.2336	3626616.69	-0.2127
Opportunity Kenya	USD	2009	-0.1835	4719912	-6.45	3322112.97	0.4611	1557164.01	0.3299	-866171.56	-0.1814
Opportunity Kenya	USD	2010	-0.0818	4892557	-13.23	3265102.23	0.4706	1856636.17	0.3795	-400190.99	-0.1248
Opportunity											
Kenya	USD	2011	0.2138	7111195	3.68	2899399.65	0.5006	2438917.01	0.343	1520565.04	-0.0881
Kenya	USD	2012	0.1676	8315168		3931486.64	0.5127	2605611.97	0.3134	1393275.26	
Opportunity Kenya	USD	2013					0.5004	3044662.64			-0.0333
PAWDEP	USD	2009	0.025	8695291	38.98	2058889.35	0.7632	6264538.01	0.7205	217483.36	0.0024
PAWDEP	USD	2010					0.7765	6044344.78			
PAWDEP	USD	2012					0.8032	6132244.03			
Platinum Credit	USD	2012									
RAFODE	USD	2009	0.7982	470309.8		0	0.3513	94924.19	0.2018	375385.63	
RAFODE	USD	2010	0.8299	601445.4		5576.21	0.2889	95501.86	0.1588	499128.13	
RAFODE	USD	2011	0.8346	569388.1	0.2		0.2902	93243.08	0.1638	475203.3	-0.0131
Rafiki MFB	USD	2011	0.3055	5187298	2.27	0	0.9774	1200600.35	0.2315	1584908.77	
Rafiki MFB	USD	2013	0.1339	4.26E+07	6.47	8716657.03	0.7462	1.64E+07	0.3858	5697015.62	0.0032
Real People	USD	2013	0.3348	2.91E+07	1.99	1.75E+07				9757031.55	
Remu	USD	2009		0		0		0		0	
Remu	USD	2010		0		0		0		0	
Remu	USD	2011					0.4728	236244.85			
Riverbank	USD	2009	0.6772	43336.16	0.48	0	0.4592	13152.34	0.3035	29348.32	0.1385
SISDO	USD	2012					0.6925	2460012.86			
SMEP MFB	USD	2009	0.2174	1.75E+07	3.6	6422024.98	0.5607	6944222.65	0.3971	3802254.57	0.0101

SMEP MFB	USD	2010	0.129	2.22E+07	6.75	1.15E+07	0.5195	7608767.04	0.3431	2859739.43	
SMEP MFB	USD	2011	0.1285	2.35E+07	6.78	1.07E+07	0.5312	9580847.56	0.4073	3021495	0.0084
SMEP MFB	USD	2012	0.2707	2.66E+07	2.69	7168641.11	0.6446	1.18E+07	0.4429	7198164.92	0.0224
Sumac MFB	USD	2009	1	1423543		0	0	0	0	1423542.83	
Sumac MFB	USD	2010	1	1405845		324909.27	0	0	0	1405844.78	
Sumac MFB	USD	2011									
Sumac MFB	USD	2012	0.8005	2307503		177038.28	0.0031	6492.81	0.0028	1847212.54	
Taifa	USD	2010	1.0207	256827.8			2.3641	292193.31	1.1377	262156.13	
Taifa	USD	2011	1.0064	351312.5						353549.15	
Taifa	USD	2012					1.3172	331846.69			
UBK	USD	2009	0.548	96248.41	0.82	43505.34	0	0	0	52743.07	
UBK	USD	2010	0.6206	157544.4	0.61	59771.96	0	0	0	97772.39	0.37
Uwezo MFB	USD	2011	0.7985	690627.3	0.25	0	0.2837	112889.43	0.1635	551483.53	
Uwezo MFB	USD	2012	0.7133	943373		0	0.493	258458.54	0.274	672935.8	
VisionFund Kenya	USD	2009	0 2871	1 07F+07	2.48	3431347 87	0.6336	3984143 64	0 374	3058757 17	-0.0941
VisionFund	CDD	2007	0.2071	1.072107	2.40	3431347.07	0.0550	5704145.04	0.574	5050757.17	0.0741
Kenya VisionFund	USD	2010	0.2518	1.08E+07	2.97	3702982.67	0.6636	4197363.86	0.3891	2716856.44	-0.063
Kenya	USD	2011	0.194	7920511	4.15	3062478.81	0.8492	3179998.01	0.4015	1536863.1	-0.0925
VisionFund Kenva	USD	2012					0.6819	3654854.96			
VisionFund	UCD	2012					0.000	2576161.42			
Kenya VisionFund	USD	2013					0.000	35/0101.45			
Kenya	USD	2013	0.2905	1.05E+07	2.44	3216818.23	0.6222	3657791.51	0.3474	3058383.67	-0.0598
YIKE	USD	2010	0.9932	145866.5	0.01			0	0	144875.14	
YIKE	USD	2011	0.9388	72595.77	0.07			2372.57	0.0327	68155.54	-2.4668
YIKE	USD	2012	0.9243	68343.23						63171.28	
Yehu	USD	2012	0.2159	5652596		2440155.92	0.5376	1692882.08	0.2995	1220194.6	