

**THE IMPACT OF DEPOSIT TAKING ON FINANCIAL
PERFORMANCE OF MICRO-FINANCE INSTITUTIONS IN
KENYA**

BY

MBUGUA ROSE NJERI

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DECLARATION

This research project is my original work and has not been presented to any other examination body. No part of this research should be produced without my consent or that of the University of Nairobi.

Name: MBUGUA ROSE NJERI.....

Date.....

Sign:

This project has been submitted for examination with the approval of:

Sign:

Date.....

MIRIE MWANGI

DEDICATION

This paper is dedicated to my parents Mr. and Mrs. John Mbugua, my siblings and my daughter Samara Njoki who have been a source of inspiration and support in the course of my studies.

ACKNOWLEDGMENT

The MBA Programme has been a long, taxing and challenging journey and the successful completion has been as a result of support received from many people. I am deeply indebted not only to the people who gave me the inspiration, support and encouragement to pursue the MBA Programme but also to everybody who gave me the guidance and assistance on what has been reported in this paper. Special thanks go to my supervisor Mr. Mirie Mwangi, School of Business, University of Nairobi for his continued advice, guidance, availability, encouragement, useful criticism and suggestion throughout the project.

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May God bless you all!

ABSTRACT

The Microfinance Act of 2006 that was enacted on 2nd May 2008 paved way for the transformation of Microfinance Institutions (MFIs) to deposit taking Microfinance Institutions (DTMs) in Kenya. This research project is aimed at determining whether this transformation, and in essence, the adoption of deposit taking has had an impact on the financial performance of nation-wide Microfinance Institutions in Kenya.

The study has used secondary data of all the nation-wide MFIs that have adopted deposit taking in Kenya. In particular, the study used the financial statements of these nation-wide MFIs. ROA pre and post adoption of deposit taking was computed. The pre adoption ROA was then projected over the entire period that the MFIs had been taking deposits. The projected ROA was then compared with the post adoption ROA using paired t test at a significance level of 0.05.

The results of the study generally suggest that deposit taking has had a negative impact on the financial performance of MFIs. This is because a general analysis of the trend in financial performance for two out of the three DTMs studied exhibited negative results. Further, the results of the paired t test confirmed that deposit taking has had a negative impact on the financial performance of nation-wide MFIs in Kenya. This is mainly attributed to the huge transformational costs that the MFIs incur during the transition period. However, experience from other countries such as Uganda suggests that with time, DTMs register positive financial results. The study therefore recommends that further studies should be carried out in future when the DTMs have been in existence for a longer period.

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ABBREVIATIONS

CGAP:	Consultative Group to Assist the Poor
DTM:	Deposit Taking Micro-Finance Institutions
FINCA:	Foundation for International Community Assistance
GLP:	Gross Loan Portfolio
MDIs:	Microfinance Deposit Taking Institutions
MFI:	Micro-Finance Institutions
MIX:	Microfinance Information Exchange
NPO:	Not-for-Profit Organization
ROA:	Return on Assets
ROE:	Return on Equity
SHFs:	Shareholder Firms
UNDP:	United Nations Development Programme
USAID:	United States Agency for International Development

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In the present day, every organization is striving to achieve financial sustainability so as to enhance its going concern. This is being done using a number of channels all aimed at either increasing the organization's revenue or cutting down its cost or both. Microfinance institutions are no exception to this. Microfinance Institutions are seeking ways of increasing and diversifying their products and offerings as well as seeking to reduce their cost and enhancing efficiency. It is for this same reason that deposit taking is quickly taking root in the modern day Microfinance business.

Deposit taking cannot take place without the necessary laws and regulations in place. In Kenya, the Microfinance Act of 2006 was enacted on 2nd May 2008 paving way for MFIs to apply for licenses to take deposits from the general public. A number of MFIs have thereafter transformed from MFIs to Deposit taking Microfinance Institutions, a phenomenon expected to increase the amount of funds available to these institutions for lending. These funds would accrue lower interests compared to the interest rates charged by banks and other lenders from whom the MFIs had been borrowing. As a result, this is expected to boost the financial performance of the MFIs due to the increased gross loan portfolio and the wider interest margins. It is against this backdrop that the study is modeled in an effort to ascertain whether indeed, licensing of deposit taking and the subsequent adoption of deposit taking by MFIs in Kenya has yielded the expected positive results.

1.1.1 Microfinance Institutions

Microfinance is often defined as financial services for poor and low-income clients. In practice, the term is often used more narrowly, referring to services delivered by self-described “microfinance institutions” (MFIs) who usually use techniques developed over the last three decades to make and manage tiny uncollateralized loans. These techniques include group lending and liability, pre-loan savings requirements that test clients’ willingness and ability to make regular payments, graduated loan sizes, and most importantly an implicit guarantee of quick access to future loans if present loans are repaid promptly (Gonzalez & Rosenberg, 2006).

Microfinance is viewed as a means of extending credit, usually in the form of small loans with no collateral, to non-traditional borrowers such as the poor in rural or undeveloped areas. This approach was institutionalized in 1976 by Muhammad Yunus, an American-educated Bangladeshi economist who had observed that a significant percentage of the world's population has been barred from acquiring the capital necessary to rise out of poverty. Yunus set out to solve this problem through the creation of the Grameen Bank in Bangladesh. The Grameen approach is unique because the small loans are guaranteed by members of the borrower's community; pressure within the group encourages borrowers to pay back the loans in a timely manner. Grameen's clients are among the poorest of the poor, many of whom had never possessed any money and relied on a barter economy to meet their daily needs. Using microloans, borrowers are able to purchase livestock or start their own businesses. By 1996 Grameen had extended credit to more than three million borrowers and was the largest bank in Bangladesh, with more than 1,000

branches. The number of microfinance institutions (MFIs) making small loans to the developing world's poor has grown to over 7,000 (Tucker & Miles, 2006).

Microfinance institutions have played a big role in driving the Kenyan economy by financing the poor and low income earners. It is believed that 50% of Kenyans are poor or in the low income bracket and hence have no bankable income making the wider banking industry shy away from them in the past. However, with the formation of banks such as Equity Bank, this ideology was proved wrong as such banks mainly targeted low income earners. Consequently, these individuals could now access financing to start businesses or boost their small businesses. Like the case was in India, micro-finance institutions in Kenya mainly work with small groups who guarantee each other as they do not have valuable assets, if any, to act as collateral for loans.

1.1.2 Deposit Taking Microfinance Institutions

A Deposit Taking Microfinance Institution is a microfinance that has the capability to offer savings and wealth creation products to the market as well as lend to consumers who require credit at a rate of interest (FauluKenya-Administrator, 2010).

According to the Microfinance Act (2006), a deposit taking microfinance business means a microfinance business in which the person conducting the business holds himself out as accepting deposits on a day-to-day basis. It also refers to any other activity of the business which is financed, wholly or to a material extent by lending or extending credit for the account and at the risk of the person accepting the deposit, including the provision of short-term loans to small or micro-enterprises or low income households and is characterised by the use of collateral substitutes.

1.1.3 Deposit Taking Microfinance Institutions in Kenya

After the coming to effect of the microfinance Act on 2nd May 2008, a number of existing micro-finance institutions applied for licenses to allow them to take deposits from members and the general public. The principal objective of the Microfinance Act is to regulate the establishment, business and operations of microfinance institutions in Kenya through licensing and supervision.

In a report by Aron (2011), there are currently six Deposit-taking MFIs, whereby one is community based and the other five are nation-wide. The nation-wide DTMs are; Kenya Women Finance Trust DTM Limited, Faulu Kenya DTM Limited, Small and Micro Enterprise Programme (SMEP), Rafiki DTM Limited and Remu DTM Limited. Uwezo DTM is a community-based DTM and will not be included in this study. In addition, given that the study is aimed at assessing the trend and movement in financial performance, the research will be carried out on nation-wide Microfinance Institutions that have transformed to Deposit Taking MFIs covering the entire period after transformation and the five-year period prior to transformation. The research will be carried out during July–August 2012 period.

1.2 Statement of the Problem

Financial performance can be seen as a measure of a company's ability to generate income over a given period of time. Trivedi (2010) describes financial performance as the degree to which financial objectives are being or have been accomplished. He further views it as the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period

of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

An analysis of the financial performance of the deposit-taking micro-finance institutions will assess whether deposit taking by these transformed MFIs has been a success in Kenya. This will in turn help in decision-making for other micro-finance institutions interested in taking deposits. Deposit-taking MFIs earn financial revenue from loans and other financial services in the form of interest fees, penalties, and commissions. Financial revenue also includes income from other financial assets, such as investment income that they may have. A deposit-taking MFI's financial activities generate various expenses, from general operating expenses and the cost of borrowing to provisioning for the potential loss from defaulted loans. A profitable institution earns a positive net income (Lafourcade, et al., 2006).

A number of studies have been carried out in other countries to assess the impact that deposit taking has had on the financial performance of MFIs upon adoption of deposit taking. Such is the case per report on Uganda Deposit Taking Microfinance Institutions by Dhaka (2010). In that study, the researcher critically assessed the impact that adoption of deposit taking has had on MDIs in Uganda. In his study he was able to show that indeed deposit taking had yielded positive results. In Kenya, numerous studies have been carried out on MFIs and deposit taking. One such study is a report by Mokoro (2010) on the transition from Micro-financing into formal banking among MFIs in Kenya. In this study, the main objective was to establish the factors influencing the transformation from micro-financing to formal banking in Kenya.

Notably, none of the studies carried out provides a picture as to whether adoption of deposit taking has impacted on the financial performance of Microfinance Institutions in Kenya. In light of this research gap, the research question is “Has deposit taking had an impact on the financial performance of Microfinance Institutions in Kenya?”

Like any other entity, the bottom-line for deposit-taking MFIs is getting positive results as far as financial performance is concerned. In addition, continued growth and increase in size and returns as may be depicted by trends derived from items and balances on their financial statements is even more desirable to stakeholders. Given that deposit-taking in Kenya is a new concept resulting from the enactment of the Microfinance Act, this research seeks to determine the impact that deposit taking has had on the financial performance of nation-wide MFIs in Kenya.

1.3 Objective of the Study

The objective of the study is to determine whether deposit taking has had an impact on the financial performance of microfinance institutions in Kenya.

1.4 Importance of the Study

This study will be of great value to several different interest groups:

i) Owners/investors

Financial performance analysis generally gives investors an idea of how their investments are faring so that they can decide whether to carry on with the investment or halt it. Analyzing the performance of DTMs will assess the viability of the investment in them and more so, the viability of deposit-taking. The investors would therefore decide

whether to proceed with this investment as is, put in more funds into the business or to pull-out all together.

ii) Other Microfinance Institutions

The results will be valuable for MFIs that wish to start taking deposits from the public given that a number of them have already applied to the Central Bank of Kenya for licensing and will shed light on what to expect in terms of movements in financial performance upon transformation, *ceteris paribus*. MFIs intending to transform to DTMs will get a rough idea of what to expect should they have an interest in the same investment.

iii) Regulators

The estimated impact of deposit taking on financial performance of MFIs will provide valuable information as to whether the introduction of deposit taking is a success. If successful, it will pave way for other similar regulations that will result in the advancement of the industry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Introduction

In this chapter, the study shall review different literature that focuses on Microfinance Institutions and their existence by critically outlining all applicable theories that support the MFI concept. In this respect, the study shall critically review the financial intermediation theories that support the existence of DTMs. Secondly, the chapter shall review the key theory on which the importance of financial performance of MFIs is based i.e. the theory of financial sustainability. In review of the latter theory, the study shall not only review the theory in itself but shall also review literature on the factors contributing to financial sustainability.

2.1.2 Financial Intermediation Theory

A financial intermediary is defined by Rochet (2008) as financial institutions specialized in the activities of buying and selling assets and financial contracts. Financial intermediaries are grouped into 2 i.e. banks (deposit taking institutions) and non-bank financial intermediaries (lenders through purchase of securities). The DTMs under study are classified under banks/deposit taking institutions and for this reason they are financial intermediaries. Financial intermediation theories attempt to explain the existence of these financial intermediaries. There are a number of financial intermediation theories but for the purpose of this study, two of the most applicable theories shall be reviewed.

2.1.2.1 Reduction of Financial Cost Theory

The theory states that financial intermediaries transform the credit portfolio demanded by borrowers into a deposit portfolio desired by lenders (Allen & Santomero, 1998). This is done in two fold. Firstly, an intermediary is able to exploit economies of scale considerations by writing and enforcing debt contracts with firms and individuals. Secondly, financial intermediaries reduce transaction costs through the payment system. Centralizing this process at the level of financial intermediaries avoids wasteful duplication of verification costs. Notably also, MFIs are able to lower the costs that would otherwise be incurred while engaging in the process of borrowing. In the case of DTMs, this is more evident as the cost of funds is reduced given that the DTMs borrow from other financial institutions at high interest rates and thereafter lend at even higher interest.

2.1.2.2 Information Provision Theory

This strand of theory is based on the notion that the borrower is likely to have more information than the lender about the risks of the project for which they receive funds. This leads to the problems of moral hazard and adverse selection (Matthews & Thompson, 2008, p.42). These problems reduce the efficiency of the transfer of funds from surplus to deficit units. In the case of DTMs, the risk associated with information asymmetry is highly reduced by group-lending such that individual members act as guarantors to each other. In most, if not all cases, the groups are composed of people who know each other very well and are therefore able to make follow-up with defaulting members of the group.

2.1.3 Financial Sustainability Theory

As a general rule, MFIs work toward a double bottom-line—financial and social—unlike the typical formal financial institution which works solely toward a financial bottom-line (Brau J.C. 2004). This study is keen on the financial bottom line aspect. The Financial Sustainability theory underlies the models of microfinance promoted since the mid-1990s by most donor agencies and the best practice approach promoted by USAID, UNDP and CGAP. The ultimate aim is to grow large programmes which are profitable and fully self-supporting in competition with other private sector and banking institutions which are able to raise funds from international financial markets rather than relying on funds from development agencies. The main target group, despite claims to reach the poorest, is the “bankable poor”, small entrepreneurs and farmers. This emphasis on financial sustainability is seen as necessary to create institutions which reach significant numbers of poor people in the context of declining aid budgets and opposition to welfare and redistribution in micro-economic policy.

According to Ganka (2010), the need for MFIs to be financially sustainable cannot be overemphasized. The study further argues that unsustainable MFIs may help the poor now but will not help them in future as the MFIs will be gone. The study further notes that it may better not to have MFIs than to have unsustainable ones as the latter may hurt the people they are supposed to be helping. The study goes on to show how important the financial sustainability of MFIs is and studying factors that affect it. It also shows that it is imperative that MFIs become financially sustainable if the objective of these MFIs is to

be achieved. The study hereafter reviews literature on the factors that contribute to financial sustainability.

The first factor is interest which is a fee paid by a borrower of assets to the owner as a form of compensation for the use of the assets. It is most commonly referred to as the price paid for the use of borrowed money. It is also referred to as money earned by deposited funds (Sheffrin & Sullivan, 2003). The core business of MFIs is to lend money to individuals usually in small groups whereby the individual group members act as guarantors for each other. The MFIs borrow this money from other financial institutions at a given interest rate and then lend it at a higher rate so as to cover its costs and make a desired margin. Interest rates and spreads drive profitability more than costs or productivity do (Gonzalez & Rosenberg, 2006). To ensure good financial performance, the borrowing rates have to be as low as possible while the lending rates have to be high enough so as to meet the set targets. In light of this, interest rates play a big role in determining the MFIs financial performance.

Ganka (2010) notes that there exists a risk-return trade-off between interest rates and demand. He further notes, all held constant, interest rates should be set to as high as possible. From economic theory, the higher the interest rates, the lower the demand for the loans. However, Ganka (2010) notes that interest rates should be set with an incentive in mind. The interest rates should be set at a level where the borrower is paying less than the return he is getting from investing the borrowed funds. He further concludes that how appropriate the interest rate is will determine the financial performance of the MFI and its success or failure in its respective stage of growth.

According to Waweru & Spraaakman (2012), another factor affecting financial sustainability according to a report on the use of performance measures used by MFIs is group lending. Group lending is the form of lending to individuals whereby a group guarantees repayment hence creating joint liability. The group members tend to be neighbours and friends who are in good positions to observe the behavior of the borrower and thereby reduce information asymmetry. The group members are also responsible for the loan if the borrower defaults, which is further incentive for the group to monitor the borrower. In effect, a joint liability contract reduces moral hazard and adverse selection by using the local group to provide information and force the borrower to adhere to scheduled repayments. According to Mersland & Strom (2007), MFIs which focus on group lending as opposed to individual lending reach poorer fractions of the population and thereby have greater depth of outreach. The group mechanism reduces transactions costs for the MFI and its clients.

Kiai (2010) further notes that microfinance involves the delivery of all loans and other financial services which the poor can use to build up their assets, establish or further develop in a business, increase their wealth, and protect against risks. Microfinance has come up with innovations to overcome the hurdles resulting from lending to the poor. These include group lending that takes advantage of peer monitoring and joint liability, very small loan amounts, frequent repayments, and the establishment of compulsory savings accounts by recipients. Loan repayment schedules are fixed save for a few types of loans e.g. education and housing loans. Interest rates are usually very high both due to the high transaction costs involved in processing high volume, low value loans and to protect the bank from risky borrowers. Allowing members to form their own groups

clearly also has benefits for the banks, because safe borrowers will form groups with other safe borrowers and risky borrowers will be put with risky borrowers. Hence the bank can charge lower interest rates to safe borrowers groups and higher interest rates to risky ones. The interest rate also diminishes according to a client or group reliability and punctuality in repayment for more than one year.

According to Imai et al. (2012), efficiency, which also affects the financial sustainability of MFIs, is the share of operating expense to gross loan portfolio. The ratio provides a broad measure of efficiency as it assesses both the administrative and personnel expense with lower values indicating more efficient operations. The importance that efficiency plays in determining MFIs performance can therefore not be over-emphasized. Though driven by other factors, efficiency is in itself a solid driver of profitability in a competitive financial sector. A review of work done by Wrenn (2005) states that an MFI must cover the cost of funds, operating costs, loan write-offs and inflation with the income it receives from fees and interest.

The MFIs that have become self-sustainable tend to be larger and more efficient, and they don't target the very poor, as targeting the less poor leads to increases in loan size and improved efficiency indicators, whereas MFIs focusing on the poorest tend to remain dependent on donor funds. This is where the compromise exists. In order to achieve such sustainability, while at the same time reaching those most in need, microfinance programmes need to be managed in a rigorous and professional manner, subsidies must be removed, and tight credit control procedures and follow-up on defaulters needs to be in place. There is no doubt that sustainability is also very important from the clients'

perspectives, as they place a high value on continued access to credit, and if they feel that the MFI will not survive it reduces their incentive to repay loans.

Wrenn (2005) notes that appropriate loan sizes for clients matching their needs, realistic interest rates, savings as a prerequisite, regular, short and immediate repayment periods and achieving scale can contribute to financial sustainability. If these measures of achieving sustainability are put in place, while focusing on the needs of the poorest, then both the social and financial objectives can be achieved. Simply put, the trade-off between financial and social objectives can be balanced if the MFI is well managed and understands the market and its clients and by combining both objectives, financial returns can potentially be increased in the long run.

Gross Loan Portfolio is yet another factor deemed to influence the financial sustainability of MFIs. According to Ganka (2010), GLP refers to the amount of loaned funds remaining unpaid at the end of the period on which interest is charged. The loan amount is the function of loan size and the number of borrowers (clients). The loan size reflects the nature of clients and their poverty levels. The general assumption is that the smaller the loan size, the more poor clients will be reached by the MFI. The loan amount can be increased by either increasing the loan size or increasing the number of clients or both. Given that GLP is used to compute interest, and given that, all else held constant, a high interest amount would result in better financial performance.

Higher interest rates and large loan amounts alone may not earn much interest income for MFIs if the loan repayments rates are low. In his report, Ganka (2010), states that the sustainability of MFIs is linked to effective loan repayments and profitability. He further

states that the efficiency of any MFI in collecting loans from its clients will lead to higher repayment rates and all things being equal, higher profitability.

The report by Ganka (2010) cites other income as another determinant of profitability and hence financial sustainability. Other income is income from other activities outside of the MFIs core activities/operation. These would include sale of application forms and return from other products or services offered by the MFI. The amount of other income to be collected by an MFI will depend on its product diversity and return from these products. The report further notes that MFIs need to be creative in introducing demand-driven products to increase income from these products. However, this is subject to having an enabling environment as set by the government.

A study by Downey & Conroy (2011) outlines a number of hypotheses on the effects of Nonprofit and For-profit status on financial performance. Firstly, the two argue that non-profit MFIs are deemed to have a higher proportion of women to men borrowers. Essentially, women borrowers provide greater social impact than their male counterparts and also tend to have higher repayment rates. The study also pre-supposes that to the extent that NGOs focus on reaching larger numbers of the poor, it is expected that nonprofits will have more loans with smaller average loan size than their for-profit counterparts. In general one would expect nonprofits to operate very close to their costs, leaving little room for excess profits. With their social mission, nonprofits would be expected to provide more services per borrower. In addition, trying to reach as many poor borrowers as possible would likely increase costs for nonprofits. This means that the nonprofit MFIs would have higher attendant expenses than for-profits hence affecting

their profitability. Since nonprofit MFIs do not have a profit motive, it is expected that they would charge their clients lower interest rates than for-profit firms. Lastly, since for-profit MFIs have a greater incentive to avoid making loans to very risky borrowers, it is expected that nonprofits would have a higher proportion of risky loans.

A study by Imai et al.(2012) states that there are two ratios that are used to assess MFI risk, namely, Portfolio at Risk and write-off ratio. The study further states that higher values for both ratios which indicate low portfolio quality are not desirable since they can lead to lower profits and the likelihood of non-sustainability of both the MFI and the clients. The portfolio at risk values represents client loans that are outstanding and write-off indicates the declaration of default. Portfolio quality of MFIs is driven by internal institutional accounting practices/norms, degree of regulation and maturity of the microfinance market where the MFI operates.

The report by Mersland & Strom (2007) suggested that management structure may also influence the financial performance of an MFI. Hence, to improve the performance of MFIs there is a need to better understand the influence of different corporate governance mechanisms in this specific industry. The two further point out that besides the owner-board/manager agency relationship found in nearly all firms, the agency aspects in the firm-customer interactions are potentially more important in banking than in other industries. In microfinance this becomes even more evident because the repayment problem is so central.

The last factor affecting financial sustainability is deposit taking. According to Longman (2012), a deposit-taking financial institution is one into which people can pay money so

that it can be held there and earn interest. Deposit taking is therefore the act of holding money for people who earn interest in the process. Deposit taking increases the amount of funds available to MFIs for lending. It is important to note that these deposits are accruing a very low interest compared to market rate while the lending rate remains as was, or slightly lower. This means that the MFIs are able to issue more loans while making a substantial margin on these loans which boosts its profits.

As earlier stated, MFIs lend funds that are mostly borrowed from other financial institutions. The interest rates on deposits is significantly lower than that which would have been paid to financial institutions had this money been borrowed. This means that the margin created is higher than would otherwise have been should the MFIs have borrowed funds from other financial institutions. Based on these pointers, deposit taking is expected to have an impact on the financial performance of MFIs that adopt it.

2.2 Empirical Literature Review

A number of studies and research have been carried out in different markets with respect to financial performance of microfinance institutions. According to Kereta (2007), the micro finance institutions participation in several developing economies is escalating from time to time. Kereta (2007) refers to financial performance as financial sustainability and he states that there are two kinds of financial sustainability namely: operational self-sustainability and financial self-sustainability. Operational self-sustainability is when the operating income is sufficient enough to cover operational costs like salaries, supplies, loan losses, and other administrative costs. And financial self-sustainability (also referred to as high standard measure) is when MFIs can also cover the

costs of funds and other forms of subsidies received when they are valued at market prices.

Kereta (2007) carried out a study on data collected from 26 MFIs in Ethiopia for a seven year period ranging from 2001 to 2007 (both years inclusive). Operational sustainability examination, as a component of financial sustainability measurement, revealed that MFIs as an industry were operationally sustainable measured by return on asset and return on equity. It also identified that the industry's profit performance was improving over time. A notable reduction in the dependency ratio over the years (i.e. from 63% in 2001 to 31% in 2007) in the MFI industry also indicated that MFIs can be self-sustainable, profitable, and meet their social missions. Loans financed from donated capital were also noted to have reduced from 42.5% in 2001 to 11.1% in 2007. Non-performing loan (NPLs) to loan outstanding ratio can also be an alternative indicator for measuring profit quality, which has an effect on financial sustainability of MFIs. Using this indicator the study found out that MFI financial sustainability is in a comfort zone with average NPLs ratio of 3.2 percent from 2005 to 2007.

The study further recorded that less default rate is critical for financial sustainability and from the representative sample MFIs, the default rate is notably very low for most of them though it shows steady growth. For instance, in one microfinance in period 2001 and 2002 it was 0% but in 2003, 2004 and 2005 it steadily grew to 6.9%, 3.2% and 7.6% respectively. Similarly, in another Microfinance the default rate has increased on average from 2001 (default rate of 2%) to 2005 (default rate of 5%) by 39%. At the time of the study, the low default rate was deemed to be encouraging in terms of supporting the

financial sustainability of the institutions. However, the growth trend of the default rate might endanger their financial sustainability. The study showed that the main causes of the default risk included improper selection, ineffective repayment enforcement mechanism, absence of effective group pressure or collateral, negligence of clients, crop failure in rural areas, sickness of the borrower or family member; and bankruptcy in the business of clients.

In a study by Dhaka (2010), licensing of Microfinance Deposit Taking Institutions resulted in increased loan portfolio such that as at the end of December 2005, the four MDIs studied had a total loan portfolio of UGX 65.7 billion. By September 2008, the portfolio had grown to Ug shs 139.9billion. Though the total MDI loan portfolio fell to Ug shs 83.4billion at end of December 2008 (due to graduation of one of the MDIs into a bank), it had by end of December 2009, risen to UGX 97.3 billion. In addition, there is evidence of repeat borrowing, business expansion and diversification, increase in frequency and volumes of savings as well as good loan repayment as reflected by the MDIs' low level of portfolio at risk. In terms of easing access, the number of MDI branches, had risen from the 64 in 2005 to 76 by end of December 2009. The study also showed that, despite criticism on the apparent“stringent” provisions of the MDI Act 2003, the MDIs asset quality had consistently improved from 2005 to 2009. Starting with a Portfolio at Risk (PAR) rate of 5.5% in 2005, the overall PAR had, by the end of December 2009, reduced to 2.4%. This is testimony of improved loan portfolio management upon adoption of deposit-taking.

The study further depicted an improved capital base hence enabling MDIs to sustain capital adequacy standards for core capital and total capital to risk weighted above 20% and above 30% (respectively) well above the minimum required 15% and 20%. This has enabled the MDIs to retain earnings which have supported organic growth of their business. The four MDIs that were licensed in 2005 had core capital of UGX 17.3 billion (USD 8.9million) and total capital UGX 24.0billion (USD 12.5million) respectively. And by end of December 2009, even after one of the four MDIs had graduated to a commercial bank, capitalisation levels for three remaining MDIs stood at UGX 26.1billion (USD 13.5 million Core Capital) and UGX 35.3billion (USD 18.2 million Total Capital). The increase in capital levels arose from a number of factors which include the limit on maximum shareholding (30%) which compelled the MDIs to bring in other investors who boosted capital levels as well as an increased access to new funding sources (commercial funds and deposits) as a result of improved management and governance of the MDIs. Earnings showed a positive trend although the trend begun with a fall in Return on Assets (RoA) and Return on Earnings (RoE) between Dec 2005 and June 2006, MDIs' RoE peaked at 19% in June 2007. The initial fall (after licensing in 2005) was due to new investments in information systems, branch upgrades and staff recruitment to meet licensing and on-going regulatory requirements. MDIs' RoA and RoE have thereafter, moderated to levels more in keeping with returns expected of the sector.

In a study from a database of 2600 microfinance institutions, Gonzalez & Rosenberg (2006) in a bid to analyse efficiency, costs were measured as Operating Expense Ratio which is administrative costs divided by gross loan portfolio. The study results further

showed that scale (number of borrowers) lowers costs early on, but not much once the MFI moves past 5,000 – 10,000 clients. In addition, higher loan sizes reduce the Operating Expense Ratio, though not as much as might have been expected. Not surprisingly, for-profit institutions tend to be more efficient than not-for-profits. There was a further analysis of profitability measured as Adjusted Return on Assets which is net income minus adjustments for subsidies and loan loss accounting, divided by period-average assets. Surprisingly, not-for-profit MFIs tend to be more profitable than for-profit MFIs. A probable explanation is that not-for-profits are less likely to be operating in competitive environments. Interest rates and spreads (= interest rate minus cost of funds) drive profitability more than costs or productivity do. The study further revealed that scale (number of borrowers or asset size) doesn't help profitability much. After very few years, older MFIs do not tend to be much more profitable than younger ones, suggesting that there is not a strong learning effect beyond the initial years.

In a study of the financial performance of MFIs that included a comparison with Performance of Regional Commercial Banks, Tucker & Miles (2006) observed that generally MFIs in every region are unprofitable and far worse performers than their geographic commercial peers. In the study 148 MFIs were reported out of which 57 were self-sufficient. The total includes 59 from Latin America, 36 from Africa, 29 from Asia, and 24 from eastern Europe. On both return on assets and return on equity, self-sufficient MFIs were noted to be statistically significantly superior to commercial banks from comparable countries. MFIs are likely to have smaller equity and asset bases than commercial banks, in part explaining their superior performance. Smaller equity bases magnify the impact of profitability. The study noted that self-sufficient MFIs that had

registered positive Return on Equity could have attained this by reducing levels of services to the poorest of the poor—those with the greater needs. The cost of servicing the poorest with smaller loans can reduce financial-profit margins. There is a trade-off between financial ROE and social returns. The study also noted that the self sufficient MFIs could have attributed their success to repeat borrowers who have both a track record of repayment and a basic understanding of the loan process. Compared to commercial banks, self-sufficient MFIs were noted to have higher operating expenses as a percentage of assets perhaps because of the differences between the two but also because the commercial banks have a larger assets base compared to commercial banks. MFIs have higher profit margins than commercial banks, though not statistically significant, in part because they charge higher interest rates which in turn offset the earlier noted higher expenses of the MFIs.

According to a research by Yirsaw (2008) on the performance of Microfinance Institutions in Ethiopia, the performance of six MFIs was assessed. In an assessment of operational and financial self sufficiency, the average operational self sufficiency for small MFIs was observed to be below average and the least compared to medium size and large MFIs. The study concluded that the MFIs are not in a position to generate sufficient revenue to cover operating costs and at the same time their ability to operate and expand without subsidies is difficult for these institutions. An analysis of the MFIs' ROA shows that the ratio is higher for institutions that maintain a large percentage of the assets in the gross portfolio. The study also observed that the MFIs that had gained access to deposits and /or borrowings at a reasonable cost because depositors and lenders considered it credit worthy registered better performance. In this respect, the study

observed that large MFIs were successful in obtaining funds at a least average interest rate (3.57%).

Further, the study by Yirsaw (2008) showed that medium and large MFIs exhibited the highest average debt in proportion to their equity and hence performed well in obtaining funds as compared to the small MFIs. An analysis of efficiency and productivity shows that as the size of MFIs increases the operating expense ratio decreases. This might be due to economies of scale and/or learning effect (experience) which enhance MFI efficiency. This is further emphasized by the fact that large MFIs spend the least (efficient) in personnel and administrative expenses to serve a single borrower.

In a report by Assefa, et al. (2010) on Competition and Performance of Microfinance Institutions an analysis of loan repayment performance shows that there seems to be support that competition is associated with this dimension of financial performance of MFIs. The results of the study strongly suggest that more competition leads to more loans at risk and higher levels of loan write-offs (i.e. lower loan repayment performance) which in turn affects profitability. With respect to cost efficiency the study found evidence that more competitive markets are associated with higher costs for MFIs. This lends support to the hypothesis that higher competition leads to lower repayment rates and default rates, adding to the costs of lending. It may also support the notion that in highly competitive environments MFIs are not only competing for clients and market shares, but also for inputs such as capital and labour. Increased competition for these inputs may lead to rising interest rates at which they borrow money and to hire loan officer salaries, leading to higher costs. Higher competition is seen to be associated with lower return on assets

associated with lower operational self-sufficiency and lower profit margins, since the coefficient of the competition measure is positive and significant in all three cases. These results support the hypothesis that increased competition is associated with falling profitability: due to competitive pressure, market shares and monopoly rents decline, forcing MFIs to reduce profit rates.

In a study by Kyereboah-Coleman (2007) on the impact of capital structure on the performance of microfinance institutions the paper seeks to examine the sector within the sub-Saharan region. The study thus explored this linkage using panel data from Ghana on 52 microfinance institutions covering the ten-year period 1995-2004. The study showed that most MFIs are highly leveraged and for that particular study, most of the MFIs were noted to have been in existence for about 18 years. Again, the study results point to the fact that highly leveraged microfinance institutions perform better by reaching out to more clientele base and reducing default rates consistent with other studies. Furthermore, the study shows that highly leveraged MFIs enjoy scale economies and therefore are better able to deal with moral hazard and adverse selection and to accommodate risk. The findings of the study further imply that MFIs used more debt than equity in financing their operations.

A study by Hartarska (2009) on the impact of outside control in microfinance, MFIs with higher focus on lending (higher loans to assets ratio) have higher ROA, as expected. However, the study observes that MFIs that are able to control risk fare better. The study further notes that industry riskiness, measured by the standard deviation of ROA among peers operating in similar markets and region, does not impact ROA, and neither does the

economic development of a country measured by the per capita income. As expected, because MFIs have a comparative advantage in serving informal enterprises, the size of the informal economy has a positive impact on sustainability.

Lukooya (2008) studies the impact of training of MFIs; a case study of Uganda Finance Trust Ltd (MDI). In the study, it was established that to assess the financial performance Uganda Finance Trust Ltd (MDI) employs various measures of financial performance which include: Profitability, net worth, real cash flows, balance sheet strength, risk/exposure and fair market value. The study indicated that there is a moderate positive relationship of 0.5 between training and financial performance. The study further recommended that the MDI should revise its training methods and systems rendered to its employees so that they acquire the desirable skills to improve its financial performance towards perfection and that managers should also put into consideration training when planning and drafting the master budget and allocate sufficient funds because training yields positive results as pertaining financial performance.

In a study of the financial performance of MFIs in India by Agarwal & Sinha (2010), it is concluded that most of the best performing firms follow different business models in India. This is reflected in 13 out of 22 parameters studied. However in other areas especially in risk coverage, debt to equity ratio, productivity, cost per borrower, operational self sufficiency etc, there exists a similarity between the firm's performance. However, the similarity in performance is not due to a chance factor but a deliberate business model that emanates from group lending and rural

focus of MFIs operating in the Asian subcontinent. They seem to be following a time tested way of doing business which has sustained itself over the years.

However the managerial capability as reflected in productivity parameters is different as it is possible that management of different MFIs are at different stages of the learning curve.

An analysis of a study carried out by Soltane (2012) on social and financial performance of microfinance institutions shows that most MFIs are tending towards group lending methodology increasingly targeting women. Among the reasons noted for this bias is the basic argument that women tend to be good credit risks and are less likely to misuse the loan. Results of the study show that MFIs are concerned with improving the portfolio at risk to ensure their sustainability. Finally, the study states that while seeking to improve their portfolio at risk to have better financial performance MFIs tend to deviate from the most disadvantaged populations.

A study of the role of savings in microfinance institutions by Kurgat (2011) takes a look at Kenya Women Finance Trust DTM Limited. The study notes that variation of savings balances have no significant influence on financial performance. However, according to the study, savings balances and financial performance indicated strong positive relationship. With respect to the relationship between outreach and financial performance, the study showed a strong correlation between outreach and financial performance. The study concludes that savings mobilization is important for improved financial performance and outreach especially in the rural areas where access to financial services is challenging.

In a study by Mersland & Strøm (2007) on the performance and corporate governance in microfinance institutions. The study finds that a CEO/chairman duality is associated with a lower ROA and higher operational costs, but a female CEO with higher ROA and lower operational costs. The findings confirm theories of agency relationships in both the owner-management dimension as well as in the bank-customer dimension. The research also found out that shareholder-owned firms bring better profitability or lower outreach than non-profit organisations. This means that MFIs are equally good or bad at creating profitability and reaching the poor independently of ownership type. Competition is also noted to be a major driver of financial performance. In particular, the portfolio yield is lower with higher competition. This means that more competition among MFIs will bring lower interest rates to clients, but lower ROA to MFIs. Group lending does not contribute positively to financial performance, but to out-reach. The study notes that if the objective of an MFI is to lend again without donor support and to improve its financial performance it should concentrate more on giving individual loans and less on group loans. ROA is observed to record increases as the average loan size increases.

In a study of MFIs in Nigeria, Anyanwu (2004) notes that bank funding of MFIs in Nigeria should be given special consideration. This is as a result of his findings that financial engineering of microfinance institutions has shown that the poor are good credit risks. He further observes that the increasing access of the poor to credit and their unmatched repayment rates has turned the provision of microfinance into a huge viable business.

A research by Osmond (2006) on the relationship between the financial performance and the capital structure of MFIs in Kenya found out that there is a strong relationship between customer outreach and efficiency ratio. This depicts that the more customers MFIs have, the more efficient they become as they incur less cost/per shilling of revenue earned. In addition, it is noted that a large market translates to high liquidity. The research further shows that financial leverage for an MFI results in low performance as expenses incurred in generating each shilling of revenue increases. Another observation of the study was that MFIs experience low performance during market entry as they incur entry costs and unstable capital structure.

Conclusion

The empirical evidence clearly illustrates the varied impact that the different factors cited therein have on the financial performance of Microfinance Institutions. In particular, and for the purpose of this study, deposit taking has been identified to have a positive impact on the financial performance of deposit taking MFIs and the same is expected to be replicated in the Kenyan case.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research methodology seeks to determine the procedures that will be used to ascertain the results of the study. There are a variety of methodologies depending on the size of the population under study and the type of information one is seeking. The types of methodologies can be either qualitative or quantitative. This chapter is an outline of the methodology that will be used by the researcher in search of a solution to the research question.

3.2 Research Design

A descriptive research design will be adopted to establish the impact deposit taking has had on the financial performance of nation-wide microfinance institution in Kenya. A descriptive research design is one that describes the state of affairs as it is at present. It includes surveys and fact finding enquiries of different kinds. A research design is a framework or blueprint for conducting a research project. It specifies the details of the procedures necessary for obtaining the information needed to structure or solve research problems (Birks and Malhotra, 2003). Descriptive research design is a valid method for researching specific subjects and as a precursor to more quantitative studies.

The study intends to make use of a descriptive research design in its data collection, analysis and presentation. This is because descriptive research involves gathering data that describes events and then organizes, tabulates, depicts, and describes the data

collection. It often uses visual aids such as tables, graphs and charts to aid the reader in understanding the data distribution. Descriptive research also uses description as a tool to organize data into patterns that emerge during analysis which aid the mind in comprehending a qualitative study and its implications. Descriptive research design and statistics is very important in reducing data into manageable form (Glass & Hopkins, 1984).

3.3 Population

Mbokane (2009) refers to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. According to Castillo (2009), a research population is generally a large collection of individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done. A research population is also known as a well-defined collection of individuals or objects known to have similar characteristics. All individuals or objects within a certain population usually have a common, binding characteristic or trait.

For the purpose of this study, the research population is composed of all nation-wide MFIs in Kenya that have adopted deposit-taking hence transforming into Deposit Taking MFIs (also referred to as DTMs). The study is a census study whereby the entire population shall be studied as opposed to a select sample. In this case therefore, the nation-wide DTMs that will be studied are Kenya Women Finance Trust (KWFT) DTM Limited, Faulu Kenya DTM Limited, Small and Micro Enterprise Programme (SMEP) and Remu DTM Limited.

3.4. Data Collection

Data collection entails gathering information to address the research question at hand. For the purpose of this study, secondary data, which refers to the information obtained from articles, books, newspapers, internet and magazines (Ileri, 2006), shall be collected. This data shall be used for generation of information and as Cooper & Schindler (2003) explain, secondary data is a useful quantitative technique for evaluating historical or contemporary confidential or public records, report, government documents and opinions. The data collected shall be from the audited accounts of the nationwide DTMs for five years prior to transformation and for the entire period after transformation. The study shall seek to determine whether deposit taking has an impact on the financial performance of nation-wide MFIs in Kenya.

3.5. Data Analysis

The study shall have one dependent variable i.e. financial performance of MFIs (measured by ROA) and one independent variable i.e. deposit taking which will take two values (0 and 1). The financial performance of MFIs shall be measured when the independent variable is 0 and then projected to develop the expected ROA for the deposit taking period. Thereafter, the dependent variable shall be measured when the independent variable is 1 i.e. during the deposit taking period. A comparison shall then be made using a statistical analysis model, specifically the paired t test (also called dependent t test) to ascertain whether deposit taking has had an impact on the financial performance of MFIs or not.

The paired/dependent t test takes the following formula (when $n_1=n_2$):

$$t = \frac{\bar{D}}{\sqrt{\frac{SS_D}{n(n-1)}}}$$

Whereby:

- n refers to the number of pairs of ROAs (X_i and Y_i).
- X_i is the projected ROA while Y_i is the actual ROA for the period after transformation to DTM
- D is the difference between X_i and Y_i

$$D = X_i - Y_i$$

- SS_D is the standard deviation of the population means under study
- \bar{D} is the mean of the difference between projected ROA (X_i) and actual ROA (Y_i)

$$\bar{D} = \frac{\sum D}{n}$$

The Null and Alternative Hypothesis for the paired t test shall be:

- $H_0: \mu_1 = \mu_2$ (there is no difference in financial performance as a result of deposit taking)
- $H_1: \mu_1 \neq \mu_2$ (there is a difference in financial performance as a result of deposit taking)

The following main steps shall be followed in the analysis:

Step one:

Computation of Return on Assets (ROA) for the DTMs for the 5-year period prior to adoption of deposit taking.

Step two:

Projecting the ROA (computed in step 1 above) using Microsoft excel for the period that each of the MFIs has been taking deposits.

Step three:

This step shall constitute statistical analysis using a Microsoft excel analysis tool referred to as the “t test: paired two sample for means”.

Interpretation of Results

The results of the computation per excel analysis shall be displayed as follows for each of the DTMs:

	<i>Variable</i>	<i>Variable</i>
	<i>1 (X₁)</i>	<i>2 (X₂)</i>
Mean		
Variance		
Observations		
Pearson Correlation		
Hypothesized Mean Difference		
df (n-1)		
t Stat		
P(T<=t) one-tail		
t Critical one-tail		
P(T<=t) two-tail		
t Critical two-tail		

The value of t (t Stat per excel results) shows the difference in the population means. The t Stat value is used to determine the P value {P (T<=t) two-tail}. If the P value is less or equal to 0.05 then the null hypothesis shall be rejected and the result shall be deemed to be statistically significant. This means that there is a significant difference in financial performance (dependent variable) as a result of deposit taking (independent variable). If the P value is more than 0.05 then the null hypothesis shall be accepted meaning that there is no significant difference in financial performance (dependent variable) as a result of deposit (independent variable).

CHAPTER FOUR

RESEARCH FINDINGS AND INTERPRETATIONS

4.1 Introduction

The main objective of this study was to determine the impact of deposit taking on the financial performance of MFIs in Kenya. In order to achieve this, financial data of net income and total assets for five years prior to deposit taking was obtained and projected for the entire period that the MFI was carrying out the business of deposit taking with a view of testing the hypothesis below:

H0: $\mu_1 = \mu_2$ (there is no difference in financial performance as a result of deposit taking)

H1: $\mu_1 \neq \mu_2$ (there is a difference in financial performance as a result of deposit taking)

Given that there are only 4 MFIs that have transformed to deposit taking, attempts have been made to obtain from all of them so as to obtain a better picture of the results. However, the study was unable to obtain information from Remu DTM Limited to assess the impact on financial performance for this entity. The data collected from the other 3 DTMs has been analyzed hereafter.

4.2 Data Analysis and Findings

4.2.1 Computation of Return on Assets (Per Appendix 2)

$$\text{Return on Assets} = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

4.2.1.1 Faulu Kenya DTM Limited

	BEFORE					AFTER		
	2004	2005	2006	2007	2008	2009	2010	2011
	Kes. 00	Kes. 00	Kes. 00	Kes. 00	Kes. '000	Kes.'000	Kes.'000	Kes. '000
Return on Assets (ROA)	0.008965	0.00876	0.031564	0.030514	0.026159	0.004127	(0.028193)	0.0055786

4.2.1.2 KWFT DTM Limited

	BEFORE					AFTER	
	2005	2006	2007	2008	2009	2010	2011
	Kes. '000	Kes. '000	Kes. '000	Kes. '000	Kes. '000	Kes. '000	Kes. '000
Return on Assets (ROA)	0.0477682	0.04712	0.04653	0.0693358	0.055804278	0.019027941	0.01680655

4.2.1.3 SMEP DTM Limited

	BEFORE					AFTER
	2006	2007	2008	2009	2010	2011
	Kes.	Kes.	Kes.	Kes.	Kes.	Kes.
Return on Assets (ROA)	0.006375193	0.006931865	0.013464588	0.014668971	0.005151627	0.013672899

4.2.2 Projection of Return on Assets (ROA) computed above

4.2.2.1 Faulu Kenya DTM Limited

Year	ROA to be projected	Actual Data
2004	0.008964976	0.008964976
2005	0.00876593	0.00876593
2006	0.031564336	0.031564336
2007	0.030514337	0.030514337
2008	0.026159619	0.026159619
	Expected ROA	
2009	0.050222344	0.004127082
2010	0.069086823	-0.02819256
2011	0.072004873	0.00557863

4.2.2.2 KWFT DTM Limited

	ROA to be projected	Actual Data
2005	0.047768211	0.0477682
2006	0.04711893	0.0471189
2007	0.046529062	0.0465291
2008	0.069335828	0.0693358
2009	0.055804278	0.0558043
	Expected ROA	
2010	0.064920607	0.0190279
2011	0.071677153	0.0168066

4.2.2.3 SMEP DTM Limited

	ROA to be projected	Actual Data
2006	0.006375193	0.006375193
2007	0.006931865	0.006931865
2008	0.013464588	0.013464588
2009	0.014668971	0.014668971
2010	0.005151627	0.005151627
	EXPECTED ROA	
2011	0.009390996	0.013672899

4.2.3 Statistical Analysis Using Microsoft Excel

The statistical analysis has been done using a Microsoft excel analysis tool referred to as the “t test: paired two sample for means”. The end results are as follows:

t-Test: Paired Two Sample for Means	Variable 1	Variable 2
Mean	0.056217	0.00517
Variance	0.000592	0.000303
Observations	6	6
Pearson Correlation	-0.24301	
Hypothesized Mean Difference	0	
df	5	
t Stat	3.769749	
P(T<=t) one-tail	0.006513	
t Critical one-tail	2.015048	
P(T<=t) two-tail	0.013026	
t Critical two-tail	2.570582	

The mean of the values for the measures of performance before and after deposit taking are displayed in the table above. The paired two sample t test procedure compares means for 2 variables for a single group. It computes the differences between values of the two variables for each case and tests whether the average differs from 0. A low significance value of “P” (less than 0.05) means that rejecting the null hypothesis and that the results shall be deemed to be statistically significant. In this study, the P value is **0.013026** which is less than the 0.05 significance level. This can be further translated to mean that adoption of deposit taking has had significant impact on the financial performance of MFIs in Kenya.

4.3 Summary of Findings and Interpretations

For purposes of analyzing the data collected, the study first uses Return on Assets (ROA) as a tool of measuring how profitable the DTMs assets are in generating profit. Return on Assets

shows how many shillings of earnings result from each shilling of assets the DTM controls. Return on Assets ratio gives an idea of how efficient management is at using its assets to generate profit. Granted that comparing the profits of DTMs on their face value may not provide accurate results because DTMs are different in a number of ways (for example in terms of their size and operating environment), ROA proves to be a useful tool of comparison of different DTMs. As a general or common rule, the higher the return on assets is, the better, because the DTM is earning more money on its assets. A low return on assets compared to its past performance indicates a decline in financial performance and this translates to inefficient use of the DTM's assets. In addition, and in an effort to compare an entity's past performance against the present performance, ROA is of great value as circumstances may have changed within the same institution hence giving a better view of the trends in financial performance.

A closer look at the DTMs studied above shows a general decline in profitability or performance as reflected by a general decline in ROA. An analysis of the results of Faulu Kenya DTM Limited shows that the DTM has recorded very negative results to the extent of registering a negative ROA of (0.028193) in its 2010 financial results. This is after a consistent decline from a ROA of 0.008965, which was registered in 2004. This can be inferred to be as a result of the adoption of deposit taking by the MFIs. The trend of the financial performance of KWFT DTM Limited for the period covered is also not commendable. This is after coming from a point of having a ROA of 0.0477682 in 2005 to a ROA of 0.01680655 in 2011. SMEP DTM Limited has also registered a decline in the trend of financial performance from 2006 where it had a ROA of 0.006375193 to a ROA of 0.013672899 in 2011. A peculiar movement is, however, notable between the year prior to transformation of the MFIs to DTM and the year after whereby two out of the three DTMs have exhibited a sudden decline in ROA. Faulu Kenya DTM Limited in the year prior to transformation (2008) had a ROA of 0.0261596 which drastically dropped to 0.0041271 in 2009. KWFT DTM Limited on the other hand had a ROA of 0.055804278 in 2009 which was the year

prior to transformation and a ROA of 0.019027941 in 2010. On the other hand, SMEP DTM Limited exhibits a ROA of 0.005151627 in 2010 and a ROA of 0.013672899 in 2011 which shows a slight improvement compared to prior year.

The analysis above has several implications or interpretation. Firstly, given that there is a general decline in ROA over the period under review for all the DTMs, the study infers that the deposit taking has not had a very positive impact on the financial performance across the board. However, the improved performance by SMEP DTM Limited could be a pointer and an exception to the general conclusion. It may be an indicator that perhaps there are other factors coming into play and hence affecting the financial performance of the DTMs. These factors may be acting as an inhibitor to improved financial performance as shown by the trend in financial performance of KWFT DTM Limited and Faulu Kenya DTM Limited between the years prior and post adoption of deposit taking. Notwithstanding the varying results as depicted by the opposite movement in ROA in the years prior and post transformation, it is clear from the results that in deed, deposit taking has had an impact on financial performance. The question to further seek answers for is whether the impact is towards the positive or the negative direction and whether this impact on the financial performance is significant or not. In addition, given that two out of the three DTMs have exhibited a negative trend in financial performance, the first general conclusion is that the DTMs have generally reflected negative results.

This therefore calls for further analysis of the data and hence our use of statistical analysis using the paired t test. In this case, the study attempts to test the hypothesis below stated earlier:

H₀: $\mu_1 = \mu_2$ (there is no difference in financial performance as a result of deposit taking)

H1: $\mu_1 \neq \mu_2$ (there is a difference in financial performance as a result of deposit taking)

The study uses Microsoft Excel to carry out the analysis while applying an alpha of 0.05. This is the level of significance below which the deposit taking shall be deemed to have impacted the financial performance of the DTMs studied. This is determined from the P value obtained in the paired t test, whereby the P value is compared to the alpha (0.05) and if the P value is lower, then the null hypothesis is rejected. The null hypothesis in this case is the proposition that there is no difference in financial performance as a result deposit taking.

From the general analysis above, the study has been able to ascertain that 2 out of the 3 DTMs registered a decline in financial performance upon adoption of DTM. However, the approach of the study requires, for purposes of analyzing using paired t test, that the performance of 5 years prior to adoption should be projected first. The Paired-Samples t test (also called dependent t-test) compares the means between two related groups on the same continuous variable. In this case, groups analyzed are the ROAs prior to and post adoption of deposit taking. At the 0.05 significance level, the sample data supports the claim that the mean for the projected ROAs without deposit taking (**0.056217**) is lower than the mean for MFIs that have adopted deposit taking (**0.00517**). This means that there is a decline in financial performance which can be inferred to mean that the impact that deposit taking has had on it is negative.

Additionally, results from the paired t test show a P value of **0.013026**. As earlier outlined, a P value that is less than 0.05 would mean that we reject the null hypothesis. This can be inferred to mean that deposit taking has a significant negative impact on the financial performance of the DTMs.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study examined the impact of deposit taking on the financial performance of MFIs in Kenya. This chapter summarizes the various findings in line with the main objective of finding out the impact of deposit taking on the financial performance of MFIs in Kenya. It summarizes the findings that form the conclusion of the study. Further, the chapter contains recommendations made and highlights the limitations of the study together with making suggestions for further research.

5.2 Conclusion

The main objective of this study was to find out the impact of deposit taking on the financial performance of MFIs in Kenya. In line with this objective, data from DTMs on financial performance was obtained and analyzed to determine the Return on Assets (ROA). Return on Assets (ROA) was the financial performance measure that was used to measure financial performance. The average data for five years before deposit taking was collected and ROA was computed for each of the DTMs so as to come up with the expected performance over the period of deposit taking. In addition, data on financial performance was collected so as to enable computation of ROA for the period after deposit taking was adopted. The two, i.e. projected ROA and actual ROA over the period of deposit taking were compared using the paired t-test. Out of the four DTMs in operation as at the time of the study, only three provided information necessary to carry out an assessment of the impact on financial performance.

The results of the paired t test showed a significant difference in financial performance of the DTMs as the P value was noted to be **0.013026**, which is lower than the significance level of **0.05**. This low significance level showed that there was a change in financial performance upon adoption of deposit-taking by the MFIs under study. The study therefore concludes that there was a significant decline in financial performance as a result of deposit taking which means that deposit taking has impacted financial performance in a negative manner.

5.3 Recommendations

From the forgoing study, a number of recommendations are made hereafter. From the inferences made above, it appears that the financial performance has not been as positive for the duration under study. However, from the review of literature in chapter two, the study noted that in countries where MFIs had adopted deposit taking, their financial performance over a long period of time improved. This goes on to mean that the negative results seen from the data analysis may be associated with the high transformation expenses incurred during the transition from MFI to DTM. Hence, with time and based on experience from other countries, the DTMs are expected to register positive results. Therefore, the first recommendation is that MFIs that would intend to transform to DTM must have sufficient funds to cushion against the high transformation costs. In addition, the DTMs that are already in existence should expect better results, *ceteris paribus*.

Secondly, a lot of training would be required for new DTMs with respect to the deposit taking market. This is so that unnecessary operational costs may be avoided at the

transformation stage. In addition, the training would also help staff acquire the desirable skills to improve its financial performance towards perfection.

Thirdly, policy makers should take measures to expedite the process of approving the MFIs to adopt deposit taking. While a lot of time is spent in ensuring that the entities are well able to carry on the deposit taking and that they are fully compliant with the necessary requirements, effort should be made to ensure that the process is done as fast as possible. Since the enactment of the Microfinance Act in 2008, only six MFIs have been approved to take deposits whereby only four are nationwide DTMs. In light of this, every effort must be made to encourage MFIs to adopt deposit taking as this is not only beneficial to the MFIs but the benefits also trickle down to their customers.

Lastly, further research must be done in an effort to ascertain the impact that deposit taking has had over a longer period of time. Different models should be adopted to reflect the impact that each of the factors of financial performance of DTMs so as to ascertain the exact impact that deposit taking has had relative to the other factors. Further this will help in assessment of the impact of deposit taking on financial performance from all angles.

5.4 Limitations of the Study

Having a perfect research is close to impossible and it is therefore expected that this research has some limitations. In course of this study, the researcher encountered a number of limitations which made the research a little more demanding and challenging. However, the limitations did not materially affect the results of the study and the results more or less reflect the picture on the ground at the time of the study.

The first limitation was with respect to accessibility to information. Granted that financial statements are very confidential and contain very sensitive data, it becomes hard to obtain the information easily. In addition, this information is not available from one source as the regulator is not allowed to divulge the information after it is filed with them.

Another limitation which is related to accessibility to information is specifically to do with Remu DTM Limited. The DTM did not avail information necessary information for analysis. However, this has not affected the results of the study materially as the MFI was only licensed in December 2008 which means that its results may not have necessarily given a very accurate picture of the situation on the ground.

Thirdly, the practice of deposit taking has not been in operation for long period hence limiting the data available in the post-transformation period. Furthermore, the early years of the DTMs, like in any business, require high transformation costs and this would act as a major contributor to the negative financial performance reflected. Further research must be carried out in future years when the businesses have more or less stabilized.

Fourthly, and like in any other research, a lot of money is required for various reasons which include money for printing and preparing the final documents for presentation. In addition, due to the fact that the information is not obtained from one source, the researcher spent a lot of money while travelling to the different DTMs to collect information.

Lastly, given that the researcher is in full time of employment, the time available to carry out research was very limited. This meant that the researcher spent a lot of their free time carrying out the study from the beginning to the end as to meet the requisite deadlines.

5.4 Suggestions for Further Research

Given some of the limitations and observations, the researchers appreciate that there is still more room for further research in the field more so in the Kenyan context. Firstly, future studies especially when the DTMs have practiced deposit-taking for a longer time period would generate better insight into its impact on financial performance bearing in mind the impact of initial transformation costs on the financial performance of DTMs.

Secondly, additional research should be carried out when there is a bigger number of MFIs that have adopted deposit taking. A larger population results in more accurate research as each of the DTMs would be pre-disposed to diverse economic conditions.

Thirdly, the researcher also suggests further research using alternative models so as to incorporate the impact of the other factors that affect financial performance of DTMs. This will help to separate and ascertain the individual impact that each of the factors affecting financial performance have had on deposit taking.

Lastly, future research should be carried to assess the impact of deposit taking on the financial performance of community based DTMs in Kenya. This would be beneficial in determining whether there is a material difference on the impact of deposit taking on the financial performance of nation-wide DTMs and on that of the community based DTMs over a given specific period of time.

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APPENDICES

Appendix 1

List of Deposit Taking Microfinance Institution in Kenya as at October 2012:

1. Kenya Women Finance Trust DTM Limited (Nation-wide),
2. Faulu Kenya DTM Limited (Nation-wide),
3. Small and Micro Enterprise Programme (Nation-wide),
4. Remu DTM Limited (Nation-wide),
5. Rafiki DTM Limited (Nation-wide) and
6. Uwezo DTM Limited (Community-based).

Appendix 2

4.2.1.1 Faulu Kenya DTM Limited

	BEFORE					AFTER		
	2004	2005	2006	2007	2008	2009	2010	2011
	Kes. '000	Kes. '000	Kes. '000	Kes. '000	Kes. '000	Kes.'000	Kes.'000	Kes. '000
Net Income	7,762	10,287	54,984	77,142	81,540	16,571	(122,599)	26,584
Average Total Assets	865,763	1,173,558	1,741,970	2,528,055	3,117,010	4,015,186	4,348,63	4,765,328
Return on Assets (ROA)	0.00897	0.008766	0.031564	0.0305143	0.0261596	0.0041271	(0.02819)	0.005579

4.2.1.2 KWFT DTM Limited

	BEFORE					AFTER	
	2005	2006	2007	2008	2009	2010	2011
	Kes. '000	Kes. '000	Kes. '000	Kes. '000	Kes. '000	Kes. '000	Kes. '000
Net Income	105,549	141,514	219,995	531,940	676,532	321,606	302,469
Average Total Assets	2,209,614	3,003,338	4,728,121	7,671,934	12,123,300	16,901,776	17,997,090
Return on Assets (ROA)	0.047768	0.04712	0.04653	0.0693358	0.055804278	0.019027941	0.016807

4.2.1.3 SMEP DTM Limited

	BEFORE					AFTER
	2006	2007	2008	2009	2010	2011
	Kes.	Kes.	Kes.	Kes.	Kes.	Kes.
Net Income	4,076,197	4,966,417	12,232,617	17,314,853	8,025,931	25,895,000
Average Total Assets	639,384,118	716,461,908	908,502,858	1,180,372,738	1,557,940,870	1,893,892,500
Return on Assets (ROA)	0.00637519	0.006931865	0.013464588	0.014668971	0.005151627	0.013672899