

**THE RELATIONSHIP BETWEEN OUTREACH AND FINANCIAL SUSTAINABILITY  
OF MICROFINANCE INSTITUTIONS IN NAIROBI COUNTY**

**BY**

**JEFF ODHIAMBO ARODI  
D61/62885/2011**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE AWARD OF MASTER OF BUSINESS  
ADMINISTRATION DEGREE OF UNIVERSITY OF NAIROBI**

**NOVEMBER 2013**

**DECLARATION**

This research project is my original work and has not been presented for award of any degree in any other university

Signature.....

Date.....

**Jeff Odhiambo Arodi**

**D61/62885/2011**

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

Signature.....

Date.....

**Dr. Josiah Aduda**  
**Senior Lecturer**  
**Department of Finance and Accounting,**  
**School of Business, University of Nairobi**

**DEDICATION**

To my lovely mother, Margaret Apiyo Arodi for making me who I am today

## **ACKNOWLEDGEMENTS**

Conducting a study of this nature is not possible without the help and support of a range of individuals and organizations. I would like to thank the almighty God for giving me good health, wisdom and courage of undertaking this research. I also humbly and sincerely thank my supervisor at the University of Nairobi School of business, department of Accounting and Finance, senior Lecturer, Dr. Josiah Aduda who have kept me on track for the duration of my research study and have always shown interest and understanding in my chosen subject. I cannot forget to express my appreciation to the entire academic section of The University of Nairobi School of Business School who enabled me to pursue a Degree of Masters of Business administration.

I will forever be grateful to my research respondents for the time they took filling my data collection form and their willingness to give me the vital information that was necessary for the study. In particular my appreciation to the staff at Association of Micro Finance and Kenya Women Finance Trust head office who were accommodative and supportive in giving me information on their client base. Titus Machii has been instrumental in assisting me with the data analysis with the aid of SPSS

I wish to thank my family and those who are special to me for being patient with during the times when they needed me the most. These include my Mom, Margaret Arodi, Dad, Joseph Arodi and Brother Seth Arodi who gave me the emotional and financial support and Millicent Makena for her understanding during my studies. Last but not least, my friends; Samwel Ngera Mbugua, Judy Maiyo Hellen Nyong'a who kept on encouraging and inspiring me

## ABSTRACT

Several micro finance institutions (MFIs) are operating with the key objective of giving credit services to the poor. In light of this, this paper attempted to look at MFIs financial in Nairobi County with key focus on outreach and financial sustainability. The paper has been compiled with the use of data obtained from secondary sources. The purpose of this study was to investigate the relationship between financial sustainability and outreach of MFIs in Nairobi County. The study was guided by the following research objectives, establishing the relationship between financial sustainability and outreach of MFIs in Nairobi County. A sample of 8 MFIs in Nairobi County was selected from Nairobi region.

The respondent MFIs used in the study was positively selected from Association of Microfinance report. A cross sectional research design was adopted which involved descriptive, correlation, factor analysis and regression approaches. Findings revealed that there was a significant positive relationship between all the study variables financing strategies, financial sustainability and outreach of MFIs. Results from the regression analysis showed that financial sustainability significantly predicted of outreach of MFIs.

The study found that the industry's outreach rose in the period from 2008 to 2012 on average by 12 percent. It identified that while MFIs reach the very poor, their reach to the disadvantages particularly to women is limited (48.4 Percent on average). From financial sustainability angle, it finds that MFIs are operational sustainable measured by return on asset is improving over time

The paper recommends that MFIs should develop appropriate financial strategies that would enable them develop the right proportions of debt to equity putting into consideration the accessibility of these sources of funding and also cost of such funds, adopt adequate professional management of financial constraints so as to increase their capacity to clear debt obligations and continue with operations and also to have various sources of finance other than donor funds in order to improve their financial self sufficiency.

## TABLE OF CONTENTS

Declaration.....	ii
Dedication.....	iii
Acknowledgements.....	iv
Abstract .....	v
Table of Contents.....	vi
Abbreviations .....	ix
List of tables.....	x
List of figures.....	xi
<b>CHAPTER ONE: INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the Study.....	1
1.1.1 Micro-Finance.....	1
1.1.2 Outreach of Microfinance.....	1
1.1.3 Financial Sustainability.....	3
1.1.4 Outreach and sustainability of MFIs.....	4
1.1.5 Microfinance Institution in Kenya.....	6
1.2 Statement of the Problem .....	7
1.3 Objective of the Study.....	9
1.4 Value of the Study.....	9
<b>CHAPTER TWO: LITERATURE REVIEW.....</b>	<b>10</b>
2.1 Introduction .....	10
2.2 Brief History of Micro Finance.....	10
2.3 Theories of Micro-Finance.....	11
2.3.1 Joint Liability Theory.....	11
2.3.2 Financing System Model.....	11
2.3.3 Women’s Empowerment Theory.....	12
2.3.4 Poverty Lending Model.....	12

2.3.5 Endogenous Growth .....	13
2.4 Empirical Review.....	14
2.5 Chapter Review.....	17

**CHAPTER THREE: RESEARCH METHODOLOGY..... 18**

3.1 Introduction .....	18
3.2 Research Design.....	18
3.3 Target Population and Sample.....	18
3.4 Data Collection.....	19
3.5 Data Analysis.....	19
3.6 Data Validity and Reliability.....	20

**CHAPTER FOUR: DATA ANALYSIS, RESULTS AND PRESENTATION OF FINDINGS**

4.1 Introduction.....	21
4.2 Data presentation and analysis of results.....	21
4.2.1 Distribution of Loan to Women Clients in Sampled MFIs .....	21
4.2.2 Distribution of total loan of Branches in Sampled MFIs.....	22
4.2.3 Distribution of loan to youthful clients in sampled MFIs.....	22
4.2.4 Distribution of Loan to Disabled Clients in Sampled MFIs.....	23
4.2.5 Summary of loan Amount and Distribution.....	24
4.2.6 Relationship between MFIs and their Return on Asset.....	25
4.2.7 Regression Analysis.....	26
4.3 Summary and interpretation of Findings.....	31

**CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS..... 34**

5.1 Summary.....	34
5.2 Conclusion.....	35
5.3 Policy recommendation.....	36
5.4 Limitations of Study.....	36
5.5 Suggestion for further Research.....	37

<b>REFERENCES.....</b>	<b>39</b>
<b>APPENDICES.....</b>	<b>43</b>
Appendix I: Introduction Letter.....	43
Appendix II: Data collection form I.....	44
Appendix III: Data collection form II.....	46
Appendix IV: MFIs Operating in Nairobi County.....	48



## ABBREVIATIONS

AMFI	Association of Microfinance Institutions
ASCAs	Accumulating Savings and Credit Associations
CBK	Central Bank of Kenya
GDP	Gross Domestic Product
KPSOB	Kenya Post Office Savings Bank
KSTES	Kenya Small Traders and Entrepreneurs Society
KWFT	Kenya Women Finance Trust
MFI	Microfinance Institutions
MSEs	Medium Size Enterprises
NGOs	Non Governmental Organizations
POCSSBO	Project Office for Creation of Small Scale Business Opportunities and the office
SACCOs	Savings and Credit Co-operative Society
SMEP	Small and Medium Enterprise Programme
SMEs	Small and Micro Enterprises
SPSS	Statistical Package for Social Science
ROA	Return on Assets
ROE	Return on Equity
ROSCAs	Rotating Savings and Credit Associations

## **LIST OF TABLES**

- Table 1: Summary of loan distribution from SPSS
- Table 2: Regression Model Summary
- Table 3: Analysis of Variance (ANOVA) Table
- Table 4: Correlations

## **LIST OF FIGURES**

- Figure 1: Loan distribution of women clients
- Figure 2: Bar Graph Representing the Percentages of Loan to Branches as Per the Sampled MFI Institutions in Nairobi County
- Figure3: Pie Chart Representing the Percentage of Loan to Youths between the Ages of 18 To 35 Years as Per the Sampled MFI's operating In Nairobi County
- Figure4: Pie Chart Representing the Percentage of Loan to Disable as per the Sampled MFI's operating in Nairobi County
- Figure 5: Pie Chart showing the Mean Statistics of the Amount of Money given to the Predictors
- Figure 6: Line Graph showing the relationship between the sampled MFI's in Nairobi County and the Mean Return on Asset.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the study**

##### **1.1.1 Microfinance**

Ledgerwood (2000) defines Microfinance as provision of financial services to poor or low-income clients, including consumers and the self-employed. A subset of microfinance, microcredit is the provisioning of small loans to such clients, which has proven particularly valuable to small business entrepreneurs who otherwise might not be served by traditional financial institutions due to certain economic constraints. The impact of the microfinance industry gained considerable publicity with the award of the 2006 Nobel Peace Prize to the Grameen Bank and its founder Muhammad Yunus (2007), who is often credited with formalizing the microfinance approach to serve the unbanked poor (Chaia et al. 2009).

Micro financing therefore involves the provision of financial services to low income earners by firms described as microfinance institutions (MFIs) using lending methods which are both formal and non formal (Kareta, 2010). The lending methods are detailed in the credit policy which is used in determining the extent to which microfinance services are extended to customers in form of outreach.

##### **1.1.2 Outreach of Microfinance**

The two most usual aspects of outreach in the literature are its depth and breadth. Depth of outreach refers to the poverty level of clients served, whereas breadth of outreach refers to the scale of operations of a MFI. There is some disagreement in the literature with regard to the relative benefits of depth and breadth of outreach, this disagreement exists between the pro-poor and the proponent of microfinance sustainability. The pro-poor microfinance approach argues that depth of MFIs reach out to the poorest individuals of the society, hence that depth of outreach is more important for achieving the social objective of microfinance. Proponents of sustainable microfinance on the other hand are more interested in opening access to a wide range of un-served or underserved clients (Rhyne 1998).

According to the breadth logic, the microfinance industry should have large-scale outreach in order to make a difference in the world's poverty levels. Some argue that shallow depth can be compensated by the breadth of outreach (Navajas et al. 2000). The objective functions of microfinance institutions might thus differ in the weight they assign to different aspects of

outreach. In addition to considering outreach with respect to poverty, a microfinance program might decide to target a specific client group that is considered restricted from access to financial services either because of their characteristics or because of physical constraints. Such target groups include women, people in rural areas, ethnic minorities, illiterate people, and so on. In addition to those reaching the very poor, those serving hard-to reach clients can also be said to have deep outreach. Meyer (2002) on the other hand, outreach can be looked as the number of persons that are served by MFIs who were previously denied access to formal financial services who on most cases are the poor

Other than the above measures, six more measure of outreach can also be pointed out these are: Breadth, cost to users, length, worth of users, depth and scope. In this context, depth of outreach refers to the value the society attaches to the net gain from the use of the micro credit by a given borrower. This measure identifies the poor clients. Because, the poor are the one who fail to get access to get credit from formal financial institutions since they fail to signal that they can repay their loan (Conning, 1997). Worth of outreach to users refers to how much a borrower is willing to pay for a loan. Similarly, cost of outreach to user refers to cost of a loan to a borrower. These costs to users might consists of prices like interest rates and various payments that they have to pay, which could be revenue to the lender, and other loan related transaction costs like expenses on documents, transport, food, taxes, etc. Finally, breadth of outreach is the number of users. Length of outreach is the time frame in which a microfinance organization produces loans, and Scope of outreach is the number of type of financial contracts offered by a microfinance organization. It is argued that length of a loan matter, because if the microfinance institutions support the poor only in the short run it will hamper the social welfare of the society in the long run. In the case that when the client of the microfinance institution knows that he/she will not receive additional loan in the future they would have no incentive to borrowers or to repay their loan (Navajas et al., 2000.)

Some of the indicators that may therefore be used in measuring outreach are: the average loan size, the number of branches of the MFI's and how they are distributed in a particular region, the percentage of women clients being served by the MFI and the total number of client in of a particular MFI.

### **1.1.3 Financial Sustainability**

According to Conning (1999), financial Sustainability is the long term continuation of the Microfinance programme after the project activities have been discontinued. 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.

Onyuma and Shem (2005) points out financial sustainability to be the ability of an institution 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. 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 (Yunus and Jolis, 2003). This definition adopts the bankers' perspective and sticks to accounting approach of sustainability. However, Meyer, (2002), 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 like obtaining funds at market rate and mobilization of local resources.

Recently, there seems to be a shift from subsidizing MFIs institutions to a focus on financial sustainability and efficiency of these institutions. This goal stresses the importance of being able to cover the cost of lending money out of the income generated from the outstanding loan portfolio and to reduce these costs as much as possible. Among other things, this increased focus on financial sustainability and efficiency is due to a number of developments the microfinance business has been recently confronted with, such as the increasing competition among MFIs, the commercialization of microfinance (i.e. the interest of commercial banks and investors to finance MFIs), technological change that also has become available for, and implemented in microfinance, and financial liberalization and regulation policies of the government (Rhyne, 1998). These developments have induced microfinance institutions to change their behaviour, and to broaden their services and activities.

Financial sustainability has been one of the indicators of performance in most MFIs. According to Meyer (2002) the poor need to have access to financial service on long-term basis rather than just a onetime financial support, he argues that, any short-term loan would worsen the welfare of the poor (Navajas et al., 2000). Meyer (2002) also stated that the financial un-sustainability in the MFI arises due to low repayment rate or un-materialization of funds promised by donors or governments, in addition he stresses on the importance of viability as it is critical for expanding outreach to achieve the primary objective of reaching the poorer segments of society.

Two types of sustainability can be pointed out, that is; Operational self sustainability and financial self-sustainability (Meyer, 2002). Operational self-sustainability is when the operating income is sufficient enough to cover operational costs like salaries, supplies, loan losses, and other administrative costs. Financial self-sustainability on the other hand is when MFIs can also cover the costs of funds and other forms of subsidies received when they are valued at market prices. Return on Assets (ROA), which relates profits to the size of the institution, is also a typical measure in the literature concerning the profitability of microfinance and by extension financial sustainability. Whereas the cost-recovery measures described above are based on a donor mentality indicating whether the target MFI is in need of more subsidies or not with ROA it is possible to compare the profitability of microfinance as an investment with that of other possible investments. Return on equity (ROE), which is a typical measure in the banking sector, is not suitable for the microfinance industry, however, as it assumes that institutions among a peer group are fundamentally similar: the peculiarities of the microfinance world limit significantly the model's application in the short run. (Christen, 2001) ROA on the other hand makes it possible to compare MFI profitability with that of other commercial banks and projects, which typically do not use self-sufficiency measures for profitability analysis.

In summary the following indicators can therefore be used to measure financial sustainability of MFI's: return on asset (ROA), Financial Self sufficiency (FSS) and Return on Equity (ROE).

#### **1.1.4 Outreach and Financial Sustainability of Microfinance Institutions**

In Africa Microfinance has proven to be one of the most effective tools that help poverty alleviation. Despite microfinance being young compared to other formal financial sectors

such as bank, the vision of totally eradicating poverty has seen it pushing 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 (Rutherford, 2000). Already the earliest microfinance initiatives in the 1970s were highly successful in ensuring repayments. By the end of the 1980s, microfinance had already proved its potential of reaching significant numbers of poor clients, who were able and willing to repay the loans and the costs of credit. According to Christen (2001), this led to a significant increase in donor resources directed at the microfinance industry. Even though microfinance has been able to present a market-based solution to overcome the dearth of finance to the poor, and the poor proving themselves creditworthy as repayment rates climb over 95 %, microfinance institutions (MFIs) are still typically unable to reap profits from their operations and therefore rely heavily on subsidies.

In recent past some MFIs have been confronted with a number of challenges that has affected their way of doing business. Competition among the MFIs has increased significantly; this has lead to lower interest rate, increased efficiency through creation of different financial products. Another key challenge has been the involvement of commercial banks in MFIs services; K-REP in Kenya is an example of a commercial bank that is involved in lending to the poor. Moreover, in some countries the government has actively stimulated commercial banks to become involved in microfinance.

Investors from developed countries and commercial banks have become interested in financing MFIs, for example large banks such as Deutsche Bank, Citigroup, and HSBC, for example, have separate microfinance divisions, supporting activities of MFIs. The interest of multinational banks is due to the so-called “double bottom line” of financing and supporting MFIs: it allows banks and investors to show their corporate social responsibility, while at the same time these investments provide attractive risk-return profiles (Deutsche Bank Research, 2007).

Other than the above mentioned factors, technology and liberalization are the new frontiers for development in MFIs; this two have improved efficiency and sustainability of such institutions. In technology, the new banking technology, such as charge cards, ATMs, the use of cell phones and the internet has begun to enter the microfinance business, helping to



reduce costs and improve the delivery of services. Many developing countries have recently liberalized financial markets, while at the same time installing regulations to help improving the stability of the microfinance business. These changes of financial market policies may also contribute to improving the sustainability and efficiency of microfinance.

The above developments and the resulting emphasis on sustainability and efficiency of MFIs may go at the cost of their outreach, however. Reaching the poor and providing them with credit may be very costly. Making very small loans involves high transaction costs, in terms of screening, monitoring and administration costs, per loan. As argued by several authors, the unit transaction costs for small loans to the poor are high as compared to unit costs of larger loans (Hulme and Mosley, 1996; Conning, 1999). The above point out a trade-off between efficiency and outreach, this signifies a shifting focus towards increasing sustainability and efficiency reduces the scope for the more traditional aim of many MFIs, which is lending to the poor.

Contrary to the above claim, most MFIs in Nairobi County have been expanding in terms of outreach and from the “face value” they look to be financially sustainable. Some of these institutions have engaged themselves in massive media campaign, advancing loans at extremely low interest rates, accepting deposit with high interest payout among others. These practices present a dilemma.

### **1.1.5 Microfinance Institutions in Kenya**

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. 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. Mutua and Oyugi, (2007) observe the presence of both the formal and informal institutions in both Kenyan rural and urban areas; they acknowledge the fact that a significant percentage of rural people do not have access to financial services.

According to Aduda and Kalunda (2012), the Kenyan financial sector comprise the following; Microfinance Institutions (MFIs), the Banking sector, Savings and Credit Cooperatives (SACCOs), Money Transfer services and the informal financial services sector. The informal financial service include; Accumulating Savings and Credit Associations (ASCAs) and Rotating Savings and Credit Associations (ROSCAs).

The information obtained from Association of Micro finance Institutions in Kenya AMFI (2012) website, as at 2012 the outreach information shows that there was a total of 7.4 million as client, 961 branches and a total of Ksh 13.9 billion as outstanding portfolio. 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. Dondo and Mutiso (1999) argues that for an economy to function well, financial intermediation must exist this is as a result of its facilitation in economic growth through provision of financial services. Oketch, (2000) point out how the formal banking sector in Kenya has over the years, regarded the informal sector as risky and not commercially viable. Alexis (2010) notes that the outreach of financial services in Kenya to the entire population is about 65% compared to countries like Uganda where on average 38% of the population can access microfinance services due to the extensive outreach

## **1.2 Statement of the Problem**

In general, MFIs reach many more borrowers than savers. The question that keeps coming up is whether and to what extent shifting the focus towards increased financial sustainability and efficiency has implications for the outreach of MFIs. On the one hand, the commercialization of microfinance may attract increased commercial funds, which may contribute to supporting the outreach goal of MFIs. They may enlarge the amount of loans to the poor and ensure the provision of such loans for a longer period of time. Thus, the absolute number of poor people that have access to MFIs may be increased.

Despite the above observation, there is almost no study available that tries to systematically explain whether there is a trade-off between the depths of outreach versus the strife for financial sustainability. An exception is the study by Cull et al. (2007). They examine financial performance and outreach in a large comparative study based on a new extensive data set of 124 microfinance institutions in 49 countries. The authors explored the empirical evidence for a trade-off between the depth of outreach and profitability. They examine this issue by examining whether more profitability is associated with a lower depth of outreach to the poor, and whether there is a deliberate move away from serving poor clients to wealthier clients in order to achieve higher financial sustainability (mission drift). This study however came up with distinction among three types of microfinance institutions, i.e. group lending systems, village banking, and individual-based lending. The study suggests that individual-based microfinance institutions seem to perform better in terms of profitability, but the fraction of poor borrowers and female borrowers in the loan portfolio is lower than for group-based institutions. The study also suggests that individual-based microfinance institutions, especially if they grow larger, focus increasingly on wealthier clients (mission drift), whereas this is less so for the group-based microfinance institutions.

A study done by Dondo and Mutiso (1999) points out the core function of providing credit to the poor by MFIs has resulted to most MFIs to be loss making institutions. The two authors found out that, most MFIs succeed in lending to domestic small companies and poor agents, as a result of Western donors and Non Governmental Organizations (NGOs) who provides financial support by offering the MFIs loans against below-market interest rates. The study however fails to point out the relationship between long term sustainability and outreach effort of various MFIs. Kioko (2012) did a study on factors influencing sustainability of MFIs in Kenya but failed to show the relationship between financial sustainability and outreach. Same has been done by Kimando, Kihoro & Wachera (2012).

This paper explored the concept of microfinance institutions (MFIs) sustainability in light with the ever expanding branches (outreach) both within and outside Nairobi County, this expansion is seen through the many branches and large loan portfolio in such institutions. There is need to establish whether this expansion is fruitful for the long term financial sustainability of such MFIs within Nairobi county.

### **1.3 Objectives of the study**

The objective of this study was to establish the relationship between outreach and financial sustainability of MFIs in Nairobi County.

### **1.4 Value of the Study**

The study is important to the following groups: To policy makers the study will give a glimpse of the factors being considered by MFIs before they decide to expand. This will give them better understanding that will in drafting and passing necessary legislation and by extension will assist in realization of the vision 2030 which is a critical blue print for the economic growth and development in Kenya. The study will also contribute towards domestic institution building for financial capacity widening and deepening in locally constituted organizations and funds a key development ingredient in the devolve structure of government

To the academicians, this study will be useful in enriching the body of knowledge and would also help them in carrying out further and 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 Micro finance

The study will benefit Micro financial consultants who endeavour to advice investors and Governments on the effective application of MFIs outreach program in various regions, moreover business owners who have received funding from MFIs will be able to know their contribution towards the success and sustainability of the MFIs, which are important to their operations and by these they will eventually take up their ultimate role in supporting the performance of the institutions.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents a brief history of MFIs, review of literature on the theories of microfinance, the various dimensions of MFIs outreach activities together with factors affecting such outreach activities. The chapter will also review various MFIs sustainability and the factors affecting sustainability of such institutions. Moreover, the chapter will review some of the past studies that relate to outreach and sustainability of MFIs. Finally the chapter will present a conclusion from the literature reviewed

### **2.2 Brief History of Micro-Finance**

The history of micro-financing can be traced back as long to the middle of the 1800s when the theorist Lysander Spooner was writing over the benefits from small credits to entrepreneurs and farmers as a way getting the people out of poverty. Spooner believed that it is beneficial if people are self-employed so that they could enjoy the full fruits of their labour rather than having to share them with an employer. He argued that various forms of government intervention in the free market made it difficult for people to start their own businesses. For one, he believed that laws against high interest rates, or "usury" prevented those with capital from extending credit because they could not be compensated for high risks of not being repaid. It was at the end of World War II with the Marshall plan when the Microfinance concept had a big impact, (Yunus, 2007).

In recent time, Micro finance concept can be traced back to 1974, when an economist/lecturer at the University of Chittagong, Bangladesh, Mr. Muhammad Yunus (a Nobel peace prize winner) lent \$27 to a group of impoverished villagers. Since then microfinance has become world's favourite's development area as it is regarded as the solution to world's poverty and a way of spreading the wealth thus creating force of capitalism across the globe, (Yunus and Jolis, 2003)

Records have it that, Muhammad Yunus founded his Grameen Bank in 1983 whose main objective was making small loans of about £15 a time to these who were perceived to be poor and non-credit worthy. The bank is also in record to have loaned about £3 billion to more than six million of the very poorest in Bangladesh and across the Asian sub-continent. The bank has however remained entirely self-financing; in the sense those borrowers' deposits cover the costs.

The greatest triumph of microfinance is the demonstration that poor households can be reliable bank customers. The received wisdom at the start of the 1970s held that substantial subsidies were required to run financial institutions serving poor households in low-income countries.

## **2.3 Theories of Micro-Financing**

### **2.3.1 Joint Liability Theory**

Joint liability as a theory can be interpreted in several ways which can broadly be grouped under two categories. First, under explicit joint liability, which can occur when one borrower cannot repay a loan, group members are contractually required to repay in the member's stead. Such repayments can be enforced through the threat of common punishment, typically the denial of future credit to all members of the defaulting group, or by drawing on a group savings fund that serves as collateral (Banerjee, et al, 1994).

Second category of the concept of joint liability is implicit, which is to say that, a believe among the borrowers that, if a group member defaults, the whole group will become ineligible for future loans even if the lending contract does not specify this punishment. One form in which this can happen is if the microfinance organization itself chooses to fold its operations when faced with delinquency (Banerjee, et al, 1994).

### **2.3.2 Financial Systems Model**

The aim of financial systems approach is achievement of maximum outreach of MFIs services through a sustainable institution that focus on a financial intermediation model (Rosenberg, 2003). In this approach MFIs do provide finance to the public e.g. commercial banks; or serve only their members such as village banks. This MFIs loan portfolio is financed from savings mobilized or commercial debt and for-profit investment, or retained earnings such as micro lenders. These MFIs are differentiated from informal money lenders like, 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 (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 oppose to direct financing of loan portfolios. This model however poses a challenge in terms of; the approach relies on market approach which 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

### **2.3.3 Women's Empowerment Theory**

Generally societies with a high level of gender inequality are characterized by slow economic growth and high level of poverty (King et al., 2001). Studies have shown that well performing microfinance programs, specifically the once providing programs integrated with social services, empower and increase the wealth of the borrower. This is one of the reasons as to why MFIs do focus on women, in addition to as to why many international donors, local NGO's and governments have put microfinance on both their gender and poverty reduction agenda. (Cheston et al., 2002)

Empowerment is a concept used in a variety of academic fields; sociology, economics, anthropology and public health. Despite that, the definition of the word is surprisingly alike in all the disciplines. The women's possibility to make decisions concerning themselves, their children and their family is one important aspect often underlined; the control over one's own life as well as the control over economic resources is others. Access to financial resources is pointed out as central factors that contribute to the empowerment of women. The concept of empowerment can be divided into various dimensions and when looking into the economic and interpersonal dimension, that is women's control over income, access to credit, decision-making in the household and birth control are emphasized (Malhotra et al., 2002).

According to Malhotra et al., (2002) women often bear the heaviest part of poverty, with no education, no job, and no income in the formal sector and limited social mobility. If the women could achieve a better education, health and economic wellbeing, their status would improve in both the family and in the society. In many countries, the women have a low status, no control or power over their own body, which results in no birth control and high fertility rates. Consequently, the population growth can be the outcome of the women's lack of power. If a country wants to control the fertility rate of their nation they have to raise the social and economic status of the women, and this is where MFIs comes to play.

### **2.3.4 Poverty Lending Model**

According to Honohan (2004), 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 than productivity enhancing activities. 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 (Rosenberg, 2003).

This 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 (Rosenberg, 2003).

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 (Honohan, 2004).

### **2.3.5 Endogenous Growth Theory - Education / Human Capital Theory**

The endogenous growth theory emphasizes the importance of human capital for the economic growth in a country. The model includes knowledge as a type of capital, which leads to that the production function which does not exhibit diminishing return on capital. In the endogenous growth model, both savings and investments in human capital can lead to persistent growth. Neo-classical growth theories as the Solow model also points out human capital as one of the factors affecting per capita growth. (Lipsey et al., 1999). Todaro et al. (2003) along with many other economists' argues that it is the human resources of a nation that determine its economic and social development. Both education and health are part of the human capital, which leads to that both aspects are fundamental in order to develop a



country. The two aspects are closely related since school attendance relies on good health. And by extension human capital

In the literature treating microfinance and education, there are several ways in which microcredit affect human capital. Maldonado (2005) has divided the effects into five categories: that is Income effect. An increase in income lowers the opportunity cost of sending the children to school. (Behrman, 1999) This implies that if the microfinance leads to an increase in the household's income, the children should be sent to school to a larger extent than before since the return to primary school is high i.e. the income elasticity on the demand for schooling is positive (Maldonado, 2005).

Risk-management effect happens since poor individuals are vulnerable to external shocks, an adverse income shock often leads to that children enrolled in schooling are taken out of school. Access to microcredit can help smoothen the consumption and increase the household's capability to foresee and handle income shocks, which lead to a lower probability of taking the children out of school (Behrman, 1999). There is also the effect of gender. Various studies has shown that women prioritize their children to a larger extent than men and microcredit given to women thus affect the children's schooling to a higher degree than credits given to men (Maldonado, 2005).

Information effect happens because many households in developing countries may take short-term decisions due to imperfect information about opportunities. If microcredit programs increase information and change the awareness about opportunities, they can contribute to households taking long term decisions, for example taking into account the high return on primary schooling. One example is credit programs that combine financial services with education. This education of the program participants may change the preferences about schooling their children.

## **2.4 Empirical Review**

Olivares-Polanco (2005) investigates the determinants of outreach in terms of the loan size of MFIs, using data for 28 MFIs in Latin America for the years 1999-2001. The analysis includes only one observation for each MFI in the dataset. Using simple OLS, Olivares-Polanco's study confirms the existence of a trade-off between sustainability and outreach. In this regard the finding of this study only confirms the trade off but fails to establish the level of such a trade off, in addition the observation of data of only three years cannot be

conclusively used to establish a long term relationship. Finally considering the period as to when the study was done, many changes have taken place within the MFIs environment

Cull et al. (2007) examine the financial performance (using measures of profitability) and outreach in a large comparative study, based on a new and extensive data set of 124 MFIs in 49 countries. The study suggests that MFIs that focus on providing loans to individuals perform better in terms of profitability. Yet, the fraction of poor borrowers and female borrowers in the loan portfolio of these MFIs is lower than for MFIs that focus on lending to groups. It also suggests that individual-based MFIs, especially if they grow larger, focus increasingly on wealthier clients, a phenomenon termed as “mission drift”. This mission drift does not occur as strongly for the group-based MFIs. Thus, Cull et al. do find evidence for a trade-off between efficiency and outreach. This study however cannot be used to explain the unique situation of Nairobi County because many changes have occurred within Nairobi. These changes range from liberalised business environment, competition from main stream bank and increased government involvement in MFIs activities through the central bank

In a related paper, McIntosh et al. (2005) focus on the effects of increased competition in microfinance. In their study, they empirically show that wealthier borrowers are likely to benefit from increasing competition among microfinance institutions, but that it leads to lower levels of welfare for the poorer borrowers. This seems to support the view that outreach is hurt by the pressure of competition on the business of microfinance. The main research gap in this study is the increased outreach despite their claim

In Ethiopia, Lakew (1998) examines Project Office for Creation of Small Scale Business Opportunities and the office (POCSSBO) micro financing program contribution to poverty reduction. He found that after the credit program employment opportunity for the beneficiaries have been created. He also noted that the credit program of POCSSBO had positive effect on income and saving of the clients. In addition, He stated that medical, education and nutrition access of the clients had been improved. This study fails to explain how all the finding relates to outreach of MFIs

A study was conducted by Hartarska and Nadolnyak (2007) using data for 114 MFIs from 62 countries specifically investigate the impact of regulation on the performance of MFIs. In general terms, they do not find any evidence that regulated MFIs perform better in terms of

either sustainability of outreach as compared to non-regulated. Makame and Murinde (2006), however, do find evidence for a negative relationship between regulation and outreach. To the contrary, Hulme and Mosely (1996) argues that there is inverse relationship between outreach and financial sustainability. Here the argument is higher outreach means higher transaction cost in order to get information about creditworthiness of clients and hence make MFI financially unsustainable.

Aklilu (2002) reviews the importance of micro finance institutions in developing economies based on countries' experiences. In the review she suggested for promotion of the existing well developed institution 'iddir" to facilitate growth of formal MFIs. Similarly, Borchgrevink and et. al (2005), studies marginalized groups, credit and empowerment for the case of Dedebit Credit and Saving Institution (DECSI) of Tigray. The study finds that female household heads are extremely marginalized groups; and also, young households', rural landless households and urban house-renting households are the other marginalized groups. Trough two-phase assessment, the study found that the DECSI's program has had a positive impact on the livelihood of and as well enhanced the social and political position of many clients. Concerning the constraints for economic development, the study noted poor rainfall, small farm size, and shortage of labour during peak agricultural seasons as the main constraints.

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.

A study of factors influencing financial sustainability of MFIs in Kenya (Kioko, 2012) used descriptive survey of 33 MFIs operating in Nairobi. Differentiated services, credit defaults among others are responsible for influencing sustainability. This study did not in any way suggest how such MFIs will be sustainable in the midst of various outreach activities they are currently involved in. Kimondo, Kihoro, Njogu & Wachera (2012) did a study in Muranga'a municipality to find out of factors affecting sustainability. They came up with many factors; however the study has nothing to do with outreach of the institutions they were surveying

## **2.5 Chapter summary**

The chapter has presented a review of literature regarding outreach of MFIs. The empirical review has provided the factors that generally influence outreach and sustainability of MFIs. The review shows mixed results on what factors influence outreach of MFIs. Moreover, the above review shows that there is only limited empirical evidence on the compatibility or trade-off between sustainability and outreach of MFIs. The few studies available suggest that there is a trade-off, yet they mostly use small data sets analyses. From the review it is also evident that competition leads to less access to credit for the poorest, hence, less outreach.

Given that there has been a lot of growth in the MFI industry in Kenya, it is important to establish what factors have influenced the outreach activities paying keen interest to 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 with more focus on Nairobi County which is regarded as the key county in the newly devolved system of government in Kenya.

## **CHAPTER THREE:**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research design and methodology that was used to carry out the research. It presents the research design, the population, sample size and sampling procedure, data collection, data analysis and reporting

#### **3.2 Research Design**

This study adopted a survey research method to show the relationship between outreach and financial sustainability. According to Nissen (2005), survey method as one which involves asking participants questions on how they feel, what their views are, and what they have experienced. Survey method is useful when a researcher wants to collect data on phenomena that cannot be observed directly. Its advantage is that, it allows the collection of large amounts of data from a sizeable population in a highly effective, easily and in an economical way, often using questionnaires.

#### **3.3 Target Population and Sample**

The population of interest in this study consisted of 49 microfinance that operate within Nairobi (AMFI Directory, 2012). This study was limited to the institutions that operate within Nairobi. Due to time and budgetary constraint, a sample of 8 MFIs of the population of MFIs in Nairobi County was sampled and used in the data analysis.

Kothari (2004) explained that sampling is the selection of some part of an aggregate or totality on the basis of which judgement or inference about the aggregate or totality is made. The eight sampled MFIs used did give representative information of the entire population of MFIs in Nairobi County

Since the population constitute 49 MFIs, a random sampling was used to narrow down the sample size to 8 MFIs. The procedure did ensure that in each successive drawing each of the remaining elements of population has the same chance of being selected.

### 3.4 Data Collection

The study used secondary data for the information regarding loans advanced by selected MFIs in addition to number of women clients. This data did help in measuring outreach of the selected MFIs. Moreover, data related to the number of youthful client (client between the ages of eighteen to thirty-five years of age) and clients with disabilities was also gathered from secondary data. Data pertaining to financial sustainability was collected from various comprehensive financial statements for years between 2008 and 2012 of selected MFIs. The reports made it easier for figures of ROA to be easily identified.

### 3.5 Data Analysis

The data collected has been analysed by use of Statistical Package for Social Science (SPSS). SPSS has been instrumental in establishing the data associations which eventually has lead to conclusions on the objectives of the study.

Moreover regression analysis and correlation has been used to determine relationship between two variables i.e. financial sustainability (ROA and ROE) and outreach activities of the institutions. The MFIs' profitability was measured using ROA. Fraser and Fraser (1991) argued ROA and ROE are best measure of profitability. Rutherford (2000) presented size of loans among factors indicator of MFIs sector outreach. Although this indicator cannot be precise measurement of access to finance among the poor, it was a good proxy indicator of measuring accessibility of financial service among the poor.

The multiple regression equation that has been analysed is:

$$Y_T = a + b_1 \text{ (LOAN TO YOUTH)} + b_2 \text{ (LOAN WOMEN)} + b_3 \text{ (BRANCHES)} + b_4 \text{ (LOAN TO DISABLE)} + b_5 \text{ (LOAN TO FARMERS)} + b_6 \text{ (LOAN TO JUAKALI ARTISAN)} + e$$

Where a, b and c are constants

$Y_T$  is Dependent Variable (Return on Asset) in year T

a is constant, intercept of the equation

$b_{1...6}$  is regression Coefficients of the independent variables

LOAN WOMEN is independent variable of number of women customers in year T

BRANCHS is the number of branches operated by MFIs in year T

LOAN TO YOUTH	is independent variable of number of youthful client
LOAN TO DISABLE	is independent variable of number of clients with disabilities
LOAN TO FARMERS	is independent variable of number of clients who are taking loan purely for farming
LOAN TO JUAKALI	is independent variable of number of clients who are operating in “Jua Kali” sector
e	Error Term
T	year under consideration

The analysis for financial sustainability was done using ROA as a profitability tool

ROA = net operating income, adjusted and net taxes, inflation and subsidies/ average total assets.

The basis of the model is to incorporate all the likely customers who are being served by microfinance institutions as independent variables. The analysis for the variables was done using the mean values and the standard deviations. The results have been presented in tables and charts.

### **3.6 Data validity and Reliability**

To ensure a good quality of research, validity and reliability of data must exist. Trochim (2005) explain reliability to relate to quality of measurement.

Data from KWFT was pretested; Pre-testing enables the researcher to access the clarity of the instrument and its ease to use, Mugenda and Mugenda (2003) highlights the benefit of pre-testing of instrument as that of allowing errors to be discovered as well as a tool for training a research team before the actual data collection begins.

According to Mugenda and Mugenda (2003), the effective revision of result by determining participant interest, discovering if the intended questions have meaning for them and checking modifications of intended questions is a process that can only be achieved through validity and reliability test, Moreover, validity will ensure questions flow and continuity.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND PRESENTATION OF FINDINGS

#### 4.1 Introduction

This chapter provides a summary of the data analysis, results of the study and the discussion of the results of the study. The chapter is organized as follows: section 4.2 describes the data presentation, analysis and the results of the study and section 4.3 discusses the implication of findings of the study with regard to the objective of the study which was to establish the relationship between outreach and financial sustainability of the sample of Micro-financial Institutions in Nairobi County

#### 4.2 Data Presentation and Analysis of the Result

The data was obtained from a number of MFIs branches. These include; the amount of loan offered in various years and ROA of sampled MFIs from AMFI (2013) report which had all the variables of the study for the period between years 2008 to 2012. The data pertaining to number of youthful and women and disabled clients were obtained from specific MFIs. The analysis of this study has been done by use of SPSS as follows:

##### 4.2.1 Distribution of Loan to Women clients in Sampled MFIs

As can be observed in figure 1 which shows the total loan distribution that had been issued to women clients between 2008 and 2012, KWFT has the highest with 79.44% as compared to other micro financial institutions. Faulu Kenya with 10.69% is the closest rival in this sector.

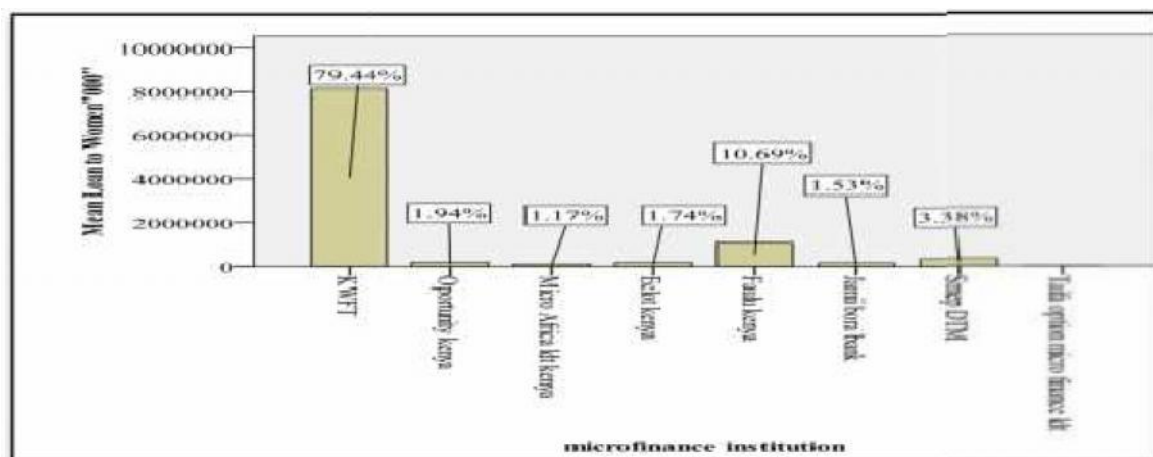


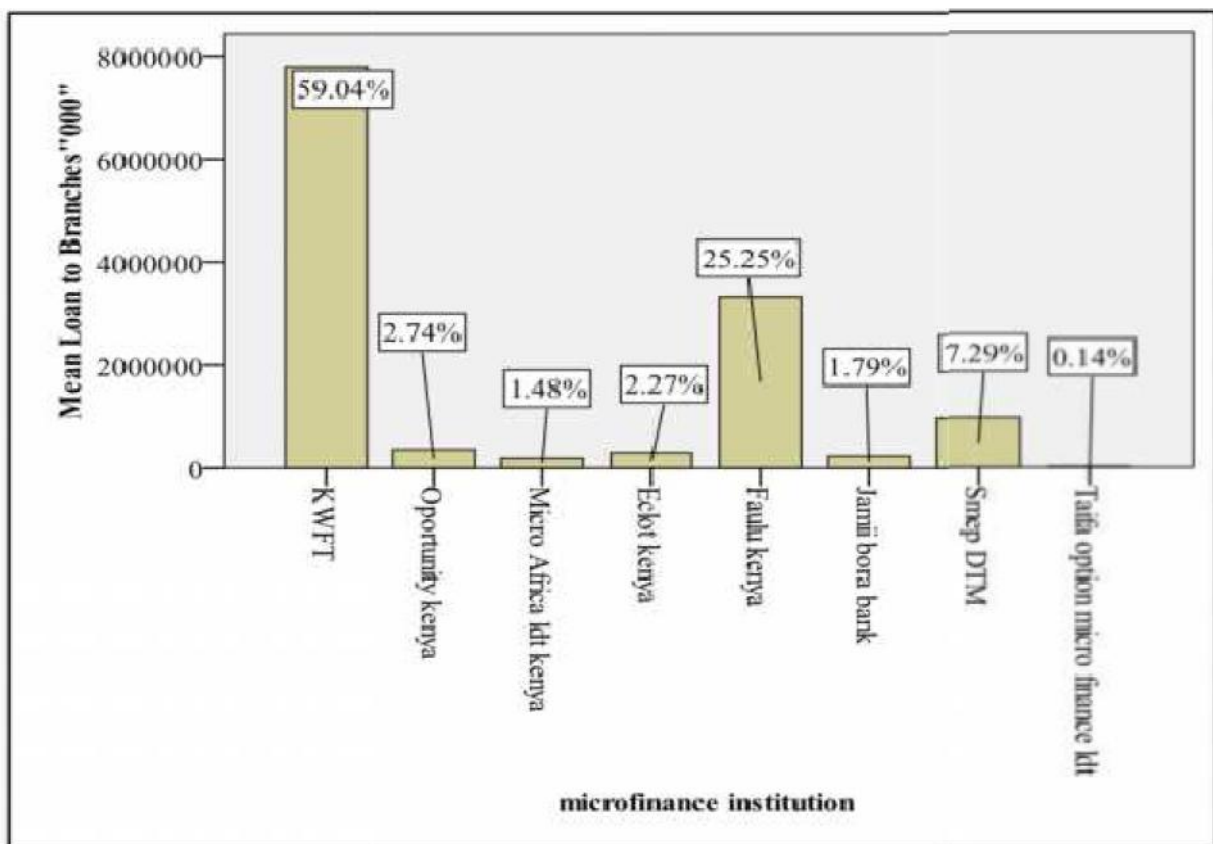
Figure 1: loan distribution of women clients



#### 4.2.2 Distribution of Total Loan of Branches in Sampled MFIs

As can be observed in figure 2, the total loan distribution that had been advanced by various sampled MFIs branches over a period of five years beginning 2008 to 2012 shows that KWFT loaned to more branches with 59.04% followed by Faulu Kenya with 25.25% and the least is Taifa Option Microfinance with 0.14%.

**Figure 2: Bar Graph Representing the Percentages of Loan to Branches as Per the Sampled MFI Institutions in Nairobi County**

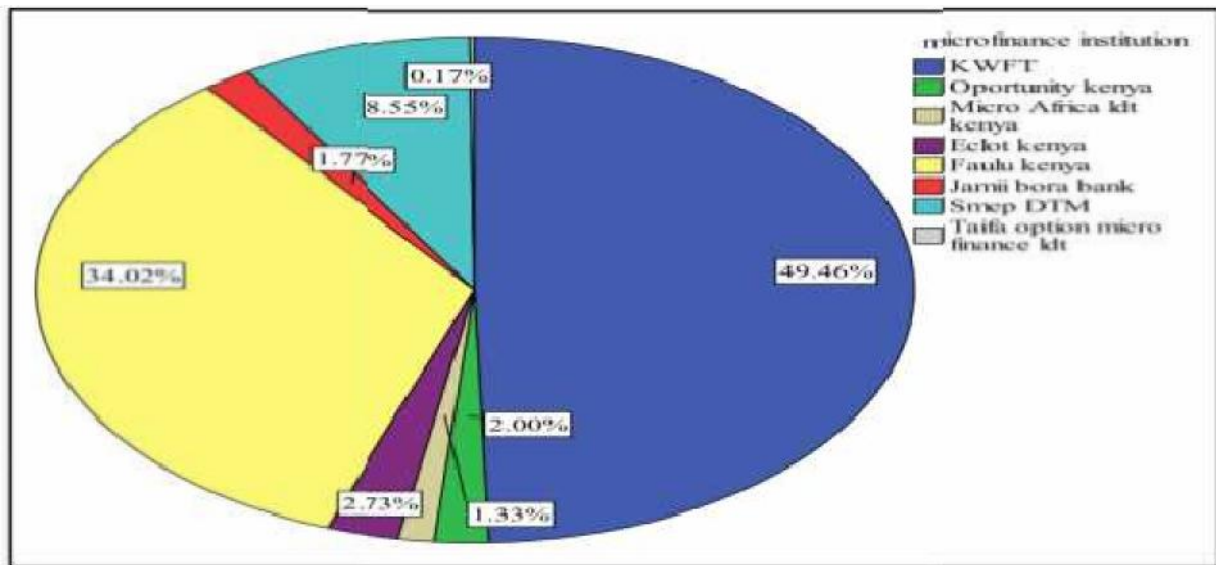


Source: Appendix II & III

#### 4.2.3 Distribution of Loan to Youthful Clients in Sampled MFIs

As can be observed in figure 3, the total loan advanced to youthful clients shows again KWFT to be having the highest percentage of 49.46% with the least Taifa Option Ltd with 0.17%

**Figure3: Pie Chart Representing The Percentage of Loan to Youths Between The Age of 18 To 35 Years as Per The Sampled MFI's operating In Nairobi County**

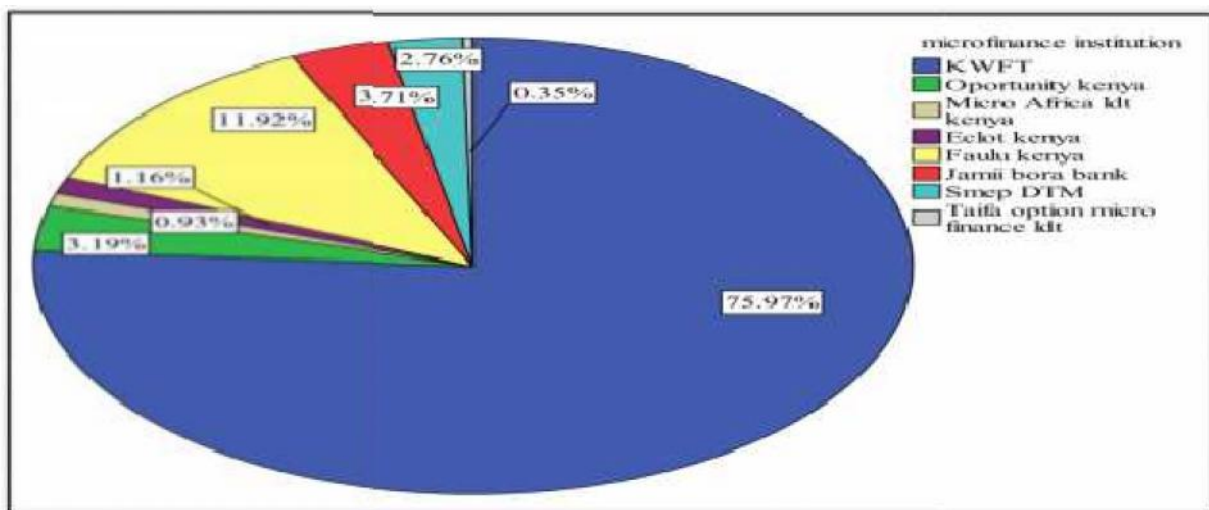


Source: Appendix II & III

#### 4.2.4 Distribution of Loan to Disabled Clients in Sampled MFIs

Figure 4 shows the loan amount in percentage given to the disabled, it depicts that most of the amount was given by KWFT which was three quarter of the entire loan granted by all other sampled MFIs within the same period.

**Figure4: Pie Chart Representing the Percentage of Loan to Disable as per the Sampled MFI's operating in Nairobi County**



Source: Appendix II & III

#### 4.2.5 Summary of the Loan Amount and the Distribution

Table 1 give a brief overview of the summary of the loan distribution to various persons. That is, the amount given to youth on average was 1033760 and the maximum given was 8424243. The minimum amount to the youth was zero because the figures in some years e.g. 2012 had missing value which the program automatically inserted 0 value as the minimum amount. The variances for the loan to the youth (how the amount vary from the mean) was not normally distributed because from the mean and the maximum values, this is attributed to great variation which could have been omitted if it was normally distributed

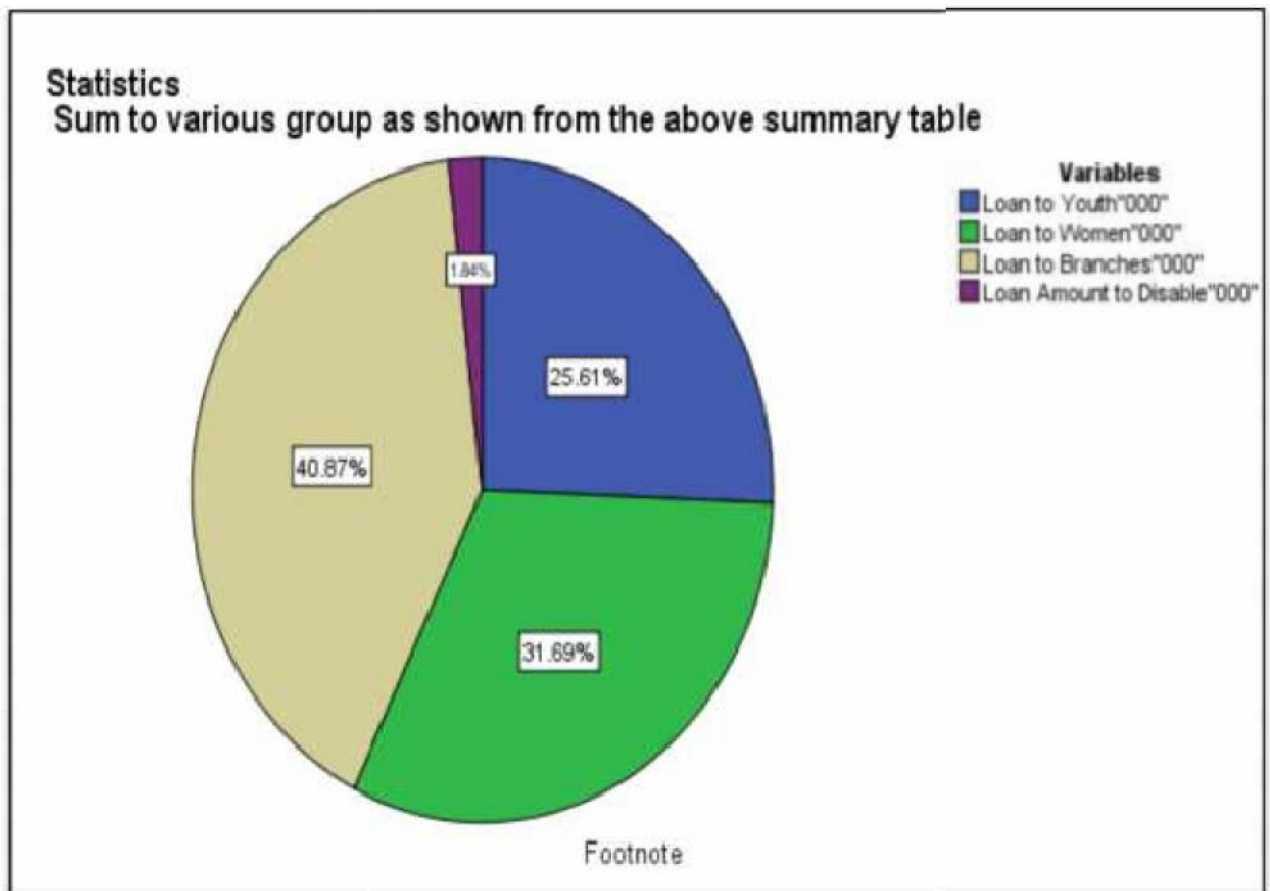
Figure 5 shows the amount of loan given to predictors. From the table a woman takes the larger percentage

**Table 1: Summary of loan distribution from SPSS**

Statistics	Loan to Women "000"	Loan to Branches "000"	Loan Amount to Disable "000"	Loan to Youth "000"	Return on Asset (ROA)
N Valid	40	40	40	40	40
Missing	0	0	0	0	0
Mean	1279013.43	1649544.93	74141.1840	1033760.58	-.020425
Std. Error of Mean	485409.065	553681.060	42420.72217	335590.700	.0111183
Std. Deviation	3069996.484	3501786.492	2.68292	2122461.949	.0703183
Variance	9.425	1.226	7.198	4.505	.005
Skewness	2.804	3.171	5.856	2.478	-2.671
Std. Error of Skewness	.374	.374	.374	.374	.374
Minimum	0	0	.00	0	-.3050
Maximum	11793941	16793941	1684849.00	8424243	.0520
Sum	51160537	65981797	2965647.36	41350423	-.8170

Source: Appendix II & III

**Figure 5: Pie Chart showing the Mean Statistics of the Amount of Money given to the Predictors**



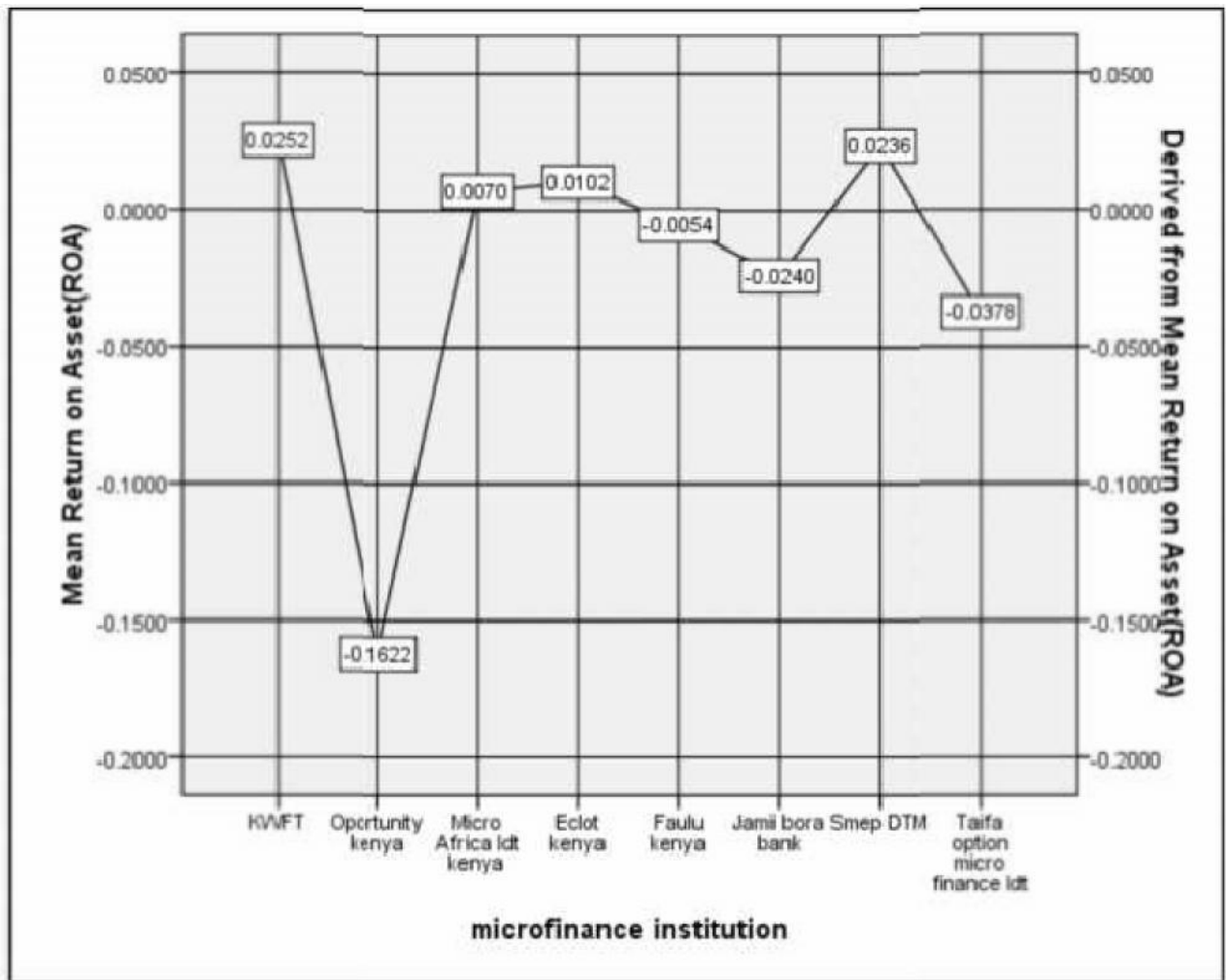
Source: appendix II and III

The above pie-chart indicates the summary of the total amount given to the four predictors the percentage indicate women to be the highly beneficiary while the disabled clients are the underserved.

#### **4.2.6 Relationship between the sampled MFI's in Nairobi County and the Mean Return on Asset.**

Figure 6 is showing the comparison of mean Return on Asset (ROA) of MFI'S. the Trend line shows that KWFT has the highest mean of ROA (0.0252) and the opportunity Kenya has the lowest mean of ROA (-0.1622)

**Figure 6: Line Graph showing the relationship between the sampled MFI's in Nairobi County and the Mean Return on Asset**



Source: SPSS data Analysis report

#### 4.2.7 Regression Analysis

From table 3 and 4, the conditional probability of the relationship shown from the data is present, if the null hypothesis is true. The standard significance level is usually less or equal to 5%. Alpha ( ) at 5% with (4, 35) degree of freedom give a tabulated value of testing the hypothesis using the Fishers distribution table which shows that the ratio of the variations (predictors) is 2.6060. The value given in the ANOVA table to indicate the significance level is 0.767 but the normal significance is 0.05; this is because the data used for the variations (predictors) was varying.

The Critical (tabulated) value is 2.6060 and the calculated value is 0.456 that is:  $0.456 < 2.6060$  Therefore we accept the objective as it defines the hypothesis to be true

Moreover from the objective, it has been proven that there is a weak positive relationship between the outreach and the financial sustainability of the micro-financial institution in the Nairobi County.

**Table 2:**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.223 <sup>a</sup>	.050	-.059	.0723667

a. Predictors: (Constant), Loan to Youth"000", Loan to Women"000", Loan Amount to Disable"000", Loan to Branches"000"

b. Dependent Variable: Return on Asset(ROA)

**Table 3: Analysis of Variance (ANOVA) Table**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.010	4	.002	.456	.767 <sup>a</sup>
	Residual	.183	35	.005		
	Total	.193	39			

a. Predictors:(Constant), Loan to Youth"000", Loan to Women"000", Loan Amount to Disable"000", Loan to Branches"000"

b. Dependent Variable: Return on Asset(ROA)

Using table 4: since the predictor are four (loan to women, branches, disable and youth) the linear multiple regression has a negative constant since its cutting the y-axis at the negative values (this has greatly been influenced by the nature of the data) From the table, the coefficient for the multiple linear regression are as shown as calculated from the SPSS

The normal multiple linear regressions is:

$$Y = a + b_1 X_1 + b_2 x_2 + b_3 x_3 + b_4 x_4$$

(the independent variables differs depending with the kind of data)

The multiple regression equation that has been analysed from the data is:

$$Y_T = a + b_{1,T}(LOAN TO YOUTH) + b_{2,T}(LOAN WOMEN) + b_{3,T}(BRANCHS) + b_{4,T}(LOAN TO DISABLE) + e$$

Where a, b and c are constants

$Y_T$	is Dependent Variable (Return on Asset) in year T
$a$	is constant, intercept of the equation
$b_{1..4}$	is regression Coefficients of the independent variables
LOAN WOMEN	is independent variable of number of women customers in year
BRANCHES	is the number of branches operated by MFIs in year T
LOAN TO YOUTH	is independent variable of number of youthful client
LOAN TO DISABLE	is independent variable of number of clients with disabilities
$e$	Error Term
T	year under consideration

From the table 4 below the following equation is depicted

$$Y_T = -0.028 + 1.756 (LOAN TO WOMEN) + 3.933 (LOAN TO BRANCHES) - 1.73 (LOAN TO DISABLE) + 2.827 (LOAN TO YOUTH) + error term (e)$$

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.028	.013		-2.180	.036
Loan to Women"000"	1.756	.000	.077	.293	.771
Loan to Branches"000"	3.933	.000	.196	.403	.690
Loan Amount to Disable"000"	-1.730	.000	-.066	-.263	.794
Loan to Youth"000"	2.827	.000	.009	.024	.981

a. Dependent Variable: Return on Asset(ROA)

**Source: SPSS analysis report**

From table 5: With the strong Pearson correlation coefficient of loan to women, branches disabled clients and youths from the coefficient has given very low values of the ROA (return on asset). These indicate that the independent variables have greater effect to the financial sustainability (Return on Asset). This will result to accepting the null hypotheses that there is relationship between outreach and financial sustainability of microfinance institutions in Nairobi County. And since the Pearson correlation is a measure or linear association between two variables values of the correlation coefficient range from -1 to 1. And as from the table above the coefficient of the Return on Assets (RAO) and the various Outreach activities ranges from 0 to 0.5 which it indicates that there is weak positive relationship. Thus as outreach activities increases so is the sustainability of the MFI and vice versa.



Table 5

## Correlations

		Loan to Women "000"	Loan to Branches "000"	Loan Amount to Disable "000"	Loan to Youth "000"	Return on Asset (ROA)
Loan to Women	Pearson Correlation	1	.768**	.579**	.618**	.194
	Sig. (2-tailed)		.000	.000	.000	.230
	N	40	40	40	40	40
Loan to Branches	Pearson Correlation	.768**	1	.749**	.878**	.213
	Sig. (2-tailed)	.000		.000	.000	.188
	N	40	40	40	40	40
Loan Amount to Disable	Pearson Correlation	.579**	.749**	1	.620**	.130
	Sig. (2-tailed)	.000	.000		.000	.422
	N	40	40	40	40	40
Loan to Youth	Pearson Correlation	.618**	.878**	.620**	1	.187
	Sig. (2-tailed)	.000	.000	.000		.248
	N	40	40	40	40	40
Return on Asset (ROA)	Pearson Correlation	.194	.213	.130	.187	1
	Sig. (2-tailed)	.230	.188	.422	.248	
	N	40	40	40	40	40

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 4.3 Summary and interpretation of Findings

Correlation analysis is a statistical analysis that defines the variation in one variable by the variation in another, without establishing a cause-and-effect relationship. The objectives of the study were based on the relationships between the different variables which were: financial sustainability and outreach. In order to achieve this, the Pearson (r) correlation coefficient was computed using SPSS to give the interval nature of the data and the need to test the direction and strength of relationships that exist among the study variables.

According to the presentation and analysis of data in 4.2, several observations were made. Firstly, in the establishment of the relationship between outreach and financial sustainability of the sample of Micro-financial Institutions in Nairobi County, it was observed that there was a positive relationship. Thus the sustainability of the Micro Finance Institution strengthens as the outreach activities increases in the County and vice versa.

According to the objective, the analysis has shown that there is a strong relationship between the ROA and the MFI outreach variables as shown in the ANOVA table 4.2.2 and its hypothetical objective i.e The Critical (tabulated) value is 2.6060 and the calculated value is 0.456 that is:  $0.456 < 2.6060$

From the Correlation table 4, it has indicated relationship that is positively weak due to the variance of the data (amount). The data is negatively skewed as shown in Figure 1 and 2. This skewness has been accelerated by the big variance of the maximum and minimum values as depicted in table 1, in addition to the variance and the standard deviation among the predictors (independent variables). This is best explained by the multiple linear regression equation i.e.

$$Y_T \text{ (ROA)} = -0.028 + 1.756 \text{ (LOAN TO WOMEN)}_T + 3.933 \text{ (LOAN TO BRANCHES)}_T - 1.73 \text{ (LOAN To DISABLE)}_T + 2.827 \text{ (LOAN To Youth)}_T + \text{error term (e)}$$

The above equation shows that though all the independent variables are correlated to the Return on Asset, the amount given to the disabled and the constant term is far below to the

amount given to the women which was much higher as show from the various pie charts. Therefore ROA which is a dependent variable will vary greatly depending with the amount of money to the four independent variables.

As part of the conclusion, it is therefore seen that there is variance of the loans to the four predictors varied as compared to the Return on asset. Due to this big variance, the above multiple linear regressions should be used to calculate the Return on asset to give a consistent figure that has minimal variance. The study also identified no evidence of trade-off between outreach and financial sustainability for MFIs that operate in Nairobi County, rather positive correlation was observed between them. Yet, correlation test among loan size, outreach and ROA, revealed imprecise result.

From the outreach angle, it is found that individual MFI's outreach has shown increment over the period of the study with different rates of growth, leading the industry's outreach to rise in the period from 2008 to 2012 on average by 13 percent. It is also identified that while MFIs reach the very poor, their reach to the disadvantages particularly to women is limited 48 Percent on average. In general, the study has also identified various challenges that constrain MFIs from efficient operations. And, different policy implication could be drawn from the findings of this study. To mention few: As women access is still limited, women's access to credit has to be Strengthened Positive correlation between outreach and financial sustainability implies that we could reach more client to attain social mission and as well we could be profitable

The results revealed that majority of microfinance institutions in Nairobi County 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

This study differs significantly from the study done by Dondo and Mutiso (1999) points out the core function of providing credit to the poor by MFIs has resulted to most MFIs to be loss making institutions. The two authors found out that, most MFIs succeed in lending to domestic small companies and poor agents, as a result of Western donors and Non Governmental Organizations (NGOs) who provides financial support by offering the MFIs loans against below-market interest rates. The study however point out some relationship between long term sustainability and outreach effort of various MFIs.

Kioko (2012) did a study on factors influencing sustainability of MFIs in Kenya but failed to show the relationship between financial sustainability and outreach, a factor with this study has pointed out. Kimondo, Kihoro, Njogu & Wachera (2012) did a study in Muranga's municipality to find out of factors affecting sustainability, they came up with many factors; however the study has nothing to do with outreach of the institutions they were surveying. This study differs from Kimondo, Kihoro, Njogu & Wachera (2012) study in context that it was purely carried out of MFIs that are found within Nairobi County.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary

The paper examines the performance of MFIs in relation to outreach and financial sustainability. It reviews literatures on core performance indicators of MFIs. The literatures noted that MFIs could be examined through three main polar: outreach to the poor, outreach to women, and outreach to disabled and outreach to branches with regard to financial sustainability and welfare impact

The main objective of this study was to establish the relationship between outreach and financial sustainability of MFIs in Nairobi County. To find answers to this objective the main variables of outreach were to be clearly defined, that is, amount of loan offered to the following groups, Women, youth, disabled clients and the branches of sampled MFIs. Moreover, measure of financial sustainability had to be chosen, which in this case Return on Asset was used. To find these data on the variables the researcher did approach several MFIs with a data collection form.

An important observation is that most established MFIs has advanced more loans to their customers in addition to having large customer base. Those MFI that appear to be relatively new in the market have advanced less loan compared to the well established ones. Moreover most MFIs that were sampled in the study tend to have more women and youth clients compared to other categories of customers. The behaviour of ROA was however had to predict from one MFI to the other. On the level of MFI sustainability as represented by return on assets, most of the MFIs were below the medium level of performance.

In the establishment of the relationship between outreach and financial sustainability of the sampled MFIs in Nairobi County, it was observed that there was a positive relationship. Thus increase in financial sustainability of the MFI leads to an increase in outreach and vice versa. With reference to analysis and findings in chapter four, there is a strong relationship between the return on asset and the microfinance institution outreach variables

## 5.2 Conclusion

The study sought to establish relationship between financial sustainability and outreach of MFIs in Nairobi County. The results revealed that majority of microfinance institutions sampled revealed Women as core clients and youth were the main clients, moreover most of the MFIs are having very low ROA. However in the recent past most MFIs have been on a growth mode despite low return on asset they exhibit. Thus, the study concludes that there is a weak positive relationship between outreach and financial sustainability of MFIs. Moreover, it was evident from the data collected that most new MFIs that are emerging have been operating of significantly high negative Return on Asset, these MFIs mostly target the youth as oppose to women.

Microfinance institutions focus on providing credit to the poor who have no access to commercial banks. While microfinance institutions try to be financially sustainable, they appear to be often loss making. Nevertheless, some of them have succeeded in lending to women, youth, disabled and rural branches most of whom need financial support against below market interest rate. Recently, however, there seems to be a shift from microfinance institutions to a further focus on financial sustainability and efficiency. Financial sustainability and efficiency of microfinance institutions is obviously very important for a well-functioning financial system in newly created county system of governance in Kenya

The results revealed that majority of microfinance institutions in Nairobi County 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. It was also found that individual MFI's outreach has shown increment over the period of the study with different rates of growth, leading the industry's outreach to rise in the period from 2008 to 2012 on average by 13 percent. It is also identified that while MFIs reach the very poor, their reach to the disadvantages particularly to women is limited 48 Percent on average.

### **5.3 Policy Recommendation**

The study recommends that the microfinance institutions in Nairobi County and by extension Kenya need to work more on being financially sustainable. This can be done by ensuring that there is improved ROA through less default in repayment of various loans advanced so that their equity values are stabilised as well as their net incomes. Moreover, the results revealed that majority of microfinance institutions in Nairobi County 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 and recommends more action by the MFIs which are geared towards funding

The study also recommends that since the levels of sustainability are positively influenced by the average size of loans offered to various groups of customers, the microfinance institutions need to explore ways of increasing loans advanced customers through taking advantage of increase demand of funding by various businesses and individuals either by churning out loan products that entice the members to ask for more or by bringing on to board more clients for the savings to rise and take loans in the future.

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, the Government needs to look into what regulatory impediments hinder the sustainability of this sector and then come up with policies that can help improve the current situation.

### **5.4 Limitations of Study**

First it was not possible to obtain 100% of the required data. Most data for 2012 for various MFIs was not available. Some MFI that that was visited also refused to disclose data on Return on Asset, their fear was that they may release sensitive information to their

competitors, especially in the current times of stiff competition. In addition some MFIs were lacking categorized data as per age and those data pertaining to disabled clients. Closely related to the above challenge is that, the study was limited to MFIs operating within Nairobi County hence not all MFIs within Kenya were allowed to be part of the sample

Most of the data was obtained from AMFI (2013) report which also had conflicting figures with the one received from the few selected sampled MFI that agree to provide us with the information. In this regard it became very hard to decide on which data was reflecting the actual picture. Another major challenge was the numerous visits that were made to some MFIs with no success in at the end, this led to more time and resources being used to search for data that never was. Other MFIs on the other hand ended up giving piles of files which took a long time to be analysed so as to come up with required data, this was very time consuming as in most cases most files ended up not having the required information

The use of SPSS for the first time by the researcher was a major challenge, and in most cases, the researcher had to seek the service of professional data analyst which ended up costing extra resources. Last but not least, the decision on which variables to be used in the study was a major challenge as various parameters were available and the advantage of each of them was equally similar

## **5.5 Suggestion for Further Research**

With a positive relationship between outreach activities and financial sustainability of MFIs being established in this study, the researcher recommends further study on the positive factors that might be encouraging the financiers of such institutions to continue funding the operations of such despite the low Return on Assets as evident in this study

Another key area of further research is to establish the reason behind women being the highest number of clients in various MFIs. Establishing the likelihood of a MFI serving other clients other than women with same proportion as women need to be established

Those MFIs that have been authorized to take deposit by the CBK have increased in the recent past. Further research needs to be done to ascertain the specific factors that makes traditional MFIs to seek this authorization and the exact benefits that comes from this practice



Finally, further research needs to be carried out to establish if there is any relationship between the period under which a MFI has been in operation and the number of customers they serve, in the research the need to establish if there is any competitive a MFI is likely to yield as a result of being in operation for a long time needs to be ascertained

## References

- Adongo, J. and Stork C. (2005) Factors Influencing the Financial Sustainability Of Selected Microfinance Institutions in Namibia, The Namibian Economic Policy Research Unit, available on [www.nepru.org.na](http://www.nepru.org.na)
- Aduda, J. and Kalunda, E. (2012) "Financial Inclusion and Financial Sector Stability With Reference To Kenya: A Review of Literature" *Journal of Applied Finance & Banking*, vol. 2, no. 6, 95-120
- Aklilu, Y. (2002), "The Importance of Micro Finance Institutions in Developing Economies: Country Experience and Policy Implications to Ethiopia", *NBE Staff Working Paper*, ERD/SWP/005/2002.
- Association of Micro Finance, (2013) Annual Report on Microfinance Sector in Kenya
- Banerjee, A.V., Besley, T and Guinnane, T.W (1994). Thy Neighbour's Keeper: The Design of a Credit Cooperative with Theory and a Test. *Quarterly Journal of Economics*, 109(2): 491–515.
- Behrman, J. R., Knowles, J C. (1999) Household Income and Child Schooling in Vietnam, *The World Bank Economic Review*, Vol. 13, No. 2:211-56
- Bogan, V., Johnson, W., and Mhlanga, N. (2007) Does Capital Structure Affect the Financial Sustainability of Microfinance Institutions? Retrieved on 07/04/2013 from [http://www.cid.harvard.edu/neudc07/docs/neudc07\\_poster\\_bogan.pdf](http://www.cid.harvard.edu/neudc07/docs/neudc07_poster_bogan.pdf)
- Borchgrevink, A., T. Woldehanna, G. Ageba, and W. Teshome (2005), "Marginalized Groups, Credit and Empowerment: The case of Dedebit Credit and Saving Institution (DECSI) of Tigray, Ethiopia", *AEMFI Occasional Paper*, No. 14, September.
- Chaia, A., Dalal, A., Golland, T., Gonzalez, M.G., Morduch, J., and Schiff, R. (2009) Half the world is unbanked. Framing note, Financial Access Initiative, Wagner Graduate School, New York University. Available at: [www.financialaccess.org](http://www.financialaccess.org).

- Cheston, S., Kuhn, L., (2002) Empowering Women through Microfinance: *the Microcredit Summit Campaign*
- Christen, R.P. (2001) Commercialization and mission drift: *The transformation of microfinance in Latin America*, Occasional paper No. 5, Washington DC: CGAP
- Conning, J. (1999) “Outreach, sustainability and leverage in monitored and peer-monitored lending”, *Journal of Development Economics*.
- Cull, R., Demirguc-Kunt A. and Morduch J. (2007), “Financial performance and outreach: A global analysis of lending micro banks”, *Economic Journal*, 117, 2007, 107-133.
- Deutsche Bank Research, (2007.) *Microfinance: An Emerging Investment Opportunity*, Frankfurtam Main: Deutsche Bank.
- Dondo A. and Mutiso J. (1999). Physical infrastructure: *Micro and Small Enterprises in Kenya: Agenda for Improving the Policy Environment*. Nairobi: International Centre for Economic Growth. 57-80.
- Hartarska, V. and Nadolnyak, D. (2007). “Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence”, *Applied Economics journal*
- Honohan, P. (2004). Financial sector policy and the poor: Selected findings and issues. WP 43, Washington D.C.: The World Bank.
- Hulme, D. and P. Mosley (1996), *Finance Against Poverty*, Volumes 1 and 2, Routledge, London.
- Kareta, B. (2010), Outreach of financial performance analysis of microfinance institutions in Ethiopia *Research paper*
- Kimondo, L. N., Kihoro, J.M., Njogu, G. W (2012). “Factors influencing the sustainability of Micro-Finance institution in Muranga’a Municipality”, international journal of business & Commerce; June 2012, vol. 1 issue 10
- King, E. M., Mason, A. D., (2001) Engendering Development through Gender Equality in Rights, Resources and Voices, The World Bank, Oxford University Press

- Kioko, J.M. (2012). “*An investigation into factors influencing financial sustainability of micro finance institutions in Kenya*”, Unpublished MBA project, Kenyatta University
- Kothari, C. (2004). *Research Methodology: Methods and Techniques* (2<sup>nd</sup> Edition). New Delhi; New Age International
- Lakew, B. (1998), " Micro enterprise Credit and Poverty Alleviation in Ethiopia: The Case the Project Office for the Creation of Small Scale Business Opportunities (POCSSBO) In Addis Ababa", *Unpublished MSc. Thesis*, Department of Economic, Addis Ababa University.
- Ledgerwood, J. (2000): *Microfinance Handbook: An Institutional and Financial Perspective*. The World Bank, Washington, DC
- Lipsey R.G., Courant P.N., Ragan, C.T.S (1999), *Economics*, twelfth edition, Addison-Wesley Publishing Company, Inc., USA
- Maldonado, J. H., (2005). The influence of microfinance on the education decision of rural households: evidence from Bolivia, Document CEDE 2005-46
- Malhotra, A., Schuler, S. R., Boender, C. (2002). Measuring Women’s Empowerment as a Variable in International Development, Background Paper Prepared for the World Bank Workshop on Poverty and Gender: New Perspectives
- Makame, A.H. and Murinde, V. (2006) Empirical findings on cognitive dissonance around microfinance outreach and sustainability, unpublished paper, Birmingham: University of Birmingham
- Meyer, R. L. (2002), "Track Record of Financial Institutions in Assisting the Poor in Asia" *ADB Institute Research Paper*, No 49.
- McIntosh, A. De Janvry and Sadoulet, E. (2005) “How competition among microfinance institutions affects incumbent lenders”, *Economic Journal*
- Mugenda A and Mugenda M (2003), *Research Methods: Quantitative and Qualitative Approaches*, ACTS Publishers, Nairobi
- Mutua, J. and Oyugi, L.N. (2007) *Poverty Reduction through Enhanced Rural Access to Financial Services in Kenya*, Institute for Policy Analysis and Research (IPAR)

- Navajas, S., Schreiner, M. Meyer, R. L. Gonzalez-Vega C. and Rodriguez-Meza J. (2000), "Micro credit and the Poorest of the Poor: Theory and Evidence from Bolivia", *World Development*, Vol. 28, No. 2, 333-346.
- Nissen, E. Mark (2005) Dynamic Knowledge Patterns to Inform Design: A Field Study of Knowledge Stocks and Flows in an Extreme Organization *Journal of Management*
- Olivares-Polanco, F., (2005) "Commercializing microfinance and deepening outreach? Empirical evidence from Latin America", *Journal of Microfinance*
- Oketch, H. O. (2000). *Gender Equity: Micro and small Enterprises in Kenya: Agenda for improving the Policy Environment*. Nairobi: ICEG.
- Rhyne, E., (1998) "The yin and yang of microfinance: Reaching the poor and financial sustainability," *Microfinance Bulletin*.
- Rosenberg, R. (2003). Core Performance Indicators for Microfinance, CGAP, no. 9, July 2003
- Rutherford, S. (2000) Raising the curtain on the 'Micro financial services era, Focus note, CGAP, Washington DC.
- Todaro, M. P., Smith, S. C (2003) *Economic Development*, Pearson Education Limited, Harlow, England,
- Trochim, W.M (2005) Research Method Knowledge Base-Survey Research. *UNDP, Human Development Report*
- Yunus, M. (2007): *Banker to the Poor: Micro-lending and the Battle against World Poverty*. Public Affairs, New York.
- Yunus, M and Jolis, A. (2003). *Banker to the Poor: Micro-lending and the Battle against World Poverty*. Public Affairs, London, England

APPENDICES

Appendix I: Introduction Letter



**UNIVERSITY OF NAIROBI**  
**SCHOOL OF BUSINESS**  
**MBA PROGRAMME**

Telephone: 020-2059162  
Telegrams: "Varsity", Nairobi  
Telex: 22095 Varsity

P.O. Box 30197  
Nairobi, Kenya

DATE 13/06/13

**TO WHOM IT MAY CONCERN**

The bearer of this letter JEFF ODHIAMBO ARCOI

Registration No. DCI/62285/2011

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

**PATRICK NYABUTO**  
**FOR: MBA CO-ORDINATOR**  
**SCHOOL OF BUSINESS**



## APPENDICES

### Appendix II: Data Collection Form I

Name of MFI	year	Number of Women Customers	Number of Branches	Number of Clients who are Disable	Number of Youthful Clients (18 -35 years)	Return on Asset (ROA)
KWFT	2012	345708	14	8642	172854	0.013
	2011	345708	14	8642	172854	0.015
	2010	350123	10	16672	195902	0.016
	2009	297427	8	6683	97115	0.043
	2008	262648	8	2854	57097	0.052
Opportunity Kenya	2012	5234	13	45	4319	-0.042
	2011	4499	11	43	4232	-0.083
	2010	4084	11	40	3212	-0.136
	2009	3874	12	48	2848	-0.245
	2008	3428	11	60	1844	-0.305
Micro Africa LTD Kenya	2012	0	0	0	0	0
	2011	4579	7	191	3848	0.003
	2010	2997	6	130	2412	0.045
	2009	1288	5	98	848	-0.009
	2008	1104	3	57	643	-0.004
Eclot Kenya	2012	0	0	0	0	0
	2011	13432	17	645	10482	0.037
	2010	10848	16	343	12644	0.014
	2009	9484	16	264	9044	0.003
	2008	9788	16	107	6387	-0.003
Faulu Kenya	2012	0	26	7861	54489	0.004
	2011	37042	26	6231	49679	0.002
	2010	34489	26	5481	44396	-0.03

	2009	38448	26	4459	39498	-0.001
	2008	45649	26	3049	30489	-0.002
Jamii Bora Bank	2012	8448	11	1486	4856	-0.01
	2011	7365	11	1344	3987	-0.02
	2010	5289	7	1258	3448	-0.07
	2009	3648	5	746	1849	-0.016
	2008	2136	3	654	1048	-0.004
SMEP DTM	2012	34631	20	4861	37567	0.013
	2011	20341	20	5674	38948	0.009
	2010	30648	21	3267	40361	0.003
	2009	32634	20	3048	39897	0.05
	2008	31489	19	3186	37234	0.043
Taifa Option Microfinance Ltd	2012	647	1	108	548	-0.025
	2011	548	1	102	636	-0.054
	2010	48	1	14	89	-0.066
	2009	38	1	7	52	-0.038
	2008	51	1	5	48	-0.006

**Source: AMF report (2013)**



**Appendix II: Data Collection Form III**

Name of MFI	year	Total loan amount to women customers “000”	Total loan amount of Branches “000”	Total loan amount to clients who are disable “000”	Total loan amount to youthful clients (18 -35 years) “000”	Return on Asset (ROA)
	KWFT	2012	11793941	0	0	0
2011		11793941	16793941	1684849	8424243	0.015
2010		8604281	11627407	174411	6976444	0.016
2009		8197600	10247000	51235	4918560	0.043
2008		251228	285487	342584.4	131224	0.052
Opportunity Kenya	2012	350193	528440	5284.4	314064	-0.042
	2011	247813	523480	78487	214062	-0.083
	2010	167813	299667	5993.34	104844	-0.136
	2009	125928	262350	3935.25	103234	-0.245
	2008	102434	194238	971.19	89348	-0.305
Micro Africa ltd Kenya	2012	0	0	0	0	0
	2011	181777	324603	16230	232431	0.003
	2010	183961	292002	5840	132685	0.045
	2009	139158	204644	3069	102631	-0.009
	2008	94112	156852	2352.78	80484	-0.004
Eclot Kenya	2012	0	0	0	0	0
	2011	247879	442642	15492	345487	0.037
	2010	254259	391169	9779	284234	0.014
	2009	201195	365810	5623	296892	0.003
	2008	187143	295431	3645	200439	-0.003
Faulu Kenya	2012	2894398	4267488	80485	1084954	0.004
	2011	1829504	3266971	78492	942395	0.002
	2010	245505	2784945	66395	6394448	-0.03
	2009	265439	3331371	71689	5236441	-0.001
	2008	235498	3012486	56349	408397	-0.002

Jamii Bora Bank	2012	0	0	0	0	-0.01
	2011	289484	366405	23648	239489	-0.02
	2010	324964	397622	49439	274989	-0.07
	2009	98489	224772	21623	121431	-0.016
	2008	70682	189984	15436	94461	-0.004
SMEP DTM	2012	0	0	0	0	0.013
	2011	680783	1512851	30257	983353	0.009
	2010	489984	1310884	25432	1042262	0.003
	2009	312227	1040757	18436	984492	0.05
	2008	248362	948489	7869	523484	0.043
Taifa Option MF ltd	2012	21849	42637	4049	31485	-0.025
	2011	18984	31514	3496	22684	-0.054
	2010	5621	9335	1062	7848	-0.066
	2009	3021	5075	984	3648	-0.038
	2008	1087	3048	725	2856	-0.006

**Source: AMF report (2013)**

### **Appendix III: MFIs Operating in Nairobi County**

1. AAR Credit Services
2. Agakhan First Microfinance Agency
3. Blue Limited
4. Canyon Rural Credit Limited
5. CIC Insurance
6. Century DTM LTD(Interim)
7. Chartis Insurance
8. Co-operative Bank
9. ECLOF Kenya
10. Equity Bank
11. Faulu Kenya DTM Limited
12. IndoAfrica Finance
13. Jitegemea Credit Scheme
14. Jitegemee Trust Limited
15. Juhudi Kilimo Company Limited
16. KADET
17. Kenya Entrepreneur Empowerment Foundation (KEEF)
18. K-rep Development Agency
19. K-rep Bank Ltd
20. Kenya Women Finance Trust
21. Kenya Post Office Savings Bank
22. Fusion Capital Ltd
23. Micro Africa Limited
24. Micro Enterprises Support Fund(MESPT )
25. Kilimo Faida
26. Micro ensure Advisory Services
27. Molyn Credit Limited
28. Muramati SACCO Society Ltd
29. Musoni
30. Ngao Credit Ltd
31. One Africa Capital Limited
32. Opportunity International

33. Oikocredit
34. Pamoja Women Development Programmed (PAWDEP)
35. Platinum Credit Limited
36. Rupia Limited
37. Renewable Energy Technology Assistance Programmed (RETAP)
38. Rafiki Deposit Taking Microfinance Ltd
39. Remu DTM Limited
40. Reenland Fedha Limited
41. Select Management Services Limited
42. SISDO
43. SMEP DTM Limited
44. Sumac Credit Ltd
45. Swiss Contact
46. Women Enterprise Fund
47. Uwezo DTM Ltd
48. U & I Microfinance Limited
49. Yehu Microfinance Trust

Source: The Association of Microfinance Institution (AMFI) Directory (2012)