A SURVEY OF USE OF FINANCIAL PERFORMANCE INDICATORS BY MICROFINANCE INSTITUTIONS IN KENYA.

By: Kitaka Peter Nthiwa.

A Management Research Project Submitted in Partial Fulfillment of the

Requirement of the Degree of Master of Business Administration

(MBA),

Faculty of Commerce,

University Of Nairobi.

October, 2001.

DECLARATION

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

Signed: ....   Date: ...19/11/2001

Kitaka Peter Nthiwa

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

Signed: ....   Date: ...19/11/2001

Angela Kithinji
Lecturer
Department of Accounting
University of Nairobi

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DEDICATION

To my loving parents, my dad Paul K. Munuve and mum Alice, and my dear brothers and sisters

for their immeasurable love, care and support.

ACKNOWLEDGEMENT

This research has been made possible by a number of people who I am indebted and would like to express my gratitude.

Special thanks go to my supervisor Angela Kithinji, who patiently and conscientiously guided me through the research, for without her caring and timely guidance, this project would not have been possible. To Mr. Mwangi Mirie, lecturer, department of Accounting and Mr. Jackson Maalu, lecturer, department of Business Administration, who devoted their time and effort especially during the proposal stage to make this research a success, I say thank you.

I am deeply indebted to the members of my family for the overwhelming support they have accorded me through out the program. Special thanks go to my dad, Paul Munuve and my mum Alice for their unlimited parental love and financial support. My brothers James and Faraja and my sisters Ester, Ruth, Naomi, Tabitha, and Miriam remained very close. I thank God for them. I thank Naomi specifically for supporting me financially.

To my dear friends, I deeply thank you. I am deeply indebted to Matilda, who has been a source of inspiration through out my program, and more importantly, encouraging and upholding me when things seemed unbearable. I thank God for you. To Erick, because of printing my proposal and Steve for helping me type, I say thank you, it was greatly through your kind support that this project has became a success. To my fellow MBA class 2001, I thank you for being helpful to me. For all those people who helped me in one way or the other, I thank you all. May God bless you.

Naturally, whereas I received a lot of support and guidance in this research project, responsibility and blame for any deficiencies therein rests solely on my shoulders.

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LIST OF ABBREVIATIONS.

MFIs   -Microfinance Institutions.

CBK   -Central Bank of Kenya.

MSE   -Micro and Small Enterprises.

K-Rep   -Kenya Rural Enterprise Programme

NGOs   - Non Government Organizations

PAR   - Portfolio At Risk.

SDI   - Subsidy Dependence Index

AMFI   - Association of Microfinance Institutions.

ROSCAs   - Rotating Savings and Credit Associations.

SACCOs   -Savings and Credit Co-operative Societies.

DFIs   -Development Finance Institutions

NBIs   - Non-Banking Institutions

KWFT   - Kenya Women Finance Trust

ROA   - Return On Assets

ROB   - Return On Business

ROE   - Return On Equity

Npar   - Non Parametric

M Ksh.   - Million Kenya Shillings

ABSTRACT

This study focused on the assessment of the use of financial performance indicators among the microfinance institutions in Kenya. All the interviewed institutions are located in Nairobi.

The study had two main objectives. First, to assess the indicators of performance used by the MFIs in Kenya, and secondly, to establish whether there is any relationship between the sources of finances and the financial performance indicators used by these MFIs.

Data was collected by use of a questionnaire and was analyzed by use of Excel and SPSS. The results were tabulated in the form of frequencies and percentages.

The research revealed that all the MFIs in Kenya use financial performance indicators. Some financial performance indicators like Arrears Rate, Delinquent Borrowers, Portfolio At Risk among others were more frequently used.

Further analyses revealed that majority of the MFIs have their financial indicators of performance determined by their financiers. This was confirmed by a Chi-Square test (χ^2) at 95% confidence level. The value of the calculated χ^2 exceeded the value of χ^2 at the critical point and thus the null hypothesis was rejected. This lead to a conclusion that we are 95% confident that there is a relationship between the financial performance indicators used and the sources of finance. The relationship being the providers of finance determine the financial performance indicators the MFIs in Kenya use.

1.0. INTRODUCTION.

1.1. Background.

Financial institutions are defined as organizations that provide services that facilitate financial activities in an economy (Kapoor, 1994). According to Mullie and Bokea (1999), the financial sector in Kenya alone is providing 10% of the Gross National Product. They also noted that this sector has been highly segmented with about 17 different types of financial institutions in existence by 1998 which includes, among others 53 commercial banks, 16 non-bank financial institutions and 39 insurance companies.

With the rapid expansion of the formal banking in Kenya in the recent years, a large number of Kenyans cannot access the financial services because they are poor and are considered risky and not commercially viable (Mullie and Bokea, 1999). The authors observe that MFIs have cropped up in order to facilitate financial services to the majority poor.

1.1.1. Microfinance Institutions (MFIs) in Kenya.

According to Central Bank of Kenya (CBK, 2000), MFIs are organizations involved in provision of thrift, credit and other financial services, and products to the small and microenterprises (SMEs). The Association of Microfinance Institutions (AMFI), the MFIs' umbrella body defines Microfinance to include "services such as savings, deposits, insurance services and other financial instruments, and products aimed at the poor or low-income people."

MFIs need to have clear objectives. Khandker (1995) states that Grameen Bank's objective in providing credit and other services to the poor is to enable them improve their income and employment status through entrepreneurial activities.

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MFIs operating in Kenya have concentrated mainly in providing financial assistance to SMEs (Daily Nation, 2000). Their objective is helping the country's economically marginalized communities by allowing them access to finance for development through creating employment and awareness to income generations. This works in line with their core function, which is provision of the financial services. Bodie (2000) emphasizes that the key function of MFIs is to provide a way to transfer economic resourses through time, across borders and among individuals.

1.1.2. Sources of Finance for Microfinance Institutions.

The government recognizes that greater access to and sustainable flow of credit to informal sector operations are critical to progress in poverty reduction (Budget speech, 2000/2001). The government channels financial assistance's to SMEs through MFIs and other financial institutions in efforts to reduce poverty.

In Bangladesh, the scenario is not different. The government has been financing the Grameen Bank. Khandker (1995) observes that since its establishment as a financial institution by government ordinances in 1983, Grameen Bank, has financed its activities with funds obtained at concessionary rates from external and domestic sources, including the Central Bank of Bangladesh.

The donors have also played a vital role in providing finances to MFIs. For the case of Grameen Bank, they provided most of the financial resourses as grant and low interest loans (Khandker, 1995). Most of the donors are non-government organizations (NGOs) who channel funds

through MFIs with a focus on social welfare promotion (CBK, 2000). Commercial banks play a major role in financing MFIs. According the a CBK Report (2000) commercial banks provide financial services to MFIs in a bit to enable them reach the SMEs. Some well-established banks have come up with sections which support MFIs, Barclays Bank- Small Business Loan, KCB- KCB Special Loan Scheme are some of the examples.

According to the CBK (2000), the self-help groups (SHG) provide finances to MFIs through savings. They initiate and start an income-generating venture from which they save the surplus funds with an MFI of their choice. These savings become sources of fund to that MFI. The MFI can then lend at an interest.

Several other sources of financing do exist. They include among others: - saving and credit co- operative societies (SACCOs), Kenya post offices saving Bank Ltd. and Rotating savings and credit associations (ROSCAs).

1.1.3. Performance Indicators used by MFIs in Kenya.

The sector of Microfinance in Kenya has not fully developed compared to that of the developed countries. Ledgerwood (1998), emphasizes on the use of performance indicators as being collecting and restating financial performance of an MFI. This is important especially for the donors and other providers of funds because they can determine the efficiency, viability and outreach of MFIs operations (Ledgerwood, 1998). Some examples of performance indicators are portfolio quality, productivity and efficiency, viability, profitability, leverage and capital adequacy, and scale and outreach. Some MFIs in Kenya already have some of these performance indicators in practice. A good example is of the Cooperative Bank, which uses portfolio at risk

(PAR) in its section of Microfinance. It defines PAR as the outstanding amount of loan in arrears for over seven days divided by the total outstanding loan balance multiplied by 100. It is its policy to always maintain a PAR of less than 5%. The Kenya rural enterprise program (K-REP) Bank Ltd. on the other hand uses Subsidy Dependency Index (SDI) which enables it to know the extent to which it requires subsidy in order to earn a return equal to the opportunity cost of capital employed.

1.2. Statement of the Problem.

The Microfinance sector in Kenya is expanding at a very high rate (Mullei and Bokae 1999). Various providers of finance are coming into the sector while others are on their way out. The level of donor funding has significantly reduced as more and more MFIs become self-sustaining (CBK, 2000). It is also evidenced that as MFIs develop, they adopt better ways of measuring their performance (Ledgerwood, 1998). He argues that this is important especially for the donors and other providers of funds because they can determine the efficiency, viability, and outreach of MFI's operations. Few researches, which have been done in this area, have not dealt with the issue of performance indicators but rather, on how MFIs reach out to SMEs. Mbuvi (1983) for example, studied the causes of failure in small businesses in Machakos with an aim of establishing where they obtain finances and found out that the causes were both internal and external. Maalu (1990) carried out a case study to establish the factors influencing record keeping in small-scale enterprises in Eastlands area of Nairobi and found out that 72.2% of SMEs sampled kept no records or kept only the simple transaction records.

Other researches include that of Perderson and Kiiru (1995) about the operations of K-REP as a Case of a Microfinance Institution in Kenya. They looked at the mission, the goals, the sources

of finances and the performance indicators K-REP uses. They found out that mainly donors finance K-REP and it widely uses SDI in measuring its performance. Other financial performance measures used are outreach and profitability. A more recent research is of Wakah (1999). He studied the perceived relevance of non-financial business development offered to small and micro-enterprises in Nairobi. He sort to determine the extent to which non-financial business development services available reached the SMEs operation in the city of Nairobi. None of these studies has looked at the performance indicators used by MFIs in Kenya and whether the indicators used are in any way related with the sources of funds for the MFIs.

1.3. **Objectives.**

Objectives of the study are:-

1. To assess the indicators of performance used by MFIs in Kenya.

2. To establish whether there is any relationship between the sources of finances and the performance indicators used by the MFIs.

   Hypothesis

   Ho : There is no relationship between the financial performance indicators and

   the sources of finances.

   Ha : There is a relationship between the financial performance indicators and

   the sources of finance.

1.4. **Importance of the Study**.

♦ To the management of MFIs.

The study is aimed to advice the management of the MFIs on the best indicators of performance they should use depending on their sources of finances.

♦ To the academic world.

There is very little literature if any in the field of MFIs especially in the developing countries. The forerunners in this area have written in depth about the micro and small enterprises. The research thus aims at shading more light in this field and to form bases for further researches.

♦ To the Government.

The main aim of MFIs is to provide financial assistance to the less privileged people in the society. It is expected that the research will shade more light on how its funds are being utilized by the MFIs. Through this research, the government will be able to know whether proper financial performance measurements are put in place and the necessary measures to be taken.

♦ To the donors and other providers of funds.

They need to know how their finances are being managed.

The research will also act as an eye opener for those willing to provide funds to MFIs. This will make them to be more careful when making their decision on whether to release finances or not.

2.0. LITERATURE REVIEW

2.1. Historical Development of Microfinance Institutions.

The phenomenon of MFIs is relatively new in the developing world, though in the developed world it has been in existence for a longer period. In order to fully understand MFIs, it is of great importance to trace their trend of development. According to Levitsky (1989) in the article 'Financial Services for Microenterprise: Programmers on Markets,' MFIs came up as government agencies as donors pumped billions of dollars into agricultural credits especially small farmer's programs in developing countries. The initial objective of these programs was to expand the supply and reduce the cost of loans especially for small farmers. From this point of view, it was expected that, through 'supply lending' approach to rural finance technological change would accelerate, agricultural output would expand and small farmer output would rise.

The great concern today for microenterprise credit is reminiscent of this earlier preoccupation with agriculture. The reason Levitsky (1989) gives is that the MFIs' approach, the earmarking of funds, the targeting of beneficiaries and rationalization of poor performance in microenterprise projects are similar to agricultural credit projects.

2.2. Development of Microfinance Institutions in Kenya.

The growth of MFIs in Kenya came mainly after independence. According to Alila and Obando, it was not until after independence that the savings and credit co-operative societies were registered in Kenya (Alila and Obando 1990). The main reason is that colonial administration favored neither independence nor credit to Africans. Africans formed local and clan associations consisting mostly of welfare societies, burial societies, and thrift associations in the late 1940's

and 1950's with the encouragement of the African elite (Mc Cormic and Ove; 1996). According to the authors, the growth of these organizations was thwarted by the colonial administration who turned down earlier attempts to register them as savings and credit associations under the Department of Co-operatives Development.

Up to the 1960's the financial system was oriented towards agricultural exports and other primary production activities and some foreign trade catering principally for the expatriate communities. The formal institutions consisted of a few institutions mostly foreign owned banks which had branches in the major cities only, post office, saving banks, and co-operative societies. Small number of moneylenders available provided funds to trading companies, mines, and plantations which were often foreign owned.

The formal financial institutions mainly financed the foreign trade and were accessible only by expatriates. These lead to local small businessmen being financially sidelined. Due to the local small businessmen being unable to access the banks, indigenous informal sector cropped up. This informal financial sector was made up of moneylenders, traders, and pawn brokers who thus provided the needed resources to borrowing needs of the local farmers and small businessmen. They served their customers while maintaining close personal contact with them and acquiring intimate knowledge of their operations. Their services were easily accessible and included rotating savings and credit association (ROSCAs) among others.

The development of the financial sector in the post-independence era has seen major changes. These changes include among others the creation and support of Development Finance

Institutions (DFIs) geared to provide long-term finance to particular sector including MSEs. These DFIs failed mainly because they relied heavily on foreign aids as their major source of financing.

The financial sector has evolved over the years with notable developments being in early 1980's. This saw the birth of saving and credit co-operatives (SACCOs) and Non-Banking Institutions (NBIs) expanded rapidly to fill the leading gap prevailing, but were only useful for the salaried workers who needed them least (Alila and Obando 1990).

During this period, K-REP and the Kenya Women Finance Trust (KWFT) were established. They were heavily subsidized, relied mainly on donor funding and used the integrated (credit and training) approach to assist the SMEs. Their loans were not tied to tangible collateral.

Currently, there are more than 100 institutions involved in Microfinance operations in Kenya. By June 1st 2001, AMFI had registered 10 MFIs as its members with K-REP Bank being the first MFI to become a fully pledged commercial bank (AMFI, Brochure 2001).

2.3. Sources of Finances for MFIs.

Governments and international aid donors have pictured predominantly in provision of credit to the rural poor for quite a long time. Johnson (1997) states that from 1950's, government and international donors subsidized credit delivery to small farmers in rural areas of many developing countries.

Khandker (1995) states that, since the establishment of Grameen Bank, as a financial institution by the government ordinance in 1983, it has financed its activities with funds obtained at concessionary rates from external and domestic source including the Central Bank of

Bangladesh. He noted that most of these funds were grants and low interest loans provided by the donors.

This model of subsidized credit though widely used has been met with criticism. The argument here according to Jackson (1997), is that from as back as 1970s donors and other resource allocators have switched their attention from state intervention to market based solutions. The credit could not be described as debts and that over-supply of subsidized credits without realistic assessment of people's ability to repay could result in impoverishment of borrowers.

In Kenya the phenomenon is not different. Microfinance institutions were highly stimulated by donor funding. They were highly subsidized, relied mainly on donor funding and used the integrated approach to assist Microenterprises (Dondo, 2000). Most of these organizations have since died or collapsed due to lack of funding caused by donor's withdrawal.

According to CBK Report (2000) however the major sources comprise the government, donors, and Commercial banking and cooperative societies. Some major commercial banks have gone a step ahead to have sections specifically catering for Microfinance. These sections get their finances mainly from their mainstream bank.

2.4. Performance Measurement.

Performance measurement is a very general term. According to Terence (1989), it is a way of ensuring that resources available are used in the most efficient and effective way. The essence is to provide for the organization the maximum return on the capital employed in the business.

Financial performance for MFIs is very important because managers need to know how well the MFI is performing. There are two major reasons as to why MFIs should have financial performance measurement (Johnson, 1997). The first one is to produce financial statements at the right time. He argues that information given late can not give accurate picture of the organization's financial position. Secondly, financial statements should be analyzed to produce information about the performance of the scheme, which must be used to improve that performance. For example if one is trying to find out whether the portfolio of a loan and saving that the scheme is holding is being effectively managed, financial performance measurements are used.

2.5. Various Indicators of Performance used by MFIs.

The essence of calculating and coming up with analysis of performance indicators (ratios) is to provide information that can identify the potential or existing problems, which can lead to changes in policies or operations which in turn may improve the financial performance (Ledgerwood, 1998). He has highlighted six major indicators of financial performance. They include - portfolio quality, productivity and efficiency, financial viability, profitability, leverage and capital adequacy and scale, outreach and growth. This approach is adopted in this research for easy understanding of performance indicators.

1.)   *Portfolio Quality*

Portfolio quality ratios provide information on the percentage of non-earning assets, which in turn decreases the revenues and liquidity position of a MFI. Various ratios are used to measure portfolio quality and provide other information about the portfolio. They are the repayment rates, portfolio quality ratios, and loan loss ratios.

a) Repayment Rates.

This rate measures the amount of payments received with respect to the amount due. It is an important measure for monitoring repayment performance overtime and projecting future cash flow – because it indicates what percentage of the amount due that is expected to be received based on the past experience.

♦ On – time repayment Rate = $\dfrac{\text{Collection on current amount due less prepayment}}{\text{Total current amount due.}}$

♦ Repayment Rate including past due amounts = $\dfrac{\text{Collection on current amount due plus past amount less prepayments}}{\text{Total current amount due plus past due amount.}}$

b) Portfolio Quality Ratios.

Three ratios used here are: -

♦ Arrears Rate.

The arrears represent the amount of loans principal that has become due and has not been received. The arrears rate provides an indication of the risk that a loan will not be repaid, that is the ratio of overdue loan principal (or principal + interest) to the portfolio outstanding.

Arrears Rate = $\dfrac{\text{Amount in Arrears}}{\text{Portfolio outstanding (including amount past due).}}$

♦ Portfolio At Risk (PAR)

According to Ledgerwood (1998), PAR refers to all loans that have an amount overdue. PAR is different from arrears ratio because it considers the amount in arrears plus the remaining outstanding balance of the loan.

PAR = $\dfrac{\text{Outstanding balance of loans with payments past due}}{\text{Portfolio outstanding (including amount past due)}}$

The PAR ratio reflects the true risk of a delinquency problem because it considers the full amount of the loan at risk – this is particularly important when the loan payments are small and loan terms are long.

♦ Delinquent Borrowers.

A ratio that aims to determine the number of borrowers who are delinquent relative to the volume of delinquency loans. If there is variation in the size of the loans disbursed, it is helpful to know whether the larger or the smaller loans result in greater delinquency. If the ratio of delinquent borrowers is lower than the portfolio at risk or the arrears rate, then it is likely that larger loans are more problematic than smaller ones.

$$\text{Delinquent Borrowers} = \frac{\text{Number of delinquent borrowers}}{\text{Total number of active borrowers.}}$$

c) *Loan Loss Ratios.*

They are calculated to provide an indication of the expected loan losses and the actual losses for an MFI. The two loan loss ratios are: -

♦ Loan loss reserve ratio.

This ratio shows what percentage of the loan portfolio has been reserved for future losses. By comparing this over time, MFIs can determine how well they are managing delinquency, provided they are making adequate loan loss reserves. It is recommended to be 5% and below. It should decrease as the MFI improves its delinquency management.

$$\text{Loan loss reserve ratio} = \frac{\text{Loan loss reserve for the period.}}{\text{Portfolio outstanding for the period.}}$$

♦ Loan loss ratio.

This ratio reflects the only amount written off during the periodic (one year) hence it is calculated to determine the rate of loan losses for this period.

It provides an indication of the volume of a loan loss in a period relative to average portfolio outstanding. The average portfolio outstanding is determined by adding the portfolio outstanding at the beginning of the year to the portfolio outstanding at the end of the year and then divide by the results of the two.

Loan loss ratio =   Amount written off in the period.
                         Average portfolio outstanding for the period.

2.)   *Productivity and Efficiency Ratios.*

They provide information about the rate at which MFIs generate revenues to cover their expenses. By calculating and comparing productivity and efficiency ratios over time, MFIs can determine whether they are maximizing their use of resources. Productivity refers to the volume of the business that is generated (output) for a given resources or asset (input), while efficiency refers to the cost per unit of output. These ratios are used to compare performance over time and to measure improvements in MFIs operations. This means branch managers can compare their branches to other branches and determine where they might need to reduce costs to increase productivity.

a) *Productivity Ratios.*

Their main focus is on the productivity of the credit officers, because they are the primary generators of revenue.

These ratios include - the number of active borrowers per credit officer, portfolio outstanding per credit officer, and total amount disbursed in the period per credit officer.

♦ *Number of active borrowers (loans) per credit officer.*

This number varies depending on the method of credit delivery and whether or not loan are made to individuals, to individual as group members, or to groups. For each MFI there is an optimal number of clients that each credit officer can manage effectively.

When comparing this ratio with other MFIs (or between different branches or different lending products within the same MFI), it is necessary to take into account the average loan term because this greatly affects the number of borrowers a credit officer can maintain.

Average number of active   =   average number of active loans
loans per credit officer   average number of credit officers

♦ *Portfolio outstanding per officer.*

The size of the average portfolio outstanding per credit officer will vary depending on the loan sizes, the maturity of the MFI's clients, and the optimal number of active loans per credit officer. Internal management uses this ratio especially when comparing productivity with other MFIs. This means that, if a particular credit officer is with an MFI over a long period of time, the number of active borrowers and portfolio outstanding should increase to an optimal level, at which point growth is the number of active borrowers that the credit officer managers should be minimized.

Average portfolio per   = average value of loan outstanding
credit officer.   Average number of credit officers.

♦ *Total amount disbursed in the period per credit officer*

In accounting terms, the amount disbursed by a credit officer is a flow item (cash flow item) whereas the amount outstanding is a stock item (balance sheet item). It is important to distinguish them because there are specific costs associated to either of them. The average portfolio outstanding ratio measures the stock (portfolio outstanding) i.e. the flow of loan disbursements.

As clients take out additional loans, both the portfolio outstanding and the total amount disbursed per credit officer should increase, provide the clients require larger loan amounts or the MFI is operating in an inflationary environment.

Total amount disbursed   =   Total amount disbursed
per period per credit officer   average number of credit officers.

b) Efficiency Ratios

They measure the cost of providing services (loans) to generate revenue. Also called operating costs. These operating costs can be broken down to measure the efficiency of specific cost elements such as salaries and benefits, occupational expenses such as rent, and utilities, or travel.

♦ *Operating cost ratio*

It provides an indication of the efficiency of the lending operations - also called efficiency indicator.

Operating cost ratio =   operating cost
                  average portfolio outstanding

It is advisable for MFIs to maintain operating cost ratios to between 15% and 21% of the average loan portfolio and between 5% and 16% of their average total assets.

◆ *Salaries and benefits to average portfolio outstanding.*

Many MFIs have salaries and benefits running between 4% and 16% of average portfolio outstanding. The variation is depended on the model used, the density of the population, and the salary level in the country.

Salaries and benefits to average   =   salaries and benefits
average portfolio outstanding ratio.   average portfolio outstanding

Other efficiency ratios, which can be used here, are the average credit officer salary as a multiple of per capital GDP, cost per unit of currency lend, and cost per loan made.

For a successful MFI, efficiency ratios should be decreasing over time. This means the disbursed amount and the average portfolio outstanding appear to grow at a greater rate than costs.

3)   *Financial viability.*

Financial viability refers to the ability of an MFI to cover its costs with earned revenue. To determine financial viability, self-sufficiency indicators are required which are in two levels – the operational self-sufficiency and financial self-sufficiency. It should be noted here that if an organization is not self-sufficient, the subsidy dependence index can be calculated to determine the rate at which the MFIs interest rate needs to be increased to cover the same level of costs with the same revenue base (loan portfolio).

Financial viability can be determined through the following ways.

a) *Operational self–sufficiency.*

Some MFIs define operational self-sufficiency as generating enough operating revenue to cover operating expenses, financing costs, and the provision for loan losses.

$$\text{Operational self-sufficiency} = \frac{\text{operating income}}{\text{operating expenses} + \text{financing costs} + \text{provision for loan loss.}}$$

It is important to note that if an MFI does not reach operational self-efficiency, eventually its equity (loan-fund capital) will be reduced by losses (unless additional grants can be raised to cover operating shortfalls). This means there will be a smaller amount of funds to borrowers. To increase its self-sufficiency, the MFI must either increase its yield (return on assets) or decrease its expenses (financial costs, provisions for loan losses, or operating costs).

b) *Financial self-sufficiency*

Financial self-sufficiency indicates whether or not enough revenue has been earned to cover both direct costs, including financing costs, provision for loan losses, and operating expenses, and indirect costs – including the adjusted cost of capital.

$$\text{Financial self-sufficiency} = \frac{\text{operating income}}{\text{operating expenses} + \text{financing costs} + \text{provision for loan losses} + \text{cost of capital}}$$

For a successful MFI, this ratio shows an increasing trend.

c) *Subsidy Dependency Index (SDI)*

SDI measures the degree to which MFI relies on subsidies for its continued operations. SDI developed by the Jacob Yaron at the World Bank (1992) is used to calculate the extent to which an MFI requires subsidy to earn a return equal to the opportunity cost of capital.

The objective of SDI is to provide a comprehensive method of assessing and measuring the overall financial costs involved in operating an MFI and quantifying its subsidy dependence. A SDI of zero means that a MFI has achieved financial self-sufficiency whereas a SDI of 100% means that a doubling of the average on-lending interest rate is required if subsidies are to be eliminated. SDI of negative value means full self- sustainability and profit achievement.

$$SDI = \frac{\text{total annual subsidies received (s)}}{\text{Average annual interest income (LP*i)}}$$

$$= \frac{A(M-C) + [(E*M) - P] + K}{(LP*I)}$$

Where   A = MFI concessional borrowed funds outstanding (annual average).

M = interest rate that the MFI would be assured to pay for borrowed funds if access to borrowed concessional funds were eliminated.

C = weighted average annual concessional rate of interest actually paid by the MFI on its average annual concessional borrowed funds outstanding.

E = average annual equity.

P = reported annual profit (before tax and adjusted, when necessary, for loan loss provisions, inflation, and so on).

K = the sum of all other annual subsidies received by the MFI (such as partial or complete coverage of the MFI's operational costs by the state).

LP = average annual outstanding loan portfolio of the MFI.

I = weighted average on lending interest rate earned on the MFI loan portfolio.

4) *Profitability Ratios.*

Profitability ratios measure a MFI's net income in relation to the structure of its balance sheet. They help the investors and managers in determining whether they are earning an adequate return on the funds invested in the MFI. Examples include - return on assets (ROA), return on business (ROB), and return on equity (ROE).

a) *Return On Assets Ratio (ROA).*

This ratio measure the net income earned on the assets of an MFI. When calculating ROA, average total assets are used rather than performing assets, because the organization is being measured on its total financial performance, including decisions made to purchase fixed assets or invest in land and building or invest in securities. The return on total assets ratio shows how the MFI is performing relative to all assets, including nonproductive assets such as fixed assets, or land and property.

Return On Assets = $\dfrac{\text{Net Income}}{\text{Average assets}}$

The importance of analyzing this ratio is that it will improve the ability of an MFI to determine the revenue impact of policy changes, improve delinquency management or the addition of new products.

b) *Return On Business Ratio (ROB).*

This ratio is important because MFIs mobilize deposits as a large part of their operations. ROB is directly affected by the capital structure of an MFI. If the majority of an MFI's assets are funded by equity, the return on the business level will be misleading and should not be calculated. On the other hand, if an MFI is acting as a true financial intermediary, and funding its loan portfolio

with client savings, the return on business ratio may be a fairer ratio to compare wit other institutions other than the return on asset ratio.

Return On Business = $\dfrac{\text{Net Income}}{\text{Average Business Base.}}$

c) **Return On Equity Ratio (ROE).**

This ratio provides the management and investors with the rate of return earned on invested equity. It measures the return on funds that are owned by the MFI. This rate also allows donors and investors to determine how their investment in a particular MFI compares against alternative investments.

Return On Equity = $\dfrac{\text{Net Income}}{\text{Average equity.}}$

It should be noted that most MFIs target a high ROE though this is influenced by the inflation rate in the particular country.

5) **Leverage and Capital Adequacy.**

Leverage:

Leverage refers to the extent to which an MFI borrows money relative to its amount of equity. This means it answers the question of how many additional shillings can be mobilized from commercial sources for every shilling owned by the MFI. Leverage states the relationship of funding assets with debt versus equity. An MFI leverage is measured by calculating its debt to equity ratio. This ratio states how much debt an MFI has relative to equity.

Debt to Equity Ratio = $\dfrac{\text{Debt}}{\text{Equity.}}$

The degree of leverage greatly affects the return on equity ratio of an MFI. An MFI that is more highly levered than another will have a high return on equity, all other things remaining constant.

Capital Adequacy Standards.

Capital adequacy means that there is a sufficient level of capital required in absorbing the potential losses while providing financial sustainability. The main purpose of establishing and measuring capital adequacy for an MFI is to ensure there is solvency in the organization.

Capital to risk-weighted assets $= \dfrac{\text{Invested capital} + \text{reserves} + \text{retained earnings.}}{\text{Risk-weighted assets.}}$

This ratio needs to be calculated periodically to determine the level of an MFI. As an MFI grows and presumably increases its leverage, this ratio will decrease over time as the organization takes advantage of increased borrowings.

6) *Scale, outreach, and growth*.

Scale refers to the number of clients served with different types of instruments while the depth of outreach refers to the type of clients reached and their level of poverty. The indicators of outreach are both qualitative and quantitative. They are simple to collect and provide a good measure of scale of outreach and good proxies for depth of outreach. These indicators can be weighted, quantified, and prioritized according to their relevance to a particular MFI.

To evaluate the successful outreach of an MFI, it is useful to track these indicators over time and compare them with the stated goals of the organization.

Examples of outreach indicators:

Clients and staff.

♦ Number of clients or member (percentage women).

- Percentage of total target clientele serviced.

- Number of women as a percentage of total borrowers.

- Numbers staff e.t.c.

Loan outreach.

- Number of current active borrowers.

- Total balance of outstanding loans.

- Average outstanding portfolio. e.t.c.

Saving outreach.

- Total balance of voluntary savings accounts.

- Total annual average savings as s percentage of annual average outstanding loan portfolio.

- Number of current voluntary saving clients.

- Value of average saving account.

3.0. RESEARCH METHODOLOGY.

3.1. Population of the Study.

The population of the study consisted of all the MFIs in Kenya. Though there was no accurate figure of how many they are, CBK (2000) estimated the number to be more than one hundred. According to a K-REP Report (1997) there were about 63 institutions involved in microfinancing in Kenya by the end of 1997. By June 1st 2001, only ten MFIs were registered under AMFI.

3.2. Sampling.

The sample consisted of the 10 MFIs registered under AMFI and 28 others considered as major players in the sector by the K-REP Report (1997). The MFIs selected were mainly involved in the provision of credit facilities.

3.3. Data collection.

The study was facilitated by use of both primary and secondary data.

Primary data was collected through questionnaires, which were administered to the financial accountants, financial managers, and credit officers of MFIs. Structured open-ended questions were used. The questionnaires were administered through drop and pick method. Direct interview was also used in some selected cases. Secondary data concerning the particular MFI was obtained from financial reports and brochures.

3.4. Data analysis techniques.

Descriptive statistics was used to analyze the primary data. This made use of frequency distribution tables and percentage distributions.

Chi-Square test was used to establish whether any significant relationship existed between performance indicators used and the sources of finance of the MFIs.

4.0. RESEARCH FINDINGS.

4.1. Profile of the Respondents.

Questionnaires were distributed to a total of 38 MFIs. The response rate was 95% (36 out of the 38). All of these organizations are situated in Nairobi. Excel and SPSS were used to analyze the collected data.

General characteristics of these organizations were established by considering the length of period they have been existing and the services they offer.

Table 1. Period of Existence

Duration in years	Number	Percentage	Cumulative %
<=5	11	31	31
6--10	9	25	56
11--20	16	44	100
>20	0	0	100
Total	36	100	

Source: **Research Data.**

The tables 1 shows the period of existence. Out of the 36 MFIs interviewed, 44% indicated that they have been in existence for more than 10 years while none-had been in existence for more than 20 years. 31% of the MFIs interviewed are relatively new has they have been operational for less than five years. 25% of the interviewed MFIs have been in existence for a period of between six and ten years.

Table 2: Services Offered by MFIs.

Services	Number	Percentage	cumulative %
Credit provision only	19	52.5	52.5
Credit provision & deposits	11	32.5	85
Credit provision & training	6	15	100
Total	36	100	

Source: **Research Data.**

Table 2 shows that MFI offers several services. 52.5% of those interviewed offer credit facilities only, 32.5% provide credit, and accepts deposits while about 15% coupled credit provision with training.

The research focused on credit provision among the MFIs (Table 3)

Table 3. Priority in Credit Provision

Priority	Number	Percentage	cumulative %
Core business	36	100	100
Not core business	0	0	100
Total	36	100	100

Source: Research Data.

It was revealed that although some MFIs provide other different services a part from credit provision, they all regard credit provision as their core business.

Table 4: Beneficiaries of Credit Facilities.

Beneficiaries	Number	Percentage	Cumulative %
Individuals	11	30	30
Groups	10	27.5	57.5
Groups & individuals	15	42.5	100
Companies	0	0	100
Total	36	100	

Source: Research Data.

Table 4 shows various beneficiaries of these services. It was established that 42.5% of the MFIs provide their services to groups and individuals, 30% offer services to individuals only while 27.5% give to particular groups only. It was noted that none of them offered its services to companies. Thus generally, the MFIs interviewed either offer their services to individuals and or to groups.

4.2. Sources of Finance for Microfinance Institutions.

Table 5(i): Major Sources of Finance for MFIs.

Source	Number	Percentage	Cumulative %
Donors alone (NGOs)	19	52.5	52.5
Government	0	0	52.5
Commercial Banks	3	7.5	60
Self-Help Groups & deposits	13	37.5	97.5
Savings and Credit societies	1	2.5	100
Total	36	100	

Source: Research Data.

The research established that while some MFIs obtained finances from a single source, others obtained from various sources (Table 5(i)). According to the research, donors, mainly NGOs emerged as the major single source of finances to MFIs contributing to about 52.5%. Following closely was Self-help Groups (SHG) and deposits with 37.5%. Others, though minimal were commercial banks with 7.5% and Savings and Credit Societies providing only 2.5%. The MFIs interviewed however, did not regard government as a source of finance.

Table 5(ii) : Distribution of Sources of Finance for MFI.

Sources	Number	Percentage	Cumulative %
One source	24	67.5	67.5
More than one source	12	32.5	100
Total	36	100	100

Source: Research Data.

Table 5(ii) shows that the majority of the MFIs obtain finances from one source. Thus 67.5% obtain finances from one source while only 32.5% obtain from more than one sources.

The amounts of finances obtained from one source differed from one MFI to another (Table 6(i) to 6(iv)).

Table 6(i): Amount from Donors per Annum.

Amount in M Ksh.	Number	Percentages	Cumulative %
<10	3	14.3	14.3
10--100	10	52.4	66.7
100--500	6	33.3	100
>500	0	0	100
Total	19	100	

Source: Research Data.

For those who considered donors as their major source, it was revealed that 52.4% of them benefited with an amount ranging from Ksh.10 million to Ksh. 100 million (Tables 6(i)). Those who got between Ksh.100 million and Ksh. 500 million were about 33.3% of those interviewed. Only 14.3% benefited with an amount less than Ksh.10 million.

Table 6(ii): Amount from Self-Help Groups and Deposits per Annum

Amount in M Ksh.	Number	Percentage	Cumulative %
<10	0	0	0
10--100	9	66.7	66.7
100--500	4	33.3	100
>500	0	0	100
Total	13	100	

Source: Research Data.

Majority of the beneficiaries from Self-Help Groups and Depositors got an amount between Ksh.10 million and Ksh. 100 million, representing 66.7% of those interviewed (Table 6(ii)). 33.3% of those MFI showed they obtained between Ksh.100 million and Ksh. 500 million. None of them benefited with an amount less than Ksh. 10 million or more than Ksh. 500 million.

Table 6(iii): Amount from Commercial Banks per Annum.

Amount in M Ksh.	Number	Percentage	Cumulative %
<10	1	33.3	33.3
10--100	2	67.7	100
100--500	0	0	100
>500	0	0	100
Total	3	101	

Source: Research Data.

Commercial banks provided 67.7% of these conducted MFIs with finances amounting between Ksh.10 million and Ksh.100 million (Table 6(iii)). Those who got less than Ksh. 10 million were 33.3%. None of them got between Ksh.100 million and Ksh.500 million or more.

Table 6 (iv): Amount from Savings & Credit Societies per Annum.

Amount in M Ksh.	Number	Percentage	Cumulative %
<10	0	0	0
10--100	0	0	0
100--500	1	100	100
>500	0	0	100
Total	1	100	

Source: Research Data.

Only one organization out of the thirty-six interviewed got financing from Savings and Credit Societies (Table 6(iv)).

Table 7(i): Repayment of Finances.

Organizations	Number	Percentage	cumulative %
Repay	30	82.5	82.5
Do not repay	6	17.5	100
Total	36	100	

Source: Research Data.

It was found that about 82.5% of the MFIs interviewed repaid their finances while 17.5% did not (Table 7(i)).

Table 7(ii): Repayment Rates.

Rates (%)	Number	Percentage	Cumulative %
<5	9	30.3	30.3
5--10	12	39.4	69.7
11--20	4	15.1	84.9
>20	5	15.2	100
Total	30	100	

Source: Research Data.

Repayment rates also differed from one MFI to another (Table7 (ii)). It was found that 39.4% paid a rate of between 5% and 10% while 30.3% of them paid less than 5% repayment rate. About 15.2% of those MFIs paid a higher rate of more than 20% while equally the same number, 15.1% paid repayment rates of between 11% and 20%.

4.3. Preparation of Financial Reports.

Preparation of financial reports was found necessary because it forms the bases for use of financial performance indicators.

Table 8(i): Preparation of Financial Reports.

Organizations	Number	Percentage	Cumulative %
Prepare	36	100	100
Do not prepare	0	0	100
Total	36	100	

Source: Research Data.

All the MFIs interviewed prepared financial reports in one way or the other (Table 8(i)).

Table 8(ii): Types of Financial Reports.

Type	Number	Percentage	Cumulative %
Profit and Loss A/C & Balance Sheet	32	87.5	87.5
Income and Expenditure A/C	4	12.5	100
Total	36	100	

Source: Research Data.

Establishing what types of financial reports were used revealed that Profit and Loss Accounts and Balance Sheet were the most widely prepared financial reports with 87.5% support. Income and Expenditure accounts were prepared by at least 12.5% of the MFIs interviewed (Table 8(ii)).

Table 9: Frequency of Preparation of Financial Reports.

Frequency	Number	Percentage	Cumulative %
Monthly	9	25	25
Quarterly	11	30.5	55.5
Half yearly	5	13.9	69.4
Half yearly& Yearly	6	16.7	86.1
Yearly	5	13.9	100
Total	36	100	

Source: Research Data.

The period at which these financial reports are prepared varied from one MFI to another. Those who prepared on quarterly bases were 30.5% while 25% prepared monthly (Table 9). Others who prepared half yearly were 13.9%, 16.7% half-yearly and yearly, while 13.9% prepared on yearly bases.

4.4. Use of Financial Performance Indicators.

Table 10(i): Frequency of Use of Financial Performance Indicators.

Frequency	Number	Percentage	Cumulative %
One indicator	0	0	0
Two indicators	5	13.9	13.7
More t an two indicators	31	86.1	100
Total	36	100	

Source: Research Data.

The research found that all the MFIs interviewed used at least two financial performance indicators (Table 10(i)). While only 13.9% of them used two types of financial performance indicators, 86.1% used more than two types.

Table 10(ii) Giving Priority to Performance Indicator.

Priority	Number	Percentage	Cumulative %
Priotise	20	55	55
Do not priotise	16	45	100
Total	36	100	

Source: Research Data.

In order to establish the usage of each of the financial performance indicator, the respondents were required to indicate whether they gave priority to various indicators (Table 10(ii)). 55% gave priority whereas 45% did not.

Table 10(iii): Particular Performance Indicators According to Preference.

Indicator of Performance	Number	Percentage	Cumulative %
Portfolio At Risk (PAR)	6	38.9	38.9
Arrears Rate	3	16.7	55.6
Average portfolio per credit officer	3	16.7	72.3
Delinquent Borrowers Rate	4	27.7	100
Total	16	100	

Source: Research Data.

The financial performance indicators given priority includes Portfolio At Risk 38.9%, Delinquent Borrowers Rate 27.7%, Arrears Rate and Average Portfolio per Officer each with 16.7% (Table 10(iii)).

Table 11: Length of Period in Which Performance Indicators have been in use.

Period in years	Number	Percentage	Cumulative %
<1	0	0	0
1--5	11	30	30
>5	25	70	100
Total	36	100	

Sources: Research Data.

The period of time in which these indicators have been in use also varied among the MFIs (Table 11). 70% of them have used the indicators for more than five years while 30% have used for a period of between one and five years. None of the MFIs had used indicators for a period of less than one year.

The summary of the financial performance indicators surveyed and the order of their distribution among the MFIs is given in appendix 3 (Table i & ii). It was established that all the MFIs interviewed used Arrears Rate. The second widely used financial performance indicator was Delinquent borrower's rate with 87.5% followed by Average number of active loans with 75%. Other financial performance indicators found to be used by more than half of the MFIs interviewed includes:- Portfolio At Risk (PAR) with 70%, Total amount disbursed per period per credit officer (67.5%), Operating costs (62.5%), Average portfolio per credit officer (60%), Active clients per branch (60%), Savings per branch (60%) and Value of all Savings accounts (57.5%). Others follow just below 50% and included:- Percentage of female clients with 45%, Operational Self- sufficiency (40%) and Annual growth in investors with 37.5%. Other financial performance indicators identified include:- Annual growth in Savings (35%), Repayment Rates (30%), Portfolio outstanding ratio (27.5%), Loan Loss reserve (25%), Net interest margin (25%), and Quick ratio (22.5%). Those who claimed less that 20% popularity included Average cost of funds (15%), and Loan Loss ratio and Subsidy Dependence Index (SDI) each with 12.5%.

5. Comparing the Sources of Finance and the Performance Indicators used.

Table 12: Sources of Finance in relation to Performance Indicators.

Effect by Sources	Number	Percentage	Cumulative %
Determining the indicators	22	60	60
Do not determine the indicators	14	40	100
Total	36	100	

Source: Research Data.

According to the research, it was found that 60% of the MFIs have their performance indicators determined by their financiers (Table 12). The rest 40% revealed that their financiers did not determine the performance indicators they use.

Table 13: How Sources of Finance Influence the Performance Indicators.

Criteria	Number	Percentage	Cumulative %
Different sources of finance require different indicators	18	75	75
Different sources of finance charge different interest rates on loans.	6	25	100
Total	24	100	

Source: Resource Data.

Some reasons as to why MFIs use certain financial performance indicators were put forward (Table 13). The major reason was the fact that different financiers require different financial performance indicators. This was supported by 75% of the interviewed MFIs. 25% of the MFIs indicated that different financiers charged different interest rates on the amount provided to them.

Table 14: Effect of Use the Financial Performance Indicators.

Effect	Number	Percentage	Cumulative %
Improvement	34	95	95
No improvement	2	5	100
Total	36	100	

Source: Resource Data.

The use of financial indicators of performance contributed to improvement in the functioning of the MFIs (Table 14). Of the MFIs interviewed, 95% recorded improvement after using these performance indicators while only 5% did not.

Table 15: Areas Showing Improvement.

Area	Yes		No		Cumulative %	
	Number	Percentage	Number	Percentage	Number	Percentage
Increased transparency to sources of finances.	14	42	20	58	34	100
Cost reduction	30	87	4	13	34	100
Increased profitability & sustainability	20	58	14	42	34	100
Increase in client level	14	42	20	58	34	100
Decrease in PAR	10	29	24	71	34	100

Source: Resource Data.

Some areas were found to have recorded higher improvements than others (Table 15). Cost reduction gained 87% support, increased profitability and sustainability (58%), and increased transparency to sources of finance (42%). Other improvements were noticed at increase in Client's level (42%), and decrease in Portfolio At Risk (PAR) (29%).

4.6. Testing the Hypothesis.

The Chi-Square test (χ^2) of independence was used to test this hypothesis. According to Frankfort and Nachmias (1996), Chi-Square is a general test to evaluate whether the differences between the observed frequencies and expected frequencies under a set of theoretical assumption are statistically significant. The expected frequencies for both categories of MFIs using the same or different types of financial performance indicators are shown in the Table 16.

Table 16: Expected Frequencies in Usage of Financial Performance Indicators.

Sources of finance	Indicators of performance.		
	Same type	Different types	Total
Donors	15	4	19
Commercial banks	2	1	3
Self-Help Groups & Deposits	9	4	13
Savings and Credit societies.	1	0	1
Total	27	9	36

Source: Research Data.

The above data was put in SPSS and gave the results shown in appendix 4.

The χ^2 value calculated was found to be 0.5. This value was compared to the critical value of χ^2 obtained from the Chi-Square tables. To determine the critical value, the test was performed at 95% level of confidence, which meant Alpha (α) was 0.05. The degrees of freedom (df) were determined by the formula:-

$$df = (r—1)(c—1) \quad \text{where } r = \text{number of rows.}$$

$$= (4—1)(2—1) \quad c = \text{number of columns.}$$

$$= 3$$

Therefore the critical value at $\alpha =0.05$ and df = 3 was found to be 0.352. The comparison made between these two values showed that the χ^2 calculated was bigger than that of the critical point and hence falls in the rejection region.

5.0. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

5.1. SUMMARY OF THE FINDINGS.

5.1.1. Profile of the Respondents.

The study revealed that MFIs have been existing in Kenya for quite some time. It was found that 44% of the MFIs have existed for more than eleven years though none has been in existence for more than twenty years. 56% of the MFIs have existed for a period of less than ten years although, 31% have indeed been in existence for a period of less than five years. This means that the phenomenon of MFIs is gaining root in the country though at a very slow rate.

The research found that MFIs regarded credit provision as their core business. However, this does not mean that they do not offer other forms of services. It was found that although 52.5% offered credit provision facilities only, 32.5% and 15% offered credit provision and deposits, and credit provision and training respectively. This means that all the MFIs in Kenya offer credit provision facilities in one way or the other.

The research findings indicated that the target beneficiaries of these services are mainly groups and individuals. Of the MFIs surveyed, about 42.5% offered services to groups and individual while 30% and 27.5% provided their services to individuals only and groups only respectively. None of the MFIs offered services to companies.

5.1.2. Sources of finances for Microfinance Institutions.

The study revealed that donors were the major single source of finances for MFIs in Kenya as indicated by 52.5% of the MFIs interviewed. The donors are mainly Non Government Organizations. The second major source of finance was Self-Help Groups and Deposit mobilizations, which support of 37.5% of the MFIs. Commercial banks though widely viewed as a major supporter to microfinance sector, provided finances to about 7.5% of the MFIs. Savings

and Credit Societies provided finances to about 2.5% of them. None of the MFIs obtained finances from the government. It was concluded that donors and self help groups and deposits are the major sources of finances providing funds to about 90% of the MFIs. Commercial banks and saving and credit societies play a dismal role in this while the government play barely no role.

These MFIs revealed that they obtained their finances from various sources. Majority of them, 67.5% obtained finances from a single source while 32.5% got from more that one source. The amount obtained by a particular MFI differed from one source to another. It was revealed that for those who obtained finances from donors, about 52.5% benefited with an amount ranging from Ksh.10 million to Ksh. 100 million, 33.3% obtained between Ksh. 100 million and Ksh. 500 million while 14.3% obtained less than Ksh. 10 million. None of them got more than Ksh. 500 million. Self-help groups and deposits mobilization also provided finances amounting to between Ksh. 10 million and Ksh. 100 million to 67.5% of the MFIs. The rest 33.5% of the MFIs obtained finances amounting to between Ksh 100 million and Ksh. 500 million.

Commercial banks' major disbursement was between Ksh. 10 million and Ksh 100 million given to about 67.5 % of the MFIs. About 33.5% of the MFIs obtained less than Ksh.10 million. Savings and credit societies gave finances of between Ksh. 100 million and Ksh. 500 million to only one MFI.

The study established that the major disbursement was between Ksh 10 million and Ksh 100 million. It also revealed that most of the MFI repaid their finances though at varying repayment rates. 82.5% of the MFIs repaid their finances while 17.5% did not. 39.4% of the MFIs repaid their loans at an interest rate of between 5% and 10% while 30.3% repaid their loans at an rate of less than 5%. About 30% of the MFIs repaid their loans at an interest rate ranging from 11% and

above. Majority of the MFIs, about 70% therefore repaid their funds at an interest rate less than 10%.

5.1.3. Preparation of Financial Reports.

All the MFIs were found to prepare financial reports. The widely prepared financial reports were Profit and Loss Accounts and Balance Sheet of which about 75% of the MFIs supported. Income and expenditure accounts were prepared by 12.5% of the MFIs. It is evidenced that most MFIs in Kenya prepare mainly Profit and Loss Accounts and Balance Sheet. They however prepare these statements at varying periods in a financial year. 30.5% of the MFIs were found to prepare on quarterly bases, 25% on monthly bases, 16.7% on both half-yearly and yearly bases and 13.9% on yearly bases. It is possible to conclude that most of the MFIs (about 55%) prepared their financial reports either quarterly or monthly. The rest 45% prepared on half yearly or yearly bases.

5.1.4. Financial Performance Indicators.

The study revealed that there was an intensive use of financial performance indicators. Every MFI used at least two financial performance indicators.

It was found that only one financial indicator, the Arrears Rate was used by all the MFIs. Other financial indicators which are used by more than 50% of the MFIs were among others:- Delinquent Borrowers Rate, Average number of active clients, Portfolio At Risk (PAR), Total amount disbursed per period per officer, Operating costs, Average portfolio per credit officer, Active clients per branch, Savings per branch, and the Value of all savings accounts. There were other indicators of performance used by less than 50% of the MFIs. They include:- Percentage of female clients, Operational self-sufficiency, Portfolio outstanding ratio, Loan loss reserve ratio, Net interest margin, quick ratio, Loan loss ratio, and Subsidy dependency index.

This reveals that quite a large number of financial performance indicators are used by Kenyan MFIs. It was found that most MFIs have used financial performance indicators for a relatively long time. About 70% of MFIs have used these indicators for more than five years while 30% have used them for a period of between a year and five years.

The financial performance indicators given priority were among others Portfolio At Risk, Delinquency Borrowers, Arrears Rate and Average portfolio per credit officer.

Wide use of these financial performance indicators has lead to high improvement in operations of the MFIs. Notable improvements were in areas like reduction of costs, increased transparency to providers of finances, increased profitability and sustainability, increased clients level, and decrease in PAR.

5.1.5. Sources of Finances and Financial Performance Indicators.

The study revealed that financiers of MFIs determined the type of financial performance indicators MFIs use. It was found that 60% of MFIs used certain financial performance indicators to meet the interests of their providers of finances. First, it was found that different financiers required varying information from different MFIs in order to continue providing finances. This means MFIs should use certain performance indicators to meet the providers' interests. Secondly, different financiers' charge varying interest rates on the loans given. This way, MFIs are forced to use those financial performance indicators, which clearly reflect the interest charged to meet the interests of their sources of finances. The study revealed that 75% of the MFIs held the first view while 25% held the second as the major reasons for the financiers' to determine the financial performance indicators to be used.

5.1.6. Test Statistics.

Chi-Square test carried out at a confidence level of 95%, α of 0.05 and 3 degrees of freedom was 0.352 this formed the critical value. This was compared with the χ^2 value of 0.5 calculated by use of SPSS (Appendix 4, Table 4). This lead to the rejection of the null hypothesis meaning that there was a relationship between the financial performance indicators and the sources of finance. The relationship being that source of finance determined the financial performance indicators used by the MFIs in Kenya. It can then be concluded that we are 95% confided that sources of finances determine the financial performance indicators MFIs uses.

Microfinance institutions in Kenya need to reexamine the financial indicators of performance they use and ensure that they use them if possible at the interest of their financiers. The main challenge is how best an MFI can strike a balance where more than one financier exists.

5.2. CONCLUSIONS.

The main focus of the research was to assess the use of the financial performance indicators among the MFIs in Kenya and if the financial performance indicators used are influenced by the financiers of the MFIs. The study revealed that MFIs use various financial performance indicators. Some have used them for over ten years. The highly used financial performance indicators are among others Arrears Rate, Delinquent Borrowers, Quick Ratio, and Average Number of Active Loans. The use of these financial performance indicators has lead to improvement in the operations of the MFIs in Kenya.

The study revealed that MFIs get funds from different sources. Donors are the largest single source of finances to MFIs in Kenya followed by the Self-Help Groups and Deposit mobilization respectively. Other sources of finance include Commercial banks and Savings and Credit societies. The government does not offer financial support to MFIs according to the study. It was concluded from the study that there is a relationship between the financiers of the MFIs and the financial performance indicators the MFIs use. Financiers determine the type of the financial performance indicator to be used by the particular MFI.

5.3. RECOMMENDATIONS.

The study has revealed that financial performance indicators are widely used among the MFIs in Kenya. However, there are financial performance indicators, which are highly used than others, for example, Arrears Rate and Delinquent Borrowers Rate. The most frequently used indicators have been established and analyzed in order of their popularity. MFIs in Kenya are supposed to reassess the financial performance indicators they are currently using and ensure they rank among the highly preferred ones. The research recommends all the MFIs to use almost the same

financial performance indicators. This is because they have a lot in common in terms of their sources of finance and their business environment.

Microfinance institutions, which do not use financial performance indicators favored by their providers of finances, are recommended to do so. This is because the research has established that sources of finance determine the financial indicators of performance the MFIs use.

The government of Kenya is advised to put more effort in strengthening this sector. The study revealed that of all the microfinance institutions interviewed, the government did not support any of them financially.

Various financiers of Kenyan microfinance institutions need to be aware of the financial performance indicators their beneficiaries use. This would ensure that the financial performance indicators used by the MFIs reflect what the financiers would prefer.

5.4. LIMITATIONS OF THE STUDY.

Firstly, the major limitation of this study was lack of enough resources to carry out a more detailed research. Also, time constraint hindered the researcher from enlarging the area of study beyond Nairobi City.

Secondly, most of the microfinance institutions in Kenya are not registered under the umbrella body, Association of Microfinance Institutions (AMFI) thus it was very hard to trace them. The researcher had to contact various bodies under which they are registered like the banking Act, Co-operative societies Acts, Non-Governmental Organizations Act etc.

Thirdly, due to the use of questionnaires to collect the primary data, the weaknesses associated with this technique can not be ruled out. In some cases, the respondents had a difficult time in understanding certain questions and either left them blank or filled irrelevantly.

5.5. SUGGESTIONS FOR FURTHER RESEARCH.

The study concentrated in assessing the use of the financial performance indicators among the microfinance institutions in Kenya. It forms a foundation for further researches in this area. Further studies should include:-

1). To determine the extent to which microfinance institutions in Kenya use financial performance indicators. These should include ratio analysis for the particular indicators.

2). To determine the use of non financial performance indicators among the microfinance institutions in Kenya. This would reveal whether there are some non financial performance indicators used in this sector and their contributions if any.

APPENDIX

APPENDIX 1

KITAKA PETER N
C/O FACULTY OF COMMERCE
UNIVERSITY OF NAIROBI
P.O. Box 30197
NAIROBI.

Dear Sir/Madam

RE: REQUEST FOR RESEARCH DATA- MICROFINANCE INSTITUTIONS

I am a post graduate student at the University of Nairobi studying Masters of Business Administration (MBA) degree and specializing in finance. In partial fulfillment of the requirement of the stated degree, I am conducting a research entitled " A Survey of Use of Financial Performance Indicators by Microfinance Institutions in Kenya. "

You have been selected for this research. I would greatly appreciate if you completed the attached questionnaire. The information obtained will be purely used for academic purposes and the findings of the research shall be made available to you upon request.

Kindly avail any other information or comment not included in the questionnaire that you think is of importance to the research.

Thank you for your co-operation.

Yours faithfully,

Kitaka Peter N.   Mrs. Kithinji A.
MBA Student   Lecturer / Supervisor
Sign _____.   Department of Accounting
                                             University of Nairobi.
                                             Sign _____.

APPENDIX 2

QUESTIONNAIRE.

Your organization has been selected as part of this study, please take some time and answer the following questions appropriately. Your response will be treated purely for academic purposes. (Tick or state where possible).

1. Name of your MFI ---.

2. Postal Address ----------------------------,   Tel--------------------------.

3. Location ---------------------------------------.

4. For how long has your MFI been operating?

    5 years and below   [   ]   6 – 10 years   [   ]

    11 –20 years   [   ]   20 years and above   [   ]

5. What services do you offer? (tick all applicable).

    Credit provision   [   ]   Saving   [   ]

    Consultation / advisory   [   ]   Others specify   ----------------

6. a) Do you consider credit provision as your core business?

    Yes   [   ]   No   [   ]

    b)   (i)   If yes, who do you give credit to? (tick all applicable).

    Individual borrowers   [   ]   Groups of people   [   ]

    A company   [   ]   Others specify ------------------

        (ii)   If no, what is your core business? ---

7. Where do you source your finances

    1. The donors (NGOs)   [   ]

    2. The government   [   ]

    3. The commercial Banks   [   ]

4.Self-Help Groups   [   ]

5.Saving and Credit Cooperative Societies   [   ]

6.Rotating Credit and Credit Associations   [   ]

7.Kenya Post Offices Saving Bank Ltd.   [   ]

Others specify   -------------------------------------

(please rank according to the amount if you have more than one sources : 1= highest proportion,

2= second highest proportion e.t.c.) -----------------------------------

8.   On average, how much do you get from each of your sources in Ksh.?

	[Bellow 10m]	[10-100m]	[100–500m]	[500m and above]
1.The donors (NGOs)	[ ]	[ ]	[ ]	[ ]
2.The government	[ ]	[ ]	[ ]	[ ]
3.The commercial Banks	[ ]	[ ]	[ ]	[ ]
4.Self-Help Groups	[ ]	[ ]	[ ]	[ ]
5.Saving and Credit Cooperative Societies	[ ]	[ ]	[ ]	[ ]
6.Rotating Credit and Credit Associations	[ ]	[ ]	[ ]	[ ]
7.Kenya Post Offices Saving Bank Ltd	[ ]	[ ]	[ ]	[ ].
Others specify	[ ]	[ ]	[ ]	[ ]

9.   a) Do you repay your finances?

        Yes [ ]   No [ ]

b) If yes, at about what rate do you repay your funds?

   Below 5%   [   ]   5%-10%   [   ]

   10%-20%   [   ]   20% and above [   ]

10. a) Do you prepare financial reports?

        Yes [ ]   No [ ]

b) If yes, which ones?

Profit and loss   [ ]   Balance sheet   [   ]

c) (i) If yes, how often do you prepare them?

A quarter yearly   [   ]   Half yearly   [   ]

Annually   [   ]

Others specify   ---------------------------------------

(ii) If no, why? ---.

11. a) Do you use financial indicators to assess your performance?

Yes [   ]   No [   ]

b). If yes, which of the financial indicators of performance listed below do you use?

(Tick as appropriate)

Repayment rates	[ ]
Arrears rates	[ ]
Portfolio At Risk (PAR)	[ ]
Delinquent borrowers	[ ]
Loan loss reserve	[ ]
Loan loss ratio	[ ]
Average number of active loans	[ ]
Average portfolio per credit officer	[ ]
Active clients per branch	[ ]
Percentage of female clients	[ ]

Value of all saving accounts	[	]
Savings per branch	[	]
Total amount disbursed per period		
per credit officer	[	]
Operating costs	[	]
Quick ratio	[	]
Net interest margin	[	]
Salary and benefits to average		
portfolio outstanding ratio	[	]
Operational self- sufficiency	[	]
Financial self- sufficiency	[	]
Annual growth in savings	[	]
Annual growth in depositors	[	]
Subsidy Independence Index (SID)	[	]

c). Any other financial performance indicators; please specify: -

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12. a) Of the performance indicators you use, do you consider some as more superior

than others?   Yes [   ]   No [   ]

b) If yes, which ones and why?

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13. If your MFI uses performance indicators, for how long has it been using them?

        Less than a year   [   ]

        1 –5 years   [   ]

        Above 5 years   [   ]

14. a) Do the sources of your finances determine the performance indicators to use?

        Yes [ ]   No [   ]

  b) If yes, how?

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15. a) Has the usage of financial performance indicators lead to an improvement in the

    performance of your MFI?

        Yes [ ]   No   [ ]

c) (i) If yes, in what way?--

    (ii) If no, why? --

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16. If your MFI does not use financial performance indicators,

    (i) What are the reasons as to why it does not use them?

(ii) Explain how it assess its financial performance

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17. Please provide any other information you consider necessary in relation to

performance measurement by MFIs.

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APPENDIX 3

Table 1: Distribution of Financial Performance Indicator's Usage in MFIs.

Performance indicators	Yes		No		Cumulative Frequency.	
	Number	%	Number	%	Number	%
Repayment Rate	11	30	25	70	36	100
Arrears Rate	36	100	0	0	36	100
Portfolio At Risk (PAR)	25	70	11	30	36	100
Delinquent borrowers	32	87.5	4	13	36	100
Loan Loss Reserve	9	25	27	75	36	100
Loan Loss Ratio	4	12.5	32	88	36	100
Average number of active loans	37	75	9	25	36	100
Average portfolio per credit officer	22	60	14	40	36	100
Active clients per branch	22	60	14	40	36	100
Percentage of female clients	16	45	20	55	36	100
Value of all savings Accounts	21	57.5	15	43	36	100
Savings per branch	22	60	14	40	36	100
Total disbursement per period per credit officer	24	67.5	12	33	36	100
Operating costs	22	62.5	14	38	36	100
Quick Ratio	8	22.5	28	78	36	100
Net Interest Margin	9	25	27	75	36	100
Salary & benefits to average portfolio outstanding Ratio	10	27.5	26	73	36	100
Operational Self-Sufficiency	14	40	24	60	36	100
Financial Self-Sufficiency	11	30	25	70	36	100
Annual growth in Deposits	13	37.5	23	63	36	100
Annual growth in Savings	13	37.5	23	63	36	100
Subsidy Dependence Index (SDI)	4	12.5	32	88	36	100
Average Cost of funds	5	15	31	85	36	100

Source: Research Data.

Table 2: Financial Performance Indicators According to Priority.

Performance Indicators	Priotity	
	Number	%
Arrears Rate	36	100
Delinquent borrowers	32	87.5
Average number of active loans	37	75
Portfolio At Risk (PAR)	25	70
Total disbursement per period per credit officer	24	67.5
Operatin costs	22	62.5
Average portfolio per credit officer	22	60
Active clients per branch	22	60
Savings per branch	22	60
Value of all savings Accounts	21	57.5
Percentage of female clients	16	45
Operational Self-Sufficiency	14	40
Annual growth in Deposits	13	37.5
Annual growth in Savings	13	37.5
Repayment Rate	11	30
Financial Self-Sufficiency	11	30
Salary & benefits to average portfolio outstandin	10	27.5
Loan Loss Reserve	9	25
Net Interest Margin	9	25
Quick Ratio	8	22.5
Average Cost of funds	5	15
Loan Loss Ratio	4	12.5
Subsidy Dependence Index (SDI)	4	12.5

Source: Research Data.

Appendix 4

Descriptive Statistics *Table 1.*

	N	Mean
Same type of Indicators	4	6.75
Different types of Indicators.	4	2.25

Source: Research Data.

Chi-Square Test
Frequencies *Table 2.*

Same type of Performance Indicators.

	Observed N	Expected N
1	1	1
2	1	1
9	1	1
15	1	1
Total	4	

Source: Research Data.

Different types of Performance Indicators *Table 3*

	Observed N	Expected N
0	1	1.333333373
1	1	1.333333373
4	2	1.333333373
Total	4	

Source: Research Data.

Test Statistics *Table 4*

	Same types	Different types.
Chi-Square a, b	0	0.5
df	3	2
Asymp. Sig.	1	0.778800783

Source: Research Data.

a = 4 cells (100.0%) have expected frequencies less than 5. The minimum cell frequency is 1.0.

b = 3 cells (100.0%) have expected frequencies less than 5. Minimum cell frequency is 1.3.

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