RELATIONSHIP BETWEEN COMMERCIALIZATION AND FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS IN KENYA

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A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF MASTER OF BUSINESS ADMINISTRATION (MBA)

SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

OCTOBER, 2014
DECLARATION

This research project is my original work and has not been submitted for examination at the University of Nairobi or any other University

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This research project has been submitted for examination with my approval as the University Supervisor

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DEDICATION

This Research Project is specially dedicated to my lovely family for their sacrifice, patience and understanding. Best friend, Sarah for support and being there for me throughout the entire Programme, wonderful daughters Joan, Maureen, Sharon and Emily. All of you have been my best cheerleaders.

Special dedication to my mother, who taught me that even the largest task can be accomplished if there is faith and discipline. This laid solid foundation for my present and future.
ACKNOWLEDGEMENT

I thank and honour the Almighty God for His guidance, resources and grace to complete this assignment despite heavy demands on my professional and personal life.

I sincerely wish to thank my Supervisor, Dr. J. Aduda for his steadfast support, positive and insightful contributions and above all patience throughout the entire process. His advice and guidance greatly assisted the completion of this work in innumerable ways.

My appreciation to the staff of School of Business at the University of Nairobi for their cooperation throughout the programme.
ABSTRACT

This Research Project examines the relationship between commercialization and financial performance of Microfinance institutions (MFIs) in Kenya. Recent trends have emerged where MFIs aspire to embrace commercialization for a variety of reasons more so to ensure sustainability and expand their reach. Although sustainability has been viewed as a necessity for the existence of an organization, this may have consequences on the initial purpose of the MFIs. Descriptive survey design was used for this study whose population consisted of all the microfinance institutions operating in Kenya that have already undergone commercialization. Data was analysed through the Statistical Package for Social Sciences (SPSS) and presented using tables and charts for easy understanding and analyses. Performance of an MFI can be gauged from two perspectives; social and financial. The latter indicator being important for commercialized MFI. This study used the analysis of financial ratios to determine the relationship between financial performance of MFIs and commercialization. The analysis revealed that there is significant relationship between commercialization and financial performance. Debt/equity ratio and the size of the firm are the aspects of commercialization. An increase in these variables is an indication of commercialization in the firm. ROE is used as a measure of financial performance. The findings of the study validated a negative relationship between Return on Equity (ROE) and Debt to Equity ratio and dependence on MFI size. This is an indication of existing relationship between commercialization and financial performance.
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<tr>
<td>AMFI</td>
<td>Association of Microfinance Institutions</td>
</tr>
<tr>
<td>CAMEL</td>
<td>Capital Adequacy, Asset Quality, Management Efficiency, Earnings Ability and Liquidity</td>
</tr>
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<td>CBK</td>
<td>Central Bank of Kenya</td>
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<td>CGAP</td>
<td>Consultative Group to Assist the Poor</td>
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<td>CSFI</td>
<td>Centre for the Study of Financial Innovation</td>
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<td>DTM</td>
<td>Deposit Taking Micro Finance Institution</td>
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<td>FSA</td>
<td>Financial Services Associations</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>KWFT</td>
<td>Kenya Women Finance Trust</td>
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<td>MFI</td>
<td>Micro-Finance Institution</td>
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<td>MSE</td>
<td>Micro and Small Enterprises</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>NIM</td>
<td>Net Interest Margin</td>
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<td>ROA</td>
<td>Return on Asset</td>
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<td>ROB</td>
<td>Return on Business</td>
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<td>ROE</td>
<td>Return on Equity</td>
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<td>ROSCA</td>
<td>Rotating Savings and Credit Association</td>
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<td>SACCO</td>
<td>Savings and Credit Co-operative Society</td>
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<tr>
<td>SDI</td>
<td>Subsidy Dependency Index</td>
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<td>USD</td>
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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Microfinance is usually understood to entail the provision of financial services to micro-entrepreneurs and small businesses, which lack access to banking and related services due to the high transaction costs associated with serving these client categories (Stiroh, 2007). The two main mechanisms for the delivery of financial services to such clients are relationship-based banking for individual entrepreneurs and small businesses; and group-based models, where several entrepreneurs come together to apply for loans and other services as a group. The transformation of the concept of Microfinance has been an ongoing process. It used to refer to the simple transfer of funds in the form of microcredit. Traditionally, the idea of microfinance was very standardized – providing people and families in poverty with a credit product (Christen, 2000).

The World Bank defines Microfinance Institutions (MFIs) as institutions that engage in relatively small financial transactions using various methodologies to serve low income households, micro enterprises, small scale farmers, and others who lack access to traditional banking services.

It is the provision of loans and banking services to the low income; small and micro entrepreneurs that help them engage in productive activities, to better organize their financial lives as well as expand their businesses (Chu, 2008). The key objective of MFIs is to provide micro credit and other financial services like savings to the otherwise poor people and help alleviate poverty. Micro Finance has been recognized as one of the most important tools for poverty alleviation (KWFT, 2005).
The Microfinance institution has changed dramatically, offering the poor a vast amount of financial services and products, including consumer loans, savings accounts, time deposits, micro insurance and international money transfers (Stiroh, 2007). According to the Micro Finance Bulletin (2007), some microfinance institutions that have traditionally provided loans to micro entrepreneurs are moving into the consumer, mortgage and low-end commercial loan segments. At the same time, large consumer focused lenders are trying to compete on the microfinance market. Moreover, the private sector is increasingly becoming involved in microfinance. The involvement of traditional commercial banks in microfinance is growing rapidly around the world. In several developing countries, large state banks and private banks have started to provide microfinance services (Shreiner, 2002).

The Microfinance sector is also considered to be heavily dominated by Non-governmental organizations (NGOs), which are recently starting to look more like commercial institutions. Taking into account the great profitability of the sector, it seems that this transformation process has been very successful and has impacted the region in a very positive way. The shift towards commercialization has influenced the industry significantly. However, opinions on this alteration in Microfinance perspective have been divided. There are two opposing views of microfinance that represent different schools of thought- the Welfarists and Institutionalists. Whereas Welfarists are solely centered into the social mission of microfinance, the Institutionalists believe in the creation of institutions being more useful than the actual transfer of funds. They also argue against subsidy funded programs as they believe the money end up assisting non-deserving recipients. Thus poor people need continuous access to credit, not ‘cheap credit’ (Morduch, 2000). Welfarists see the whole commercialization process as driving microfinance institutions away from their mission andcharging competitive interest rates that will diminish demand.
The increased focus on financial sustainability and efficiency by microfinance institutions is due to several developments. Most importantly, a commercialization of microfinance takes place due to increased access to funding from commercial sources and the need for product diversification as argued by Christen et al. (1995). With the transformation, microfinance institutions enhance their ability to provide a wider range of financial services, such as savings funds and insurance services. It has also induced a move from group lending to individual-based lending.

1.1.1 Microfinance Institutions in Kenya

The Kenya Microfinance sector consists of a large number of competing institutions which vary in formality, commercial orientation, professionalism, visibility, size and geographical coverage. These institutions range from informal organizations e.g. rotating savings and credit associations (ROSCAs), financial services associations (FSAs), Savings and credit co-operative societies (SACCOs), NGOs, to commercial banks that are down scaling (Dondo, 2009).

The goal of MFI organizations in Kenya is to raise the levels of income and welfare of people. They support the poor and unemployed by giving them loans often without collateral to establish small businesses. Kenyans today are faced by increased poverty, unemployment and insecurity, food scarcity and rural urban migration among others. MFIs address the above problems by accessing small loans at affordable repayment rates, and other financial services for Micro and Small Enterprises (MSE). These take the form of self-help projects and individual enterprises. Most MFIs lend up to a maximum of Shs. 500,000 and a minimum of Shs. 5,000 per applicant.

The 1999 MSE base line survey found that micro-financing, a core source of funding for micro and small enterprises contributes about 18% of the county's GDP and employs 2.3 million people (The Financial Standard, March 19, 2002). Microfinance provide an enormous potential to
support the economic activities of the poor and thus contribute to poverty alleviation. They are important in promoting development among the poor who may be out for the scope of the traditional (formal) financial sector services.

Many MFIs started as NGOs with funding from foreign donors and agencies. According to Wainana (2002), NGO's in Kenya have been accused of misappropriation of donor funds and questions have been raised as to whether the funds they receive are used for the designated purposes. The issue of ownership of NGOs has raised fundamental concerns for their governance. For instance, if there are no owners or shareholders, then who hold and exercise the supreme authority of the institution to appoint Directors or change the composition of the Board, appoint auditors and satisfy themselves that an appropriate governance structure is in place? (Mwaura & Gatamah 2000). Secondly, if the Board and Management are part owners of the institution, and have to balance the interests of all stakeholders including their own, what would prevent them from maximizing their "joint" interests through empire building, perks, and special benefits at the expense of other stakeholders - given that they are responsible for determining and implementing organization purpose and implied accountable to themselves? (Mwaura & Gatamah, 2000).

Moreover, according to the Association of Microfinance Institutions (AMFI) 2004, for a growing number of microfinance institutions, the source of capital has shifted or is shifting from being donor-dependent to accessing financial markets in increasingly sophisticated ways. The recent entrance of investors who are providing capital for the most advanced microfinance institutions also raises important issues regarding the characteristics and quality of the governing bodies that lead these institutions (Otero, 2004). The growth of Kenya's MFI industry has witnessed at least 100 non-governmental organizations (NGOs) offering services to clients. However, only 15
organizations can be classified as significant players. It has however been recognized widely in Kenya that promotion of the micro and small enterprise sector is a viable and dynamic strategy for achieving national goals, including employment creation, poverty alleviation and balanced development between sectors and sub sectors. All these together are essential for the achievement of the government vision of industrialization by the year 2020 (Mullei & Bokea, 1999).

1.1.2 Commercialization of Microfinance Institutions

Several notions exist about the meaning of the term commercialization of microfinance and no consensus in the field has yet emerged. Microfinance professionals worldwide, however, are increasingly using the term to mean “the application of market-based principles to microfinance” or “the expansion of profit-driven microfinance operations.” (Poyo & Young, 1999).

Looking at microfinance and MFIs on a broad level, sustainability must be a necessary condition if the MFIs and the microfinance field as a whole are to deliver on their purpose: ensuring continued availability of credit for low-income borrowers. Donor funding and capital injection might be necessary in a start-up phase, but if an MFI is dependent on continuous capital injections and subsidized loans, the donors and benefactors can quickly run out of money.

Janus (2009) views sustainability and commercialization as two sides to the same coin – the realization that if the field of microfinance is to expand its scale beyond the supply of capital from non-profit sources, it must begin to tap the capital markets. This can only be done if microfinance works on market terms, and not just as a development project – as such, commercialization is very much related to pricing. Liquidity constraints induced by the worsening financial climate during 2008 and early 2009, as reported by Reille, Kneiding, and
Martinez (2009) and CSFI (2009) might have revealed to MFIs that they cannot afford to be complacent about the availability of funding; to serve their clients during both booms and busts, they must have a buffer and be self-sufficient.

Considering the views above, this study will view commercialization of microfinance as Nimal (2002) views it. He considers it as progress along a process, which is described as follows: (i) Adoption of a for-profit orientation in administration and operation, such as developing diversified, demand-driven financial products and applying cost-recovery interest rates. (ii) Progression toward operational and financial self-sufficiency by increasing cost recovery and cost efficiency, as well as expanding outreach. (iii) Use of market-based sources of funds, for example, loans from commercial banks, mobilization of voluntary savings, or other non-subsidized sources. (iv) Operation as a for-profit, formal financial institution that is subject to prudential regulation and supervision and able to attract equity investment. Thus commercialization of the microfinance industry is considered to be the increased provision of microfinance by MFIs sharing these characteristics.

Progress toward MFI commercialization is usually hastened by a strategic decision of an MFI’s owners/managers to adopt a for-profit orientation in administration accompanied by a business plan to operationalize the strategy to reach full financial self-sufficiency and to increasingly leverage its funds to achieve greater levels of outreach. The recognition that building a sound financial institution is vital to achieving substantial levels of outreach essentially means that MFIs need to charge cost covering interest rates and continually strive for increasing operational efficiency.
1.1.3 Commercialization and Financial Performance

Financial sustainability is expected to enhance further the outreach of MFIs to poor people. In order to expand outreach to the poor, stable and low-cost funds are crucial; therefore, many MFIs have received subsidies from governments or donors to cover their operational expenses. However, subsidies are controversial, with some critics contending that they foster lax management and reduce efficiency, and that they have not promoted the sustainable operations of MFIs. Robinson (2002) points out that MFIs that operate with subsidized loan portfolios cannot achieve a wide outreach for either lending or savings operations because their lending interest rates are too low to cover the costs and risks of larger-scale financial intermediation.

With the commercialization of MFIs, it is assumed that managerial and efficiency problems will be overcome, thereby promoting the large-scale expansion and sustainability of microfinance (Charitonenko & Afwan 2003). The ultimate goal of applying commercial principles to MFIs is for them to become formal financial institutions or banks. Robinson (2002) introduces the Indonesian Bank (BRI) as among the most advanced examples of the microfinance revolution. Revolution in this case refers to the operation of an entire microfinance business without subsidy.

1.2 Research Problem

Most of the estimated 7,000 MFIs have fewer than 3,000 clients and less than a 95% repayment record (Garber, 1997). Many of these organizations have been unable to control administrative costs. For some MFIs, high administrative costs are simply a way of doing business that enables staff members to earn a living through the generosity of NGO subsidies. Job creation in the MFI itself was not the original goal, though for some, job sustainability may have become more
important than minimizing expenses. This is no longer a viable strategy. Competitiveness in the market for funds is prompting a return to the original MFI mission motivated by a need for continuing access to capital.

The commercialization of microfinance is assumed to be a way of overcoming managerial and efficiency problems, and is thought to promote the large-scale expansion and sustainability of microfinance institutions. Once they become commercial banks, are the problems of MFIs such as their shortage of funds resolved? Commercialization in itself does not automatically solve the problem of funding. Commercialized banks face another problem, and that is the difficulty of fund mobilizing (Sunarto, 2007).

Ever since the successful transformation of Bolivian’s Banco Sol from an NGO to a commercial bank in 1992, more than 39 other important NGOs in the world followed suit (Fernando, 2003). This is because Banco Sol could access international capital markets, and gain more profitability than other commercial banks in Bolivia. The same trend has been seen in other parts of the world; Grameen Bank in Bangladesh and Equity in Kenya. These success stories have made the institutions win awards in various global platforms. This has increased interest from many scholars intent on studying this field in various parts of the world.

In Kenya, however, there are very few studies on commercialization of MFIs. Ringera (2003) studied the implications of commercialization of microfinance institutions on their client outreach in Kenya. In her findings, she learned that majority (82%) of MFIs indicated that the important financial objective is operational self-sufficiency, which shows a realization that a commercial approach will allow MFIs greater opportunity and control to fulfill their social objectives of providing the poor with increased access to an array of demand-driven
microfinance products and services. A large proportion (41%) of MFIs offer one product, which is the group lending product, 9% of MFIs offer more than four products while the rest offer between two and four products. This indicates a low level of commercialization in MFIs.

Apart from this, no studies have been carried out on the relationship between commercialization and financial performance of MFIs. This is what this study intends to achieve.

1.3 Research Objectives

The objective of the study is to:

(i) Establish the relationship between commercialization and financial performance of MFIs in Kenya.

1.4 Value of Study

The findings of this study will be important to the following parties:

Academicians / Researchers: Findings from this research will provide the current status of commercialization of microfinance institutions in Kenya. The findings may stimulate other researchers to venture into studying various factors on commercialization of MFIs in the African context and propose mitigating factors.

Micro Finance Institutions: Micro finance Institutions managers and other decision makers will gain an insight into the current commercialization trends in the microfinance sector. Knowledge of the contemporary commercialization and management roles will enable them identify, plan, control and effectively manage the risks and impacts associated with commercialization to enhance their new corporate stature.
**Government:** The government can use the findings to assist in policy formulation and development of a framework to guide MFI’s commercialization targeted at ensuring that they remain relevant in economic development in the country. The study might also help in pointing out areas in which relevant regulatory agencies and government bodies like Central Bank of Kenya (CBK) can develop competencies and capabilities to guide commercialization of MFIs.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

In a very broad sense, microfinance is the provision of financial services to the poor. At first, the aim of microfinance was to provide very small loans (microcredit) to the poor, to help them engage in productive activities or grow their small businesses (microenterprises), which could not have been otherwise financed. However, over time microfinance moved towards a broader range of services including loans, savings, insurance, transfer services and other financial products. MFIs and academics have come to realize that the poor require a variety of financial products, enabling “a world in which as many poor and near-poor households as possible have permanent access to an appropriate range of high quality financial services, including not just credit but also savings, insurance, and fund transfers” (Christen, Rosenberg & Jayadeva, 2004).

In the course of the past two decades, microfinance has started to become more commercial thereby accelerating the commercialization process. Commercial banks and international private and institutional investors have been playing an increasing role in funding of microfinance institutions. Even pension funds are willing to invest in microfinance. To some extent, the trend of increasing private and institutional investors interest for microfinance can be explained by the growing pressure for socially responsible investment. However, microfinance may also provide attractive opportunities for portfolio diversification since the risk-adjusted returns exhibit low correlations with other assets (Krauss & Walter, 2008). In addition, Ahlin and Lin (2006) and Gonzalez (2007) show that microfinance portfolios have high resilience to economic shocks. This high resilience may be due to the fact that many clients of MFIs are part of the informal
economy, which is less sensitive to macro-economic business cycles. Therefore, investing in microfinance could provide diversification benefits.

2.2 Review of Theories

The theories reviewed in this study are related to the subject of MFIs and commercialization. The section will review the concept of microfinance and poverty alleviation and financial performance measures.

2.2.1 The Concept of Microfinance and Poverty Alleviation

Microfinance has become established as a primary policy for combating poverty in developing countries. The rapid development of microfinance has benefited many poor people, through provision of low interest rates small loans, on. The high repayment levels, compared to those on commercial banks’ loans, has changed views on the viability of lending to the poor.

The figure below illustrates a basic concave production function.

Figure 1: Production Function

Source: Morduch and Armendariz (2010)
It can be observed that small capital inputs at low levels of production generate high returns on the margin. However, there are barriers to entry – start-up costs – and the poor usually hold few if any collateralizable assets and little savings. Without the means to achieve an initial level of scale in a small enterprise, the extreme poor are arguably unable to lift themselves out of poverty. For example, although a potential entrepreneur might be able to cover the cost of a dairy cow after one month of selling its milk, a minimum level of start-up capital: the cost of the cow, is needed to exploit the market opportunity. Channelling small amounts of financial capital into poor markets to overcome these barriers should thus result in welfare gains for both borrowers and lenders as latent productive potential can be unlocked.

However, the market for credit in developing countries is inherently one of asymmetric information. In the absence of a screening mechanism such as a credit bureau, lenders have little means of predicting the risk level of a given borrower. Because borrowers often have minimal assets to offer as physical collateral, lending is extremely risky. Small loans to the rural poor also carry a steep transaction cost, and formal creditors are unlikely to take large risks for small returns. These market imperfections produce a void: a missing market for formal credit, which is traditionally filled by the two alternatives mentioned above: informal money-lenders and government-subsidized lending programs.

2.2.2 Informal Money-Lenders

Informal money-lending can be broadly categorized into two types: informal non-commercial and informal commercial (Bell, 1989). The former refers to loans made between friends and family, the later to the infamous moneylenders. Although both play central roles in the rural financial landscape, informal commercial loans come at a high cost. Interest rates can top 10
percent per day, and lenders are notorious for employing ruthless tactics to enforce repayment (Davis, 2005).

2.2.3 Public-Sector Formal Credit

Empirical analyses of borrower welfare in the market for high interest loans are relatively few, but some argue that formalizing credit – even at the market rate – could improve welfare outcomes (CGAP, 2009; Karlan&Zinman, 2009).

Formalizing credit through public works projects, however, introduces a fresh set of potential complications. Though some studies support the idea that state-funded credit programs can have positive effects on welfare (Burgess & Pande, 2005); a body of empirical work suggests that in the absence of private market forces like interest rates and competitive incentives, credit rationing mechanisms break down and capital does not owe to its most productive purposes (Kane, 1977; Zeller, 2002; Laeven, 2004).

An ideal scheme would combine the advantages of informal money-lending – the efficiency gains produced through utilizing the private market – with those of a state-run program which are secure deal making and more affordable rates. In theory, microfinance does just this be leveraging what the poor possess perhaps most richly: social solidarity.

2.2.3.1 Group Lending

A hallmark of the microfinance movement is its creatively designed lending model: the joint liability group loan. In theory, several simple mechanisms underlie even the most diverse group lending models: peer group selection (Ghatak, 1999; Armendariz & Gollier, 1997), joint liability and monitoring (Stiglitz, 1990; Besley&Coate, 1995; Varian, 1990; and Mordoch, 1999), and

In short, holding groups jointly liable for repayment induces borrowers to select themselves into groups of similar risk level and hold each other accountable. This diminishes adverse selection. The ongoing promise of future loans provides a further incentive for borrowers to repay on time, thus also mitigating moral hazard. How these mechanisms combine formally to explain the success of early microfinance programs is outlined by Mordorch (1999).

2.2.3.2 Peer Selection

The socially optimal equilibrium results if both types of borrowers enter the market, but safe types pay less for credit than risky types. To achieve this, lenders must be able to charge different effective prices to different types of borrowers. Armendariz and Gollier (1997) argues that by appropriately pricing how much a borrower must pay if successful and in the event that their partners fail, an MFI can price discriminate between types. In theory, since borrowers have knowledge of each other’s relative risk levels, the only equilibrium is one in which borrowers select themselves into groups of similar risk-type.

2.2.3.3 Joint Liability

Borrowers voluntarily form groups. For simplicity, limit the group size to two. Assume the partners go about their productive activities independently. Besley and Coate (1995) points out that borrowers have perfect knowledge about the risk level of their partner, and choose carefully as they will be held jointly liable for repayment of the loan. We assume that borrowers are the poorest of the poor – in the event of failure, they have no assets to sell to finance loan repayment. In most contracts, borrowers are held responsible for covering costs for defaulted partners. Consider a contract where, in lieu of a traditional fixed interest rate, a successful borrower pays
and the partner of an unsuccessful borrower pays a joint-liability payment. Borrowers themselves pay nothing if they fail (Stiglitz, 1990).

The group-lending scheme thus induces borrowers with perfect information about each other’s risk level to select themselves into homogenous groups. Assortative matching enables lenders to effectively price discriminate between types even though all groups face the same contractual terms. With this lending scheme, safe types can profitably to enter the credit market. The problem of adverse selection is thus solved: both borrowers and lenders can profitably engage in the credit market (Varian, 1990).

Peer selection and group homogeneity thus generate an efficient equilibrium extant. But what about moral hazard? As it turns out, this potential danger is also mitigated by characteristics of the group loan.

2.2.3.4 Peer Monitoring

In theory, after receiving a loan borrowers are faced with a choice: they can either invest in a safe activity with a certain payout, or chance a more risky venture with potentially higher returns. Borrowers have expected utility depending on whether they do the safe or risky activity, and when ventures fail. Monitoring the activities of borrowers is costly, and although lenders prefer borrowers to select the safe activity there is no mechanism to enforce this preference once the loan is disbursed.

If it is realized that borrowers are taking risky actions, the lender will raise interest rates, whereafter borrowers have lower expected utility. Since borrowers cannot credibly commit to taking the safe action, lenders will always charge the higher interest rate.
Group lending, however, gives borrowers the incentive to choose the safe activity. If the joint-liability payment, is set high enough, borrowers always prefer the safer activity. Since lenders know that borrowers are always better off with the safe choice, they can afford to offer lower rates (Mordorch, 1999).

Peer monitoring thus enables lenders to price discriminate and offer safe types lower rates than the risky types.

2.2.3.5 Dynamic Incentives

Since the lending relationship is not a finite game, borrowers have an incentive to uphold the favor of their fellow group members in order to receive loans later on. Many MFIs also maintain a "progressive lending" scheme where in good behaviour in early stages of the game gives borrowers access to increasingly large loans down the road. Hence borrowers who value the continued favour of their group partners and access to MFI credit in the future will take responsible business actions and repay their loans on time.

These four mechanisms: peer selection, joint-liability, group monitoring, and dynamic incentives thus explain the success of the microfinance model in lending to the poor in markets with asymmetric information.

2.2.4 Financial Systems Model

The objective of financial systems approach is to achieve maximum outreach for MFIs services through a sustainable institution that focus on a financial intermediation model (Rosenberg, 2003). Therefore, MFIs provide finance to the public or serve only their members such as village banks. The loan portfolio may be financed through deposit savings, commercial debt or retained earnings. These MFIs are differentiated from informal money lenders like unregulated
institutions such as NGOs and from subsidized formal micro credit regulated institutions such as state-owned bank channels government or donor funds to borrowers at subsidized interest rates (Rosenberg, 2003)

Those who support the financial system believes that, both the government and donors need to shift the allocation of their scarce resources to promoting the replication of this model as opposed to direct financing of loan portfolios. This model however poses a challenge in terms of the approach which relies on market approach that may be thin and weak in marginal areas (Rutherford, 2000). Bogan, et al., (2007) however, argued that, even in these areas, market solutions can be found to overcome any obstacles,

2.3 Commercialization Process

Commercialization is characterized, according to Christen (2001), by profitability, competition, and regulation, but at the same time large differences in loan size are observed between regulated and unregulated institutions. In 2001, Christen inventoried 205 MFIs in Latin America, where seventy-seven MFIs (37.6%) were regulated and accounted for 73.9% of a US$ 877 million portfolio. While unregulated MFIs recorded an average outstanding loan size of US$ 322 in 1999, regulated institutions recorded US$ 803, which is 2.5 times larger. Assessed in terms of relative wealth, the average outstanding loan size for unregulated MFIs represented 24% of GNP per capita in 1999, while for regulated MFIs this percentage was 49%.

2.3.1 Progress of Microfinance towards Commercialization

The strong financial performance of larger MFIs in Latin America is linked with a trend toward commercialization of microfinance in the region. In 1992, Banco Sol became the first regulated microfinance bank by transforming from an NGO to a commercial bank. Banco Sol surpassed
other Bolivian banks in profitability and became the first MFI to access international capital markets. Following this successful example, at least 39 other important NGOs worldwide transformed into commercial banks over the period 1992-2003 (Fernando, 2003). But, the transformation is not so simple. It is a sequential process as figured out below:

Figure 2: MFI Commercialization Process

![Diagram of MFI Commercialization Process]

Source: Janus (2009)

Commercialization of microfinance is a relatively new consideration in Kenya. The term commercialization carries with it a negative connotation among many domestic microfinance stakeholders who equate commercialization with exploitation of the poor. Microfinance professionals worldwide, however, are increasingly using the term to include “the application of market-based principles to microfinance,” with the realization that only through achievements in sustainability can MFIs achieve levels of outreach commensurate with demand. There is a growing realization that commercialization allows MFIs greater opportunity to fulfil their social objectives of providing the poor with increased access to an array of demand driven microfinance products and services, including not only credit but also savings, insurance, payments, and money transfers (Nikhil, 2009). In Kenya, we have already witnessed that some banks are offering collateral free loan to SMEs. Thus indicating that the process of commercialization is on
the way. Level of outreach will be increased for the small businessmen once this become a competition in formal and regulated financial sector.

Nikhil (2009) argues that the first evidence of commercialization of microfinance is reflected in strong financial performance. Second, once microfinance institutions are committed to managing business on a commercial basis, competition quickly becomes a hallmark of the environment in which they operate. The very profits created by pioneering NGOs generate a demonstration effect, attracting others to follow suit and offer similar services. This, in turn, forces microfinance institutions to begin to make changes in product design, pricing, delivery mechanisms, or other basic features of classic businesses to preserve or increase their market share. Third, reaching sustainability is a precondition for obtaining a license, so it can be assumed that licensed, regulated microfinance institutions have already adopted a commercial approach. Regulated microfinance institutions are far more sustainable than unregulated microfinance institutions, although many of them started out as unregulated or specially licensed organizations clearly rooted in the non-profit sector.

2.3.2 Principles of Commercialization

The array of factors inhibiting the commercialization of microfinance implies specific roles for major stakeholders such as the government, funding agencies, MFIs themselves, and microfinance support institutions.

The commercialization of an MFI may lead to a more viable organization, ruled by legislations and put under the pressure of competition; thus, the commercial approach is based on three key principles: Viability, Competition and Regulation. (Christen, 2001).
2.3.2.1 Viability

The transformation of an NGO into a commercial entity requires the financial autonomy. Hatarska (2005) and Mersland and Ström (2009) argue that the viability of the MFIs leads to mission drift. The method of group loans, adapted to the poor’s needs, becomes a heavy burden on rich clients who are capable of investing in big businesses. They argue that after commercialization, the MFIs tend to put focus on profits at the expense of the outreach of poor clients under the argument that high profits result in a higher outreach.

Christen, (2001) finds that in Latin America, the MFIs which adopted a commercial approach showed a high profitability which could even exceed that of the commercial banks. On another hand, Ly (2012) finds that for certain NGOs, their transformation into a commercial entity is considered as the only way to attain self-sufficiency and profitability. However, it shows that as the NGOs are engaged in commercial businesses, they must show that the conflicts with the primary social objectives are reduced to the least to ensure that the support of the funders and the tax exemptions remains justified.

2.3.2.2 Competition

In several studies, the impact of competition on the social outreach is ambiguous. In one study supported by Motta (2004) and Cull and al (2009), stipulates that the competitive environment is favourable for the development of the sector of microfinance and the inclusion of the poor particularly of the women. They argue that competition may prompt the MFIs to reduce the costs and enhance the efficiency of their transactions through improving the quality of their services in order to guarantee the loyalty of their clients.

The second point of view foresees that if the increasing competition is associated with successive failures, the MFIs prefer to be engaged in more cautious credits intended for borrowers that are
considered as more secure and profitable. This may decrease the outreach given that the loans
granted to unexploited markets are generally seen as more risked and costly (Olivares-Polanco,

Christen (2011), as well, foresees that the structural changes that take place due to the
transformation of the MFIs in order to increase their shares of the market, can be at the origin of
a mission drift due to the over debts of the clients which may lead to the degradation of the
stakeholders’ portfolio present on the market. He argues that in a normal market, an organization
usually respond to competitive pressures by offering new and better products at more
competitive prices and by improving productivity. As microfinance institutions increasingly find
themselves operating in markets where competition abounds, they closely resemble such an
organization.

2.3.2.3 Regulation

The commercialization of microfinance gives a big deal of importance to the regulation of the
MFIs. In most cases, MFIs provide their services to less than 5% of their potential clients due to
the insufficient resources. Several MFIs wish to develop their activities by calling for
commercial sources of financing, particularly deposit mobilization, the access to external sources
of financing and so the enhancement of their financial results which makes the resort to the
regulation a necessity (CGAP, 1996).

Christen (2001) found important differences in loans size between regulated and unregulated
MFIs, with a big deal of importance in loans size given to regulated ones.

Furthermore, Cull and al (2009) show that the regulation exhibits a negative impact on the
outreach. Merslan and Strôm (2009), as well, show that the regulation gives the right to mobilize
the savings and so give access to important source of financing. Consequently, this, not only,
gives the possibility to increase the number of clients, but also, the average loan size, which is originally similar to a social mission drift. However, Murdoch (1999) and Arun and al (2005) foresees that the regulation of microfinance provides a favourable environment for the improvement of the outreach.

The impact of the regulation is, then, difficult to foresee because a more strict regulation may imply less free actions and consequently smaller benefits. On another hand, the regulation can guarantee to clients an equitable behaviour. This may lead to a better financial performance.

2.3.3 Financial Performance of MFIs

Performance of an MFI can be gauged from two perspectives; social and financial. The latter indicator being important for commercialized MFI. There is currently no widely accepted measure for assessing the social performance of MFIs, outreach always being defined in terms of several indicators, like the percentages of female and rural clients or the average loan size (Schreiner, 2002). Very few attempts have been made to aggregate those numerous indicators into one single measure, although it would be useful since it would give a straight and accurate view of the outreach. Zeller et al. (2003) provide some hints for building such a measure, either by assigning arbitrary weights to each of the indicators, or by deriving the weights through principal components analysis.

Several financial ratios are available for assessing the financial performance of MFI for each of the critical domains including profitability, efficiency leverage and risk. (CGAP 2003). The selection of these indicators is based on their wide usage and frequency of data available from the MIX market. Return of Assets (ROA) falls within the domain of profitability measures and tracks MFIs ability to generate income based on its assets. The ratio transcends the core activity of MFIs which is the provision of loans and excludes non-operating income and donations.
Apart from tracking income from all operating activities it also assess profitability regardless of the MFIs funding structure. The debt to equity attempts to track MFIs’ leverage. It provides information on the capital adequacy of MFIs and assess their susceptibility to crisis and helps to predict probability of an MFI honouring its debt obligation.

Return on Equity (ROE) is a percentage (%) ratio which provides information on how much net income was earned on the equity of a Microfinance Institution (MFI). In other words, ROE reflects how much the MFI has earned on the funds invested by the shareholders/donors. This ratio is obviously of interest to present or prospective shareholders (and donors), and is also of concern to management, because this measure is viewed as an important indicator of shareholder value creation by providing the management and investors with the rate of return earned on the invested equity. It differs from the Return on Assets ratio in that, it measures the return on funds that are owned by the MFI (rather than total assets, which by definition includes both liabilities and equity).

It can also be argued that RoE indicates the profitability of the institution. This is particularly relevant for a private, 'for-profit' MFI, as it indicates the return on their investment in the institution. However, given that most MFIs are 'not-for-profit organisations, the RoE measure is most often used as a proxy for commercial viability.

These ratios will be important in determining the relationship between financial performance of MFI and commercialization.
2.3.4 Challenges and Implications of Microfinance Commercialization

Several challenges to microfinance commercialization exist at institutional (micro) and operational environment (macro) levels with both positive and negative implications. Proper care is the precondition to reap the maximum benefit out of it.

Most of the microfinance challenges come from the strong acceptability of NGOs by the target group. People have wrong perception that NGOs are working for poverty alleviation but other financial institutions are working to make profit that must not go with poverty alleviation. Even when the NGOs want to transform, they may not succeed as they do not have the required institutional capability in terms of skilled manpower, infrastructure, cost structure etc. Many MFIs have no clear vision about what to achieve. This is due to the fact that over the decades they are running their poverty alleviation programs whose results are not satisfactory (Ditcher, 1996).

Some studies have argued that with commercialization, there is the risk of the exclusion of the poor from the MFIs which is similar to the problem of the mission drift from poverty alleviation. Mersland and Strom (2009) indicated that the MFIs changed their targeted clientele by presenting their services to a richer segment capable of taking bigger loans and yet reducing the risk of no-refund.

The legal and regulatory environment must be supportive and conducive with a clear vision of the respective authorities. A true commercialization should have the motive to reduce the demand of soft or subsidized or donated loans that will ultimately reduce the donor dependency and lead to financial and economic sustainability (Cull, 2009).
Critics of regulated microfinance institutions argue that the regulatory framework is a hindrance to its development goals because increased resources go towards adding and training staff, there is decreased flexibility when dealing with clients, and there is an increased workload for staff because of the paperwork and requirements involved with reporting to the regulatory authorities. Although regulations do provide a level of bureaucracy that translates into more work for the microfinance institution, there are benefits to the formalities. Regulatory supervision of financial institutions improves the credibility of the institution by ensuring that risk is minimized and failing institutions are improved or closed. Regulations also protect borrowers from unethical lending and collection practices, protect depositors from losses, and provide transparency to borrowers about the costs associated with loans (Kelly & Sahra, 2002).

Commercialization has a lot of positive and negative implications. Critics of commercialization believe that it leads to ‘mission drift’ by giving less focus on the poorest of the poor. Thus many poor households would remain unserved who are presently under the net of micro credit. Focus may also be lessening from women folk who have a great contribution towards family income. Commercialization may also increase the loan sizes by reducing the number of clients to ensure more control and reduce transaction and recovery costs. The rate of interest may rise due to the fact that the invested funds will have costs that will be recovered by charging the loan receiver only. These are the negative perceptions of potential users against commercialization though most of the problems can easily be solved by a proper system.

2.4 Review of Empirical Studies

The number of MFIs and the number of clients served worldwide is increasing rapidly. Now, more than 10,000 MFIs in more than 85 countries, serve over 100 million micro entrepreneurs.
The increase in the number of MFIs and respective clients calls for additional funding. Driven by increasing access to commercial funding sources, the volume of microfinance loans has risen sharply in recent years, from an estimated USD 4 billion in 2001 to approximately USD 25 billion in 2006. Still, only a fraction of today’s potential borrowers’ demand is met, while the microfinance sector still faces a USD 250 billion funding gap (Dieckmann, 2007). This means a significant investment opportunity for capital markets. The current trends in microfinance will lead to a more financially and efficiency-driven microfinance environment, where many MFIs tend to transform themselves from mission-driven, often inefficient NGOs, into regulated financial institutions funded by private capital.

According to Dieckmann (2007), MFIs can be distinguished into four classes according to the degree of commercialization. Tier 1 MFIs are the top 150 largest MFIs who are mature and well-known, mostly regulated and financially sustainable. Tier 2 MFIs are smaller and less well-known MFIs, which are nearly profitable. The majority are candidates for institutional conversion to microfinance banks (about 8 percent of MFIs). Tier 3 MFIs are mostly NGO’s, which are approaching profitability (about 20 percent of MFIs). Tier 4 MFIs are start-up MFIs, which are mostly unprofitable (about 70 percent of MFIs). Although the most MFIs are still in tier 4 and show little perspective for private investors, the top tier is most important regarding the size of loan portfolios and the degree of outreach. The 100 largest MFIs experience a growth rate of their client base of 26 percent per year (Reddy, 2007), and in 2006 there were already about 30 MFIs with a loan portfolio in excess of USD 100 million.

The commercialization of microfinance is reflected in strong financial performance. Christen (2000) shows that in a competitive environment in Latin America, MFIs are more profitable than their peers from other non-commercial regions, and in addition, are even more profitable than
commercial banks in their own region. Littlefield and Holtman (2005) find that worldwide, the top MFIs are nearly twice as profitable as the leading commercial banks in their local environment. In addition, studies have indicated that MFIs show low default rates, which tend to fall between 1% and 3% (Easton, 2005; Kraus and Walter 2008). In combination with impressive growth rates and strong returns, MFIs are potentially attracting interest from foreign investors.

While domestic savings are still the main funding source for MFIs, representing 41 percent of all assets in 2005 (Sengupta and Aubuchon, 2008), many MFIs turn to international capital markets as financing alternative. As Swanson (2007) points out, most of the MFIs are not deposit-taking institutions, and are unlikely to become so, given the cost and complexity of regulations typically applied to deposit-taking institutions. Consequently, future MFI funding is unlikely to be obtained by means of deposit-taking. It is also not assumed that other domestic sources in emerging countries will generate more than a fraction of the enormous potential capital demand. This is because capital markets in developing countries are thin and the key institutional investors are averse to or legally constrained from significant investment in microfinance.

The longer maturity of international capital financing will strengthen the financial structure of MFIs, and will make them less exposed to external factors such as bank runs, currency risks, and macroeconomic crises. Especially the top tier MFIs are increasingly attracting the interest of foreign investors, as these MFIs are usually profitable, have a more experienced management, and are considered to most effectively absorb the commercial funding.

Before the commercialization of the microfinance business, many MFIs were operating as monopolists (CGAP, 2001; McIntosh et al. 2005). In the literature on competition, monopolistic market power has been associated with allocative and technical inefficiencies, leading to welfare
losses. Moreover, it does not provide incentives to invest in efficient technology and introduce new products. In contrast, increased competition among MFIs may contribute to well-functioning markets, protection of consumers, promotion of allocative and technical efficiency, and the provision of incentives to develop new products (Motta, 2004).

Yet, in the presence of increased competition MFIs may be forced to search for new clientele and/or sustain or increase market shares. At the same time, the increased focus on cost efficiency may reduce efforts to monitor and screen new clients. This may result in reducing the quality of their loan portfolio as they increasingly approve loans to riskier borrowers (Vogelgesang, 2003). Consequently, repayment rates may fall, which ultimately adversely affects efficiency levels. Moreover, increased competition makes it easier for borrowers to take up multiple loans from different MFIs, leading to increasing levels of indebtedness and repayment problems. The phenomenon of clients taking multiple loans due to increased competition has been described in the literature by, among others, Vogelgesang (2003) and McIntosh et al. (2005a and 2005b). Again, reduced repayment rates lead to decreased financial performance, having adverse consequences for the efficiency of MFIs. The pressure on reducing costs may also lead to a reduced focus on outreach, since providing small loans to poorer clients is generally more expensive than providing loans to better off clients.

As the above discussion makes clear, in theory the impact of competition on the social and financial performance of MFIs may be either positive or negative. As the outcome is not clear, this calls for an empirical investigation. Surprisingly, however, only very few studies have examined the impact of competition on the performance of MFIs. Some of them are descriptive, some use more thorough econometric techniques; some look at impact directly, some take an indirect approach; some studies use country or region-specific data, some use multi-country data;
most studies look at one aspect of performance, only few take a broader perspective; and they all use different (and sometimes rather ad hoc) measures of competition.

Cull et al. (2009a) merely describe competition in the Latin American microfinance market where the commercial approach to microfinance proceeded swiftly during the past decade. The paper characterizes the market as witnessing rising competition, leading to market saturation in some countries. Olivares-Polanco (2005), using anecdotal and descriptive evidence from CGAP (2001), investigates the effect of competition in the microfinance business. Olivares-Polanco uses a concentration index, measured as the market share held by the four largest MFIs in a country. Higher concentration is considered to be associated with a lower competitive environment. The analysis mainly focuses on outreach (measured by average loan size) and finds that increased competition results in lower outreach.

Hermes et al. (2009) analyze the impact of formal financial development on microfinance efficiency using data for 435 MFIs over the period 1997-2007. They argue that in a more developed formal financial environment efficiency of MFIs improves due to competitive pressure. At the same time, cost reductions reduce the outreach of MFIs. In their analysis, Hermes et al. use various standard measures of financial development, such as the liquid liabilities to GDP ratio, the interest rate margin and the private credit to GDP ratio. The empirical analysis in the paper provides support for both these effects.

In a related paper, Cull et al. (2009b) investigate the performance of MFIs under the pressure of competition from formal banks, measuring competitive pressure by using bank penetration variables such as the number of bank branches per capita and per square kilometre. The dataset they use consists of 342 MFIs located in 38 developing countries. Their results show that MFIs
faced with high competition tend to reduce the breadth of outreach but will focus more on the depth of outreach, i.e., more loans to women borrowers and smaller loans. However, the effect on other performance indicators, such as profitability, appears to be weak. Both Hermes et al. (2009) and Cull et al. (2009b) use country-level measures of competition, rather than measures reflecting competition at the institutional level.

2.5 Conclusion

It is argued that micro credit programs have a strongly positive relationship with poverty alleviation. But, the only requirement is that the loan giving authorities really mean it which is not a simple task due to poverty in many prevailing aspects of life. The geographical location of the poorest and the broader environment in which they operate also make it more difficult to serve them. For example, while the poorest can be found in urban areas, most of the poorest in Asia are concentrated in rural areas where basic physical infrastructure is highly inadequate (Haan and Michael, 1998). The bulk of the poorest in India are in such states as Bihar (including Jharkhand), Uttar Pradesh (including Uttaranchal) and Madhya Pradesh (including Chatisgarh) (Mehta and Amita, 2003). These states have seen relatively very little institutional micro finance. The poor are scattered throughout the remote geographical area where the outreach is so difficult and due to the rapidly increasing number of borrowers, a matured institutional set up is required. So, micro finance is required to be commercialized. Application of commercial principles in micro finance becomes a time demanding issue in addition to the increase in failure rate of MFIs. Micro-businesses (defined as those employing less than five people) have a high failure rate and are considered high-risk investments (Dahn, 1992). Micro-business borrowers seek to borrow
sums that, because of their small, often non-standard, character, incur disproportionately high transaction costs (Dahn, 1992). Micro finance facility may suit them in such a situation.

Finally, if the group (target market, loan receivers) is identified rightly, if commercial principles can be applied equitably and if the poor are rightly and timely focused, micro finance may work as a strong and timely intervention against poverty that no laboratory can test and prove. It may work as a cause of smile for a vast majority poor people who suffer from acute poverty level in terms of hunger, illiteracy, ignorance, slavery, insecurity and such other in humanitarian condition. And if commercialized properly, small business entrepreneurs may accrue extra benefits form the process.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

A research design provides a framework for the collection and analysis of data where a research method is the technique for collecting data (Bryman & Bell, 2009). This chapter describes the design and methodologies which were used in the research to determine the relationship between commercialization and financial performance of microfinance institutions in Kenya. They are discussed under the following subsections: Research Design, Target Population, Sampling Technique, Data Collection Instruments and Data Presentation and Analysis.

3.2 Research Design

The study will cover microfinance institutions excluding any other finance agency or Bank in Kenya. The fieldwork for this research will be based on a descriptive survey which aims at establishing the relationship between commercialization and financial performance of microfinance institutions in Kenya. This calls for a combination of quantitative and qualitative methods of doing research, which have been practiced, as recommended by management studies in the developing countries. According to Cooper and Schindler (2009), a descriptive study is concerned with finding out who, what, where and how of a phenomenon. This is a useful approach to establish the credibility of qualitative research noting that, 'mixing a qualitative method and a quantitative method to give the researcher the potential to cover each method's weaknesses with strength from the other method. The design has in the past been successfully used by Njoroge and Mazrui (2008).
3.3 Target Population

The population of interest in this study is all the micro finance institutions operating in Kenya that have already undergone commercialization. There are 39 Micro finance Institutions in according to the Central Bank of Kenya, (2013), retrieved from (www.centralbank.go.ke). See Appendix 1 attached. Only 9 have been licensed by the CBK to operate as Deposit Taking MFIs

3.4 Sampling procedures

The study will be a census of the commercialized Micro-Finance Institutions which are licensed as Deposit Taking MFIs by the Central Bank of Kenya. These are regulated by the Microfinance Act in their operations enabling them to mobilize savings from the general public in order to promote competition, efficiency and access. Currently out of 39 members of the Association of Microfinance Institutions (AMFI), only 9 MFIs are licensed to operate as DTMs according to the list provided by the CBK (Appendix 2). This is about 23% of the licensed MFIs in Kenya. The data will be collected for the last 5 years a period in which commercialization has gained ground from 2009.

3.5 Data Collection

The study will utilize secondary sources of data for the analysis. The sources to be used will be annual data on MFI’s for the period 2009 to 2012, and is publicly available from MixMarket (www.mixmarket.org). The MixMarket is a global, web-based, microfinance information platform, which seeks to develop a transparent information market to link MFIs worldwide with investors and Donors and promote greater investment and information flows. Secondary data will be obtained from official statistical publications from MFIs, Statistical Abstracts and the Central Bank of Kenya.
### 3.6 Data Analysis

A multiple linear regression model and t-statistic will be used to determine the relative importance (sensitivity) of each explanatory variable in affecting the performance of the MFIs.

This study considers Nimal (2002)’s view of commercialization of MFIs. This implies the use of market principles on MFIs. It will therefore use other commercial performance measures. The major dependent financial performance indicators used in commercial institutions are Return on Asset (ROA), Return on Equity (ROE) and Net Interest Margin (NIM). The CBK uses CAMEL ratios to evaluate the performances of commercial banks (Olweny and Shipho, 2011). This study will adopt only one of the standards to measure financial performance, ROE: computed as percentage of net income in terms of total equity.

Commercialization of an MFI means an alteration to the capital structure of the MFI. There is no fixed way to measure the capital structure of a firm but its measurement is based on various methods like short term liability to total assets, long term liability to total assets and total debt to total assets (Abor, 2005, 2007). This study will take total debt to total assets as a proxy for capital structure of a firm, and a measure of commercialization.

#### 3.6.1 Specific Model

In this study, ordinary regression equation is employed to measure the relationship between commercialization and financial performance of an MFI. Regression analysis will be done using SPSS software program to estimate the equation.

The specific model to be used was used by Raheel et al. (2013) in their study of the effect of financial structure on financial performance of Pakistani firms. The model is:
ROE_{i,t} = \alpha + \beta(D / E Ratio)_{i,t} + \Theta(Ln Total Asset)_{i,t} + e_{i,t}

Where:

D / E Ratio = Debt to Equity Ratio

ROE = Return on Equity

Ln Total Asset = Size of firm

e_{i,t} = The error term

There was need to test the existence of a relationship between commercialization and financial performance of MFIs. This was achieved by testing the formulated hypotheses below:

H_0: There is no significant relationship between commercialization and financial performance of MFIs.

H_1: There is significant relationship between commercialization and financial performance of MFIs.

3.7 Data Validity and Reliability

Validity refers to the extent to which the research measures what it is supposed to measure. According to the Berg & Gall (1989), validity is the degree by which the sample of test items represents the content the test is designed to measure.

Findings can be said to be internally invalid because they may have been affected by factors other than those thought to have caused them, or because the interpretation of the data by the researcher is not clearly supportable (Seliger & Shohamy 1989). Findings can be said to be
externally invalid because they cannot be extended or applied to contexts outside those in which the research took place (Seliger & Shohamy 1989).

Charles (1995) adheres to the notions that consistency with which questionnaire [test] items are answered or individual’s scores remain relatively the same can be determined through the test-retest method at two different times. This attribute of the instrument is actually referred to as stability. If we are dealing with a stable measure, then the results should be similar. A high degree of stability indicates a high degree of validity and reliability, which means the results are repeatable.

To ensure validity and reliability in qualitative research, examination of trustworthiness is crucial. Seale (1999), while establishing good quality studies through reliability and validity in qualitative research, states that the “trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability” (p. 266). When judging (testing) qualitative work, Strauss and Corbin (1990) suggest that the "usual canons of ‘good science’…require redefinition in order to fit the realities of qualitative research" (p. 250).
CHAPTER FOUR
FINDINGS AND ANALYSIS

4.1 Introduction

This chapter analyses the findings of the study and aims at interpreting them to meet the objective outlined in the first chapter of the study. This section shows how data was collected, analyzed and then discussed.

4.2 Data Presentation

The dataset used in this paper contains annual data on MFI’s for the period 2009 to 2012, and is publicly available from MixMarket (www.mixmarket.org). Participation of MFIs in the MIX database is voluntarily, but data submission is closely monitored. MFIs have to enclose substantiating documentation, such as audited financial statements and annual reports, which help external analysts and researchers to understand their operations. As reported in Gonzalez (2007), MFIs should have the availability of adequate information systems, which is driven by the potential exposure to investors and donors looking for MFI investment opportunities. Therefore, the Mix database can be viewed as a random sample of the best MFIs in the world. Consequently, the dataset should present the potential investment environment for microfinance investors looking for diversification benefits.

Data used in this study were sourced from MixMarket. The data was selected using the following criteria. First, the MFI must be operational in Kenya for more than the last seven years. Secondly, the MFI must have data available for all the years under study.
Out of 48 Institutions listed on MixMarket, 7 institutions met the above criteria and were therefore used in the study. These institutions include: BIMAS, Equity Bank, Faulu Bank, K-Rep, KWFT, Opportunity Kenya, SMEP.

4.2.1 Descriptive Statistics

Table 4.1: Variables’ mean values

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>In (assets)</th>
<th>Debt to equity ratio</th>
<th>Return on equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>22.0172</td>
<td>2.4829</td>
<td>0.2130</td>
</tr>
<tr>
<td>2010</td>
<td>22.1660</td>
<td>3.1786</td>
<td>0.1814</td>
</tr>
<tr>
<td>2011</td>
<td>22.3587</td>
<td>5.5002</td>
<td>-0.0036</td>
</tr>
<tr>
<td>2012</td>
<td>22.5385</td>
<td>5.2758</td>
<td>0.0934</td>
</tr>
</tbody>
</table>

Table 4.1 above shows the average values to each of the variables used in the study. It shows general growth in each of the variables through the years under study. This shows growing profitability among the MFIs. However, it is imperative to note that the overall negative performance of ROA variable in the years 2009-2012 is an indication of inefficiency in the MFIs’ management, which changes positively in 2012.

The average debt equity ratio has also upwardly across the years under study. This is depicted by figure 4.2 below. The trendline indicates an approximated growth rate of 1.07. This is an indication of MFIs becoming more aggressive and increasing the use of debt financing through the years under study.
Fig 4.2 Average debt to equity ratio

When we take a look at the average size of assets, there is a similar observation of growth in the size of the MFIs through the years. Figure 4.3 below depicts this observation with the trendline indicating an approximated average growth rate of 1.07. This is an indication of overall growth of the resources employed by MFIs under study.

Fig. 4.3: Mean ln(assets)
Return on equity shows a reverse overall growth over the years under study as depicted in fig 4.4 below. The average ROE of all the MFIs under study keeps declining each year at a general rate of -0.0544, with the lowest returns being observed in the year 2011 at 0.0036. This downward growth is a pointer of declining commercial viability of the MFIs over the years under study.

Fig.4.4: Average ROE

![Return on equity graph]

When all the data is considered, the descriptive statistics appear as shown in table 4.2 below.

<table>
<thead>
<tr>
<th>Table 4.2 Overall Descriptive Statistics</th>
</tr>
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</table>

When all the data is considered, the descriptive statistics appear as shown in table 4.2 below.

<table>
<thead>
<tr>
<th></th>
<th>ln(assets)</th>
<th>Debt to equity ratio</th>
<th>Return on equity</th>
<th>Return on assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Valid Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>22.270111</td>
<td>4.109360</td>
<td>.121080</td>
<td>-.002066</td>
</tr>
<tr>
<td>Mode</td>
<td>19.6961 a</td>
<td>7.8500</td>
<td>-.6232 a</td>
<td>-.1820 a</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.9423400</td>
<td>4.8117699</td>
<td>.3505521</td>
<td>.0549483</td>
</tr>
</tbody>
</table>

a. Multiple modes exist. The smallest value is shown
4.2.2 Regression Analysis

Appendix II shows the dataset that was used in regression analysis. Regression analysis was run across all the years in the period under analysis. Discussions of the findings are therefore also based on year under study.

For the purpose of testing hypotheses about the values of model parameters, the linear regression model also assumes the following: The error term has a normal distribution with a mean of 0; the variance of the error term is constant across cases and independent of the variables in the model. An error term with non-constant variance is said to be heteroscedastic, the value of the error term for a given case is independent of the values of the variables in the model and of the values of the error term for other cases.

4.2.3 Financial performance of MFIs

Before exploring the relationship between commercialization and financial performance of MFIs, it is important to verify that the models are suitable for comparison. This is done by examining the portion of data that is used in the first part of linear regression is the determination of the portion of data that has been used in predicting the models. This is done by examining the R statistics. From table 4.3 below, the regression models for the years 2009, 2010, 2011 and 2012 can be predicted using the models. R values shows the level of correlation between the dependent and independent variables while the R square values show the proportion of independent variables that describe the dependent variable.

From table 4.3 below, the R values for the years 2009, 2010, 2011 and 2012 are 95.4%, 92.3%, 73.5% and 90.0% of the MFIs being studied. These indicate high correlation between the dependent and independent variables. The R square values for the respective models are 91.1%,
85.2%, 54.0% and 81.0% respectively for MFIs’ data. This means that the dependent variables of the years 2009, 2010, 2011 and 2012 in the model have been influenced by 91.1%, 85.2%, 54.0% and 81.0%of the independent variables. The R square values are greater than 0.5. This means that the independent variables in the models are described by more than 50% of the dataset. This makes the model accurate in describing the MFIs under study’s performance in that year.

Table 4.3: Regression Model Summaries

<table>
<thead>
<tr>
<th>Year</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>.954&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.911</td>
<td>.866</td>
<td>.1896534</td>
</tr>
<tr>
<td>2010</td>
<td>.923&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.852</td>
<td>.779</td>
<td>.1801777</td>
</tr>
<tr>
<td>2011</td>
<td>.735&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.540</td>
<td>.310</td>
<td>.2478452</td>
</tr>
<tr>
<td>2012</td>
<td>.900&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.810</td>
<td>.715</td>
<td>.0649297</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), Debt to equity ratio in 2009, ln(assets) in 2009
<sup>b</sup> Predictors: (Constant), Debt to equity ratio in 2010, ln(assets) in 2010
<sup>c</sup> Predictors: (Constant), Debt to equity ratio in 2011, ln(assets) in 2011
<sup>d</sup> Predictors: (Constant), Debt to equity ratio in 2012, ln(assets) in 2012

Source: Research Findings

4.2.4 Analysis of Variance

The next part of regression analysis is the analysis of variance (ANOVA). The ANOVA is used in testing hypothesis of the whole model. We compare the calculated F ratio to the significant F ratio (which is read from the statistical table of critical values), and reject the null hypothesis if the calculated F ratio is greater than the critical F ratio.
Table 4.4: ANOVA

<table>
<thead>
<tr>
<th>Year</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Regression</td>
<td>1.472</td>
<td>2</td>
<td>.736</td>
<td>20.463</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>.144</td>
<td>4</td>
<td>.036</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.616</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Regression</td>
<td>.750</td>
<td>2</td>
<td>.375</td>
<td>11.555</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>.130</td>
<td>4</td>
<td>.032</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.880</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>Regression</td>
<td>.289</td>
<td>2</td>
<td>.144</td>
<td>2.349</td>
<td>.211</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>.246</td>
<td>4</td>
<td>.061</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.534</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>Regression</td>
<td>.072</td>
<td>2</td>
<td>.036</td>
<td>8.526</td>
<td>.036</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>.017</td>
<td>4</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.089</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return on equity in 2009
b. Predictors: (Constant), Debt to equity ratio in 2009, ln(assets) in 2009
c. Dependent Variable: Return on equity in 2010
d. Predictors: (Constant), Debt to equity ratio in 2010, ln(assets) in 2010
e. Dependent Variable: Return on equity in 2011
f. Predictors: (Constant), Debt to equity ratio in 2011, ln(assets) in 2011
g. Dependent Variable: Return on equity in 2012
h. Predictors: (Constant), Debt to equity ratio in 2012, ln(assets) in 2012

Source: Research Findings

In our case, the hypothesis to be tested is clearly outlined in chapter three. The results from the ANOVA table in Table 4.4 show that the calculated, absolute F value for the MFIs is greater than the significant F value in all the years under study. We therefore reject the null hypothesis at 95% level of confidence for all the years under study except for 2009. This implies that based on our analysis, we are 95% confident that there is significant relationship between commercialization and financial performance of MFIs. This allows us to go ahead to the next level of the analysis, which is the study of the specific regression model.
4.2.4.1 Commercialization and Financial Performance

The third and the final part of the regression analysis is the estimation of the models. This is obtained from the coefficients table generated by the SPSS software. These coefficients are shown in table 4.5 below where final model estimates can be drawn by reading the corresponding B values.

<table>
<thead>
<tr>
<th>Table 4.5: Models’ Coefficients Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>ROE in 2009</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>ln(assets)</td>
</tr>
<tr>
<td>Debt to equity ratio</td>
</tr>
<tr>
<td>ROE in 2010</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>ln(assets)</td>
</tr>
<tr>
<td>Debt to equity ratio</td>
</tr>
<tr>
<td>ROE in 2011</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>ln(assets)</td>
</tr>
<tr>
<td>Debt to equity ratio</td>
</tr>
<tr>
<td>ROE in 2012</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>ln(assets)</td>
</tr>
<tr>
<td>Debt to equity ratio</td>
</tr>
</tbody>
</table>

Source: Research Findings

From the models’ values above, it is clear that there is a relationship between commercialization variables and financial performance of the MFIs.

For the year 2009, a decrease in debt/equity ratio by 0.136 led to an increase in ROE by 1 in the sampled MFIs. An increase in the natural log to the total assets by 0.77 resulted in an increase in ROE by 1 among MFIs. For the year 2010, a decrease in debt/equity ratio by 0.052 led to an increase in ROE by 1 in the sampled MFIs. An increase in the natural log to the total assets by 0.59 resulted in an increase in ROE by 1 among MFIs.
For the year 2011, a decrease in debt/equity ratio by 0.003 increased ROE of the sampled MFIs by 1. In the same year, an increase in the natural logarithm by 0.106 increased the ROE of the MFIs by 1. In 2012, a decrease in debt/equity ratio by 0.017 increased the ROE by 1 while an increase in natural log of the total assets by 0.055 increased the ROE by 1 among the MFIs sampled.

4.3 Summary and interpretation of findings

Results mentioned in this section show that change in debt/equity ratio have a negative and significant relation to change in ROE. If a firm’s level of debt changes it is expected to cause deviations in firm’s ROE, ultimately increasing a firm’s risk level. R square value indicates that change in debt/equity ratio explains as high as 95 percent of the volatility in returns of firms. This is highly evident in MFI studied.

The R values were found to be significant & positive for the association between debt to equity ratio and the natural logarithm of total assets, in all the years under study. Debt to equity ratio and natural logarithm of the total assets consisting of the R values: 0.954, 0.923, 0.735 and 0.900 for the years 2009, 2010, 2011 and 2012 respectively. This reveals that there is high correlation between debt to equity ratio and the size of the firm in determining the financial performance of MFIs.

From the descriptive statistics, a decreasing ROE is observed. This occurs when during the same time, there is increasing debt/equity ratio as well as natural log of assets. Decreasing ROE indicates decreasing profitability across the years under study. Increasing debt/equity ratio indicates increasing debt financing in the MFIs. Increasing natural log of assets indicates
increasing asset size of the MFIs. The regression model indicates that the increase in debt financing has a decreasing effect on profitability of the MFIs.

In MFIs, debt/equity ratio negatively affects ROE of the MFIs by less than 10%. This means that an optimum financial mix for MFIs would be one that has minimum debt/equity ratio. On the other hand, acquisition of assets increases ROE. MFIs are therefore increasing their ROE by investing in assets. This finding can be explained by commercialization, a common characteristic of MFIs (Thorsten, Asli and Ouarda, 2010).

In looking at the relationship between commercialization and financial performance, we refer to our analysis for these aspects. Debt/equity ratio and the size of the firm are the aspects of commercialization. An increase in these variables is an indication of commercialization in the firm. ROE is used as a measure of financial performance. The analyses of seven MFIs over a period of four years has given clear description of two aspects of commercialization and financial performance.

The commercialization of microfinance is reflected in strong financial performance (Christen, 2000). This is yet to be observed among MFIs operating in Kenya. However, they are applying financial principles: they are increasingly using debt financing in their structures and aggressive at increasing their asset sizes. These observations are similar to previous studies by Ng’ang’a, (2013) and Raheelet. Al (2013). It can therefore be said that commercialization is taking root in the Kenyan economy.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study aimed at establishing the relationship between commercialization and financial performance of MFIs in Kenya. It sought to find out how commercialization relates with financial performance. It explored a descriptive research design and formulated hypotheses to help achieve the objective of the study. The elements of commercialization studied were debt to equity ratio and the size of the MFI. For financial performance, this study considered only one measure: ROE. Data required for the study was collected from MixMarket (mixmarket.org) as well as Annual Audit Reports of the MFIs.

Ordinary Least Squares was used in analysing the collected data. Analysis was done based on four years: 2009 – 2012. The findings revealed an overall growth among the MFIs sampled. This can also be observed across all the variables through the years. The findings revealed that the effect of debt to equity ratio to ROE was quite low in MFIs as it does in other financial institutions. The size of the MFIs, also had small effect (less than 20% impact) on ROE of the MFIs. ROE has a negative relationship with debt to equity while it has a positive relationship with the size of the firm.

Debt/equity ratio and the size of the firm are the aspects of commercialization. An increase in these variables is an indication of commercialization in the firm. ROE is used as a measure of financial performance. The analyses of seven MFIs over a period of four years gave a clear description of two aspects of commercialization and financial performance.
5.2 Conclusion

The aim of conducting this study was to establish the relationship between commercialization and financial performance in MFIs in Kenya. The findings of study validated a negative relationship between ROE and debt to equity ratio and dependence on MFI size. This is an indication of existence relationship between commercialization and financial performance.

Sustainability has been viewed as a necessity for the existence of an organization. Janus (2009) pointed out that commercialization and sustainability are two sides of the same coin. Robinson (2002) pointed out that MFIs cannot achieve wide outreach without commercialization which is based on three principles.

Performance of an MFI can be gauged from two perspectives; social and financial. The latter indicator being important for commercialized MFI. This study used the analysis of financial ratios to determine the relationship between financial performance of MFIs and commercialization.

In studying this relationship regression analysis was carried out on the financial ratios. The analysis revealed that there is significant relationship between commercialization and financial performance. Debt/equity ratio and the size of the firm are the aspects of commercialization. An increase in these variables is an indication of commercialization in the firm. ROE is used as a measure of financial performance.

These show that MFIs in Kenya that have existed for more than 7 years are taking up on commercialization. This can also be confirmed by the application of market principles to the institutions and skewness towards for profit initiatives, e.g. Equity Bank, KWFT, etc. This can be
seen to have increased their outreach and is in accordance to institutionalists’ school of thought on microfinance.

5.3 Policy Recommendations

Microfinance is about providing financial services to the poor who are traditionally not served by the conventional financial institutions. Three features distinguish microfinance from other formal financial products. These are: (i) the smallness of loans advanced and or savings collected, (ii) the absence of asset-based collateral, and (iii) simplicity of operations.

To ensure sustainability of MFI services to the poor in the wake of commercialization, the researcher recommends the following:

a) Promote synergy and mainstreaming of the informal sub-sector into the national and county financial system. This is because financial systems need to be regulated and monitored in order to ensure stability in the monetary sector. The informal sub-sector is a huge part of the economy and should be guided in line with the country’s development goals.

b) Enhance service delivery by microfinance institutions to micro, small and medium entrepreneurs. MFIs are the few key players that offer formal financial services to low income earners and micro institutions. Policies should therefore be put in place that will enhance service delivery to micro, small and medium entrepreneurs.

c) Contribute to rural transformation. The nature of MFIs have enabled it to expand outreach beyond other financial institutions. This puts them in a position to impact more than 60% of the population that are found in rural areas. They should therefore be in a position to carry out transformative agenda with the locals in the regions in which they operate.
5.4 Limitations of the Study

The model used in this study to establish the relationship between commercialization and financial performance was regression analysis. This exposes the data to three main limitations. (i) Parameter Instability - This is the tendency for relationships between variables to change over time due to changes in the economy or the markets, among other uncertainties. (ii) Public Dissemination of the Relationship - In an efficient market, this can limit the effectiveness of that relationship in future periods. (iii) Violation of Regression Relationships –In chapter three we summarized the classic assumptions of a linear regression. In the real world, these assumptions are often unrealistic.

This study employed a quantitative approach in determining the relationship between financial performance and commercialization of MFIs. No qualitative data was used. This would not be sufficient to conclude our findings. This is because the quantitative aspect did not determine the application of market principles in the microfinance sector as earlier anticipated.

In our study, we only looked at two aspects of commercialization, size of firms and debt to equity ratio. Other aspects such as efficiency were not measured. The inclusion of other aspects would have painted a better picture of what is happening in the industry, thus drawing more satisfactory conclusions.

Another limitation is that the study was only limited to only 7 MFIs who had complete required data set from the pool of 39 MFIs who are registered with the Association of Microfinance Institutions in Kenya. In statistics, the larger the sample size, the closer the accuracy. As much as the findings could act as a guideline, larger sample size could have been recommended.
5.5 Suggestions for Further Studies

Commercialization of MFIs is rapidly taking root, as sustainability is necessitated with the growth process. This exposes the firms to various forces in the market in the various regions they operate in. This study has looked at commercialization of MFIs and attempted to determine the relationship. This has inspired the following suggestions for further research studies:

The study of the relationship between commercialization and financial performance of MFIs was carried out in this paper using the quantitative approach. Further studies can be carried out on the same topic but employ both quantitative and qualitative approaches. This will facilitate capturing of the extent to which market principles are being applied to firms.

This study also looked at 7 firms from a pool of 39 firms registered with the Association of Microfinance Institutions in Kenya. The researcher suggests that further studies could be carried out on more microfinance institutions, which are registered with the Association of Microfinance Institutions in Kenya with availability of more data.

As microfinance institutions commercialize, it would be interesting to study what impacts MFIs have on various stakeholders, especially the micro-loanees. The researcher would also suggest further studies on the impact of commercialization of MFIs on stakeholders.

Finally, the researcher would like to suggest a comparative research study between commercialized MFIs with non-commercialized MFIs. These categories can be measured against MFI benchmarks in terms of services to the poor and outreach.


http://www.csfi.org.uk/Microfinance%20Banana%20Skins%202009.pdf


http://ecorner.stanford.edu/author/geo__davis,


APPENDIX 1: List of Micro Finance Institutions

1. ACDF
2. AdokTimo
3. BFDP
4. BIMAS
5. DRC Microfinance
6. Eb-F
7. ECLOF - KEN
8. Equity Bank
9. Family Bank
10. Faulu - KEN
11. Greenland Fedha
12. Jamii Bora
13. JuhudiKilimo
14. K-Rep
15. KADET
16. KEEF
17. KPOSB
18. KWFT
19. MakaoMashinani
20. MCL
21. Micro Kenya
22. Musoni
23. Opportunity Kenya
24. PAWDEP
25. Platinum Credit
26. Rafiki
27. RAFODE
28. Remu
29. Riverbank
30. SEED
31. SISDO
32. SMEP
33. Sumac DTM
34. Taifa
35. UBK
36. Ufanisi - AFR
37. Uwezo
38. WEEC
39. Yehu

Source: List obtained from http://www.mixmarket.org/mfi/country/Kenya
APPENDIX 2 : List of Licensed Deposit Taking Microfinance Institutions

1. Faulu Kenya DTM Limited
   Postal Address: P. O. Box 60240 – 00200, Nairobi
   Telephone: +254-20- 3877290 -3/7, 38721883/4
   Fax: +254-20-3867504, 3874875
   Website: www.faulukenya.com
   Physical Address: Faulu Kenya House, Ngong Lane -Off Ngong Road
   Date Licenced: 21st May 2009
   Branches: 27

2. Kenya Women Finance Trust DTM Limited
   Postal Address: P. O. Box 4179-00506, Nairobi
   Telephone: +254-20- 2470272(5, 2715334/5, 2755340/42
   Pilot Line: 070 - 3067000
   Website: www.kwftdtm.com
   Physical Address: Akira House, Kiambere Road, Upper Hill,
   Date Licenced: 31st March 2010
   Branches: 24

3. SMEP Deposit Taking Microfinance Limited
   Postal Address: P. O. Box 64063-00620 Nairobi
   Telephone: 020-3572799 / 26733127 / 3870162 / 3861972 / 2055761
   Fax: +254-20-3870191
   Website: www.smep.co.ke
   Physical Address: SMEP Building - Kirichwa Road, Off ArgwingsKodhek Road
   Date Licensed:14th December 2010
4. Remu DTM Limited
   Postal Address: P. O. Box 20833-00100 Nairobi
   Telephone: 2214483/2215384/2215387/8/9, 0733-554555
   Physical Address: Finance House, 14th Floor, Loita Street
   Date Licensed: 31st December 2010
   Branches: 3

5. Rafiki Deposit Taking Microfinance
   Postal Address: 12755-00400 Nairobi
   Telephone: 020-216 6401
   Cell - phone: 0719 804 370/0734 000 323
   Website: www.rafiki.co.ke
   Physical Address: 2nd Floor, El-roi Plaza, Tom Mboya Street
   Date Licensed: 14th June 2011
   Branches: 3

6. UWEZO Deposit Taking Microfinance Limited
   Postal Address: 1654-00100 Nairobi
   Telephone: 2212917 / 9
   Email: info@uwezodtm.com
   Website: www.uwezodtm.com
   Physical Address: Park Plaza Building, Ground Floor, MoktarDaddah Street
   Date Licensed: 08 November 2010
   Branches: 2
7. Century Deposit Taking Microfinance Limited
   Postal Address: P. O. Box 38319 – 00623, Nairobi
   Telephone: +254-20- 2664282, 20 6768326, 0722 168721, 0733 155652
   Physical Address: KK Plaza 1st Floor, New Pumwani Road, Gikomba
   Date Licensed: 17th September 2012
   Branches: 1

8. SUMAC DTM Limited
   Postal Address: P. O. Box 11687-00100, Nairobi
   Telephone: (254) 20 2212587, 20 2210440
   Fax: (254) 2210430
   Website: www.sumacdtm.co.ke
   Physical Address: Consolidated Bank House 2nd Floor, Koinange Street
   Date Licensed: 29th October 2012
   Branches: 1

9. U&I Deposit Taking Microfinance Limited
   Postal Address: P.O. Box 15825 – 00100, Nairobi
   Telephone: (254) 020 2367288, Mobile: 0713 112 791
   Fax: (254) 2210430
   Website: http://uni-microfinance.co.ke/uni-microfinance/
   Physical Address: Asili Complex Building 1st Floor, River Road
   Date Licensed: 8th April 2013
   Branches: 2
<table>
<thead>
<tr>
<th>MFI name</th>
<th>Fiscal Year</th>
<th>Assets</th>
<th>ln(assets)</th>
<th>Debt/equity ratio</th>
<th>Return on equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIMAS</td>
<td>2009</td>
<td>413,012,853</td>
<td>19.8390</td>
<td>1.65</td>
<td>-0.0657</td>
</tr>
<tr>
<td>Equity Bank</td>
<td>2009</td>
<td>96,512,000,000</td>
<td>25.2929</td>
<td>3.14</td>
<td>0.2122</td>
</tr>
<tr>
<td>Faulu - KEN</td>
<td>2009</td>
<td>4,307,180,000</td>
<td>22.1835</td>
<td>5.6</td>
<td>-0.1207</td>
</tr>
<tr>
<td>K-Rep</td>
<td>2009</td>
<td>7,136,327,000</td>
<td>22.6885</td>
<td>5.45</td>
<td>-0.1878</td>
</tr>
<tr>
<td>KWFT</td>
<td>2009</td>
<td>14,749,566,000</td>
<td>23.4145</td>
<td>4.39</td>
<td>0.2819</td>
</tr>
<tr>
<td>Opportunity Kenya</td>
<td>2009</td>
<td>358,005,322</td>
<td>19.6961</td>
<td>-6.45</td>
<td>1.3239</td>
</tr>
<tr>
<td>SMEP</td>
<td>2009</td>
<td>1,326,317,334</td>
<td>21.0057</td>
<td>3.6</td>
<td>0.0474</td>
</tr>
<tr>
<td>BIMAS</td>
<td>2010</td>
<td>402,797,101</td>
<td>19.8139</td>
<td>7.29</td>
<td>-0.2521</td>
</tr>
<tr>
<td>Equity Bank</td>
<td>2010</td>
<td>133,890,000,000</td>
<td>25.6203</td>
<td>3.73</td>
<td>0.2889</td>
</tr>
<tr>
<td>Faulu - KEN</td>
<td>2010</td>
<td>4,390,079,000</td>
<td>22.2026</td>
<td>5.63</td>
<td>0.0447</td>
</tr>
<tr>
<td>K-Rep</td>
<td>2010</td>
<td>7,670,049,000</td>
<td>22.7606</td>
<td>10.69</td>
<td>0.1247</td>
</tr>
<tr>
<td>KWFT</td>
<td>2010</td>
<td>18,958,394,000</td>
<td>23.6655</td>
<td>0.04</td>
<td>0.9693</td>
</tr>
<tr>
<td>SMEP</td>
<td>2010</td>
<td>1,789,564,405</td>
<td>21.3052</td>
<td>6.75</td>
<td>-0.0128</td>
</tr>
<tr>
<td>BIMAS</td>
<td>2011</td>
<td>537,943,400</td>
<td>20.1033</td>
<td>4.05</td>
<td>0.3241</td>
</tr>
<tr>
<td>Equity Bank</td>
<td>2011</td>
<td>176,911,217,000</td>
<td>25.8989</td>
<td>8.24</td>
<td>-0.0439</td>
</tr>
<tr>
<td>Faulu - KEN</td>
<td>2011</td>
<td>5,140,576,000</td>
<td>22.3604</td>
<td>6.00</td>
<td>0.1303</td>
</tr>
<tr>
<td>K-Rep</td>
<td>2011</td>
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