FACTORS INFLUENCING SUSTAINABILITY OF MICROFINANCE INSTITUTIONS IN KENYA:

BY

GITHINJI, BEATRICE WANGECHI

D61/P/8906/2004

A Management Research Project Submitted In Partial Fulfillment Of The Requirements For The Award Of Masters Of Business Administration (MBA) Degree, School Of Business, University Of Nairobi

November 2009
DECLARATION

This management project is my original work and has not been presented for a degree in any other university.

Signed.......................................................... Date............................

GITHINJI, BEATRICE WANGECHI
D61/P/8906/2004

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

Signed.......................................................... Date............................

Mr. Anyangu
Department of Business Administration
DEDICATION

To my family and friends
DEDICATION

To my family and friends
ACKNOWLEDGEMENT

I would like to acknowledge the following persons whose contributions facilitated the completion of this project. First, I thank the Almighty God for the gift of life and for giving me the skills, acknowledge and energy to be able to complete this paper.

My special thank you goes to my supervisor Mr. Anyangu for shaping the project idea into a meaningful form, and for his consistent and insightful reviews. Without his encouragement and patience, it would have been difficult to complete this project.

I am most grateful to my family for the invaluable support and understanding you accorded me while studying for the MBA Programme.

Finally, I am indebted to all those who helped me achieve this dream in one way or another especially my classmates and my friends, for their invaluable assistance in proof reading and critic of the paper throughout the stages.

To all of you wherever you are I say a big Thank You!
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ABSTRACT

The study sought to establish the factors that influence sustainability of microfinance institutions (MFIs) in Kenya and to establish the direction of such influence on financial sustainability of MFIs. The challenges facing MFIs were also sought. A descriptive survey design was used. The population of interest in this study consisted of all the 30 microfinance that operate within Nairobi. Since the study was a survey and the number in the population was not so large, all the 30 MFIs operating in Nairobi were selected for the study. This study was facilitated by the use of both primary and secondary data. Primary data were collected from the managers of the institutions using structured questionnaires. The questionnaires collected data on the factors influencing sustainability of MFIs in Kenya and on challenges facing MFIs. A pilot test was used to test validity and reliability of data collection instruments on a sample of microfinance firms outside Nairobi. The results of the pilot survey were used to amend the questionnaires appropriately. The questionnaires were administered using the drop and pick method. Secondary data helped in calculating the financial sustainability. Operational sustainability, as component of financial sustainability measurement, was measured using return on assets (ROA) and return on equity (ROE). This information was found from the financial statements of various MFIs selected for the study. The data obtained from the questionnaires were grouped into different classes and analyzed using factor analysis to show magnitude of influence of the variables on the sustainability of the institutions. Regression analysis was also run to establish the direction of influence of each of the factors on financial sustainability.

The results revealed that majority of microfinance institutions in Kenya are below the market mean sustainability as measured by both the return on
assets as well as the return on equity. The study found that the average size of savings had a positive influence on return on assets and that this relationship was positive. The rest of the variables did not have a significant influence on either ROA or ROE. On the challenges, the study found that the major challenges facing microfinance institutions in Kenya are funding, repayment default and government regulations. Low profits and number of clients were not found to be major challenges facing the sector.

The study therefore concludes that majority of microfinance institutions in Kenya are not financially sustainable if measured by the return on assets or return on equity. It is also concluded that the most significant factor that influenced sustainability of microfinance institutions in Kenya is the size of savings. The study further concludes that the major challenges facing microfinance institutions in Kenya are funding, repayment default and government regulations.

The study recommends that the microfinance institutions in Kenya need to work on being financially sustainable. The study also recommends that since the levels of sustainability are positively influenced by the average size of savings, the microfinance institutions need to explore ways of increasing ember savings. It is also recommended that since there are a couple of challenges facing MFIs in Kenya especially in terms of funding, repayment default and regulations. There is need to carry out further research in Kenya on sustainability of microfinance institutions. An angle which should be explored by future researchers is the relationship between outreach and financial sustainability of microfinance institutions.
1.1 Background of the study

1.1.1 Microfinance Institutions Sustainability

Sustainability refers to the long-term continuation of the Microfinance programme after the project activities have been discontinued (Ahlin and Lin, 2006). It entails that appropriate systems and processes have been put in place that will enable the Microfinance services to be available on a continuous basis and the clients continue to benefit from these services in a routine manner. This also would mean that the programme would meet the needs of the members through resources raised on their own strength, either from among themselves or from external sources.

Though sustainability does get understood immediately in the financial terms or the resource terms, it actually has broader dimensions, of which financial sustainability is only one major dimension (Ahlin and Lin, 2006). The different dimensions of sustainability are: institutional sustainability (mission sustainability, programme sustainability, human resource sustainability, financial sustainability, and market sustainability), legal policy environment sustainability, and impact sustainability.

The microfinance movement is large and growing. It is reported that more than 100 million customers worldwide are borrowing small loans from around 10,000 microfinance institutions (MFI’s). A great deal of attention and funding has been directed toward microfinance by the development community over the past few decades. Levels of success, however defined, vary across MFI’s. Some fail and cease to be; others grow to reach millions of
borrowers, covering costs in the process. In this context, evaluation of MFI’s is a critical exercise (Ahlin and Lin, 2006).

In a stable political environment and enabling macro economy, evidence arising over several decades has supported the view that the provision of microfinance is an important component of any effort to improve the livelihoods of the poor in any society. In recent years in Kenya, there has been renewed interest in microfinance by both policymakers and practitioners. This interest is based on its valued contribution to efforts aimed at improving the livelihoods of the rural population in Kenya through policies and programs geared towards addressing inequalities arising from the country’s socio-political history. Microfinance refers to all types of financial intermediation services; savings, credit funds transfer, insurance, pension remittances, provided to low-income households and enterprises in both urban and rural areas, including employees in the public and private sectors and the self-employed (Robinson, 2003).

Various researchers have argued that in democratic societies, small scale entrepreneurs have a right to a participatory role and full ownership of microfinance organizations including planning, management, and decision-making (Weitz, 1982; Wehnert and Shakya, 2003). The basis of the argument is that the entrepreneurs have access to local knowledge, which is unknown to official experts. The supporters of this school of thought have argued that microfinance institutions should not be run by public sector organizations; it should rather be handed over to small farmers in order to generate a sense of ownership among small farmers (Sharma and Nepal, 1997) and to attain institutional sustainability of microfinance institutions (MFIs).
Microfinance, the provisions of financial services to the low-income households and micro and small enterprises (MSEs), provide an enormous potential to support the economic activities of the poor and thus contribute to poverty alleviation. Widespread experiences and research have shown the importance of savings and credit facilities for the poor and MSEs. This puts emphasis on the sound development of microfinance institutions as vital ingredients for investment, employment and economic growth. The potential of using institutional credit and other financial services for poverty alleviation in Kenya is quite significant (Omino, 2005).

1.1.2. Microfinance institutions in Kenya

The World Bank defines Micro-finance (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.

Financial intermediation is of great importance in any economy. In fact, in Kenya’s poverty Reduction paper (PRSP), the financial sector is expected to play a catalytic role in facilitating economic growth through SMEs (Dondo and Ongila 2006.)

About 18 million people, or 60% of the population, are poor and mostly out of the scope of formal banking services. According to the National Micro and Small Enterprise Baseline Survey of 1999, there are close to 1.3 million MSEs employing nearly 2.3 million people or 20% of the country’s total employment and contributing 18% of overall GDP and 25% of non-agricultural GDP. Despite this important contribution, only 10.4% of the MSEs receive credit and other financial services. The formal banking sector in Kenya over the
years has regarded the informal sector as risky and not commercially viable (Omino, 2005).

According to the Poverty Reduction Strategy Paper (PRSP) of 1999, a large number of Kenyans derive their livelihood from the MSEs. Therefore, development of this sector represents an important means of creating employment, promoting growth, and reducing poverty in the long-term. However, in spite of the importance of this sector, experience shows that provision and delivery of credit and other financial services to the sector by formal financial institutions, such as commercial banks has been below expectation. This means that it is difficult for the poor to climb out of poverty due to lack of finance for their productive activities. Therefore, new, innovative and pro-poor modes of financing low-income households and MSEs based on sound operating principles need to be developed (Omino, 2005).

In the past, microfinance institutions (MFIs) established using either an NGO or a savings and credit co-operative societies framework have been important sources of credit for a large number of low income households and MSEs in the rural and urban areas of Kenya. The MFIs have, however, operated without an appropriate policy and legal framework. There is therefore need to focus more on these institutions to enhance their effectiveness in the provision of savings, credit and other financial services to the poor and MSEs (Omino, 2005).

The Government of Kenya recognizes that greater access to, and sustainable flow of financial services, particularly credit, to the low-income households and MSEs is critical to poverty alleviation. Therefore, an appropriate policy,
legal and regulatory framework to promote a viable and sustainable system of microfinance in the country has been developed via the Deposit Taking Micro Finance Act. In drafting the law, the Government consulted with stakeholders to get their views on the best way to create the required enabling environment for the microfinance sub-sector. In addition, full-fledged microfinance units have been established in the Ministry of Finance (the Treasury) and the Central Bank of Kenya to formulate policies and procedures to address the challenges facing microfinance institutions, especially in the rural areas, and to build a database to facilitate better regulation and monitoring of their operations (Omimo, 2005).

Over 100 organizations, including about 50 NGOs, practice some form of microfinance business in Kenya. About 20 of the NGOs practice pure micro-financing, while the rest practice micro-financing alongside social welfare activities. Major players in the sector include Faulu Kenya, Kenya Women Finance Trust (KWFT), Pride Ltd, Wedco Ltd, Small and Medium Enterprise Programme (SMEP), Kenya Small Traders and Entrepreneurs Society (KSTES), Ecumenical Loans Fund (ECLOF) and Vintage Management (Jitegemee Trust). The Kenya Post Office Savings Bank (KPSOB) is also a major player in the sector but only to the extent of providing savings and money transfer facilities. Many microfinance NGOs have successfully replicated the Grameen Bank method of delivering financial services to the low-income households and MSEs.

In recent years, a growing number of developing countries including Kenya have embarked on reforming and regulating their financial systems, transforming their institutions into effective intermediaries and extending viable financial services on a sustainable basis to all segments of the
population (Seibel, 1996). By gradually increasing the outreach of their financial institutions, some developing countries have substantially alleviated poverty lending, institutional strategies and financial systems approaches. In the process, a new world of finance has emerged which is demand led and savings driven and conforms to sound criteria of effective financial intermediation. There is now incipient experience with the successful integration of microfinance strategies into micropolicies, which makes banking the micro economy and the poor both viable and sustainable.

1.2 Problem Statement

There are various factors that may ordinarily affect sustainability of microfinance institutions. These factors may include subsidized loans (Brau and Woller, 2004; Morduch, 2005; Hudon and Traca, 2006), international support (Stauffenberg, 2007), and existence of higher economic growth (Khandler, 1996). There is need therefore to explore how these factors influence MFIs in Kenya. Studies have provided mixed results on the factors that affect sustainability of microfinance institutions. For instance, Bogan et al. (2007) sought to establish whether capital structure affects financial sustainability of microfinance institutions. Using data from more than three hundred MFIs, Bogan et al. (2007) tested the hypothesis that MFIs mature towards sustainability through a “life cycle” of institutional development. The empirical evidence failed to support interpretations of the life cycle approach that focus on MFI age as the deciding factor in sustainability but pointed to the importance of capital structure and funding instruments as key determinants of financial sustainability.

Brau and Woller (2004) review over 350 articles and studies on microfinance institutions (MFIs) and their impact on both economic growth and society.
The review includes a section on sustainability of MFIs where they site many studies concluding that institutional sustainability is a necessary goal as subsidized loan funds generally are more fragile and less focused. Just as Yunus of Grameen Bank knows that these subsidies distort the incentives in the microfinance institution, others have further argued that subsidies undercut the efficiency and the scale of operations. Abrams and von Stauffenberg (2007) conclude that an increase in international support of microfinance by development institutions is “crowding-out” private investment. Development agencies are supporting the largest and most successful MFIs, increasing their scale, and discouraging support of these institutions that should be the primary market for private investors. Morduch (2005) argues that subsidies should be “time-limited and rule-bound”. Otherwise, an institution could be sustainable using standard measures but vulnerable to competition from new. So far, the study by Omino (2005) and Onyuma and Shem (2005) remain the only studies in this area.

Rukwaro (2001) in the study of credit rationing by microfinance Institutions (MFIs) noted that the microfinance subsector has emerged as an alternative source of credit to a large number of small micro enterprises (SMEs) in Kenya. The study found that 20% of MFIs obtained their lending capital from donor agencies, 50% from internal operations, 25% from borrowing and 5% from member’s deposits. It is further noted that internal operations involved operating revolving funds that were initially financed by donor agencies. Many of the MFIs rely on donor agencies for funding, as they are not financially stable enough to access commercial funding (Ledgerwood, 1993). Kamau, Joyce Wambui (2008) in the study of determinants of profitability of
Microfinance Institutions in Kenya (MFIs) noted that Profitability has evidently been one of the most important underlying elements seducing capital in the long run. MFIs are moving more and more towards profitable areas seeking the best returns related to the amount or level of risk their stockholders are willing to bear. It is important that sufficient profits are generated by MFIs so as to allow for dividends to be paid to shareholders and if possible, for some funds to be ploughed back into the business in order to finance further growth.

As the environment in which microfinance institutions change so does the need by management to ensure that they fit in the environment they live in. As the market of MFIs increase more responsibility will be placed upon them to ensure their performance improves. Performance can only improve if managers know their current status. There is need to ensure that accounts are kept properly so that these managers can know the specific areas that need improvement.

Given the mixed opinions on the factors influencing sustainability of microfinance institutions, the present study seeks to bridge the gap by identifying the factors that influence sustainability of MFIs in Kenya. Thus, the study is designed to answer the following research question: what factors influence sustainability of MFIs in Kenya?

1.3 Research Objectives

The objectives of this study are:

1. To establish the factors that influence sustainability of microfinance institutions (MFIs) in Kenya.
2. To establish the relationship between financial and institutional sustainability of MFIs

1.4 Significance of the Study

The study is important to the following groups:

Regulators and practitioners

By focusing on achieving institutional, financial sustainability; regulators and practitioners of microfinance in Kenya, the study will contribute towards domestic institution building for financial capacity widening and deepening in locally constituted organizations and funds.

Business owners

The owners of the enterprises will be able to know their contribution towards the success and sustainability of the microfinance institutions, which are important to their operations. Eventually, they will take up their ultimate role in supporting the performance of the institutions.

Scholars

The study will provide a source of reference for future studies on microfinance institutions. It will also act as a source of literature for academics in the field of entrepreneurship.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter presents a review of literature on the theories of microfinance, the various dimensions of microfinance sustainability, the factors affecting sustainability of microfinance and the conclusion from the literature reviewed.

2.2 Theories of micro-financing

2.2.1 Financial Systems Model
The financial systems approach aims to achieve maximum outreach of microfinance services through financially sustainable institutions that focus on a financial intermediation model (Robinson, 2003). The microfinance institutions under this approach provide finance to the public e.g. commercial banks; or serve only their members such as village banks. They finance their loan portfolios from locally mobilized savings, commercial debt and for-profit investment, or retained earnings such as micro lenders.

Microfinance institutions under this approach are differentiated from informal money lenders, from unregulated institutions such as NGOs and from subsidized formal micro credit – where a regulated institution such as a state-owned bank channels government or donor funds to borrowers at subsidized interest rates (Robinson, 2003). The proponents of the financial systems approach argue that donors and governments should shift the allocation of their scarce resources from direct financing of loan portfolios, to promoting the replication of this model by disseminating lessons from the best practices of fully sustainable microfinance institutions and financing the
development of more microfinance institutions of this type. One challenge of the financial systems approach is that it relies on market approaches, which may be thin and weak in marginal areas (Pralahad, 2004). However, even in these areas, market solutions can be found to overcome any obstacles (Hitchins, Elliot & Gibson, 2005).

2.2.2 Poverty Lending Model

The poverty lending approach focuses on reaching the poorest of the poor, who are typically engaged in pre-entrepreneurial activities that are more focused on consumption-smoothing than productivity enhancing activities (Honohan, 2004). This group requires assistance in the form of income transfers to meet their basic needs, because any credit extended to them will most probably be consumed rather than invested in something that generates a return sufficient to repay the debt (Rosengard, 2001).

The poverty lending approach differs from the minimalist financial services model characterized by the financial systems approach. In addition to microfinance services, it provides ancillary services such as training on nutrition, better farming techniques, family planning, health and basic financial management skills aimed at reducing the target group's vulnerability to avoidable risk. The funding for these ancillary services is typically provided by governments, donor grants and other subsidized funds. Previously, loan portfolios used to be funded by donors and governments and loan provision was subsidized at below market interest rates. However, increasing evidence that the microfinance target group repayment rates are not affected by market related interest rates has changed the practice of subsidizing interest rates. In addition the use of 'forced savings' has reduced
the extent to which donors and governments are required to fund loan portfolios, even if the microfinance target group is not able to save, initially.

Practices have been adopted to ensure that the provision of ancillary services that target those in the pre-entrepreneurial group is done without compromising the financial sustainability of the microfinance function of the institution. This is done by making a clear distinction between the funds allocated to services. Member savings are used to fund the former, while government and donors support is used to fund the latter.

2.3 Sustainability of MFIs

Microfinance has proven to be one of the most effective tools to help alleviate poverty. While microfinance is relatively young when compared with the formal financial sector, the formalization of micro-finance is younger still, and the vision of halving poverty by 2010 has pushed key players to design, test, and replicate successful models all over the world. Today, the microfinance sector spans various age bands, from more formalized and saturated markets in Latin America to rather nascent markets in other parts of the world (Khabeer, 2006).

Kenya is an emerging market for microfinance. Over the past decade, the microfinance sector has been growing in Kenya at a fairly steady pace. Though no microfinance institution (MFI) in Kenya has yet reached anywhere near the scale of the well-known Bangladeshi MFIs, the sector in India is characterised by a wide diversity of methodologies and legal forms. However, very few MFIs have achieved sustainability yet.
Experience has shown that sustainability is critical to the longevity and further growth of any microfinance institution (MFI). Sustainability, or financial health, becomes more critical as the sector continues growing; unfortunately the potential market continues to grow as well. Growth, among its other ramifications and side effects, both positive and negative, has the ability to drag the focus away from sustainability.

Sustainability is the ability to generate sufficient funds to sustain the costs of the program. Various factors determine the sustainability of the program. These include pricing of the product, costs of funds, administrative overheads, loan losses or portfolio quality, and inflation. Each determinant has its own significance and can be controlled in different ways (Khabeer, 2006).

Sustainability itself has to be seen in a broader sense than just financial sustainability. The sustainability of demand, of the MFI's mission, of its ownership and governance structure and the legal and regulatory framework under which it works, are all contributory to overall sustainability of an MFI (Mahajan and Nagasri, 1999). Further, the sustainability of an MFI by itself may not be enough unless a full-fledged micro-finance sector (MFS) is established on sustainable lines.

From bankers' perspective, a microfinance institution is said to have reached sustainability when the operating income from the loan is sufficient to cover all the operating costs (Sharma and Nepal, 1997). This definition adopts the bankers' perspective and sticks to 'accounting approach' of sustainability. However, Shah (1999) adopts for an 'integrated approach' in defining the term sustainability as the 'accounting approach' to sustainability that takes
into account the financial aspect of the institution is too narrow. He states that the concept of sustainability includes, amongst other criteria, - obtaining funds at market rate and mobilization of local resources.

Therefore, the performance assessment criteria for the financial viability of any microfinance related financial institution are: repayment rate, operating cost ratio, market interest rates, portfolio quality, and 'demand driven' rural credit system in which farmers themselves demand the loans for their project.

From banker's perspective, sustainability of microfinance institution includes both financial viability and institutional sustainability (self sufficiency) of the lending institution (Sharma and Nepal, 1997). The frames of reference in banker's definitions are therefore, more financial, administrative and institution focused. As The Economist concluded in the fall of 2006, microfinance has both virtues and limitations. The greatest limitation may be that these loans do little to eradicate poverty.

Heart-warming case studies abound, but rigorous analyses are rare. The few studies that have been done suggest that small loans are beneficial, but not dramatically so. A further question is whether an approach emphasizing credit really can eradicate poverty: a ridiculously ambitious goal, though one that Mr. Yunus's evangelical view of the virtues of credit has perpetuated.

Brau and Woller (2004) review over 350 articles and studies on microfinance institutions (MFIs) and their impact on both economic growth and society. The review includes a section on sustainability of MFIs where they site many studies concluding that institutional sustainability is a necessary goal as subsidized loan funds generally are more fragile and less focused. Just as Yunus knows that these subsidies distort the incentives in the microfinance
institution, others have further argued that subsidies undercut the efficiency and the scale of operations. Abrams and von Stauffenberg (2007) conclude that an increase in international support of microfinance by development institutions is “crowding-out” private investment. Development agencies are supporting the largest and most successful MFIs, increasing their scale, and discouraging support of these institutions that should be the primary market for private investors.

Morduch (2005) argues that subsidies should be “time-limited and rule-bound”. Otherwise, an institution could be sustainable using standard measures but vulnerable to competition from new sources of credit. As the economic area in which the clients of the institution operate grows new lenders are likely enter. The data reported here shows that greater subsidies do lead to greater scale. However, we must also control for the benefits a microfinance institution may receive from changes in the overall economic conditions of the country in which they operate.

Khandker (1996) has a review of the many Grameen studies and further looks at its impact and sustainability. One important conclusion in that study was that higher economic growth is needed to support Grameen Bank, but more importantly, achieve the goal of moving the bank’s borrowers out of poverty. The author states that “the government thus has an important role to play in promoting and sustaining economic growth to reduce poverty on a sustainable basis”. Microfinance institutions alone are not what will sustain the microentrepreneur.

Hudon and Traca (2006) find that a higher subsidy level in microfinance institutions is associated with lower sustainability. The authors use detailed
data from a microfinance institution rating agency. The authors note that the sample is not representative in that these rated institutions are more likely to have achieved sustainability, having already achieved operational scale. Their study also did not control for overall economic activity. The study conducted here addresses these two issues by using both new and established institutions across many countries and controlling for economic activity in the country.

Due to inequalities arising from Kenya’s socio-political history, improving the livelihoods of the rural population is a priority for the Kenyan government as part of its effort to increase the levels of human development. In pursuit of this goal the provision of microfinance is a key instrument adopted to enhance the livelihood of low-income households in Kenya. These programs envisage that financial services provided by microfinance institutions will enable low-income households engaged in pre-entrepreneurial activities and micro-enterprises and marginal, small-scale enterprises or micro enterprises to increase their livelihoods. The benefits to these households and micro-enterprises should have positive implications for the Kenyan macro economy.

Most microfinance institutions are started with the target group being the middle and low income level persons, their success therefore depends on the support received form those who operate and benefit from it. Sustainability is achieved when microfinance is able to cater for its routine expenses and meet any debts that arise in the course of its operations. The literature above has considered the model of a micro finance to be very important in ensuring success. Different models attract people with different needs and therefore a specific model should be used when it best fits the desired target group.
In Namibia, a representative sample of respondents in a survey conducted in 2003 indicated that 49% who received money as a payment medium made use of bank accounts to store their savings (Finscope, 2003). This suggests that savings held by the remaining households are in a variety of forms such as grain, cattle, cash 'under the mattress, (Robinson, 2003). The safe and convenient savings facilities provided by microfinance institutions enable low-income households to transform their non-financial assets into more liquid, high-yield forms that may eventually serve as collateral for larger loans (De Soto, 2000).

2.4 **Different dimensions of sustainability**

2.4.1 **Institutional sustainability**

Institutional sustainability looks at those dimensions of the organization, which deals with the internal organizational environment (Ruben and Schers, 2007). These are the dimensions that make the organization a wholesome, vibrant and a going concern.

2.4.2 **Mission sustainability**

Sustainability of its mission is what will keep the organization in its chosen path in the long term. Activities that the organization is engaged in have to be constantly evaluated for its compatibility with the defined mission of the organisation. If changes are brought about in the mission, it would be through a well articulated and participatory process in the organization (Ruben and Schers, 2007).
2.4.3 Programme sustainability

Programme sustainability occurs when stakeholders (clients) perceive that the services that they are receiving are of sufficient importance and value and are willing to assume responsibility and ownership for them. When this occurs the MFI can develop a phasing out strategy because the programme remains client supported and no externally subsidized support is sought (Bret, 2006).

2.4.4 Human Resource sustainability

It means that the MFI is able to recruit, induct, train and maintain well-qualified staff who are capable of delivering the services as required. Also the staff are able to monitor and maintain the organization on the right track, keeping in mind all the other parameters of sustainability (Ruben and Schers, 2007).

2.4.5 Financial sustainability

Financial sustainability means that the MFI is able to cover all its present costs and the costs incurred in growth, if it expands operations (Johnson et al, 2006). It would mean that the MFI is able to meet its operating costs, its financial costs adjusted for inflation and costs incurred in growth. Financial sustainability is a tangible parameter and can be measured and monitored continually through a set of indicators.

Otero and Rhyne classifies financial sustainability into four levels, starting from the stage when the MFI is totally dependent on subsidies and grants for running its operations to the final stage when the programme is fully financed from resources mobilized from the clients and on funds raised from financial institutions on commercial rates of interest.
To summarise, the key to sustainability financially is to charge an interest rate that is high enough to cover operating costs, loan losses and interest and adjustment expenses. However, MFIs must operate efficiently enough that reasonable, affordable and competitive interest rates can be charged to cover these costs. Therefore long term sustainability requires MFIs to manage delinquency, keep their cost of capital low (by mobilizing savings), rotate their portfolio efficiently, keep operating costs to a minimum and most importantly, set interest rates to cover all these costs (Rutherford, 2000).

2.4.6 Market sustainability

This deals with the whole gamut of issues that deal with demand and supply of Microfinance. It deals with issues relating to the different types of the clientele, their differing types of needs, and designing products that suit the needs of this clientele. Servicing these needs in the most client friendly manner will lead to the sustainability of the demand. A sustainable supply of resources will need that the MFI is financially self-sufficient and meets all its costs from operations and has access to resources raised from the clients and from external sources at commercially viable rates of interest (Johnson et al, 2006).

Market sustainability is also about availability of a large number of choices to the clientele. The MFIs sustain purely on the effectiveness and efficiency of its services and not due to artificially created imperfections (Rosenberg, 2003).

2.4.7 Legal and policy environment sustainability

Market sustainability as described above assumes the existence of a stable and friendly legal and policy environment that will enable the proliferation of a large number of organizations involved in the delivery of Microfinance services (Onyuma and Shem, 2005). It would deal with issues relating to legal
forms of organization, interest rates, savings mobilization, and resource mobilization from capital markets, from overseas commercial sources, etc.

2.4.8 Impact sustainability

Microfinance has emerged as an effective methodology for alleviation of poverty among the disadvantaged sections. Thus it is necessary that the services delivered by the different organizations have a positive impact on poverty. The positive changes that occur in the life of the poor family have to be sustained over the long term for the family to gradually emerge out of the state of poverty (Onyuma and Shem, 2005).

2.5 Factors Influencing Sustainability of MFIs: An Empirical Review

2.5.1 Form of incorporation

In finance literature, the principal-agent theory argues that the form of institutional incorporation should have an effect on the behavior of its managers and how they are influenced by external stakeholders (Myers & Majluf, 1984). The study by Adongo and Stork (2005) showed that the forms of incorporation common to microlenders i.e. closed corporations, trusts and proprietary limited, are negatively (positively) related to financial unsustainability (sustainability). However, based on the model in the report, there is no evidence that the form of incorporation for microlenders influences financial sustainability, because the coefficients of the variables capturing the forms of incorporation common to micro-lenders are insignificant at the 5% or 10% level.

2.5.2 Level of support/Subsidies

It is theoretically expected that microfinance institutions that are supported by other bodies will have a positive relationship to financial sustainability due
to the closer support they receive. Subsidies are common in microfinance, especially in the form of soft loans. In a study by Balkenhol (2007), all 45 MFIs reviewed in the survey were being subsidized in one way or another, of which 34 were convinced that without subsidies, they would not be able to move up-scale by improving their use of human and financial resources. These results have implications for public policy, and especially subsidies. Subsidies should enhance and stimulate efficiency, rather than obliging an MFI to choose between its social objectives and financial performance.

2.5.3 Flexibility of Repayment Schedule

The flexibility of the repayment schedule is theoretically expected to influence financial sustainability to the extent that it affects the effective rate of interest, which in turn has an effect on the break-even interest rate. To the extent that a more frequent repayment schedule generates a higher effective interest rate, a weekly payment schedule should be negatively (positively) associated with financial unsustainability (sustainability) (Adongo and Stork, 2005).

This theoretical expectation highlights the trade-off between aiming to provide more flexible microfinance credit products for customer satisfaction while reducing costs of frequent collection and reducing risk when designing microfinance products from an institutional perspective. It is argued that in the pursuit of lower cost for the microfinance institution through less frequent collection schedules and higher levels of customer satisfaction through more flexible repayment terms, microfinance institutions should not lose sight of the need for stronger loan delinquency control systems to prevent moral hazard from creeping in that may lead to the collapse of the microfinance institution.
In stark contrast to bank debt contracts, most microfinance contracts require that repayments start nearly immediately after loan disbursement and occur weekly thereafter. Even though economic theory suggests that a more flexible repayment schedule would benefit clients and potentially improve their repayment capacity, microfinance practitioners argue that the fiscal discipline imposed by frequent repayment is critical to preventing loan default. In a study by Field and Pande (2008) data from a field experiment which randomized client assignment to a weekly or monthly repayment schedule was used. The study found no significant effect of type of repayment schedule on client delinquency or default. The findings suggest that, among microfinance clients who are willing to borrow at either weekly or monthly repayment schedules, a more flexible schedule can significantly lower transaction costs without increasing client default.

Adongo and Stork (2005) in their study found that the coefficient of the variable capturing the weekly repayment schedule has a negative sign, while that of the monthly and term repayment schedules have a positive sign. Although this conforms to the theoretical expectation based on the model adopted in this report, there is no evidence that these relationships are robust because none of the coefficients of the variables capturing the flexibility of the repayment schedule are significant at the 5% or 10% level.

### 2.5.4 Donor involvement

Underlying the role of outside assistance in the success of MFIs, theory would suggest that, to a certain extent, some form of outside assistance, most often in the form of financial aid, would be necessary in the early stages of MFI creation. Without help from donors and other outside aid organizations, it would be difficult for MFIs to build up a financial base from which to provide
loans and other services to borrowers. However, noting that successful MFIs are defined in part by their ability to, eventually, provide sustainable financial services to the poor, their reliance upon donor organizations should be limited to the beginning stages of development. At some point, it can be assumed that successful MFIs develop sufficient profits from interest gained on loans, allowing them to provide loans and other services from such profits rather than relying upon donors for such funding. Successful MFIs must strike a balance between realizing the need for outside assistance in initial capacity building, and overusing aid, in turn becoming reliant upon the help of outside donors.

Nearly all successful MFIs have benefited from some form of outside funding or assistance during the course of their existence. The extent to which MFIs are reliant upon this outside assistance, however, varies greatly. According to Christen (2004) in his analysis of the role that the World Bank played in the success of the CrediAmigo program, “multilateral donors can play a catalytic role in microfinance development” if they 1) adopt policies individualized for the needs of specific countries rather than creating a universal model, 2) encourage MFIs to develop management capacity for growth before funding expansion, 3) encourage MFIs to take advantage of up to date technological advancements, and 4) ensure that workers on both the donating side and the receiving side are “grounded in the basic elements of sustainable microfinance.” This framework for relationships between donors and MFIs is relatively constant across institutions and countries. Most importantly, the hope is that in receiving foreign aid MFIs will not suffer from mission drift, and will thus be able to use the donated funding to support the original mission of sustainable financial services for the poor.
Van de Ruit (2001) reports that donors were integral to the establishment of the micro-finance sector in South Africa and Mozambique. Donors such as DFID, USAID and FES were instrumental in promoting the practice of micro-finance and supporting the policy environment. Overall, donors have had a limited influence on the development of SMME policies but have had a direct role in the implementation of sector support strategies. At times however, donor polices and approaches have been contradictory.

The model implemented in the report by Adongo and Stork (2005) provided evidence that donor involvement in providing start-up funds for the loan portfolio is positively associated with financial sustainability. However, this report strongly qualifies this statement by reiterating that the definition of financial sustainability is the ability to cover costs independent of external subsidies from donors or government. The formula promoted to calculate financial sustainability in this report does not focus on the sources of funds used to cover costs and does not differentiate between donor and government funds or self-generated funds.

The study by Chua (1998) reveals that donor support played a crucial role in contributing to the two NGOs' outreach and movement towards sustainability. A review of AusAID's involvement in microcredit in the Philippines highlighted the important contribution of various AusAID microcredit support projects to Philippine microcredit NGOs in particular, and to the development of the Philippine microfinance sector in general. AusAID support was instrumental in the development and adaptation of models in start-up programs and in the growth and expansion of tested models (Chua, 1998).
A key contributory factor was AusAID's continuing support to selected NGOs for over a decade which no doubt helped move those NGOs from start-up to stabilization, and to expansion. This support has also facilitated the NGOs' progress towards increased self sustainability. The level of AusAID funding was significant in comparison to the NGOs' scale of operations (Chua, 1998).

2.5.5 Group lending

The model of lending employed by MFIs has proven to be a very important determinant of success and sustainability over time. Most importantly, the lending model established tends to have a large effect on loan repayment rates. MFI lending can be broken down into three common models: The Village Banking Model, the Solidarity Group Model, and the Individual Model. Under the framework of the Village Banking Model, loans are made to entire villages for projects such as community gardens and water systems. Villages as a whole are then expected to repay the loan over time, from community funds rather than the pockets of individuals.

The Solidarity Group Model is similar to the Village Banking Model in the cooperative sense, yet on a smaller scale. Under the Solidarity Group Model loans are given to groups of five or six community members, chosen on the basis of societal reputation, and often composed only of women. In this scenario, each member backs the loans of the other members of the group, thus if one member of the group fails to repay their portion of the loan the remaining members are held responsible. While solidarity groups most often do not all use the funding for a common project, but rather individual business endeavors, they meet as a whole to provide support and guidance for one another. Finally, under the Individual model, as the name implies,
loans are given to individuals for personal business endeavors. The individual alone is held responsible for repayment of the loan; however they do still maintain some level of group support in the form of business development classes and guidance provided by lending institutions (Armendariz and Murdoch, 2004).

The Solidarity Group Model is the most common framework for lending, attributed to its ability to reduce a number of the information asymmetries that are present in other models. Group members are chosen and approved by their peers, thus people who would be likely to default on loans are less likely to be involved in the system. The K-rep program in Nairobi is based in a group lending model that has evolved over time to fit the specific needs of the local clientele. The Juhudi program, which operates under the umbrella of the K-rep program, is modeled after a similar group-based system employed by the Grameen Bank. Groups, made of five to seven members, receive two months of training on group dynamics and the importance of savings and are then issued loans.

According to theory, group lending is expected to positively influence financial sustainability for microfinance institutions because the peer pressure that group members exert on each other should lead to lower default rates on the number of loans disbursed (Adongo and Stork, 2005). The study revealed that group lending positively (negatively) influences the financial unsustainability (sustainability) of microfinance institutions. In addition, there is evidence that this relationship is robust because the coefficient of the variable that captures group lending is significant at the 10% level.
Although this differs from the theoretical expectation, it can be explained by the fact that micro-lenders that do not rely on a group lending methodology to deliver microfinance have much lower degrees of financial unsustainability in Namibia compared to SACCOs, SCAs and MPCMs, when taken as a category. Furthermore, loans by micro-lenders in Namibia are made to individuals who are salaried employees. These microfinance institutions have direct access to the payroll of their clients in urban areas, which gives them very strong loan delinquency control over a clientele that is arguably not as risky as those that are in the more marginal areas institutions (Armendariz and Murdoch, 2004).

In the attempt to test the relationship between the group lending methodology in microfinance service provision and financial sustainability, the model used in a study by Harker (2006) highlights the identity of microfinance institution as opposed to the theoretically posited relationship that group lending should positively influence financial sustainability for microfinance institutions. This suggests that to reduce the default rate, group lending strategies can be complemented by the adoption of credit and risk management tools. Despite this finding, it is important to note that where an individual delivery strategy is chosen, it should be done on a case by case basis and gradually, because it has proven to be a powerful tool in the more vulnerable target groups, i.e. where group cohesion is not strong – Grameen bank model. The positive coefficient of the group lending variable could also suggest that group lending strategies can be complemented by the adoption of credit and risk management tools.

While the group-based lending system reduces the risks associated with imperfect information and adverse selection, in the case of exogenous shocks
this approach can often leave the lending institution worse off. In the case of a drought or natural disaster, most often if one of the group members defaults on the loan the entire group, facing similar predicaments, will have to default on the loan. Individual loans also reduce the free rider problem seen in the group model, particularly in cases in which there is a peer monitoring system in place (Zaman 2004). In these cases, individual loans will often better serve the lending institution.

2.5.6 Savings mobilized

While currently MFIs tend to focus outreach efforts on providing credit services to the poor, the hope is that eventually efforts will enable borrowers to start saving. It is thought that achieving long-term financial sustainability in developing areas is not only dependent upon access to capital, but also the ability to save a portion of funds generated through the use of given capital. According to Solimano et al (1994) ensuring an adequate savings level is crucial for development in its ability to finance capital accumulation over time. A Consultative Group to Assist the Poor (CGAP) study, aimed at developing deposit services for the poor, found that access to such services allowed the poor to better manage emergencies, smooth consumption, meet demands for larger amounts of cash, such as school fees, and take advantage of future investment opportunities.

In providing savings services to the poor MFIs are not only increasing the welfare of those they serve but also reducing the risk of involuntary default on the part of borrowers. In making borrowers better prepared to deal with adverse shocks, such as sickness or drought, such shocks are less likely to make an individual unable to repay existing loans. If faced with a severe drought, farmers who have been given access to, and taken advantage of,
savings institutions will still have the funds to repay at least a portion of loans, as compared to a farmer with no savings who would be forced to default. Once MFIs have successfully developed the institutional capacity to become independent of donor and government subsidies, savings generation theory would suggest that adding savings institutions to the already existing MFI framework will benefit both lenders and borrowers, leaving both parties better off than in the absence of these institutions.

The amount of savings mobilized is theoretically expected to influence the financial sustainability of microfinance institutions, to the extent that they increase interest expense and cost of the microfinance institution, or to the extent that they provide credit information that can be used to assess the eligibility of a borrower and reduce the costs of the lending process for the microfinance institution. These effects work in opposite directions.

In a study by Adongo and Stark (2005), the negative sign of the coefficient that captures the savings component suggests that savings is negatively (positively) related to financial unsustainability (sustainability). This could suggest that the benefit of savings in reducing the cost of the lending process outweighs the cost of interest expenses for the microfinance institution. However, based on the model in this report, there is no evidence to suggest that savings influences the financial sustainability of the selected microfinance institutions in Namibia, because the coefficient is not significant at the 5% or 10% level.

2.5.7 Loans disbursed

The amount of loans disbursed is theoretically expected to be negatively (positively) related to financial unsustainability (sustainability) because it
reduces per unit cost of the lending. The findings of Adongo and Stark (2005) reveal that the coefficient of the variable that captures the amount of loans disbursed confirmed the expected theoretical relationship. However, based on the model adopted in this report there is no evidence to suggest that this relationship is robust because this variable is not significant at the 5% or 10% level.

2.5.8 Per capital income

Per capita income of a location reflects the welfare and socio-economic profile of its residents. The more income the microfinance clientele has, the higher the probability that a microfinance institution serving this target group will be financially sustainable. According to this theoretical perspective per capita income is expected to be negatively related to the financial unsustainability of microfinance institutions in Kenya.

Based on the model in the report by Adongo and Stark (2005) the coefficient of the variable that captures the per capita income of the microfinance target group has the expected negative sign. However, based on the model there is no evidence to suggest that this relationship is robust because the per capita income variable is not significant at the 5% or 10% level. Thus, the model adopted in the report does not find evidence that a lower per capita income in the microfinance target group will hinder the financial sustainability of the selected microfinance institutions in this report.

2.6 Summary

The chapter has presented a review of literature regarding sustainability of microfinance institutions. The empirical review has provided the factors that generally influence sustainability of microfinance institutions. The review
shows mixed results on what factors influence sustainability of microfinance institutions. Such include the form of incorporation, level of support, repayment schedule, donor involvement, the lending model, savings mobilized, per capita income as well as the amount of loans disbursed. Given that there has been a growth in the MFI industry in Kenya, it is also important to establish what factors have influenced the sustainability of such institutions. This is the gap that the present study seeks to bridge. The present study differs from previous ones since it is based on the Kenyan context.
3.1 Introduction
The chapter is organized in this manner: first, the research design is discussed followed by the study location. Then, the population of study is given as well as the sample size and the sampling technique. Data collection tools are then presented. Data analysis and reporting completes the chapter.

3.2 Research Design
This study was a descriptive survey. This method had been successfully used by Wanjiru, (2000), in a study of factors that influence productivity of credit officers in microfinance institutions.

3.3 Population and sample
The population of interest in this study consisted of all the 30 microfinance that operate within Nairobi (AMFI Directory, 2008). This study was limited to the institutions that operate within Nairobi in order to address the influence of location. Therefore, the population of study was 30 institutions which had been identified to be operating within the area. Since the study was a survey, all the 30 MFIs operating in Nairobi were selected for the study. Thus, there was no sampling of the MFIs to come up with a sample size.

3.4 Data collection
This study was facilitated by the use of both primary and secondary data. Primary data were collected from the managers of the institutions using structured questionnaires provided in appendix 1. The questionnaires collected data on the factors influencing sustainability of MFIs in Kenya. A pilot test was used to test validity and reliability of data collection
instruments on a sample of microfinance firms outside Nairobi. The results of
the pilot survey were used to amend the questionnaires appropriately. The
questionnaires were administered using the drop and pick method. The
researcher also made personal visits to the study areas in order to enhance the
response rate.

Secondary data helped in calculating the financial sustainability. It is difficult
to measure financial sustainability of MFIs, as almost all MFIs are subsidized,
where some subsidies are in kind form. Nevertheless, alternative measures
were used to assess financial sustainability of MFIs in this study. Operational
sustainability, as component of financial sustainability measurement, was
measured using return on assets (ROA) and return on equity (ROE). This
information was found from the financial statements of various MFIs selected
for the study.

3.5 Data analysis
The data obtained from the questionnaires were grouped into different classes
and analyzed using factor analysis to show magnitude of influence of the
variables on the sustainability of the institutions. Regression analysis was also
run to establish the direction of influence of each of the factors on financial
sustainability. The statistical package for social sciences was instrumental in
establishing the data associations which eventually led to conclusions on the
objectives of the study.
This chapter presents the study results and the interpretation thereof. The study questionnaires were administered to all the 30 microfinance institutions operating in Nairobi (AMFI Directory, 2008). All the questionnaires were finally collected within the time period. After sorting of the questionnaires, 2 were found to be incomplete hence were not included in the final analysis. Thus, the final analysis was done with 28 questionnaires.

### 4.2 Firm characteristics

The study found that in terms of the period that the microfinance institutions had been operating, 7% had existed for less than 5 years, 32% for a period between 5 and 10 years, 36% for a period between 11 and 15 years while the remaining 25% for a period more than 15 years. These results are shown in Table 1. The results imply that most of the MFIs have existed for more than 10 years (61%).

<table>
<thead>
<tr>
<th>Period</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>5-10 years</td>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>11-15 years</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Over 15 years</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

On the number of clients, the study found that 11% had less than 50,000 clients, 21% had up to 100,000 clients, 54% had up to 200,000 clients while 14%
had over 200,000 clients. These results are summarised and presented in Table 2. The results imply that on average, majority of microfinance institutions have up to 200,000 clients.

Table 2: Number of clients

<table>
<thead>
<tr>
<th>Number of clients</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,000 or less</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>100,000 or less</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>200,000 or less</td>
<td>15</td>
<td>54</td>
</tr>
<tr>
<td>Over 200,000</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Regarding the number of branches each of the MFIs had, the study revealed that 25% had up to 20 branches, 40% had between 21 and 50 branches, 14% had between 51 and 100 branches while 11% had over 100 branches. These results are shown in Table 3. The results imply that majority of MFIs had between 21 and 100 branches.

Table 3: Number of branches

<table>
<thead>
<tr>
<th>Number of branches</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 or less</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>21-50 branches</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>51-100 branches</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Over 100 branches</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The study found that in terms of the number of employees, 7% of the MFIs had up to 50 employees, 21% had had up to 100 employees, 39% had up to
200 employees, while 32% had more than 200 employees. This is shown in Table 4. The results imply that most of the MFIs are medium sized with between 50 and 200 employees.

Table 4: Number of employees

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 or less</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>100 or less</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>200 or less</td>
<td>11</td>
<td>39</td>
</tr>
<tr>
<td>More than 200</td>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 1 shows the results on the level of MFI sustainability as represented by return on assets. As shown, most of the MFIs are below the medium level of performance as shown by ROA. Thus, it may be asserted that most of the MFIs are below the market sustainability measures.
The study found that most of the MFIs had levels of return on equity way below the market median. Thus, the sustainability levels as shown by the ROE indicates that majority of the MFIs are not financially sustainable. These results are shown in Figure 2.
4.3 Factors Affecting Sustainability of MFIs

The factor analysis shows that all the factors in the analysis had larger extraction values thus could be used in the final regression. These results are shown in Table 5.

Table 5: Communalities

<table>
<thead>
<tr>
<th>Factor</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>The form of incorporation</td>
<td>1</td>
<td>0.517</td>
</tr>
<tr>
<td>The level of support the MFIs receives in form of subsidies, grants.</td>
<td>1</td>
<td>0.801</td>
</tr>
<tr>
<td>The flexibility of the loan repayment schedule</td>
<td>1</td>
<td>0.596</td>
</tr>
<tr>
<td>Donor involvement in form of loans or capacity building.</td>
<td>1</td>
<td>0.709</td>
</tr>
<tr>
<td>Group lending model or individual lending.</td>
<td>1</td>
<td>0.696</td>
</tr>
<tr>
<td>The average size of savings mobilized</td>
<td>1</td>
<td>0.645</td>
</tr>
<tr>
<td>The amount of loans disbursed</td>
<td>1</td>
<td>0.745</td>
</tr>
<tr>
<td>Total assets.</td>
<td>1</td>
<td>0.608</td>
</tr>
</tbody>
</table>

The results in Table 6 indicate variables that had major effect. As shown, there were three factors that accounted for up to 66% of the variance in the model. The eigenvalues indicate that three components explained up to 66.463% of the variance.
Table 6: Total variance explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>2</td>
<td>1.514</td>
<td>18.93</td>
<td>50.859</td>
</tr>
<tr>
<td>3</td>
<td>1.248</td>
<td>15.604</td>
<td>66.463</td>
</tr>
<tr>
<td>4</td>
<td>0.809</td>
<td>10.108</td>
<td>76.571</td>
</tr>
<tr>
<td>5</td>
<td>0.702</td>
<td>8.778</td>
<td>85.349</td>
</tr>
<tr>
<td>6</td>
<td>0.573</td>
<td>7.162</td>
<td>92.511</td>
</tr>
<tr>
<td>7</td>
<td>0.353</td>
<td>4.409</td>
<td>96.919</td>
</tr>
<tr>
<td>8</td>
<td>0.246</td>
<td>3.081</td>
<td>100</td>
</tr>
</tbody>
</table>
The results in Table 7 show the responses on the factors that MFIs deemed to influence their levels of sustainability. The results are shown in terms of percentages, mean scores and standard deviations. The responses were on a 5-point Likert scale ranging from 1 (very low extent) to 5 (very large extent). Thus, the mean on each of the factors range from 1 to 5. The standard deviations indicate the variance on each of the responses. A mean score below 3 point indicate that the factor did not have a major influence while a mean score of above 3 indicates that the factor had a significant influence.

Thus, as shown in Table 7, 96% of the MFIs asserted that the form of incorporation had the least influence on their sustainability levels. The mean score of 1.25 also confirms that indeed the form of incorporation had the least influence. The standard deviation of 0.51819 shows that the responses on whether the form of incorporation influenced sustainability were not varied.

It was also noted that the flexibility of loan repayment least influenced MFI's sustainability levels as shown by the mean score of 2.8571. 50% of the respondents said that it has a moderate extent while 33% asserted that it has a low influence. Only 18% said it had a large influence on their sustainability. The standard deviation was 0.8 showing that the responses were not very much varied.

The study also found that 86% of the MFIs agreed that the level of support they receive in form of subsidies and grants influenced their sustainability. This had a mean score of 4.1429 and a standard deviation of 0.755. This mean score shows that the responses were not varied as much.
<table>
<thead>
<tr>
<th>Factors</th>
<th>Very low (%)</th>
<th>Low (%)</th>
<th>Moderate (%)</th>
<th>Large (%)</th>
<th>Very large (%)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The form of incorporation</td>
<td>79</td>
<td>18</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1.25</td>
<td>0.51819</td>
</tr>
<tr>
<td>The level of support the MFIs receives in form of subsidies, grants.</td>
<td>0</td>
<td>4</td>
<td>11</td>
<td>54</td>
<td>32</td>
<td>4.1429</td>
<td>0.75593</td>
</tr>
<tr>
<td>The flexibility of the loan repayment schedule</td>
<td>4</td>
<td>29</td>
<td>50</td>
<td>14</td>
<td>4</td>
<td>2.8571</td>
<td>0.84828</td>
</tr>
<tr>
<td>Donor involvement in form of loans or capacity building.</td>
<td>0</td>
<td>11</td>
<td>18</td>
<td>32</td>
<td>39</td>
<td>4</td>
<td>1.01835</td>
</tr>
<tr>
<td>Group lending model or individual lending.</td>
<td>7</td>
<td>7</td>
<td>11</td>
<td>46</td>
<td>28</td>
<td>3.8214</td>
<td>1.15642</td>
</tr>
<tr>
<td>The average size of savings mobilised</td>
<td>0</td>
<td>11</td>
<td>25</td>
<td>50</td>
<td>14</td>
<td>3.6786</td>
<td>0.86297</td>
</tr>
<tr>
<td>The amount of loans disbursed</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>36</td>
<td>60</td>
<td>4.5714</td>
<td>0.57275</td>
</tr>
<tr>
<td>Total assets.</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>36</td>
<td>50</td>
<td>4.3571</td>
<td>0.73102</td>
</tr>
</tbody>
</table>
It was also noted that 71% of the MFIs agreed that donor involvement in form of loans or capacity building had a major influence on their levels of sustainability. The mean score of 4.0 confirms this fact. But the responses on this issue were varied as the standard deviation was 1.01835.

The lending model used by the MFIs was also found to have a major influence on the sustainability levels of MFI as 74% agreed so. This was also confirmed by the mean score of 3.8214. The standard deviation of 1.15642 confirms that the responses were varied.

The study also found that the average size of savings mobilised had a large influence on sustainability levels of MFIs. As shown, 64% of the respondents agreed that it has a large influence. The mean score of 3.6786 confirms this and the standard deviation of 0.86 shows that the responses on this were not very much varied.

It was also revealed that 96% of the respondents agreed that the amounts of loans disbursed influence sustainability levels to a large extent while 4% said this had moderate influence. The mean score was 4.5714 showing that the factor had a major influence on sustainability. The standard deviation of 0.572 indicates that the responses did not vary much from the mean response.

The study also found that 86% of the respondents asserted that the levels of total assets had large influence on sustainability. The mean score of 4.3571 also confirmed this. The standard deviation was 0.73102. This shows that the variance from the mean response on this factor was low.
The results presented in Table 8 and 9 show the regression coefficients on the factors that influence the sustainability of microfinance institutions in Kenya. Table 8 shows the effect on sustainability by ROA while Table 9 shows the effect by ROE as the dependent variable.

The form of incorporation had a positive influence on sustainability as measured by both ROA and ROE (0.00282 and 0.003 respectively). The test of significance failed as the t-values were very low (t = 0.839 and 0.327 respectively).

The level of support had a positive influence on ROA and ROE (0.00479 and 0.00352 respectively). This value did not however have a significant influence on both ROA and ROE as the t-values were low (1.416 and 0.381 respectively).

The study also noted that the flexibility of loan repayment schedule had a positive influence on ROA (0.000812) but the test of significance failed (t = 0.358). It has a negative influence on ROE (-0.008) but the relationship was not significant (t = -1.335).

The effect of donor involvement on ROA was also positive (0.00195) but was not significant (t = 0.867). For the effect of donor involvement on ROE, the study found that it had a positive influence on ROE (0.00611) but the test of significance failed (t = 0.994).

The lending model was noted to have a negative influence on ROA (-0.00378). This relationship was significant (t = -2.017). But on its effect on ROE, it was found to have a negative relation (-0.00592). This relationship was not significant (t = -1.156).
The study also found that the average size of savings had a positive influence on ROA (0.00446) but a negative influence on ROE (-0.00353). This factor was found to have a significant influence on ROA (t = 2.127) but its effect on ROE was not significant (t = -0.615).

The study also revealed that the amount of loans disbursed had a positive influence on ROA (0.00373) and a negative influence on ROE (-0.00865). This effect was insignificant on both ROA and ROE (t = 1.24 and -1.051 respectively).

The study further revealed that the total assets had a negative correlation with both ROA and ROE (-0.0038 and -0.000216 respectively) but the factor was not significant (t = -1.615 and -0.034).
Table 8: Factors influencing Sustainability by ROA

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.239</td>
<td>0.3</td>
</tr>
<tr>
<td>The form of incorporation</td>
<td>0.00282</td>
<td>0.034</td>
</tr>
<tr>
<td>The level of support the MFIs receives in form of subsidies, grants.</td>
<td>0.00479</td>
<td>0.034</td>
</tr>
<tr>
<td>The flexibility of the loan repayment schedule</td>
<td>0.000812</td>
<td>0.023</td>
</tr>
<tr>
<td>Donor involvement in form of loans or capacity building.</td>
<td>0.00195</td>
<td>0.022</td>
</tr>
<tr>
<td>Group lending model or individual lending.</td>
<td>-0.00378</td>
<td>0.019</td>
</tr>
<tr>
<td>The average size of savings mobilized</td>
<td>0.00446</td>
<td>0.021</td>
</tr>
<tr>
<td>The amount of loans disbursed</td>
<td>0.00373</td>
<td>0.03</td>
</tr>
<tr>
<td>Total assets</td>
<td>-0.0038</td>
<td>0.024</td>
</tr>
</tbody>
</table>
Table 9: Factors influencing Sustainability by ROE

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>0.827</td>
<td>0.821</td>
</tr>
<tr>
<td>The form of incorporation</td>
<td>0.003</td>
<td>0.092</td>
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<tr>
<td>The level of support the MFIs receives in form of subsidies, grants.</td>
<td>0.00352</td>
<td>0.092</td>
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<tr>
<td>The flexibility of the loan repayment schedule</td>
<td>-0.008</td>
<td>0.062</td>
</tr>
<tr>
<td>Donor involvement in form of loans or capacity building.</td>
<td>0.00611</td>
<td>0.061</td>
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<tr>
<td>Group lending model or individual lending.</td>
<td>-0.00592</td>
<td>0.051</td>
</tr>
<tr>
<td>The average size of savings mobilized</td>
<td>-0.00353</td>
<td>0.057</td>
</tr>
<tr>
<td>The amount of loans disbursed</td>
<td>-0.00865</td>
<td>0.082</td>
</tr>
<tr>
<td>Total assets</td>
<td>-0.000216</td>
<td>.064</td>
</tr>
</tbody>
</table>
4.4 Challenges Facing MFIs

The study sought to establish the challenges facing the microfinance institutions in Kenya. As presented in Table 12, the results are given in terms of percentages of those who agreed or disagreed with each of the challenges listed. The mean scores present whether the challenge presented is indeed a challenge in general or not. If the mean score of 1.5 or more, it means that the respondents disagreed that the listed challenge is a challenge. If it falls below 1.5, then it is indeed a challenge. The standard deviation shows the extent to which responses varied from the mean response.

From the results in Table 10, it is revealed that 96% of the respondents agreed that funding was a challenge while 4% disagreed. The mean score of 1.0357 shows that the respondents agreed that funding was a major challenge facing MFIs in Kenya. The variance on funding as a challenge was very low as shown by a mean score of 0.1889.

The study also revealed that 82% of the respondents agreed that repayment default was a challenge facing MFIs in Kenya while 18% disagreed. The mean score of 1.1786 confirms that repayment default was indeed a challenge. The variance from the mean was 0.3900.

The study further found that 82% of the respondents agreed that government regulations were a major challenge but 18% did not think so. The mean score of 1.1786 confirmed that government regulations were a major challenge.

The study found that 68% of the respondents did not think that low number of clients was a major challenge facing MFIs while the remaining 32% saw this
as a major challenge. The mean score was 1.6786 confirming that the low number of clients was not a major challenge facing MFIs in Kenya.

Lastly, the study revealed that 32% of the respondents agreed that low profits were a major challenge facing MFIs in Kenya while 68% did not think so. The mean of 1.6786 confirms so.

Table 10: Challenges Facing MFIs in Kenya

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Yes</th>
<th>No</th>
<th>Mean</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding</td>
<td>96</td>
<td>4</td>
<td>1.0357</td>
<td>.1889</td>
</tr>
<tr>
<td>Repayment default</td>
<td>82</td>
<td>18</td>
<td>1.1786</td>
<td>.3900</td>
</tr>
<tr>
<td>Government regulations</td>
<td>82</td>
<td>18</td>
<td>1.1786</td>
<td>.3900</td>
</tr>
<tr>
<td>Low number of clients</td>
<td>32</td>
<td>68</td>
<td>1.6786</td>
<td>.47559</td>
</tr>
<tr>
<td>Low profits</td>
<td>32</td>
<td>68</td>
<td>1.6786</td>
<td>.47559</td>
</tr>
</tbody>
</table>
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This section presents the summary of findings, conclusions of the study and the recommendations for policy and practice. The section also presents the suggestions for further research.

5.2 Summary of findings
The study found that in terms of the period that the microfinance institutions had been operating, majority of the MFIs have existed for more than 10 years (61%). On the number of clients, the study found on average, majority of microfinance institutions have up to 200,000 clients. Regarding the number of branches each of the MFIs had, the study revealed that majority of MFIs had between 21 and 100 branches. The study found that in terms of the number of employees, most of the MFIs were medium sized enterprises with between 50 and 200 employees.

On the level of MFI sustainability as represented by return on assets, most of the MFIs were below the medium level of performance. The same was the case for sustainability as measured by return on equity. Thus, most of the microfinance institutions were not financially sustainable as measured by both return on assets and return on equity.

The study found that 96% of the MFIs asserted that the form of incorporation had the least influence on their sustainability levels. The mean score of 1.25 also confirms that indeed the form of incorporation had the least influence. It was also noted that the flexibility of loan repayment least influenced MFI's sustainability levels as shown by the mean score of 2.8571. 50% of the
respondents said that it has a moderate extent while 33% asserted that it has a low influence. The study also found that 86% of the MFIs agreed that the level of support they receive in form of subsidies and grants influenced their sustainability. This had a mean score of 4.1429. It was also noted that 71% of the MFIs agreed that donor involvement in form of loans or capacity building had a major influence on their levels of sustainability. The mean score of 4.0 confirms this fact. The lending model used by the MFIs was also found to have a major influence on the sustainability levels of MFI as 74% agreed so. This was also confirmed by the mean score of 3.8214. The study also found that the average size of savings mobilised had a large influence on sustainability levels of MFIs. The mean score of 3.6786 confirms this. It was also revealed that 96% of the respondents agreed that the amounts of loans disbursed influence sustainability levels to a large extent. The mean score was 4.5714 showing that the factor had a major influence on sustainability. The study also found that 86% of the respondents asserted that the levels of total assets had large influence on sustainability. The mean score of 4.3571 also confirmed this.

The form of incorporation had a positive influence on sustainability as measured by both ROA and ROE. The test of significance failed as the t-values were very low (t = 0.839 and 0.327 respectively). The level of support had a positive influence on both ROA and ROE but did not have a significant influence on both ROA and ROE as the t-values were low (1.416 and 0.381 respectively). The study also noted that the flexibility of loan repayment schedule had a positive influence on ROA but the test of significance failed (t = 0.358). It has a negative influence on ROE but the relationship was not significant (t = -1.335). The effect of donor involvement on ROA was also positive but was not significant (t = 0.867). For the effect of donor involvement
on ROE, the study found that it had a positive influence on ROE but the test of significance failed ($t = 0.994$). The lending model was noted to have a negative influence on ROA. This relationship was significant ($t = -2.017$). But on its effect on ROE, it was found to have a negative relation. This relationship was not significant ($t = -1.156$). The study also found that the average size of savings had a positive influence on ROA but a negative influence on ROE. This factor was found to have a significant influence on ROA ($t = 2.127$) but its effect on ROE was not significant ($t = -0.615$). The study also revealed that the amount of loans disbursed had a positive influence on ROA and a negative influence on ROE. This effect was insignificant on both ROA and ROE ($t = 1.24$ and $-1.051$ respectively). The study further revealed that the total assets had a negative correlation with both ROA and ROE but the factor was not significant ($t = -1.615$ and $-0.034$).

The study found that 96% of the respondents agreed that funding was a challenge. The mean score of 1.0357 shows that the respondents agreed that funding was a major challenge facing MFIs in Kenya. The study also revealed that 82% of the respondents agreed that repayment default was a challenge facing MFIs in Kenya. The mean score of 1.1786 confirms that repayment default was indeed a challenge. The study further found that 82% of the respondents agreed that government regulations were a major challenge. The mean score of 1.1786 confirmed that government regulations were a major challenge. It was also noted that 68% of the respondents did not think that low number of clients was a major challenge facing. The mean score was 1.6786 confirming that the low number of clients was not a major challenge facing MFIs in Kenya. Lastly, the study revealed that 32% of the respondents agreed that low profits were a major challenge facing MFIs in Kenya while
5.3 Conclusions

The study sought to establish the factors that influence sustainability of microfinance institutions (MFIs) in Kenya and to establish the relationship between financial and institutional sustainability of MFIs.

The results revealed that majority of microfinance institutions in Kenya are below the market mean sustainability as measured by both the return on assets as well as the return on equity. The study therefore concludes that majority of microfinance institutions in Kenya are not financially sustainable if measured by the return on assets or return on equity.

The study found that the average size of savings had a positive influence on return on assets and that this relationship was positive. The rest of the variables did not have a significant influence on either ROA or ROE. Thus, the study concludes that the most significant factor that influenced sustainability of microfinance institutions in Kenya is the size of savings.

On the challenges, the study found that the major challenges facing microfinance institutions in Kenya are funding, repayment default and government regulations. Low profits and number of clients were not found to be major challenges facing the sector. Thus, it is concluded that the major challenges facing microfinance institutions in Kenya are funding, repayment default and government regulations.
5.4 Recommendations

The study recommends that the microfinance institutions in Kenya need to work on being financially sustainable. This can be done by ensuring that there is less default in repayment so that their equity values are stabilised as well as their net incomes.

The study also recommends that since the levels of sustainability are positively influenced by the average size of savings, the microfinance institutions need to explore ways of increasing ember savings either by churning out products that entice the members to save more or by bringing on to board more clients for the savings to rise.

It is also recommended that since there are a couple of challenges facing MFIs in Kenya especially in terms of funding, repayment default and regulations, a few measures need to be taken by various stakeholders. First, on funding, the MFIs need to improve on strategies that will entice more members to increase savings or increase the number of clients so that they can increase the funding. This can be done alongside donor funding. Secondly, regarding repayment default, measures need to be taken so that more members can pay up their loans without default. Lastly, as regards the regulations, he Government needs to look into what regulatory impediments hider the sustainability of this sector and then come up with policies that can help improve the current situation.

5.5 Suggestions for further research

There is need to carry out further research in Kenya on sustainability of microfinance institutions. An angle which should be explored by future researchers is the relationship between outreach and financial sustainability of
microfinance institutions. This is because the MFIs are expanding further into so many branches and there is need to establish whether this expansion is fruitful for the long term sustainability of MFIs in Kenya.
REFERENCES


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APPENDICES

Appendix 1: Questionnaire

SECTION A: GENERAL INFORMATION

Please fill in the spaces provided with information that is as accurate as is practicable.

1. Name of the organisation

2. How long has the firm been in operation?

3. What is the average number of clients per year?

SECTION B: FACTORS AFFECTING SUSTAINABILITY OF MFIs

To what extent do you believe that the following factors influence the sustainability of your institution? Tick as applies from the box provided.

Key:

1 very low extent
2 low extent
3 moderate extent
4 large extent
5 very large extent
Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>The form of incorporation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The level of support the MFIs receives in form of subsidies, grants.</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>The flexibility of the loan repayment schedule</td>
<td></td>
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<tr>
<td>Donor involvement in form of loans or capacity building.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group lending model or individual lending.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>The average size of savings mobilised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of loans disbursed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total assets.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION C: CHALLENGES FACING MFIs

12. What challenges do you face as an MFI in Kenya? (Mark as applies).

Funding ( )
Repayment default ( )
Government regulations ( )
Low number of clients ( )
Low profits ( )

13. What other challenges does the MFI face?

THE END

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Appendix 2: MFIs Operating In Nairobi

1. AAR Credit Services
2. Abakan Foundation-First MicroFinance Agency (AKF-FMFA)
3. AIG Kenya Insurance Co. Ltd
4. Business Initiatives and Management Assistance Services (BIMAS)
5. Co-operative Bank
6. Co-operative Insurance Company of Kenya Ltd (CIC)
7. Equity Bank
8. Faulu Kenya
9. Fusion Capital
10. Jamii Bora
11. Jitegemee Credit
12. Jitegemee Trust Limited
13. Kadet Ltd
14. Kenya Gatsby Trust
15. Jitegemea Credit Scheme
17. K-Rep Bank
18. Small & Micro Enterprise Programme (SMEP)
19. Kenya SNV
21. SISDO
22. Kenya Eclof
23. Kenya Women Finance Trust (KWFT)
24. Micro Africa
25. Micro Enterprises Support Programme Trust (MESPT)
26. OIKO Credit
27. Plan International Inc.
28. Sunlink
29. Swisscontact
30. Women Economic Empowerment Consort (WEEC)