CREDIT MANAGEMENT AND FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS IN NYAMAGABE DISTRICT, RWANDA

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By:

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DECLARATION A

"This dissertation is my original work and has not been presented for a degree or any other academic award in any university or institution of learning".

KALISA Callixte

Name and Signature of Candidate

24/10/2012

Date

DECLARATION B

"I confirm that the work compiled in this thesis was carried out by the candidate under my supervision".

KASOZI Geoffrey

Name and Signature of Supervisor

Date 24th Oct, 2012

DEDICATION

To all those who struggled to educate me, I dedicate this thesis.

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ABSTRACT

This study explored the influence of credit management on financial performance of Microfinance institutions in Nyamagabe District. The objectives were to determine the profile of the respondents; to determine the level of credit management in the selected microfinance institutions under study, to determine the extent of financial performance and to establish if there is a significant relationship between credit management and financial performance of microfinance institutions in Nyamagabe District. This study used descriptive and correlation design. The target population involved a total of 156 people of 13 microfinance institutions operating in Nyamagabe District, which are Vision Finance Company, RIM s.a; Ingenzi Gasaka SACCO, Twizigamire, Umwalimu SACCO, Umutanguha Gasarenda, Kibilizi SACCO, Cyanika SACCO, Urwego C.B, Inkingi MF, Tare SACCO, Winkingi SACCO and CT Nyamagabe where we have selected a sample size of 111. Purposive sampling was used to select respondents able to provide relevant information to the research. To meet these objectives, the researcher has collected data using questionnaires. The data were presented, analyzed and interpreted using Statistical Package for Social Science (SPSS). The findings showed that the majority of the respondents are females, with age between 31 and 40 years, with one to 5 years of experience and were credits officials. All of the studied institutions have and strictly apply credit management policies, guidelines, have methodology and eligibility criteria to evaluate creditworthiness of clients and appropriate loan security requirements and monitoring procedures exist. Thus, these factors influence positively the financial performance of microfinance institutions where the findings revealed that the majority of studied institutions' profits and fixed assets have been increasing in the past three years with efficiency and productive use of their resources. By conclusion, the Pearson's correlation coefficient indicates that there is a significant and positive relationship between credit management and financial performance of studied microfinance institutions. The null hypothesis was rejected. As recommendation, MFIs could diversify geographically to reach rural areas where are located a lot of people of low income; donors and governments should focus on improving the legal and regulatory framework; MFIs should multiply techniques for improving credit management such as giving trainings and incentives packages on clients who paid regularly and they are recommended to diversify their working areas, clients and types of funded activities for keeping them competitive and facing well their current working competition.

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ABBREVEATIONS AND ACRONYMS

AMIR: Rwanda National Association of Microfinance Professionals

CGAP: Consultative Group to Assist the Poor

EDPRS: Economic Development and Poverty Reduction Strategy

GTZ: Deutsche Gesellschaft für Technische Zusammenarbeit

IMF :International Monetary Fund

KIU: Kampala International University

LLC: Limited Liability Company

MFIs: Microfinance Institutions

MINECOFIN : Ministry of Finance and Economic Planning

MIS :Management Information System

NBR: National Bank of Rwanda

NGOs : Non-Government Organizations

PRSP : Poverty Reduction Strategy Paper

RIM : Réseau Interdiocésain de Microfinance

RMF : Rwanda Microfinance Forum

SACCO: Saving and Credit Coopperatives

UBPR : Union des Banques Populaires du Rwanda

UNDP : United Nations Development Program

USAID : United States Agency for International Development

CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Background of the Study

The field of Microfinance sector is relatively new, with only about three decades. Microfinance is defined as the provision of financial services to low-income clients or solidarity lending groups, micro-entrepreneurs and small businesses, which lack access to banking and related services due to the high transaction costs associated with serving these client categories (Dichter, T., 2007).

In numerous studies done across the world, it is generally believed that various microfinance initiatives have been able to make a difference in the target population lives. Indeed, the Microfinance becomes very important by offering poverty opportunities to small entrepreneurs and by enabling poor households to access to credit and helping them to begin micro enterprises which would enable them improve their incomes and eventually escape poverty (Professional Services of Microfinance Investors, 2005).

The Government of Rwanda is aware that poverty reduction could not be achieved without access to financial services by the poor. As a result, microfinance is considered as a powerful tool and the current Poverty Reduction Strategy Paper emphasizes it by translating the global MDGs targets into national action (UNDP 2005). A number of initiatives to boost the microfinance sector in Rwanda have been put in place so far, including the development of a legal and regulatory framework. The sustainability of micro finance institutions that reach a large number of rural and urban poor who are not served by the conventional financial institutions, such as the commercial banks, has been a prime component of the new development strategy of Rwanda (BNR, 2008).

However, increasing doubts have been raised over the financial performance of MFIs. MFIs need to be economically viable and financially performing and attain sustainability in the long run but economical implication of long term sustainability are not being considered (Srinivasan et al., 2006).

Microfinance Institutions have then a big challenge of becoming a viable institution that built a firm foundation for efficient operation and must struggle to have good financial performance. And only an institution operating efficiently (operationally and financially) can be instrument in sustainable poverty alleviation efforts. However, in Rwanda, many of MFIs are recently established and so they have not yet weathered the test of time. In addition, many have been suspended in 2006 due to failure to respect the regulatory policies, others for falling in situation of insolvency because of a lack of prudence in giving loans, a lack credit management skills, weak delinquency management and unnecessary high portfolio at risk percentages. Risk management and internal control are inadequate in most MFIs. In addition, little research work was carried out on the practices used by MFIs in credit management and on the influence that this has on their financial performance (BNR, 2008).

It is that situation which led the researcher to undertake such study of assessing the influence of the credits management on the financial performance of MicroFinance Institutions in Rwanda. This paper tried to assess policies, procedures and techniques used for credit management in Microfinance institutions and the influence that this has on the financial performance of MFIs.

Credit Management, as the independent variable was measured in terms of the existence and application of credit management policies, loan appraisal and portfolio quality management of the MFIs. Financial Performance of MFIs, as the dependent variable was measured in terms of profitability, efficiency and productivity (Kyereboah, 2007).

Statement of the Problem

Microfinance has been used worldwide as a tool for development in recent years though it is faced with challenges that hamper its effectiveness and performance. It has positively impacted poverty reduction, enables the poor people to build assets and thereby reduce their vulnerability by giving them small credits and contributes to increase their income and improve the quality of life (Prahalad, 2004).

In Rwanda, a wide range of micro finance institutions (MFIs) have been established and have been operating with the objective of poverty alleviation by resolving the credit access problem of the poor particularly to those participating in petty business (BNR, 2008).

To achieve these objectives micro finance institutions should be financially viable and sustainable. Despite the increasing reliance on micro finance to reduce poverty in Rwanda there has been surprisingly very little research work carried out on the practices used by MFIs in credit management and on the influence that this has on the performance of financial institutions (MINECOFIN, 2008).

Addressing these challenges in microfinance institutions, this study intended to explore the relationship between Credit Management and the Financial Performance of Microfinance Institutions in Nyamagabe District.

Purpose of the Study

The purpose of this study was:1) To test the hypothesis that there is no significant relationship between credit management and financial performance of microfinance institutions in Nyamagabe District; 2)To validate the existing theory to which the study was based; 3) To generate new information based on the findings of the study; 4)To bridge the gap tested on the previous studies.

Research Objectives

General: This study determined the correlation between credit management and financial performance of microfinance institutions in Nyamagabe District.

Specific: To be sought further in this study was as follows:

1. To identify the demographic characteristics of the respondents in terms of:

   1.1 Gender

   1.2 Age

   1.3 Level and area of qualification

   1.4 Occupied position and number of years of experience

   1.5 Geographical location

   1.6 Types of activity funded

2. To determine the level of credit management in the microfinance institutions under study in terms of credit management policies, loan appraisal and portfolio quality management.
3. To determine the extent of financial performance in microfinance institutions in terms of Profitability, productivity and efficiency.
4. To establish if there is a significant relationship between credit management and financial performance of microfinance institutions.

Research Questions

This study intended to answer the following research questions:

1. What are the demographic characteristics of the respondents in terms of:

   1.1 Gender?

   1.2 Age?

1.3 Level and area of qualification?

1.4 Occupied position and number of years of experience?

1.5 Geographical location?

1.6 Types of activity funded?

2. What is the level of credit management in the microfinance institutions under study in terms of credit management policies, loan appraisal and portfolio quality management?

3. What is the extent of financial performance of microfinance institutions in terms of profitability, productivity and efficiency?

4. Is there a significant relationship between credit management and financial performance of microfinance institutions in Nyamagabe District?

Null Hypothesis

Ho: There is no significant relationship between credit management and financial performance of microfinance institutions in Nyamagabe District.

The Scope of the Study

Geographical Scope

This study was carried out in Nyamagabe District, located in Southern Province of Rwanda. Nyamagabe is limited by Nyaruguru District in south; Nyungwe National Park in West (Rusizi and Nyamasheke District); Huye and Nyanza District in the East and Karongi District in the North.

Time scope

The study was done from January 2012 to October 2012.

Content Scope

The study intended to examine the level of credit management and the extent of financial performance of selected microfinance institutions; cause and effect relationship between the independent variable (credit management) and dependent variable (financial performance of microfinance institutions).

Theoretical Scope

This study was based on Bhattacharya and Thakor Modern Financial Intermediation Theory described in 1993 which states that the financial intermediaries have emerged exactly to eliminate the transaction costs existing from imperfections on the financial market. From this lack of complete information result high transaction costs and moral hazard due to operating without complete information on the market (Bhattacharya and Thakor (1993).

The goal of intermediation theory is to explain why these financial intermediaries exist and to examine the main functions of financial intermediation, how the financial intermediation affects the economy as a whole and the effects of government policies on financial intermediaries (Thakor, 1993).

Under the intermediation model, financial institutions collect deposits and make loans in order to make a profit. This theory can be applied by microfinance institutions as they also, like other financial intermediaries, collect deposits and make loans in order to make a profit. In searching of how to be efficient, they can apply this theory by elimination or reducing informational asymmetry and then perform in reduced transaction costs (Diamond and Dybvig, 1983).

Significance of the Study

The following people will benefit from the findings of the study:

Microfinance Institutions in Rwanda will benefit on what and how to apply the best practices, policies, procedures and techniques of credit management to realize financial performance.

Microfinance Practitioners and managers will be assisted in credit management and measuring the financial performances of MFIs. They will find the study informative and helpful for making decision and will get some insights into how a MFIs' financial performances could be improved by applying well techniques of the credit management.

Policy makers in particular the Government of Rwanda will be helped on how to work closely with MFIs so as to improve their financial performance.

The future researchers will utilize the findings of this study to embark on a related study.

Operational Definitions of Key Terms

For the purpose of this study, the following terms are defined as they are used in the study:

Credit: According to Rose Hudgins (2010), a credit is an amount of money a lender makes available to the borrower to pay for goods and services. It is a transfer of property on promise of future payment, a contract giving a property right to creditor against debtor.

Management: According to John A. Wagner (2001), management is defined as the process of planning, staffing, organizing, coordinating, motivating and controlling the available scarce resources to achieve the set strategic goals and objectives of the organization.

Credit management is the whole process and systems through which the MFI's lending operations strive to offer services which meet the demands of the clients; operate as efficiently as possible by minimizing costs; motivate clients to repay loans and interests as per agreed terms.

Performance: refers to act of doing something successfully or the completion of a given task to specified standards.

Financial Performance: A subjective measure of how well a firm can use assets from its primary mode of business and generate revenues.

Microfinance institutions (MFIs) are institutions that provide financial services to those people who rely on their small businesses for income and who are not considered bankable because they lack collateral or are considered high risk by the traditional commercial banking sector.

Demographic characteristics of the respondents are attributes looked for in this study in terms of gender, age, level and area of education, their working position and number of years of experience.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Concepts, Opinions, Ideas from Authors/ Experts

Credit management is the whole process and systems through which the MFI's lending operations strive to offer services which meet the demands of the clients; operate as efficiently as possible by minimizing costs; charge interest rates and fees, which are sufficient to cover all costs; motivate clients to repay loans as per agreed terms and achieve sustainability of operations through high degree of efficiency exercised. Therefore the Credit management is desirable for the corporation to improve its financial performance and its sustainability (Solomon Kagaba, 2001).

Microfinance institutions (MFIs) are institutions that provide financial services to those people who rely on their small businesses for income and who are not considered bankable because they lack collateral or are considered high risk by the traditional commercial banking sector (Dichter, T., 2007).

The mission of microfinance institutions is to increase access to credit. Microfinance institutions serve entrepreneurs who live or work in low-income neighborhoods, who are unable to receive traditional financing from banks. Organizations may target new immigrants, aboriginals, mental health and addiction population and other marginalized groups (MINECOFIN, 2007).

Financial performance: From bankers' perspective, a microfinance institution is said to have reached financial performance when the operating income from the loan is sufficient to cover all the operating costs, when it can obtain funds at market rate and mobilize local resources, realize high repayment rate, low operating cost ratio, high market interest rates and a good quality of portfolio. From banker's perspective, sustainability of microfinance institution includes both financial viability and institutional sustainability (self-sufficiency) of the lending institution (Sharma and Nepal, 1997).

Credit Management policy

According to Comptroller (1998), the loan policy is the primary means by which senior management and the board guide lending activities. Although the policy primarily imposes standards, it also is a statement of the bank's basic credit philosophy. It provides a framework for achieving asset quality and earnings objectives, sets risk tolerance levels, and guides the bank's lending activities in a manner consistent with the bank's strategic direction. Loan policy sets standards for portfolio composition, individual credit decisions, fair lending, and compliance management. For the policy to be an effective credit risk management tool, it must clearly establish the responsibilities of those involved in the lending process.

Doyle (1972:293) argues that credit extension should be based on the principle of good lending and that if the credit policy is not well implemented, it may lead to defaults which affects the bank's profits, the bank's performance and hence the national economy.

Reed and Gill (1989),argued that since lending is important both to the bank and to the community it serves, loans policies must be worked out carefully after considering many factors like capital position of the bank, risk and profitability of various types of credit, stability of the deposit, economic conditions of the area served, influence of fiscal and monetary policy, ability and experience of bank personal, credit needs of the area served. They argued that as loan polices differ greatly from bank to bank, most loan/credit policies should possess the common following items: the Loan territory, the type of credits to be made, the acceptable security and credit worthiness, the maturity, their legal lending limit (Excess limit), loan liquidation, problem loans, compensating balances, loan commitment and the size of the loan portfolio.

According to Saunders (1996), banks need to gather adequate information about potential customers to be able to calibrate the credit risk exposure. The information gathered will guide the bank in assessing the probability of borrower default and price the loan accordingly. Much of this information is gathered during loan documentation (Simson and Hempel, 1999).

Fisher (1997), Ear ly (1996) and Greuning and Bratanovic (1999) observe that the lending policy should be in line with the overall bank strategy and the factors considered in designing a lending policy should include; the existing credit policy, industry norms, general economic condition and the prevailing economic climate.

Seppala et. al (2001) and Flannery and Ragan (2002) argue that a sound credit policy would help improve prudential oversight of asset quality, establish a set of minimum standards, and to apply a common language and methodology (assessment of risk, pricing, documentation, securities, authorization, and ethics), for measurement and reporting of non-performing assets, loan classification and provisioning. The credit policy should set out the bank's lending philosophy and specific procedures and means of monitoring the lending activity (Polizatto, 1990; Popiel, 1990).

A credit policy should also clearly define credit procedures and directives. Credit procedures are steps clarifying the techniques used by the bank to execute its credit policy. Credit directives on the other hand are those to address credit policy issues in response to the market and economic changes. Credit directives provide general parameters for the type of clients and market the bank is willing to serve, the loan concentration levels and the acceptable risk in each market (Castello, S., 2004).

Comptroller (1998) concluded, telling about administration of loan policy, that after either loan/credit policy has been formulated, provision for its proper execution must be made. Some individual must carry out loan policy, and some provision should be made for its periodic review and evaluation to make changes, it should be known that the loan policy acts as a guide to lending and not straightjacket. Economic condition changes and so should a credit policy.

According to Bosh (2006), a new software for Modern credit management was proposed that benefits banks and financial service providers by optimizing the end-to-end credit decision process. He proposed a Credit Management Platform from his Software Innovations which supports all process steps for data collection and import, credit policy checks, risk assessment, and approval of credit applications. All parameters in the credit approval process can be altered as necessary to suit the credit policies of the lending institution concerned. Consequently, banks and financial institutions can make timely credit decisions without sacrificing care and proper diligence.

Loan appraisal

According to Matthew Brown (2003), the branch manager does the loan appraisal by carefully evaluating the cash flow from the activity; analyze the potential risks attached to the proposal, credibility and reputation of the customers, obtaining no due certificate from previous lenders before taking the proposal to the area manager.

According to Salomon Kagaba (2001) the loan appraisal is done for making the systematic evaluation of the loan applicant to determine whether to grant the loan or not and if so how much. It involves determining in advance the various lending parameters likely to affect the successful recovery of the loan. Assessment is done of the client's willingness and his/her ability to repay the loan i.e. repayment capacity as per the agreed terms without the MFI having to enforce recovery.

The guiding principle in credit appraisal is to ensure that only those borrowers who require credit and are able to meet repayment obligations can access credit. Lenders may refuse to make loans even though borrowers are willing to pay a higher interest rate, or, make loans but restrict the size of loans to less than the borrowers would like to borrow. The argument is that credit should be made available according to repayment capability based on current performance (Mishkin, 1997).

Kagaba (2001), continued that elements of the loan appraisal process in microfinance includes the business aspects including financial performance of the borrower, the market, management capability; the character issues including the clients credit history, household stability and support as well attitude towards credit repayment.

Morris (2001), said about two broad means of evaluating credit worthiness: appraisal of repayment capacity, and set-backed lending. The former approach focuses on investigating the integrity, moral character, management ability and debt paying capacity of potential borrower either through human experts or statistical models, while the latter focuses on the quality and quantity of assets that can be pledged as collateral and quickly liquidated in the event of a default. To assess the repayment capacity of the borrower, it requires human based expert systems: With the credit appraisal category the principal means that a financial institutions uses to control credit risk is a solid evaluation done by trained professional.

Portfolio Quality management

According to Kagaba (2001), portfolio is the total outstanding loan principal owed by the borrowers that the MFI expects to receive. The aggregate of the loans and other advances that are outstanding from borrowers of the MFI. The loan portfolio is typically the largest asset and the predominate source of revenue. As such, it is one of the greatest sources of risk to a bank's safety and soundness. Whether due to lax credit standards, poor portfolio risk management, or weakness in the economy, loan portfolio problems have historically been the major cause of bank losses and failures.

Effective management of the loan portfolio and the credit function is fundamental to a bank's safety and soundness. Loan portfolio management (LPM) is the process by which risks that are inherent in the credit process are managed and controlled. Because review of the LPM process is so important, it is a primary supervisory activity. Assessing LPM involves evaluating the steps bank management takes to identify and control risk throughout the credit process. The assessment focuses on what management does to identify issues before they become problems (Anne-Lucie Lafourcade, 2005).

Effective loan portfolio management begins with oversight of the risk in individual loans. Prudent risk selection is vital to maintaining favorable loan quality. Therefore, the historical emphasis on controlling the quality of individual loan approvals and managing the performance of loans continues to be essential. To manage their portfolios, bankers must understand not only the risk posed by each credit but also how the risks of individual loans and portfolios are interrelated. These interrelationships can multiply risk many times beyond what it would be if the risks were not related.

When MFIs are faced with poor portfolio quality, they may write off the loans from their books or refinance the loans by extending the term, changing the payment schedule, or both. Given that information about loan write-offs and the use of refinancing and rescheduling is limited, detailed analysis of portfolio quality is difficult. Saving and Credits and Cooperatives (SACCOs) compare favorably for savings mobilization, even though, on average, they do not lend as much as other MFI types. Given their lower operating costs, cooperatives are well poised to improve financial performance and remain competitive. Analyses of reliable information allow institutions to identify their strengths and weaknesses, mitigate risks, establish meaningful performance targets, and increase the likelihood of attracting outside investment. Practitioners, investors, and donors should encourage other African MFIs to follow the lead of these institutions to help improve understanding and advance the microfinance industry in Africa (Francois KANIMBA, BNR 2008).

According to Reed and Gill (1989:351), problems loans are those which have not been written off but are at least 90 days past due, or renegotiated. Problem loans adversely affect bank's liquidity and increase the possibility of loss. Some problems that arise with loans vary considerably in intensity and duration. Others may present minor problems from the beginning of the loan; some develop slowly and if become chronic and others suddenly without any indication.

The financial institutions are interested in preventive steps precautionary measures that may be taken to reduce a number of problem loans, because of the costs involved in their supervision and collection as well as the impact of losses on their financial structures. The following steps may be taken to rescue the borrowers and restore financial health: Counseling, addition of capital, merger, reduction of expansion plans, encourage the collection of slow receivables, improve inventory control, obtaining additional collateral, debt restructuring and increase the amount of loans/credits (Flannery and Ragan, 2002).

Performance of MFIs in Rwanda

From bankers' perspective, a microfinance institution is said to have reached financial performance when the operating income from the loan is sufficient to cover all the operating costs, when it can obtain funds at market rate and mobilize local resources, realize high repayment rate, low operating cost ratio, high market interest rates and can achieve a good quality of portfolio (Sharma and Nepal, 1997).

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. An MFI's financial activities also generate various expenses, from general operating expenses and the cost of borrowing to provisioning for the potential loss from defaulted loans. Profitable institutions earn a positive net income (i.e., operating income exceeds total expenses). For the purpose of this review and to account for the institutional scale of operations, financial revenue and expense indicators as well as returns are compared against the institution's assets, to give what is called return on assets (MINECOFIN, 2010).

Financial institutions such as banks, financial service companies and insurance companies, securities, microfinance institutions and credit unions have very different ways of reporting financial information. Performance of MFI can be measured using profitability, asset management, efficiency and productivity ratios (Kyereboah, 2007).

MFIs in Rwanda are dynamic and perform favorably compared with their counterparts in other global regions. Indeed, Rwandan MFIs perform well in savings mobilization, in both the number of clients served and the absolute volume of savings on deposit. Although the results of this study indicate that the overall financial performance of MFIs in Africa lags behind other global regions, a growing number of MFIs—especially regulated and cooperative MFIs—are profitable. Furthermore, many institutional models thrive in Africa, and this diversity provides good choices for clients. Given their lower operating costs, cooperatives are well poised to improve financial performance and remain competitive (BNR, 2008).

Profitability

According to Cull R., A (2007), it is important for business managers and owners to be concerned with the profitably ratio of the firm. He defined profitability as the ability of the firm to maximize its revenues and minimizes its costs. To him profit is the different between revenue and costs of an organization, so that every effort should be made to reduce costs and to increase revenues. According to the accountants perspective profitability is the ability of the firm to earn a return. This return is normally a margin either of sales a proportion of capital invested or proportion passed used. It is critical because it demonstrates the ability of the firm to earn returns on investments. This can be deduced from the analysis of Return on Equity ratio (ROE).

Kifle tesfamariam Sebhatu (2011), define the Return on Equity as the net profit after taxes divided by total owner's equity. It reflects the bank management ability to generate net profits from using the owner's equity as one of the financial sources. It measures how well the MFIs and SACCOs use their assets to generate revenues and indicate how well they are managing their assets to optimize their profitability. It provides an indication of the ability of a MFI to expand profitably with unsubsidized funding.

According to Seep Network Guideline on measuring performance of performance of SACCO's sectors, a positive correlation exists between return on assets ratios and portfolio to assets. The ratio is higher for SACCOs that maintain a large percentage of the assets in the gross portfolio.

Profit is the function of variety of factors affected by changes in volume, costs and prices, profit may be affected by either increase or decrease in selling price, volume of sales, variable and field costs of a combination of all. In order the company to earn any amount of profit, the company has to operate beyond the breakeven point, which is a point where total cost of equals the total revenue of the organization. The units to be produced and sold in order to get the planned or desired profits are determined when total revenue exceeds total costs (Otero and Rhyne 1994).

Efficiency

According to, Von-Pischke (1991), efficiency indicators are performance measures that show how well the institution is streamlining its operations. Efficient institutions minimize costs of delivering services. The efficiency of an MFI can be calculated in various ways but this study will analyze only Operating Expense to ratio.

This is calculated by taking Operating Expenses divided by Gross Loan Portfolio. The ratio provides a broad measure of efficiency as it assesses both administrative and personnel expenses. With lower values it indicates more efficient operations.

Johnson and Roglay (1996), suggest that in case of delinquency or drop outs the loan portfolio reduces and thus interest. They noted, however, that operational costs follow the opposite trend because it leads to high recovery costs. Microfinance institutions find it hard to remain performing. They use the operating and self-sufficiency ratio to assess how revenue interest compares to operating expenses. Efficient institutions minimize costs of delivering services. The efficiency of an MFI can be calculated in various ways; by analyzing costs per borrower and costs per saver as indicators of efficiency (MINECOFIN, 2010).

Adrian Gonzalez (2011), in searching the financial performance/efficiency and social performance of MFIs , suggested that for all costs that must be covered by interest rates and fees paid by borrowers, operating expenses were representing more than 63 per cent on average, financial expenses 21 percent, and profits less than 8 percent. Therefore, from the point of view of efficiency it makes sense to focus our discussion on operating expenses. Financial expenses are less able to be controlled by MFIs, while profits explain only a small share of costs. He argued that, although many factors contribute to the efficiency of a MFI, only Operating expense as a percentage of average gross loan portfolios (OER), usually known as operating efficiency and Cost per borrower as a percentage of GNI per capita are the most considered in financial performance evaluation.

Productivity

Often measured in terms of borrowers per staff member, productivity is a combination of outreach and efficiency. Productive MFIs maximize services with minimal resources, including staff and funds. Because African MFIs reach many more savers than borrowers, this analysis also includes productivity measures in terms of savers.

However, productivity is difficult to compare at the product level: On the one hand, serving a loan client can be more labor intensive and costly than serving a depositor, because it implies a series of interviews and site visits before the loan can be disbursed; on the other hand, collecting deposits involves expenses such as cashiers, security, and cash management (MINECOFIN, 2010).

Here also, MFIs in Rwanda, as almost elsewhere in Africa, are among the most productive in terms of borrowers and savers per staff member compared with the global averages. The reason why Rwandan and African MFIs are more productive than many global MFIs is about the methodologies and product descriptions of the African MFIs. Limited information indicates that more than 85 percent of participating MFIs from Rwanda and Africa offer group loans through solidarity groups or village banks. These lending methodologies imply economies of scale through group transactions (MINECOFIN, 2010).

Microfinance in Rwanda

Microfinance plays a crucial role in the Rwandan economy, and more broadly in society as a whole. It is accepted today as a necessary instrument for reducing poverty in Rwanda by strengthening the poor's capacities, to create jobs and to generate revenues on a sustainable basis. That role has been recognized and prioritized in Government of Rwanda's medium term Economic Development and Poverty Reduction Strategy (EDPRS). Thus a National Microfinance Policy has been devised and adopted specifically for Rwanda's needs. This defines the orientations of microfinance and allows MFIs to achieve the ultimate objective of this sector. The objective of the sector is to contribute to economic and social development of Rwanda's vulnerable poor, who are economically active either in rural or in urban areas (MINECOFIN, 2007).

Access to financial resources is a key obstacle faced by many MFIs, as most commercial banks are reluctant to offer wholesale finance to MFIs due the perceived lack of credibility of the microfinance sector and the lack of liquidity management skills in most MFIs. In order to broaden MFI access to diversified local and international sources for lending, different models will need to be offered to increase the investment attractiveness and security of MFIs for commercial banks, as well as building trust and partnerships between the two sectors. Restructuring of existing and creation of new a fund is required, as well as other resource mobilization strategies (MINECOFIN, 2007).

Many MFIs lack credit management and delinquency management skills. This includes the lending methodology, pricing of products, customer care and the effectiveness of the lending methodology. The combination of factors above is hampering the sound development of the microfinance sector and its progress towards market-led business oriented operations (MINECOFIN, 2007).

Relationship between the credit management and the financial performance

According to Von-Pischke (1991, p. 25) effective management of credit risk is critically important for MFIs because they depend excessively on interest income from loans, and loans are their main assets. High administrative costs also make MFIs more vulnerable to defaults.

Proper Credit Management for Microfinance Institutions is a pre-requisite for the success of these Institutions and growth of the sector in general. The effective management of credit risk is then a critical component of a comprehensive approach to credit management and essential to the long-term success of any MFI or any banking organization (http://www.microbanking-bulletin/2011/05/microfinance-efficiency).

The result of a Research published in the Journal of Finance and Accounting No 7/8, 2011 on Management of Credit in MFIs from the Perspective of Outreach and Sustainability, says that there is strong positive correlation between financial performance (ROA) and the asset utilization and operational. The study also came out with a range of perspectives on the factors affecting the outreach and performance of

MFIs under study and added that inappropriate loan security requirements were among the factors affecting the outreach and sustainability of MFIs and SACCOs (Karen Doyle, Jerry Black (2001).

Meyer (2002) noted that the poor needed to have access to financial service on long-term basis rather than just a onetime financial support. Short-term loan would worsen the welfare of the poor. Meyer (2002) also stated that the poor performance financial unsustainability in the MFI arises due to low repayment rate. This may be caused by many factors, in which, are inappropriate credit management and loan policies.

According to some (Christen et al. 1995), cited in Meyer (2002), outreach and financial sustainability are complimentary this is because as the number of clients increase MFIs enjoys economies of scale and hence reduce costs which help them to financial sustainable.

Theoretical perspective

This study was based on Bhattacharya and Thakor Modern Financial Intermediation Theory described in 1993 which states that the financial intermediaries have emerged exactly to eliminate the transaction costs existing from imperfections on the financial market. From this lack of complete information result high transaction costs and moral hazard due to operating without complete information on the market. The financial intermediaries have emerged exactly to eliminate, at least partially, these transaction costs (Bhattacharya and Thakor, 1993).

This existence of imperfections on the financial market arisen in the information asymmetry. Modern theory of financial intermediation examines the main functions of financial intermediation, how the financial intermediation affects the economy as a whole and the effects of government policies on financial intermediaries (Diamond and Dybvig, 1983).

Berger and Humphrey (1997), functions of financial intermediaries are reduction of transaction costs, liquidity provision, information provision, debt renegotiation.

The goal of intermediation theory is to explain why these financial intermediaries exist. Financial intermediaries exist because they can reduce information and transaction costs that arise from an information asymmetry between borrowers and lenders.

Gurley and Shaw, (1960), define financial intermediaries as firms that borrow from customers and lend to companies that need resource for investment. They explain that saving and investments process in capitalist economies are organized around financial intermediaries.

Under the intermediation model, financial institutions collect deposits and make loans in order to make a profit. Deposits and acquired loans are considered to be inputs. Institutions are interested in placing loans, which are traditional outputs in studies of this kind (Berger and Humphrey: 1997).

In searching to determine whether banks operate efficiently, Bhattacharya and Thakor developed that theory and suggested that by screening and monitoring borrowers, commercial banks can solve potential moral hazard and adverse selection problems caused by the imperfect information between borrowers and lenders. (Bhattacharya and Thakor, 1993).

Berger and Humphrey (1997) suggest that one could assess efficiency under a variety of output/input specifications, and see the way in which calculated efficiencies change as the specification changes.

Financial intermediaries thus assist the efficient functioning of markets, and any factors that affect the amount of credit channeled through financial intermediaries can have significant macroeconomic effects. Banks' ability to ameliorate informational asymmetries between borrowers and lenders and their ability to manage risks are the essence of bank production. These abilities are integral components of bank output and influence the managerial incentives to produce financial services prudently and efficiently (Berger and Humphrey, 1997).

Thus, the financial intermediaries are commercial companies, that produce different types of loaning products for the individuals who wish to borrow. The main finished products of financial intermediaries are the loans granted to clients, and the main variable inputs are the deposits attracted from the depositors. Furthermore we can regard financial intermediaries as companies that have as sole purpose the maximization of profit, profit that occurs as a result of the difference between the interests perceived for the granted loans and the interest abated for the attracted deposits. Profit-maximizing financial institutions aim to provide financial services in a cost-effective manner, but subject to two important constraints: the competitive environment and the general institutional framework. Financial Intermediaries has the role of the elimination of informational asymmetry and the performing of the transaction (Ghatak et. Al., 1999).

This study was guided by this theory as microfinance institutions are also financial intermediaries, which, as other commercial companies, can be analyzed in the same way as other commercial companies that produce different types of loaning products for the individuals who wish to borrow. In the purpose of the maximization of profit, microfinace institutions perceive interests from the granted loans and strive to operate efficiently by minimizing transaction costs.

They can reduce informational asymmetries between borrowers and lenders and their ability to manage risks are the essence of their production. These abilities are integral components of the institutions' output and influence the managerial incentives to produce financial services prudently and efficiently (Bhattacharya and Thakor: 1993).

According to Ghatak et. Al., (1999), in that contexts searching efficiency by reducing transaction costs, microfinance institutions can benefit from two advantages by their group lending methodology. Firstly, by minimizing the effect of adverse selection: the problem of adverse selection arises in credit provision due to asymmetric information of the prospective borrowers' quality as a borrower. This positive assortative matching will enable lenders to screen safe from risky groups using various loan characteristics as instruments.

Secondly, by minimizing moral hazard. Under group lending, this moral hazard problem is minimized, due to the large amount of information that group members have of each other's activities. The absence of asymmetric information within the group solves the moral hazard problem, just as it can aid in solving the adverse selection problem.

A Microfinance Institution, like other banks, can operate with scale economies by increasing their assets, giving more loans from which they also perceive more returns (Berger and Humphrey: 1997).

In summary, Microfinance Institutions, as part of financial intermediaries play an important role in credit markets because they participate in reducing the cost of channeling funds between relatively uninformed depositors to uses to a more efficient allocation of resources. They provide credit to borrowers on terms which those borrowers would not otherwise be able to obtain. Because of the existence of economies of scale in loan markets, and by reduction of the transaction costs these MFIs can achieve profitability and efficiency in their operation and then be performing.

Related studies

Little research work has been carried out on credit management practices used by MFIs.

The CGAP (2005b) research on microfinance activities carried out by few MFIs, found that effective management of credit is critically important for MFIs because they depend excessively on interest income from loans, and loans are their main asset. High administrative costs also make MFIs more vulnerable to defaults (CGAP: 2005b).

Anne-Lucie Lafourcade, (2005), conducted a research on Outreach and Financial Performance of Microfinance Institutions in Africa. She found that MFIs in Africa tend to report lower levels of profitability, as measured by return on assets, than MFIs in other global regions. She reported however, that the microfinance sector in Africa is quickly expanding, and institutions have increased their activities, making then African MFIs to be among the most productive globally, as measured by the number of borrowers and savers per staff member. MFIs in Africa also demonstrate higher levels of portfolio quality, with an average portfolio at risk over 30 days of only 4.0 percent.

Another Research undertaken by Karen Doyle and Jerry Black (2001) on Management of Credit in MFIs and Outreach and Sustainability, found that there is strong positive correlation between financial performance (ROA) and the asset utilization and operational. The study also came out with a range of perspectives on the factors affecting the outreach and performance of MFIs under study and added that inappropriate loan security requirements were among the factors affecting the outreach and sustainability of MFIs and SACCOs (Karen Doyle, Jerry Black (2001).

In Rwanda the limited survey undertaken by the World Bank (2004) indicates that most existing Microfinance institutions were operating with loss by only resources funded by International NGOs like Word Relief, World Vision, SNV and Care ternational.

The same study recommend that those Microfinance institutions were to be helped to achieve their financial sustainability and be themselves financially and operationally performing.

The survey conducted by BNR, showed that after financial reforms done since 2004, especially in domain of microfinance, Rwandan MFIs were perform well in savings mobilization, in both the number of clients served and the absolute volume of savings on deposit. Many of them were profitable, given their lower operating costs, they well poised to improve financial performance and remain competitive (BNR, 2008).

According to Meyer (2002), in his research on outreach and financial sustainability , he found that the two are complimentary, because as the number of clients increase MFIs enjoys economies of scale and hence reduce costs which help them to financial sustainable. Meyer (2002) also stated that the poor performance financial unsustainability in the MFI arises due to low repayment rate. This may be caused by many factors, in which, are inappropriate credit management and loan policies.

Research Gap

There have been a number of valuable studies using cross-section data of credit management and relationship between financial credit and poverty reduction (Mbaraga, 2001), "The impact of capital structure on the performance of microfinance institutions", Anthony Kyereboah-Coleman, (2007), " the Management of Credit in MFIs and Outreach and Sustainability", all of which present evidence on relationship between credit and poverty reduction, capital structure and performance of MFIs, and Management of Credit and the Outreach and Sustainability.

However, none of these studies attempt to explore of relationship between credit management and financial performance of microfinance institutions.

CHAPTER THREE

RESEARCH METHODOLOGY

Research Design

This study employed the descriptive and correlation design. Descriptive studies are non-experimental researches that describe the characteristics of a particular individual, or of a group. It deals with the relationship between variables, testing of hypothesis and development of generalizations and use of theories that have universal validity.

The correlation approach of the study analyzed the relationship between credit management and financial performance Microfinance Institutions in Nyamagabe District. Both qualitative and quantitative data were used and collected from selected samples of respondents.

Research Population

The target population included a total of 153 composed by 78 management officials and 75 credit officials of the selected Microfinance Institutions in Nyamagabe District. The management officials include the Branch Manager, members of the management committee, accountants and internal auditors of the Institution. The credit Officials includes the credit officers, other members of the credit committee.

Sample Size

A sample size of 111 respondents was used based on Krejcie and Morgan tables (Appendix III). Table 1 below shows the respondents of the study with the following categories: management officials, and credits officials for target population and for the sample size.

Table 1

Respondents of the Study

Category of respondents	Number of respondents	Sample Size
Management officials	78	56
Credits officials	75	55
Totals	**153**	**111**

Source: Researcher's calculations, 2012

Sampling Procedures

The researcher used both random and purposive sampling techniques. Simple random sampling was used to ensure that all members of the population can be selected and are given equal chances, while purposive was used as a result of the researcher's judgment. The sample was determined using the Table of KREJCIE and Morgan (1970) for determining Sample Size from a given population (See Appendix III).

Research Instruments

The research tools utilized in this study included the following:

1.Face sheet to gather data on the respondents' demographic characteristics (gender, age, highest level and area of qualification, occupied position, experience on it, legal status of their institutions, their geographical location and type of funded activity).

2. Researcher devised questionnaires to determine the levels of credit management. These consist of options referring to credit management policies, to credit appraisal and portfolio quality management.

The response modes and scoring are as follows: 4 for strongly Agree; 3 for Agree; 2 for Disagree and 1 for Strongly Disagree

3. The researcher devised questionnaires to determine the extent of financial performance of microfinance Institutions. These consist of options to referring the level of profitability, efficiency and productivity of studied microfinance Institutions.

The response modes and scoring are as follows: 4 for strongly Agree; 3 for Agree; 2 for Disagree and 1 for Strongly Disagree

Validity and Reliability of the Instruments

The validity refers the appropriateness of the instrument while reliability refers to its consistency in measuring whatever it is intended to measure (Amin, 2005).

The content validity method was used. To investigate the validity of all the questionnaires five experts (who shall estimate the validity on the basis of their experience) such lecturers knowledgeable about the theme of the study were asked to judge each item in each questionnaire either relevant (R) or irrelevant (IR). There after the Content validity Index (CVI) was computed for each instrument by using the following formula: $\text{CVI}=\frac{R}{R+IR}$

Where CVI: Content Validity Index

R: Relevant questions

The indices were computed as shown in the table below:

Table 2

Content Validity Index

Instruments	Judgment/ Assessment questions			Computation
	Relevant (R)	Irrelevant (IR)	Total (R+IR)	R/R+IR
Questions of Respondents	67	7	74	67/74=0.905

Researcher's calculations, 2012

The instruments were certified valid as he stipulated the minimum Content Validity Index to be at least 0.7. Thus, the table above indicates that CVIs (0.905) were considerably more than 0.7. This implies that the questions were valid and therefore ready for data collection.

The test-retest technique is used to determine the reliability. The researcher devised instruments to twenty respondents from different MFIs. These respondents are not included in the actual study. In this test- retest technique, the questionnaires is administered twice to the same subjects. Thus, because our results were consistent and essentially the same in both times, we can say that our instrument is reliable.

Data Gathering Procedures

Before the administration of the questionnaires

An introduction letter was obtained from the College of Higher Degrees and Research for the researcher to solicit approval to conduct the study from respective people of the different microfinance institutions.

different microfinance institutions.

The respondents were explained about the study.

Reproduce more than enough questionnaires for distribution.

Select research assistants who would assist in the data collection; brief and orient them in order to be consistent in administering the questionnaires.

During the administration of the questionnaires

The respondents were requested to answer completely and not to leave any part of the questionnaires unanswered.

The researcher and assistants emphasized retrieval of the questionnaires within five days from the date of distribution.

On retrieval, all returned questionnaires were checked if all are answered.

After the administration of the questionnaires

The data were collected, encoded into the computer and statistically treated using the Statistical Package for Social Sciences (SPSS).

Data Analysis

Data collected was analyzed using descriptive statistic using computer aided SPSS method. The following statistical tools were used:

The frequency and percentage distribution were used to determine the profile of the respondents.

The mean were applied for the levels of credit management and financial performance of microfinance institutions. To interpret the obtained data, the following numerical values and interpretations were used:

Mean Range	Response Mode	Interpretation
3.26-4.00	Strongly agree	Very High
2.51-3.25	Agree	High
1.76-2.50	Disagree	Low
1.00-1.75	Strongly disagree	Very Low

The Pearson coefficient correlation to determine the correlation between the levels of credit management and financial performance of microfinance institutions is used. The coefficient of determination r^2 was computed to determine the percentage of influence of the dependent variable on independent variable in the model.

Ethical Considerations

To ensure confidentiality of the information provided by the respondents and to ascertain the practice of ethics in this study, the following activities will be implemented by the researcher:

1. Solicit permission through a written request to the concerned officials of MFIs included in the study.
2. The respondents and MFIS will be coded instead of reflecting the names.
3. Acknowledge the authors quoted in this study and the author of the standardized instrument through citations and referencing.
4. Present the findings in a generalized manner.
5. Finally, we endeavored to be very respectful to all respondents and to all participants who were part of this study.

Limitations

Potential sources of bias in the proposed study occur due to different factors. Sources may be lack of:

Testing: The use of research assistants can bring about inconsistency in the administration of the questionnaires in terms of time of administration, understanding of the items in the questionnaires and explanations given to the respondents. To minimize this threat, the research assistants are oriented and briefed on the procedures to be done in data collection.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

The chapter four presents analyzes and discusses the results obtained from the research. The percentages and frequencies distributions tables were used. The data were presented in the line with the objectives of the research and the set study questions. This was done with the use of Statistical Package for Social Sciences (SPSS). A total of 111 questionnaires were given out in our area of study, Vision Finance Company, RIM s.a; Ingenzi Gasaka SACCO, Twizigamire, Umwalimu SACCO, Umutanguha Gasarenda, Kibilizi SACCO, Cyanika SACCO, Urwego C.B, Inkingi MF, Tare SACCO, Winkingi SACCO and CT Nyamagabe. Thus, the analysis of the data was based on those questionnaires.

This chapter gives analysis of the findings and interpretation of credit management, level of profitability and relationship between the two variables. The data are analyzed in relation to the research question and objectives of the study.

Profile of the respondents

The tables below show the profile of the respondents from different institutions. This was in terms of gender, age, occupied position, working experience, level and area of education, geographic location and principal activity funded. The findings are presented using tables and analyzed by use of frequencies, percentages and correlation coefficients.

Table 3A

Demographic Characteristics of the Respondents

Category	Frequency	Percentage
Gender		
Male	25	23
Female	86	77
Total	**111**	**100**
Age		
Below 30 years of age	18	16
31-40 years of age	93	84
Total	**111**	**100**
Highest qualification		
Advanced Level	9	8
Diploma Level	34	31
Bachelor's Level	68	61
Totals	**111**	**100**
Area of qualification		
Accounting	89	80
Management	22	20
Totals	**111**	**100**
Occupied position		
Branch manager	8	7
Credit committee member	33	30
Credit officer	35	32

Source: Primary data, 2012

From the table above it is indicated that 77 % of the respondents were females and only 23 % were males. This indicates that all sexes were involved in the study but with a great number of female respondents which is explained by their important presence in the staff of studied Microfinance Institutions. A big number of women staff is used to stimulate women to use MF small credits as a mean of reducing poverty.

The Table above showed that 84% of respondents were between 31 and 40 years and 16% of the respondents were bellow 30 years. This indicates that the majority of respondents has between 31 and 40 years, has sound minds and independent ideas and therefore the responses gathered were reliable and dependable.

Findings on the level of education were captured to reveal whether respondents could be able to interpret the questionnaires given to them by the researcher. From the table above, 8% Advanced Level holders, 31% Diploma Level holders, 61% have Bachelors Level. According to their area of qualification 80% of them are qualified in Accounting while 20% are qualified in Management. This means that the respondents had the capacity (by their level of study and area of qualification) to interpret the questionnaires given to them and were able to give relevant answers. This has also a positive effect on performance of MFIs because people have enough knowledge about the domain of MF programs.

Findings on the occupied positions of respondents, from the table above 7% of them were Branch Managers, 18% were Management committee members, 32% were credits officers, 30% were credits committee members, 7% were internal auditors and 6% were accountants. According to their experience on occupied position findings from the table above, showed that 51 % of the respondents were less than 5 years experienced, 49% were 6 to 10 years experienced in working with MF institutions. This means that the respondents were able to give relevant answers based on their occupied position even if the experience of many was less than 5 years in microfinance domain (51%). This is due to the fact that a many MFIs and SACCOs were newly created (in 2004-2006 for MFIs and in 2008 for SACCOs) with new staff too (RMF, 2008).

Findings on the legal status of organizations, findings showed that 57% were Microfinance Institutions (MFIs), 45% of were Savings and Credits Cooperatives (SACCOs), and 4% were NGOs. Findings on the geographic location also showed that 64% of them were located in urban area while 36% were located in rural area and according to the activity funded; findings showed that 55% of funds were put in business activities, 23% in agriculture and 22% in construction. This is explained in that many of these institutions are financing business activities which are generally operated in urban area than in rural area. Most of them are located in town areas than in rural and consequently financing urban clients where they are located.

These findings are supported by the findings of Anne-Lucie Lafourcade,(2005) by which she explained that lower profitability of some of African MFIs was due to that many them work in rural areas, where low population density and weak infrastructure result in high operating costs which do not cover the high operating expenses.

The Level of Credit Management

The second objective of this study was to determine the level of credit management in the institutions under study.

This component was conceptualized into 54 questions. All questions were rated using a four rate, where 1= Very low, 2 = low, 3= High, 4 = Very high.

Their responses were analyzed using SPSS through the means and for their interpretation, the following numerical values and descriptions were followed.

Table 4A

Level of Credit Management (n= 111)

Indicators of credit management	**Mean**	**Interpretation**	**Rank**
Credit management Policies			
The personnel is familiar with those policies and guidelines	3.90	Very high	1
The loan agreements are properly structured and documented	3.79	Very high	2
Credits are managed & monitored with respect to stipulated written credit policy	3.72	Very high	3
There are covenants to demand for payment of loan when conditions for payment have deteriorated	3.68	Very high	4
There is a methodology and eligibility criteria to evaluate creditworthiness, collateral policy and structure of loan payment	3.64	Very high	5
The organization have a written credit policy for each step of the credit process	3.62	Very high	6
The assessment of the screening process terms for outreach is done effectively	3.51	Very high	7
There are guidelines and policies strictly followed for regularly loan disbursement	3.46	Very high	8
A maximum loan size and limit exist and is based on equity and credit product	3.45	Very high	9
There are appropriate loan security requirements and monitoring procedures	3.40	Very high	10
The management regularly obtains information about debt level among the organization's client	3.36	Very high	11
The institution has internal control and audit system in place	3.31	Very high	12
The Institution has stable interest rates charged on clients to avoid defaults cases in the last three years.	3.19	High	13
Average Mean	**3.54**	**Very high**	
Loan Apraisal			
Character issues including the clients, household stability and support as well attitude towards credit repayment credit history are considered	3.90	Very high	1
Interviews by loan officer are required for all new loans	3.82	Very high	2
Assessment is done of the client's willingness and his ability to repay loan	3.81	Very high	3
Borrower evaluation is done on the based on details like the repayment record, social status, acquaintance, employment status, recommendations and collateral	3.61	Very high	4
A third party review loan analysis and documentation to ensure that it adhere to a documented policies and procedures	3.52	Very high	5

Source: Primary Data, 2012.

Table 4B

Level of Credit Management (n= 111)

There is someone who reviews disbursement documentation to ensure compliance with policies and procedures	3.51	Very high	6
Business aspects including financial performance, the market, management capability etc are also considered	3.47	Very high	7
Before the lend disbursement the MFI should ensure all conditions are fulfilled; loan agreement, collateral, guarantors commitment, proper recording	3.34	Very high	8
Loan Portfolio management			
Average Mean	**3.62**	**Very high**	
The repayment rate have been maintained at more than 90% in the 3 last years	3.81	Very high	1
Your personnel is well qualified and trained to evaluate true repayment capacity of a borrower and monitor credits when given	3.79	Very high	2
My organization conducts on site visits and regular contact with clients	3.73	Very high	3
The institution have a provision policy for doubtful accounts bad debts	3.70	Very high	4
My organization uses the classification of the portfolio according to performance to handle the credit risk	3.69	Very high	5
There are clear credit policies to prevent delinquency	3.67	Very high	6
Sensitization of clients is one of the strategies used to prevent delinquency	3.54	Very high	7
The level of delinquency is maintained at less than 5% of the total portfolio	3.54	Very high	8
The institution maintained its portfolio at risk at less than 10% in the 3 last years	3.52	Very high	9
My organization manages and reviews clients files, documents, and collated securities	3.51	Very high	10
My institution uses portfolio in arrears or portfolio at risk in monitoring performance	3.46	Very high	11
In monitoring performance my institution uses repayment rate	3.42	Very high	12
My organization uses monitoring of the portfolio performance to handle the credit risk	3.39	Very high	13
The institution insures its risk through insurance companies	3.38	Very high	14
Strong measures for late payments and default were set to prevent delinquency	3.36	Very high	15
To deal with delinquency my institution uses community/peer pressure	3.36	Very high	16
To deal with delinquency my institution confiscates the collateral	3.35	Very high	17
My institution applies legal process (last resort) To deal with delinquency	3.33	Very high	18

Source: Primary Data, 2012.

Table 4C

Level of Credit Management (n= 111)

My organization conducts credit audit or asset review to assess portfolio quality	3.30	Very high	20
My organization ensures that the credit is orderly and fully repaid	3.23	High	21
The institution have a credit control manual or policy	3.23	High	22
The Institution have different strategies and techniques to prevent and deal with delinquency	3.18	High	23
Board, staff, committees and supervisors are regularly trained on loan appraisal and monitoring	3.09	High	24
My Institution use outreach ration to monitor performance	2.90	High	25
In my institution, growth ratios are used to monitor performance	2.90	High	26
My institution strengthens the security system (guarantee, compulsory savings and collateral etc) prevent delinquency	2.77	High	27
To deal with delinquency my institution uses restructuring or refinancing	2.76	High	28
In monitoring performance my institution uses write-off	2.65	High	29
To deal with delinquency my institution considers rescheduling	2.57	High	30
Client rating system is used to prevent delinquency	2.43	Low	31
Write off is used to deal with delinquency in my institution	2.20	Low	32
Incentive package for on-time repayment is offered to prevent delinquency	2.00	Low	33
Average Mean	**3.21**	**High**	
Grand Mean	**3.45**	**Very high**	

Source: Primary data, 2012

Legend:	**Mean Range**	**Response Mode**	**Interpretation**
	3.26-4.00	Strongly agree/Very well	Very High
	2.51-3.25	Agree/ Well	High
	1.76-2.50	Disagree / Poor	Low
	1.00-1.75	Strongly disagree/Very poor	Very Low

The table 4 presents the means of the Likert scores from the questionnaire on the level of credit management. They were ranked from top to bottom from 1st to 13th based on the mean score for each index on the credits management policies, 1^{st} to 8^{th} on loan appraisal and 1^{st} to 33^{rd} on Portfolio quality management.

Credit Management Policies

Based on the Likert analysis, almost all respondents strongly agree that most of their institutions have and strictly respect the credit management policies, guidelines, that they have methodology and eligibility criteria to evaluate creditworthiness, collateral policy and structure of loan payment and that documents and loan agreements are followed before loan disbursement. They agreed that credits are managed and monitored with respect to the stipulated written credit policy.

Their average means (3.54) range between 3.9 and 3.31; meaning that most of studied MFIs very highly have and respect management credit policies. On the Likert scale, twelve indices (from 1 to 12) proved to be very high, while the last indice (13) proved to be high with the means ranging of 3.19 (between 3.25 and 2.51) on the Likert scale.

Loan Appraisal

The means from table 4, show that respondents strongly agreed that in credit appraisal they consider character issues including the clients credit history, household stability and support as well as attitude towards credit repayment are considered in loan appraisal. Interviews by loan officer are required for all new loans, assessment is done of the client's willingness and his/her ability to repay the loan, loan analysis and documentation are reviewed to ensure that it adhere to a documented policies and procedures, before the lend disbursement the MFI should ensure all conditions are fulfilled. The borrower evaluation is done and basing on the repayment record, social status, acquaintance, employment status, recommendations and collateral, business aspects including financial performance, management capability etc.

Their average means (3.62) range between 3.9 and 3.31; meaning that in most of studied MFIs loan appraisal is done on a high level and borrowers' evaluation is done assess the client's willingness and his/her ability to repay the loan. On the Likert scale, all the 8 indices (from 1 to 8) proved to be very high.

Portfolio Quality Management

In the table 4 above the findings revealed that, on the portfolio quality management the majority of respondents strongly agreed that the repayment rate have been maintained at more than 90% in the 3 last years, that their personnel (board, staff, supervisors and committees) is well qualified and regularly trained to evaluate true repayment capacity of a borrower and on loan appraisal and monitoring credits when they are given. Most of respondents strongly agreed that the following strategies are used by their institutions to prevent delinquency: Clear credit policies (3.67), sensitization of clients (3.54), strong measures for late payments and default (3.36). They disagree using client rating system (2.43) and incentive package for on-time repayment (2.00).

To deal with delinquency the respondents strongly agree that the studied institutions use these techniques: community/peer pressure, confiscate the clients' collateral, apply legal process (last resort), or conduct on site visits and regular contact with clients and have a provision policy for doubtful accounts bad debts use. The respondents disagree using the write off technique in dealing with delinquency. They strongly agreed that their organizations use the classification of the portfolio according to performance to handle the credit risk, sensitization of clients is one of the strategies used to prevent delinquency and that they manages and reviews clients files, documents, and collated securities.

The strong measures for late payments and default were set to prevent delinquency, clients files, documents, and collated securities are regularly managed and reviewed and their institutions insure their risks through insurance companies.

The institutions have maintained the level of delinquency at less than 5% of the total portfolio and its portfolio at risk at less than 10% in the 3 last years. In monitoring performance, respondents agreed that their institutions uses ratios like portfolio in arrears (Delinquency) or portfolio at risk, repayment rate and outreach ratio to monitor performance growth ratios are used to monitor performance.

To get a summary picture on the level of credit management, an average index was computed for all the 53 items in table 4 above, which turned to have a mean index of 3.54 confirming that the level of credit management in selected institutions is very high.

These findings are supported by Reed and Gill (1989:252-258), who argued that, since lending is important both to the bank and to the community it serves, loans policies must be worked out carefully after considering many factors such as the character, will and repayment capacity of the borrower, techniques and strategies on preventing and dealing with delinquency, a provision policy and insurance for doubtful accounts and defaults etc.. According to Reed and Gill (1989:264), after either loan/credit policy has been formulated, provision for its proper execution must be made. Some individual must carry out loan policy, and some provision should be made for its periodic review and evaluation to make changes, it should be known that the loan policy acts as a guide to lending and not straightjacket.

Pantoja (2002, p. 30), also support these findings arguing that while inadequacies continue to exist, an increasing number of MFIs are making efforts to improve some of their risk management practices.

The third objective was to establish the extent of Financial Performance of microfinance institutions in Nyamagabe District. This was measured by 12 questions asked to respondents where they were required to rate them using a four rate where 1= strongly disagree, 2= disagree, 3= agree, 4= strongly agree.

Responses were analyzed using means and for their interpretation, the following numerical values and descriptions were followed:

Table 5

Extent of Financial Performance (n= 111)

Indicator of performance of MFIs	**Mean**	**Interpretation**	**Rank**
Profitability			
The institution's net profit has been improving during the 3 last years	3.92	Very high	1
The Institution's assets have been able to bring profits in 3 last years	3.76	Very high	2
The institution's fixed assets have been increasing in the last 3 years	3.63	Very high	3
The Institution will have the financial resources to continue serving members and clients t	3.57	Very high	4
Your clientele (outreach) and number of active clients has increased during 3 last years	3.52	Very high	5
Institution makes sure that the use of funds generates more revenues than cost of funds.	3.49	Very high	6
The institution's profits on assets are among the best in their industry	3.37	Very high	7
Average Mean	**3.60**	**Very high**	
Efficieny and productivity			
The cost per borrower is maintained on the low level due to the economies of scale	3.87	Very high	1
The number of borrowers have been increasing in these 3 years	3.81	Very high	2
The Institution generate sufficient revenue to cover its operating costs	3.55	Very high	3
The organization realize the high level of efficiency in its operating expenses/costs	3.49	Very high	4
The Institution has the ability to operate and expand without subsidies	3.32	Very high	5
Average Mean	**3.60**	**Very high**	
Grand Mean	**3.60**	**Very high**	

Source: Primary data, October 2012

Legend: Mean Range	**Response Mode**	**Interpretation**
3.26-4.00	Strongly agree	Very High
2.51-3.25	Agree	High
1.76-2.50	Disagree	Low
1.00-1.75	Strongly disagree	Very Low

Profitability in studied MFIs

In the table 5 above the findings on profitability revealed that most of respondents strongly agreed that the institutions' profits have been increasing in the past three years (3.92); that their fixed assets have been increasing (3.76) and generated some profits (3.63) in the three last years, that the institutions had enough financial resources to continue serving members and clients in the future (3.57), and the clientele (outreach) and number of active clients has increased during the three last years and this has affected their general performance.

The Institutions make sure that the use of funds generates more revenues than the cost of funds and to maintain their revenues in the best of the industry.

The findings were pursued to ascertain whether the institution's net profit has been improving compared to other institutions within the same industry and results as shown in the table 5, show that most of respondents strongly agreed that the institution's net profits have been improving compared to other institutions with in the same industry (3.37).

Efficiency and productivity

On the extent of efficiency and productivity findings revealed that, the cost per borrower is maintained on the low level due to the economies of scale (3.87), the number of clients has been increasing in the three last years (3.81), the institutions are in a position to generate sufficient revenue to cover their operating costs (3.55), the organizations realize the high level of efficiency in their operating expenses/costs (3.49) and the institutions have the ability to operate and expand without subsidies (3.32).

Their average means (3.60) range between 3.9 and 3.31; meaning that most of studied MFIs realize a high level of efficiency and productivity. On the Likert scale, all the 5 indices (from 1 to 5) proved to be very high.

The table 5 presents the means of the Likert scores from the questionnaire on the extent of financial performance of microfinance institutions. They were ranked from top to bottom from 1st to 7th based on the mean score for each index the profitability, 1^{st} to 5^{th} on efficiency and productivity.

To get a summary picture on the extent of financial performance (profitability, efficiency and productivity), an average index was computed for all the 13 items in table 5 above, which turned to have a mean index of 3.60 confirming that the extent of financial performance in selected microfinance institutions is very high.

This is supported by the findings of GTZ by which says that the effective management of credit risk is critically important for MFIs because they depend excessively on interest income from loans, and loans are their main asset. High administrative costs also make MFIs more vulnerable to defaults (GTZ 2000, p. 5).

Karen Doyle supported these findings saying that there is strong positive correlation between financial performance and the asset utilization and operational. Her study also came out with a range of perspectives on the factors affecting the outreach and performance of MFIs under study where she added that inappropriate loan security requirements were among the factors affecting the outreach and performance of MFIs and SACCOs (Karen Doyle, Jerry Black (2001).

Relationship between Credit Management and Financial Performance of MFIs

The fourth objective was to establish the relationship between Credit Management and Financial Performance of microfinance institutions in Nyamagabe District, Rwanda. It was hypothesized that there was no significant relationship between Credit Management and Financial Performance of microfinance institutions. In order to test this hypothesis, the Pearson's Linear Correlation Coefficient (PLCC) was used.

Table 6

Correlation between the Level of Credit Management and Financial Performance

Variables Correlated	Mean	Computed value	Sig-value	Interpretation of Correlation	Decision on Ho
Financial performance of Microfinance Institutions	3.60	0.498	0.009	Significant correlation	Rejected
Credit Management	3.45				

Source: Primary data, 2012.

The r-value (r= 0.498, sig= 0.009) in table 6 indicated that there is a significant correlation between the level of credit management and the extent of financial performance in microfinance institutions in Nyamagabe district. The significant value indicates that the two variables (level of credit management and the extent of financial performance) are significantly correlated (significance (0.009) is less than 0.05, which is the maximum significance value to declare a significant relationship).

The null hypothesis of no significant relationship between credit management and the financial performance of Microfinance Institutions in Nyamagabe District was rejected.

These findings are in agreement with Ssewagudde (2000), who asserts that when a bank strategy, credit policy, procedures and directives have been carefully formulated and administered from the top and well understood by all organizational levels, it enables the bank or any financial institution to maintain proper credit standards, avoid excess risk and evaluate business opportunities properly which help it to achieve a high level of financial performance.

Table 7

Regression Analysis between credit management and financial performance of microfinance institutions

Variables regressed	**Adjusted square(R^2)**	**F-Value**	**Sig**	**Interpretation**	**Decision on Ho**
Financial Performance of Microfinance Institutions Vs Credit Management	0.248	3.305	0.009	Significant effect	Rejected

Source: Primary data, 2012.

The r^2-value (r^2 = 0.248, sig= 0.009) in table 7 indicated that the independent variable significantly affects the dependant variable (F=3.305, sig =0.009). This therefore confirms that there is a relationship between the credit management and financial performance of selected microfinance institutions in Nyamagabe District.

The high or low level of credit management increases or decreases the extent of financial performance accordingly.

These result indicates also that 24.8 % (R^2 =0.248) of the dependent variable; financial performance of microfinance institutions; is explained by the independent variable; credit management. The rest is a contribution of other factors which are not included in this study.

CHAPTER FIVE

FINDINGS, CONCLUSIONS, RECOMMENDATIONS

Findings

This chapter gives a brief summary of findings of the present research. A conclusion and recommendations accordingly to the results are given and a set of topics for further researches is proposed at the end of the study.

The underlying objective of this study was to identify the demographic characteristics of the respondents in terms of gender, age, occupied position and number of years working experience and the level and area of education; to determine the level of credit management in the selected Microfinance institutions under study; to determine the extent of financial performance of microfinance institutions under study and to establish the relationship between credit management and financial performance of microfinance institutions in Nyamagabe District.

Under objective 1: To determine the profile of the respondents:
The researcher found that the majority of the respondents are females (77%), with age between 31 and 40 years (84%).
They have bachelors level of education (61%), especially in accounting (80%) and the majority of the respondents are 1 to 5 years experienced in managing microfinance institutions.
Many of the respondents are credits officials (credits officers and members of credits committee) (62%). Many of the studied institutions are working in urban area and fund the business activities.

Under the second objective: to determine the level of credit management in micro- finance institutions under study, findings revealed that the majority of respondents strongly agree that the credit management in studied microfinance institutions is on a very high level, as there is existence and strict application of the credit management policies and guidelines with the mean of 3.54. There are methodology and eligibility criteria to evaluate creditworthiness of the borrowers, appropriate loan security requirements and monitoring procedures for all institutions and they have internal control and audit system in place. Findings showed that loans are well appraised in most of those MFIs with the mean of 3.62 and the portfolio quality is well managed by appropriate techniques to prevent and manage delinquency when it appears (mean = 3.21).

Under the third objective: To determine the extent of financial performance of microfinance institutions under study: The results discovered that the majority of respondent strongly agree that the level of profitability in Microfinance is very high with the average mean of 3.60. As showed by findings, their profits, assets and clients were increasing for the three last years, they were operating efficiently and with productivity of their resources.

Under objective 4: To establish the relationship between credit management and financial performance of microfinance institutions: The Pearson's correlation coefficient indicates that there is a significant relationship between credit management and financial performance of microfinance institutions. Where (F=3.305, sig =0.099).

The study findings revealed that credit management in Microfinance Institutions contribute in increasing the extent of profitability, efficiency and productivity. This therefore confirms that there is a relationship between the credit management and financial performance of selected microfinance institutions in Nyamagabe District. The high or low level of credit management increases or decreases the extent of financial performance accordingly.

These results indicate also that 24.8 % of the financial performance of microfinance institutions is determined by the credit management.

Conclusions

Based on the findings from this study, the researcher made the following conclusions:

The findings in chapter above showed that there is a significant relationship between credit management and financial performance of microfinance institutions in Nyamagabe District. The null hypothesis was rejected.

Also, the modern theory of financial intermediation, described by Bhattacharya and Thakor (1993) is proved in this study in the sense that the credit management determine the level of efficiency and influence the financial performance of microfinance institutions. Thus proper credit management policies, loan appraisal and portfolio quality management contribute to achieve the higher performance of microfinance institutions by increasing profitability, efficiency and productivity.

The study was able to bridge the gaps identified in the previous studies. In this regard, credit management can predict the financial performance of microfinance institutions. This can undoubtedly help managers and investors in those MFIs ensure that credits management affects their activities by increasing or decreasing the financial performance of microfinance institutions.

Recommendations

These recommendations are arisen from the findings and conclusions of this study, following the study objectives and questions:

MFIs could diversify geographically to reach rural areas where are located a lot of people of low income. It is the role of government and the NBR to stimulate and develop rural financial markets by providing MFIs with loan guarantees and/or donorsourced credit lines to lend more to poor people located in rural area and who are the target clients of MFIs.

MFIs should multiply techniques for improving credit management for example by giving incentives packages to clients who paid regularly or to the staff to promote a sens of responsability

Donors and governments should focus on improving the legal and regulatory framework, especially with regard to improving contract enforcement, an expressed concern of many surveyed.

As many MFIs are located in the same urban area financing business activities, they keep competing for the same clients and many are not able to keep performing for the long run. They are recommended to diversify their areas, clients and types of funded activities for keeping them competitive.

Suggestion for further research

The research invites all interested persons to bring their contribution in this domain.

He suggests that research should be done on the influence of geographic location on the performance of financial institutions;

Personnel productivity and performance of MFIs;

The influence of accountability on the profitability of financial institutions in developing countries.

REFERENCES

BOOKS

Adams and Frechett, (1992), *Formal Financial banking in low income countries* : West view press, Boulder Colorado.

Aklilu, Y. (2002), *The Importance of Micro Finance Institutions in Developing Economies: Country Experience and Policy Implications to Ethiopia*, NBE Staff.

Amin, E.M. (2005). *Social sciences research: conception, methodology and analysis,* (1st ed.), Kampala: Makerere Universty.

Anne-Lucie Lafourcade. (2005), *Overview of the Outreach and Financial Performance of Microfinance Institutions in Africa,* April 2005.

Beckerman, W. (2002), *A poverty of reason: Sustainable development and economic growth. Independent Institute.*

BENSTON G.W., C.W. SMITH (1976), *"A transaction cost approach to the theory of financial intermediation"* The Journal of Finance, Vol. XXXI (1), pp. 215-231

Castello, S. (2004), *Innovative Technologies in Microfinance for Latin America: Building Effective Delivery Channels.*

Christen, R. and Pearce, D. (2005, August), *Managing Risks and Designing Products for Agricultural Microfinance: Features of an Emerging Model,* Occasional Paper 11. Washington, D.C.: CGAP.

Comptroller, (1998), *Loan Portfolio Management.*

Conning, J. (1997), "*Joint liability, peer monitoring, and the creation of social, capital*, Williams College, Williamstown.

capital, Williams College, Williamstown.

Cull R., A. Demirguc-Kunt and J. Morduch (2007), *Financial Performance and Outreach: A Global Analysis of Leading Microbanks*, Economic Journal, February 2007

Devaney, P. I. (2006), *Microsavings Programs: Assessing Demand and Impact A Critical Review of the Literature, A report prepared for the IRIS Center for the Assessing the Impact of Innovation Grants in Microfinance.*

DIAMOND D. (1984) *"Financial Intermediation and Delegated Monitoring"*, Review of Economic Studies 51, pp. 393-414

Dichter, T. (2007, February 17), *A Second Look at Microfinance: The Sequence of Growth and Credit in Economic History.*

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ). 2000. *A Risk Management Framework for Microfinance Institutions*. Frankfurt: GTZ.

Hall, J. and Lal, A. (2005), *How MFIs and their Clients can have a Positive Impact on the Environment*.

John, A. W. (2002), *Organisational Behavior*, Michigan, USA , pp.16

Otero, M. and E. Rhyne (1994), *The New World of Micro enterprise Finance*, Hartford, Kumarian Press.

Pantoja, Enrique., (2002), *Microfinance and Disaster Risk Management: Experience and Lessons Learned*. Washington, DC: Provention Consortium.

Prahalad, C.K. 2005, *The fortune at the bottom of the pyramid: Eradicating poverty through profits,* Upper Saddle River, NJ: Pearson Education, Inc., publishing as Wharton School Press

Rainey, D.L. (2006), *Sustainable Business Development: Inventing the Future through Strategy, Innovation, and Leadership*, New York, USA: Cambridge University Press.

Rhyne, E. (1998), *The Yin and Yan of Microfinance: Reaching the Poor and Sustainability*.

RMF, (2007), *Annual Report, 2007*, Rwanda.

Rose, H. (2010), *Bank Management and Financial Service*, international edition, New York,2010.

Ssewagudde (2000), *Financial credit availability and management,* Upper Saddle River, NJ: Pearson Education, Inc., publishing as Wharton School Press.

Shah, D. P., (1999), *ADBN and its experience in rural and microfinance attitude and Development* , XIII(2): 133–147.

Srinivasan R. and Srivam, M.S (2006), *Microfinance in India: Discussion, HMB Management Review*, pp.66-86.

Thakor, A. – *"Contemporary Financial Intermediation", 2nd ed. Elsevier Academic Press,* 2007, p. 43.

Von-Pischke, J.D. (1989), *Risk: The Neglected Dimension in Rural Credit Projects. Savings ,* Washington D.C.

Woller, G.M. (2002), *From market failure to marketing failure: Market orientation as the key to deep outreach in microfinance,* Journal of International Development .

Zhu, A.(2004), *Information network technology in the banking industry. Industrial Management & Data Systems*, pp. 409-417.

JOURNALS

BNR, (2008), *Review of Monetary Policy and Financial Sector Developments in 2007And Monetary Policy Guideline 2008*, Rwanda.

Brown, W. et al. (2000c, December), *A Cautionary Note for Microfinance Institutions and Donors Considering Developing Microinsurance Products,* MBP Review Paper Bethesda, MD: Development Alternatives, Inc.

Cohen, B, and Winn, M.I. (2005), *Market imperfections, opportunity and sustainable Entrepreneurship",* Journal of Business Venturing, 22:26-49.

Kyereboah (2007), *The impact of capital structure on the performance of Microfinance Institutions*, journal of risk finance vol.8 No. 1 2007.

Karen D. and Jerry B. (Spring 2001), *Performance Measures for Microenterprise in the United States*, Journal of Microfinance Vol.3 No.1

Meyer, R. L. (2002), *Track Record of Financial Institutions in Assisting the Poor in Asia,* ADB Institute Research Paper. No 49, December 2002.

MINECOFIN, (2007), *National Microfinance Policy Implementation Strategy (2008-2012)*, 2007.

Morris, J.2001, *Risk Diversification in credit portfolio: an overview of country practices, IMF working paper, International monetary Fund*, Washington,D.C

Sharma, S. R. and Nepal, V., 1997, *Strengthening of Credit Institutions /Programs, for rural poverty alleviation in Nepal*, United Nations, Economic and Social Quarterly Development Review, vol. XVI, no. 20, November.

Online Resources

Bouma, J., Sheffield, Greanleef publishing (2001), *Sustainable Banking:The Greening of Finance: http://www.sustainability-in-finance.com/recensie-sb3.pdf.*

Consultative Group to Assist the Poor (CGAP), (2006, October), *Good practice guidelines for funders of microfinance http://www.cgap.org/docs/donorquidelines.pdf* Washington, DC: CGAP.

Feiner, S. and Barker, D. (2007, January 17), *Microcredit and Women's Poverty: Granting this year's Nobel Peace Prize to microcredit guru Muhammad Yunus affirms neoliberalism,* http://www.dominionpaper.ca/articles/935.

Forum for the Future, (2002), *Financing the Future: The London Principles of Sustainable Finance. http://www.forumforthefuture.org.uk/.* Morduch, J. (2000, April), *The Microfinance Schism, World Development* 28(4): 617- 629.

http://www.microcreditsummit.org/papers/Workshops/24_HallLal.pdf

(http://www.microbanking-bulletin/2011/05/microfinance-efficiency).

USAID. (2005, January), *Case study on profitability of microfinance in commercial banks, http://pdf.dec.org/pdf_docs/PNADD679.pdf*

APPENDIX I A

TRANSMITTAL LETTER FROM CHDR

KAMPALA INTERNATIONAL UNIVERSITY

EXPLORING THE HEIGHTS

Ggaba Road - Kansanga
P.O. Box 20000, Kampala, Uganda
Tel: +256 - 414 - 266813 / +256 - 772 - 322563
Fax: +256 - 414 - 501 974
E-mail: admin@kiu.ac.ug
Website: www.kiu.ac.ug

OFFICE OF THE HEAD OF DEPARTMENT, ECONOMICS AND MANAGEMENT SCIENCES
COLLEGE OF HIGHER DEGREES AND RESEARCH (CHDR)

Date: 23. July. 2012

RE: REQUEST FOR KALISA CALLIXTE MBA/43710/92/DF TO CONDUCT RESEARCH IN YOUR ORGANIZATION

The above mentioned is a bonafide student of Kampala International University pursuing Masters of Business administration.

He is currently conducting a research entitled" **Credit Management and Financial Performance** of micro finace institutions inNyamagabe district,Rwanda."

Your organization has been identified as a valuable source of information pertaining to his research project. The purpose of this letter is to request you to avail him with the pertinent information he may need.

Any information shared with him from your organization shall be treated with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.

Yours truly,

Mr.Malinga Ramadhan
Head of Department,
Economics and Management Sciences,(CHDR)

NOTED BY:
Dr. Sofia Sol T. Gaite
Principal-CHDR

"Exploring the Heights"

APPENDIX IB

PERMISSION LETTER TO CONDUCT RESEARCH

VISION FINANCE

NYAMAGABE BRANCH

The coordinator

Business and Management Office

Kampala International University

School of Post Graduate Studies and Research

UGANDA

September, 2012

Dear Sir/Madam,

RE: REQUEST FOR KALISA Callixte, MBA/43710/92/DF

This serves as an approval allocated by our organisation to Mr. **KALISA Callixte,** a master student enrolled in your University, for accessing on any information related to the fulfilment of her academic requirements. He is in good position to conduct her research entitled **Credit Management and Financial Performance of Microfinance Institutions in Nyamagabe District, Rwanda**.

Thank you very much in advance

September 18, 2012

For SAFARI Jacques

Branch Manager of VISION FINANCE

APPENDIX IC

TRANSMITTAL LETTER FOR THE RESPONDENTS

____

Dear Sir/ Madam,

Greetings!

I am a MBA candidate of Kampala International University. Part of the requirements for the award is a dissertation. My study is entitled, **Credit management and financial performance of Microfinance Institutions in Nyamagabe District, Rwanda.** Within this context, may I request you to participate in this study by answering the questionnaires? Kindly do not leave any option unanswered. Any data you will provide shall be for academic purposes only and no information of such kind shall be disclosed to others.

May I retrieve the questionnaire within five days (5)?

Thank you very much in advance.

Yours faithfully,

Mr. Callixte KALISA

APPENDIX II A

FACE SHEET: PROFILE OF THE RESPONDENTS

1. Gender of respondents (Tick in appropriate box)

   Male ☐ Female ☐

2. Age of respondents

A. Below 30 years of age ☐

B. 31 to 40 years of age ☐

C. 41 to 50 years of age ☐

D. Above 50 years of age ☐

3. Highest level of qualification (Tick appropriate box)

   a) Ordinary Level ☐ d) Bachelors level ☐

   b) Advanced Level ☐ e) Masters levels ☐

   c) Diploma Level ☐ Please indicate your area of qualification ....

4. OCCUPIED POSITION IN THE ORGANIZATION (Tick appropriate box)

   A. President of the Management Committee ☐

   B. Branch Manager ☐

   C. Credit committee member ☐

   D. Credit officer ☐

   E. Member of Management committee ☐

   F. Internal auditor ☐

   G. Accountant ☐

5. Experience on present position (Tick appropriate box)

   A. 1 to 5 years ☐

   B. 6 to 10 years ☐

   C. 11 to 15 years ☐

   D. Above 15 years ☐

6. The legal status of your Institutions
   A. A Saving and Credit Cooperative
   B. A Microfinance Institution
   C. A Non Government Organization
   D. Other status

7. The geographic location of your Institution
   A. Urban area
   B. Rural area

8. Activity funded
   A. Business
   B. Agriculture
   C. Construction
   D. others (Please indicate what ....)

APPENDIX II B

QUESTIONNAIRE TO DETERMINE THE LEVEL OF CREDIT MANAGEMENT IN MICROFINANCE INSTITUTIONS

Direction : Please write your rating on the space after each question according to your best answer for your institution. Kindly use the scoring system below: Please rate **4** for **strongly Agree; 3** for **Agree**; **2**. for **Disagree** and **1** for **Strongly Disagree.**

---

a. Credit management policies

Statement	**4** **SA**	**3** **A**	**2** **D**	**1** **SD**
1. The organization have a clear written credit policy for each step of the credit process				
2. There is a methodology and eligibility criteria to evaluate creditworthiness, collateral policy and structure of loan payment				
3. Credit are managed and monitored with respect to the stipulated written credit policy				
4. There are appropriate loan security requirements and monitoring procedures				
5. There are guidelines and policies strictly followed for regularly loan disbursement				

6.The personnel is familiar with those policies and guidelines				
7.The loan agreements are properly structured and documented				
8. The institution has internal control and audit system in place				
9. There are covenants to demand for payment of loan when conditions for payment have deteriorated				
10. There is a maximum loan size and limit based on equity of institution and credit product				
12. The management regularly obtains information about debt level among the organization's client				
13. The assessment of the screening process terms for outreach is done effectively				
14. The Institutions have stable interest rates charged on clients to avoid defaults cases in the last three years.				

b. Loan appraisal

Statement	4	3	2	1
1. Assessment is done of the client's willingness and his/her ability to repay the loan				
2. Borrower evaluation is done on the based on details like the repayment record, social status, acquaintance, employment status, recommendations and collateral				
3.Business aspects including financial performance, the market, management capability etc are also considered				

4.Character issues including the clients credit history, household stability and support as well attitude towards credit repayment				
5. A third party review loan analysis and documentation to ensure that it adhere to a documented policies and procedures.				
6. There is someone who reviews disbursement documentation to ensure compliance with policies and procedures				
7. Interviews by loan officer are required for all new loans or are circumstances where interview is not required				
8. Before the lend disbursement the MFI should ensure all conditions are fulfilled; loan agreement, collateral, guarantors commitment, proper recording in the books of accounts.				

c. **Portfolio Quality management**

Statement	**4**	**3**	**2**	**1**
1. Your personnel is well qualified and trained to evaluate true repayment capacity of a borrower and monitor credits when they are given				
2. How well prepared do you think is your organization to handle the credit risk by using these strategies? (Please rate 1=very Poor, 2= poor, 3 = well and 4= very Well). a. Monitoring of the portfolio performance b. Classification of the portfolio according to performance c. Insuring that the credit is orderly and fully repaid				

d. Conducting on site visits and regular contact with clients e. Conducting of credit audit or risk asset review to assess portfolio quality f. Management and review of clients files, documents, and collated securities				
3.In Monitoring performance the Institution use different measures like these ratios: a. Portfolio in Arrears (Delinquency) or portfolio at risk b. repayment rate c. write-off d. outreach e. growth ratios				
4.The Institution have different strategies and techniques to deal with delinquency				
5. The following strategies are used to prevent delinquency. a. Sensitization of clients b. Clear credit policies c. Strong measures for late payments and default d. Client rating system d. Strengthen the security system (guarantee, compulsory savings and collateral etc) e. Incentive package for on-time repayment				

6. Board, staff, committees and supervisors are regularly trained on loan appraisal and monitoring				
7. To deal with delinquency the Institution use these techniques : a. Community/peer pressure b. Confiscate the collateral c. Consider rescheduling d. Restructuring or refinancing e. Apply legal process (last resort) f. Write off				
8. The institution have a provision policy for doubtful accounts bad debts				
9. The institution insures its risk through insurance companies				
10. The repayment rate have been maintained at more than 90% in the 3 last years				
11. The institution maintained its portfolio at risk at less than 10% in the 3 last years				
12. The level of delinquency is maintained at less than 5% of the total portfolio				
13. The institution have a credit control manual or policy				

APPENDIX II C

QUESTIONNAIRE TO DETERMINE THE LEVEL OF FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS

a. Profitability

Statement	4	3	2	1
1.Our institution's net profit has been improving during the three last years				
2.Our Institution will have the financial resources to continue serving members and clients tomorrow as well as today				
3.The institution's profits on assets are among the best in the same industry				
4.The institution's fixed assets have been increasing in the last three years				
5.The Institution's assets have been able to bring some profits in the last three year				
6.Our clientele (outreach) and number of active clients has increased during the three last years				
7. The Institution makes sure that the use of funds generates more revenues than the cost of funds.				

b. Efficiency and productivity

1. The organization realize the high level of efficiency in its operating expenses/costs				

2. The cost per borrower is maintained on the low level due to the economies of scale				
3. The number of borrowers have been increasing in these 3 years				
4. The Institution is in a position to generate sufficient revenue to cover its operating costs				
5. The Institution has the ability to operate and expand without subsidies				

Appendix III

The Robert V. KREJCIE & D. W. Morgan's formula to determine sample size

EDUCATIONAL AND PSYCHOLOGICAL MEASUREMENT
1970, 30, 607-610

DETERMINING SAMPLE SIZE FOR RESEARCH ACTIVITIES

ROBERT V. KREJCIE
University of Minnesota, Duluth

DARYLE W. MORGAN
Texas A. & M. University

The ever increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population. In the article "Small Sample Techniques," the research division of the National Education Association has published a formula for determining sample size. Regrettably a table has not bee available for ready, easy reference which could have been constructed using the following formula.

$$s = X^2NP(1-P) \div d^2(N-1) + X^2P(1-P).$$

s = required sample size.

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence leve (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximur sample size).

d = the degree of accuracy expressed as a proportion (.05).

No calculations are needed to use Table 1. For example, one may wish to know the sample size required to be representative of the opinions of 9000 high school teachers relative to merit pay increases. To obtain the required sample size enter Table 1 at N = 9000. The sample size representative of the teachers in this example is 368. Table 1 is applicable to any defined population.

The relationship between sample size and total population is illustrated in Figure 1. It should be noted that as the population increases the sample size increases at a diminishing rate and remains relatively constant at slightly more than 380 cases.

REFERENCE

Small-Sample Techniques. *The NEA Research Bulletin*, Vol. 38 (December, 1960), p. 99.

TABLE 1

Table for Determining Sample Size from a Given Population

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note. *N* is population size.
S is sample size.

Appendix IV

Formula for determination of the mean range

Formula : (H-L)/H: where H: (the high indice) is 4

L: (the low indice) is 3

By computing we get: (4-1)/ 4 = 3/4 =0.75

Therefore the mean range is 0.75