Credit Risk, Liquidity Risk and Financial Sustainability of Microfinance Institutions in Uganda

The case of Finca Uganda Ltd, Lira Branch

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DECLARATION

I, **Okello George Candiya Bongomin** declare that this dissertation report is my original work. It has not been submitted to any university, college or school for the award of any degree or diploma.

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2005/HD10/2739U

Date: ----------

APPROVAL

This Research Dissertation Report has been under our supervision as University Supervisors. We approve its submission for examination to Makerere University as a partial fulfilment for the requirements of the award of Master of Science in Accounting and Finance of Makerere University.

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Date: ----------

DEDICATION

This dissertation is dedicated to all those who always treasure and search for the fountain of more knowledge, B.K Bongomin Benjamin (RIP), Mrs Bongomin Aida, Bongomin George Alvin Rubangakene Jr., Emily Aber Sophie and to the entire Bongomin's family.

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Abstract

The study was carried out with the purpose of examining the relationship between credit risk, liquidity risk and sustainability of microfinance institutions in Uganda. The conceptual frame work was based on relevant literature on credit risk, liquidity risk and relating it to sustainability of microfinance institutions.

A cross – sectional survey design combined with descriptive and analytical methods was carried out among a sample of 30 FINCA staff. Purposive sampling method was used to select the sample for the study. Self administered questionnaires were employed to collect data from both FINCA's staff.

The results were analysed using SPSS software. Findings from the study showed that credit risk and liquidity risk predicts 53% of the variance in the general sustainability of microfinance institutions in Uganda. However, the significant contributors to sustainability were repayment rate and default rate, repayment cycle and asset/liability management as measures of credit risk and liquidity risk respectively. On the other hand, asset/liability management and collection policy as measures of credit risk and liquidity risk had negative relationship with sustainability.

Since credit risk and liquidity risk have significant impact on sustainability, MFIs should enforce efficient asset/liability management and collection policy in order to achieve their goal of self – sustainable operations as required by donors.

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LIST OF ACRONYMS

ACCION	American for Community Cooperation in Other Nations
AMFIU	Association of Microfinance Institutions of Uganda
ANOVA	Analysis Of Variance
BoU	Bank of Uganda
BRI	Bank Rakyat Indonesia
CGAP	Consultative Group to Assist the Poor
Fig.	Figure
FINCA	Foundation for International Community Assistance
FSS	Financial Self – Sufficiency
FY	Financial Year
Km	Kilometres
LaR	Loan at Risk
MDIs	Microfinance Deposits taking Institutions
MFIs	Microfinance Institutions
NGOs	Non – Governmental Organisations
OSS	Operational Self – Sufficiency
PaR	Portfolio at Risk
SPSS	Statistical Package for Social Scientists
UGX	Uganda Shillings
USAID	United States Agency for International Development

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Increasing risk has been the main concern of financial sectors' lending Campion, (2001). Maintaining sound financial viability and a growing base of financial resources and outreach has been neither easy nor risk free for microfinance institutions in Uganda (BoU, 2004). Micro financing is the provision of financial services (credits and savings) to the smallest enterprises so as to release financial constraints and help alleviate poverty (Otero, 2001). MFI's have been venerable to risk inherent in their operations (Adongo & Christoph, 2005).

In particular, risk is the variability that is likely to occur in the future returns from investment in a project and consequently, it becomes difficult to make any correct predictions about the future cash flow sequence (Olsson, 2002). The largest risk for any financial institution resides in the loan portfolio (CGAP, 2001). Increasing lending by MFIs has exposed them to risk, more importantly to credit risk and liquidity risk which has hindered their ability to conduct on going business on self – sustainable basis, as competition for borrowers rises (Otero, 2001). These risks are due to information asymmetry (adverse selection/moral hazard) between the lender and borrower.

Credit risk is the default in repayment by borrowers (Crab & Keller, 2004). It is the risk associated with uncertainty of loan repayment for the interest and principal, and a possibility that the borrowers will fail to honour obligations as agreed with the microfinance institutions (Bruett, 2004). Most micro – loans are not secured by tangible assets that can be seized or sold easily in case of

default. A micro – loan is typically considered to be at risk if a payment on it is more than 30 days late (Christen & Drake, 2002). This poses a threat to MFIs' sustainability.

Liquidity risk arises as a result of insufficient cash and inability of an institution, to quickly liquidate assets in the most limited time and without incurring unacceptable losses when their obligations fall due (Basel, 2006). There must be enough liquidity to meet MFIs obligations to disburse loans to borrowers, to repay loans to its creditors and meet withdrawals on demand (Bhatt, 2001). Provisioned loans, which are past due and are not paying interest as scheduled, have a negative impact on interest income which is always a boost to liquidity level of MFIs (Pissari & Gray, 2003).

Financial sustainability is the ability of a MFI to cover all its costs (Marco Elia, 2005). A microfinance institution is said to be sustainable if it can profitably continue providing commercially based loan finance to micro – enterprises on an acceptable scale in the absence of resources provided on concessional (subsidised) terms or as grants (Lapenu, 1998). Sustainability is the ability of microfinance institutions to cover both direct costs and indirect costs with operating revenue (Khandker, & Khan, 1994). Risks influences the emergence of self – dependent microfinance institutions, especially their development into self – sustaining commercial microfinance institutions capable of reaching growing numbers of poor population and financial self – reliance (Diagne, Simtowe & Mataya, 2000).

Microfinance institutions always have put in place credit policy to reduce on credit risk and proper asset/liability management to enhance its operations (Von Pischke, 1988).

Founded in 1992, FINCA Uganda Ltd an affiliate to FINCA International has provided microfinance services to economically active poor for more than a decade (FINCA Report, 2003). In FY 2000, FINCA Uganda Ltd opened more branches in the rural areas significantly increasing its rural outreach to help families increase their house hold incomes by implementing solidarity group lending, provision of small working capital inform of loans especially to women, and implements a saving culture so as to guarantee the loan and also to inoculate the habit of savings (Kasi, 2003). However, little success has been made as the number of loans written – off increased from 65 to 118 in 2004 and 2005 respectively at FINCA Uganda Ltd, Lira Branch (BOU, 2005). More so the liquidity ratio dropped from 31% to 26% in 2004 and 2005 respectively (AMFIU, 2005). Effective repayment rate also fell from 9.85% to 7.74% in 2004 and 2005 respectively, showing a decline in repayment at the same branch (FINCA Annual Report, 2004 & 2005).

1.2 Statement of the Problem

Although FINCA Uganda Ltd has implemented prudent lending policy since its inception in 2002, the loan portfolio has grown from 19% to 21% between 2004 and 2005 respectively, while the repayment rates have declined from 9.85% in 2004 to 7.74% in 2005 (FINCA Status Report, 2005). Evidence on the ground also indicates a decline in cash available for operations from UGX 738.5 Million to UGX 612.3 between 2004 and 2005 respectively (FINCA

status Report, 2004 & 2005). All these threaten the firm's financial sustainability. It is suspected that the above scenarios are attributed to way risk is managed. This therefore prompted the researcher to investigate the effect of credit and liquidity risk on financial sustainability of microfinance institutions.

1.3 Purpose of the Study

This study sought to examine the relationship between credit risk, liquidity risk and sustainability of MFIs in Uganda with the case of FINCA Lira branch.

1.4 Objectives of the Study

i) To examine the relationship between credit risk and loan portfolio of MFIs
ii) To examine the relationship between credit risk and sustainability of MFIs
iii) To examine the relationship between liquidity risk and loan portfolio of MFIs
iv) To examine the relationship between liquidity risk and sustainability of MFIs
v) To find out the relationship between loan portfolio and sustainability of MFIs

1.5 Research Questions

i) What is the relationship between credit risk and loan portfolio of MFIs?
ii) What is the relationship between credit risk and sustainability of MFIs?
iii) What is the relationship between liquidity risk and loan portfolio of MFIs?
iv) What is the relationship between liquidity risk and sustainability of MFIs?
v) What is the relationship between loan portfolio and sustainability of MFIs?

1.6 Scope of the Study

- **Subject Scope**

  The study examined the relationship between credit risk, liquidity risk and loan portfolio and sustainability of MFIs in Uganda.

- **Geographical Scope**

  The study was carried out in Lira district in northern Uganda, at FINCA Uganda Ltd.

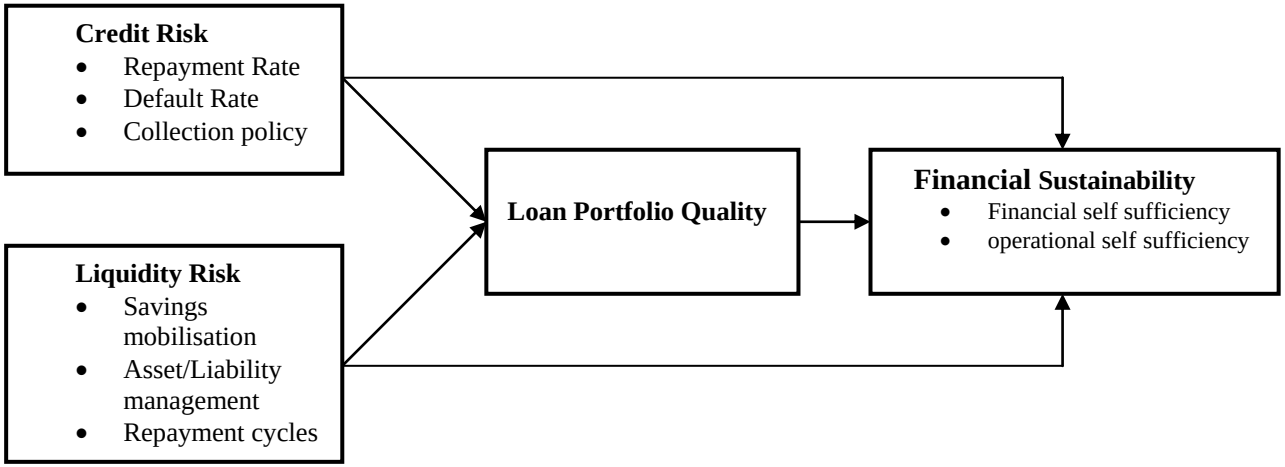
1.7 Significance of the Study

i) The study is expected to add more knowledge to the already existing literature on credit risk, liquidity risk and sustainability of MFIs.
ii) The study is expected to enable the identification of credit risk, liquidity risk levels that is critical for better sustainability of MFIs.
iii) MFI used as a case study, will benefit from this research by improving on its credit risk and liquidity risk management thus long – term sustainability.

1.8 Conceptual Frame Work

The conceptual frame work was adopted from extensive review of the existing literature as illustrated in Figure 1. The model explains the relationship between the variables under the study. It describes credit risk, liquidity risk (independent variable) and sustainability (dependent variable). Zeller & Meyer (2002) argues that an increase in the duration along with irregular repayment schedules may increase probability of default. Bruett (2004) further states that liquidity levels of microfinance institutions are determined by the quality of assets that they hold. Therefore, considering the model, microfinance operations is not sustaining if loan repayment is irregular. Sustainability allows MFIs to expand their operations and increase the level of outreach (Drake & Rhyne, 2002). Campion (2001) contends that MFIs needs funds to meet customers' daily withdrawals needs and loan request. If liquidity is not enough to meet these needs then an MFI faces liquidity risk.

Figure 1: *Conceptual Frame Work:*



Source: Developed from Campion, 2001, Niamh, 2001, Jansson, 1997, Adongo & Stork, 2005, Pissari, 2003, Bruett, 2004, Christen & Robert, 2002, Chaves & Gonzalez – Vega, 1994, Llanto, 2001, Mirza, 2006, Zeller & Meyer, 2002, Drake & Rhyne, 2002, Garber, 1997, Crabb, 2006, Schreiner, 2001.

1.9 About FINCA

FINCA Uganda Ltd is one of the five affiliates of FINCA International Incorporation. It started its operations in 1992 following a mission of providing empowering microfinance services within Uganda's poorest communities – particularly women – under positive social interactions through highly motivated staffs. It has served more than 100,000 poor women since its inception, over 37,000 are still active clients (AMFIU, 2000). FINCA Uganda Ltd has established a strong track record and has developed into the market leader in microfinance in Uganda. FINCA Uganda Ltd aims to alleviate poverty in all its form from whatever it exists. In developing countries like Uganda, where poverty exists, women form the biggest part of the poor population (BOU, 2004). FINCA Uganda Ltd saw it right and fitting to economically empower women because they are considered the pillars of families who ensure that children are educated, nourished and are healthy.

The institution specialises in offering loans using village banking methodology but has currently developed new products, including individual loans, to increase its range of services (AMFIU Report, 2000). It is a licensed MDI, operating as a company limited by shares. The only criterion for selection of the target market for inclusion in the program is that clients have a viable income generating business. Weekly instalments are paid on money loaned out to the borrowers with an average loan of 113,600 UGX per borrower (FINCA Report, 2004).

FINCA Uganda Ltd is clearly reaching the poor portion of the population. Program estimates indicate that 60% of borrowers are single mothers, and over 75% are caring for orphans – most of whom have lost parents to the AIDS

epidemic (Kasi, 2001). Also over 90% of the new clients live on less than $1 per day, which is below the $2 World Bank universal poverty line. An estimated 72% of the clients are currently located in rural areas (settlement of 10,000 people or less), and 99% are women. In FY 2000, with the assistance of the USAID PRESTO project, FINCA Uganda opened more branches in rural areas, significantly increasing its rural outreach (FINCA, 2003).

1.10 Organisation of the Study

The research report is presented in five chapters as follows:-

Chapter one consist of background to the study, statement of the problem, purpose of the study, research objectives, research questions, scope of the study, significance of the study, conceptual frame work and organisation of the study. Chapter two is a review of existing literature on credit risk, liquidity risk and sustainability of microfinance institutions. Chapter three elaborates the methodology. It includes research design, study population, sampling design and size, data sources, data collection instruments, reliability and validity of research instruments, measurements of research variables, data processing/analysis and limitations to the study. Chapter four consists of presentation, analysis and interpretation of findings. This is a result of data input in Microsoft word and statistical package for social scientists (SPSS). Chapter five covers the discussion, conclusion and recommendations based on the findings and interpretation. It also suggests areas for further research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

There have been studies on credit risk, liquidity risk and financial sustainability of microfinance institutions in developing countries. The literature reviewed in the study is cited mainly from studies carried out in developed countries and analysed in relation to its applicability to the Ugandan situation.

2.2 Credit Risk and Loan Portfolio Quality

Not only is the loan portfolio by far the largest asset of an MFI, but the quality of that asset poses risk for the institution (Zeller, 2002).

Generally speaking, any loan portfolio at risk exceeding 10% should be questionable, because unlike commercial loans, most micro – credits are not backed by bankable collateral. A micro – loan is considered to be at risk if a payment on it is more than 30 days late (CGAP, 2001). Namatovu (1999) contends that MFIs' clients have a culture of slow repayment, therefore increasing the default rate on the loan portfolio.

Brealey & Myres (1999) assert that the decision to extend a loan to a borrower is followed by a discussion regarding the terms of the loan. The terms of loans determine the loan amount that has to be extended, for what period, and what cost and concession if any is to be allowed. Rosengard (2001) further states that it is necessary for a MFI to make appraisal of a borrower before extending the loan in order to identify possible risks in lending as well as establishing the borrower's ability to repay the loan. To estimate the probability of default in

payment, a microfinance institution should consider character, capacity, conditions, capital, and collateral of a particular borrower.

Khandker, Khalily & Khan (1994) describe collateral as the most tangible item against which loans are advanced to borrowers by microfinance institutions. It is an asset pledged by a borrower to secure a loan, which can be repossessed in the case of default. In a microfinance context, collateral can vary from fixed assets to cross-guarantees from peers.

MFIs clients undertake a variety of enterprises simultaneously; MFIs should be concerned with repayment capacity of the borrower, rather than with selection of a particular activity. Nevertheless, a collection policy is also needed by the MFIs, because all clients do not pay loans in time. Some clients are slow – payers while others are non – payers. The collection policy should therefore aim at accelerating collections from slow – payers and reducing losses from high default on loans (Westone & Brigham, 1979).

Niamh (2001) contends that, achieving repayment involves asking people for money and some loan officers and managers have a personal difficulty with that. More so, making loans is easy – anyone can give money away. The real challenge in lending is getting the money back again. MFIs lends in difficult, challenging circumstances and face a particular challenge in achieving repayment. Some of this material involves calculating and understanding ratios – not an easy task. Finally, stakeholders including funders and Boards of Directors, use statistics on repayment to judge and measure performance of microfinance institutions. Variations in late payments and prepayments cause the Current Recovery Rate to jump around over short periods, often registering

above 100 percent (CGAP, 2000). Thus, it must be applied to a period long enough to smooth out random or seasonal variations – typically a year. Current thinking does not discount these ideas, but simply builds on them to include a self – concept.

Jansson (1997) also asserts that control of portfolio quality through reporting and loan provisioning is crucial for MFIs' operations. This system needs to deal appropriately with microfinance credits, in a way that corresponds to their particular weekly repayment cycles. This usually requires the application to micro credits to special treatment reserved for consumer loans or small commercial loans.

Microfinance methodologies also pose a challenge because some systems only focus on the largest loans and therefore ignoring small loans altogether (Micro Rate, 2001). The recent troubles of the Grameen Bank demonstrate the importance of agreeing on common standards for reporting and provisioning through out the industry, in order to create an even playing field. There is a good case to be made for treating micro enterprise loans in the same way or similarly to consumer loans, requiring careful monitoring and a more rapid provisioning schedule than commercial loans (Otero & Rocks, 1997).

CGAP (2000) concludes that microfinance presents a difficult challenge to supervisors especially those steeped in commercial banking supervision methodologies. In most MFIs, systems that facilitate commercial bank portfolio monitoring, hierarchical loan approval systems, documentation and filing systems are weak at best, non – existent in some cases. The monitoring and loan approval formulae developed for commercial banking does not work

well for microfinance, given the risk profile, volatility, and lending technology involved in MFIs' portfolios (Jansson, 1997).

In the case of microfinance institutions, the client base consists of low income assetless borrowers which bring about a higher risk compared to the low risk generated by the fairly diversified, high asset based client base of larger institutions. This risk arises from a different context, the concentration of small loans granted to a homogeneous group. Consequently, economic upturns and downturns directly affect the loan repayment capacity of the borrowers. In an upturn, they are made better-off, but in a downturn, they fail causing a similar failure in the microfinance institutions as well (Hulme, David & Mosley 1996).

Wijewardena (2004) further states that economic upturns and downturns do not occur without warning. Hence, when the economy is about to make a turn around for the better, microfinance institutions as well as their clients should learn to set aside a part of their wealth as reserves to go through future difficult periods. Similarly, when the economy sets itself on a downward path which does not happen all of a sudden, both the microfinance institutions and the borrowers should start making adjustments in their savings behaviour so as to be better prepared for the on-coming rainy days.

2.3 Credit Risk and Financial Sustainability

According to BoU Supervision Report (2001) credit facility with a pre – established repayment schedule is considered non – sustainable when the principal or the interest payments have not been met for at least 90 days. Indeed, credit facilities with outstanding arrears are considered non –

performing, if the principal and interest are due and unpaid over a period exceeding the customer's established borrowing days.

Rhaman (1999) further states that the first best level of repayment performance which can minimise credit risk and promote self - sustainability is 100% on – time. If the maximum repayment rate the MFI can reach given its lending methodology is lower than the targeted 100%, microfinance will take long to attain sustainable operations. MFIs finds it difficult to achieve high returns because portfolio yields have sunk so low due to older delinquency of their loans (USAID, 2005). Adongo (2005) also contends that improving repayment rates might also help reduce the dependence on subsidies of the MFIs which will improve on its profitability, hence self – sustainability.

It should be noted that, there has been weaknesses in the operational structure and the poor lending policies and decisions of MFIs due to the high costs of allocating adequate information on new clients and client's business in loan appraisal, and as a result of inadequate loan supervision and follow – up, leading to low income from the loan portfolio, hence retardation in sustainability (Slangen, 2005). Due to the small loan amounts and the large number of individual loans, the credit risk of MDIs is normally high. For the same reasons it's difficult to manage performance for each transaction, hence high administrative costs.

Repayment of an MFI's loans is a crucial indicator of sustainability. Poor collection of micro – loans is a blow to sustainability of MFIs as more cost is incurred in the supervision and monitoring of the loan portfolio (Pissari,

2003). High default rates with lesser returns from the loan portfolio retards MFIs' struggle to long – term sustainability. It's worthwhile noting that, external policy risk that arises from the changes in the policy stance of the government or the central bank has an impact on the operations of microfinance institutions. The main risk arises from the undisciplined budgetary operations of the government, leading to excessively high public debt and/or inflationary financing. When governments run high budget deficits, their borrowing requirements too rise (Weele & Markowich, 2001). The inevitable result is an increase in the interest rate structure. When inflation is generated by the government through inflationary financing, the central bank is compelled to adopt contradictory monetary policies, an important component of which would be the movement toward a high interest rate structure (Olsson, 2002). Whatever the cause, an increase in the interest rate structure imposes a risk on the microfinance institutions, because, its client-base, consisting of small microfinance users, is unable to go through the needed restructuring process that would eventually extinguish the inflationary pressures and lead to an easing of monetary policy (Wijewardena, 2001). The result would be a widespread failure of micro enterprises that would raise the loan delinquency rates of microfinance institutions. Both these sources are beyond the control of the microfinance institutions and all they can do is to become passive victims, hence unsustainable operation. Gow (2006) concludes that only those MFIs with more than 10,000 active borrowers are sustainable.

2.3.1 Financial Self – Sufficiency (FSS)

The most important element in the financial viability is, as mentioned earlier, the ability to earn a sufficient revenue to cover all costs and thereby generating a net surplus on the operations. When it comes to the financial viability of a microfinance institution, there is nothing like the building of capital reserves out of earned income.

CGAP (2001) states that a microfinance institution can be financially self – sustainable if it manages to profitably continue providing commercially based loan finance to micro enterprises on an acceptable scale in the absence of resources provided on concessional (subsidised) terms. Sustainability includes generating sufficient profits to cover expenses while eliminating all subsidies, even those less obvious subsidies, such as loans made in hard currency with repayment in local currency. Sustainability is an organization's ability to cover costs. There are varying degrees of sustainability, ranging from not sustainable to financially sustainable.

In a microfinance context, an institution is financially self-sufficient when it has enough revenue to pay for all administrative costs, loan losses, potential losses and funds. Financial – self sufficiency requires the ability to cover 99.5% of expenses exclusive of subsidies or grants (Micro Banking, 2001). Financial Self-Sufficiency (FSS) is a subsidy-adjusted indicator often used by donor-funded microfinance NGOs. It measures the extent to which an MFI's business revenue – mainly interest received – covers the MFI's adjusted costs. If the FSS is below 100%, then the MFI has not yet achieved financial break-even (ACCION, 2000).

Adongo & Stork (2005) further states that it focuses on the rate of return from the loan portfolio as loans given to clients. However, its worthwhile noting that the amount of savings mobilised by the MDIs also influence the level of financial sufficiency, this is because of the increased interest expenses on these savings. Focusing on sustainability and profitability might lead MFIs to seek to make larger loans to better – off clients in order to gain economies of scale that would both minimise expenses per loan and increase the probability of repayment. Such a strategy, while moving an MFI towards sustainability, would once again leave the poor with limited access to capital (World Bank, 2005).

Bern (2004) states that the fact that an MFI's sustainability indicator improves over a period of years does not necessarily mean that the MFI will reach financial sustainability. Sustainability indicators for MFIs will improve almost automatically in the early years; but the majority of MFIs never become fully sustainable, and thus can never expand beyond the limits of scarce subsidized funding.

Microfinance institutions usually operate on very thin margins. Hence, it is of utmost importance to re-lend funds immediately after they have been raised to minimize losses and maximize gains (Christen, 2002). The main purpose for self - sustainability is to build a microfinance structure at the grass root level that is capable of serving the poor on a sustainable basis and in a cost-effective manner to enable them to cross the poverty line and get themselves successfully integrated to the mainstream of the economy. Hence,

microfinance institutions should outlast the clientele which it is planning to support (Norell, 2001).

Conning (1998) also states that for self sustainability, at a very basic level, microfinance institutions should possess at least three key attributes; they should be able to provide the necessary services to the target groups, they should operate in a demand driven atmosphere with their services being demanded by the clients, and they should be financially sound, stable and strong institutions. The services provided by them should match the client's demand with respect to the size of the loan, maturity, collateral requirement and loan procedures.

The long-term viability of microfinance institutions is crucially dependent on their being able to meet the costs out of the revenue. This necessitates them to gradually reduce their dependence on external support, if they were created with such support in the first place.

Wijewardena (2001) further indicates that any microfinance institution which continues to be dependent on external financial support faces a high degree of vulnerability, because, in the event of the drying up of external support, it could not survive. Hence, all microfinance institutions should strive to be subsidy independent, if they are to ensure their own long-term viability and sustainability. This could be achieved by setting prices of their services at a level sufficient to cover costs, including loan losses, opportunity cost of equity and the full inflation-adjusted cost of its portfolio. In this sense, microfinance institutions should also follow the same prudential norms as any other higher level financial institution.

2.3.2 Operational Self – Sufficiency (OSS)

When a microfinance market starts to mature and MFIs have to compete for clients, price competition on interest rates will usually push the MFIs to get more efficient. But many MFIs face little real competition. External monitoring of efficiency is especially important in those cases. Young or fast-growing MFIs will look less efficient by either of these measures, because those MFIs are paying for staff, infrastructure, and overhead that are not yet fully used (Weele & Markowich, 2001).

Efficient institution minimise costs of delivering services. Serving a loan client can be more labour 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 involve expenses such as cashiers, security, and cash management (Micro Rate, 2001).

Simtowe & Diagne (2000) note that tiny loans are more expensive to make than large loans. Only a few extremely efficient MFIs have an operating expense ratio below 10 percent; commercial banks making larger loans usually have operating expense ratios well below 5 percent. The average Operating Expense Ratio of MFIs reporting to the Micro Banking Bulletin is about 30 percent, which probably reflects considerable inefficiency (Micro Banking Bulletin, 2001). Individual lending and group lending have different cost structures. Individual lending requires careful analysis on behalf of the lending institution prior to fund disbursement. Evaluating the loan proposal and defining the terms for each particular client, which may take several weeks, is costly to the lending body. In contrast, group lending is less time

consuming, and hence less costly, prior to fund disbursement. However, managing groups requires additional and greater costs after closing. Operational costs for group lending tend to be higher than those of individual lending, largely due to the additional time required for managing groups. In addition, because the bank holds no collateral, group lending is considered riskier than individual lending. High operational costs to the bank combined with relatively high risk require high revenues if the lending institution is to be sustainable. As a result, group loans are usually more expensive and have higher rates of interest than individual loans (Russia microfinance project, 2000). The responsibility for loan repayment is the legal obligation of all group members, regardless of which group member received the loan. If any group member defaults on a loan, the other members must cover the loan. None of the members will receive further loans until the delinquent loan is repaid. In this sense, a sense of collective responsibility serves as collateral on the loan. When groups have established a good repayment history, loan amounts are gradually increased, but normally do not exceed a certain set maximum amount (Galai, 2001).

According to Crabb (2006), microfinance programs with high operating costs are less viable. Schreiner (2001) concludes that transaction costs on loan portfolio are very high relative to the loan size. If the resulting spread between interest rates on subsidised loans and rates paid on deposits is too low to cover the costs, MFIs faces the challenge of mobilising savings and delivering credit effectively. MFIs can become more ‘efficient’ by simply dropping its smaller borrowers, even without making any improvements in operating systems and

through enhancing managerial skills and improvement on technology by imparting training.

The key to sustainability financially is to charge an interest rate that is high enough to cover operating costs, loan losses and interest and adjustment expenses (Yaron, 2001). However, MFIs must operate efficiently enough that reasonable, affordable and competitive interest rates can be charged to cover these costs. Therefore long term sustainability requires MFIs to manage delinquency, keep their cost of capital low, rotate their portfolio efficiently, keep operating costs to a minimum and most importantly, set interest rates to cover all these costs. It should be expected that when MFIs have achieved efficiency, they can continue to grow their portfolio. Self – sustainability requires profits.

Human resource management should be based on providing the necessary incentive system for workers to put the maximum efforts to their jobs. A performance based remuneration system coupled with accurate and clearly stated job descriptions, learning and training facilities and regular performance reviews should be made an integral part of the human resource management strategy. Microfinance institutions, if staffed by inexperienced and incompetent personnel, suffer from a general deterioration in the quality and standards of management (Khan, 1994).

Zeller, Lapenu & Greeley (1998) further states that the type of the market in which microfinance institutions operate is significantly different from the market which is faced by higher level financial institutions. Microfinance institutions, on the other hand, are relatively small in size and faced with a

market which is primitive in nature in all aspects of financing: clientele, products, resource base, contractual arrangements, delivery mechanism and outreach.

The users of their services are usually those in the lowest stratum of the society and have no access to formal banking institutions. They do not possess the required knowledge to obtain microfinance services on the one hand, and cannot satisfy the financial institutions with the type of collateral which are generally insisted upon by such institutions, on the other. The result has been a self imposed deprivation by the poor on themselves: due to a lack of knowledge and acceptable collateral, the poor normally keep themselves away from the formal financial institutions (Bhatt, Nitin & Shui-Yan 2001).

Hulme & Mosley (1996) states that this self-deprivation is institutionalized by the formal financial institutions, too, by shunning the poor as 'unbankable' and 'uncreditworthy', in a traditional sense. Hence, microfinance institutions have to play a dual role with respect to their clients. They should develop the clientele into a 'bankable' and a 'creditworthy' lot, and then, grow with them by satisfying their need for microfinance services. These challenging tasks make it necessary for microfinance institutions to continue to provide their services beyond one generation, and possibly into several generations of clients.

However, it is worthwhile noting that micro-finance is not a magic potion leading automatically to better living conditions for poor people. As a matter of fact, in some cases micro finance has led to deteriorated situations and debt equity ratio of the very poor (Hulme & Mosley, 1996). The extent to which

micro-finance programmes are able to reach the poorest of the poor with their services is still an open debate. That in many cases there is a limit to the "in depth targeting" of the poorest, the credit-worthiness of the client. According to this approach most MFIs do not reach the very poor and there is a trade-off between sustainability and reaching the poorest of the poor (Gulli, 1998)

Micro-finance is not appropriate for all the poor people. In some cases micro-enterprises owned by the poor are not ready for or do not need financial products. In other cases, micro-entrepreneurs are not creditworthy (World Bank, 1999).

Otero (2001) concludes that if microfinance institutions are not financially solid, unable to cover their costs, and incapable of delivering financial services over a long term, they become a transitory means of reaching the poor.

2.4 Liquidity Risk and Loan Portfolio Quality

MFIs take on additional risk involved with savings mobilisation, including increased demand for liquidity to meet customers' daily withdrawals demand and funds needed for covering its operating expenses (Campion, 2001). According to Bruett (2004), changes in terms and conditions of loans and lack of liquidity leads to delaying loan disbursements, which as a result reduces interest income on the loans hence lowering the loan portfolio quality further.

Though it has been noted that Assets/ Liability management is at the core of micro-financing, MFIs not only face risk by making loans to micro entrepreneurs, they also take risk of borrowing or managing investor or donor funds. Managing the supply of funds and the demand for funds requires

managing both the term and price of assets and liabilities. MFIs are more likely to see a higher proportion of short – maturity assets – the loan portfolio funded by medium to longer – term liabilities. Most MFIs deposits are payable within 90 days. This could lead to problems if clients choose to withdraw their money when the term of their deposits expires hence liquidity constraint (CGAP, 2005). A financial institution needs to monitor and control the gaps between maturing assets and liabilities in various time bands. The construction of such maturity profiles relies heavily on assumptions such as the proportion of maturing liabilities that a financial institution will be able to roll-over and the behaviour of liabilities and assets with no fixed maturity date such as call deposits and overdrafts. The assumptions will, of course, vary under different scenarios and according to the business profile of the financial institution. The appropriateness of the assumptions needs to be reviewed from time to time. Control over maturity gaps in the shorter time periods obviously needs particular attention as this is the area in which financial institutions have least room to manoeuvre (Crabb & Keller, 2004).

Rosenberg (2006) argues that as part of its liquidity management strategies, a financial institution should seek to maintain a diversified funding base and establish strong and lasting relationships with depositors and other liability holders. A financial institution should establish a policy regarding concentration of sources of funding so as to avoid an excessive reliance on any one counterparty (including related entities) or any one product or funding market. It should also undertake regular statistical analysis of liabilities to detect any signs that the deposit base is becoming more volatile. A stable core

of deposits and avoidance of reliance on large and potentially volatile deposits are significant components in successful liquidity management.

Given MFIs' loan portfolio volatility, risk profile and lending methods, borrowers will not pay within the expected time frame as agreed in the process of applying for the loan. There is need for higher reserve provisioning for the loan loss and a standard liquid reserve requirement. This comes as a result of high repayment problems in the MFI market. The quality of MFIs loan portfolio depends on the repayment cycles and there is need for careful monitoring and a more rapid provisioning schedule for high level of liquidity to be realised (Christen & Robert, 2002). This is necessary in order to meet the ever rising liquidity needs of MFIs.

Chaves & Gonzalez – Vega (1994), states that one characteristic of MFIs is the relatively undiversified nature of their loan portfolios. Only large MFIs of national scale can avoid this. Regulators can adjust for undiversified risk in most MFIs by requiring higher emergency reserves than would be required for standard bank lending. For example in Ghana, the rural banking sector is required to meet a liquid reserve requirement of 52%. This serves to alleviate liquidity risk in MFIs, which is higher than normal in financial institutions because of the strong contagion effect of repayment problems in this market.

2.5 Liquidity Risk and Financial Sustainability

Llanto (2001) argues that liquidity is the lifeblood of microfinance operations and thus, the inability to track loan performance on a daily basis constraint the efficiency of the MFI. Asset quality should be monitored in order to determine

the liquidity position of the MFIs. Since MFIs operate on thin liquidity levels, problems occur suddenly and cause instability quickly.

Financial institutions engage in maturity transformation, which makes them particularly vulnerable to sudden and unexpected demands for funds. Moreover, liquidity problems with an individual financial institution may have implications for the whole of the financial system. It is the responsibility of a financial institution's board and management to ensure that the financial institution has sufficient liquidity to meet its obligations as they fall due. As well as policies to limit risks to acceptable levels, financial institutions are expected to have appropriate liquidity measurement and information systems and clearly defined management responsibilities for managing liquidity. The policies should be reviewed as circumstances change (Zeller, 1998).

Discretionary liquid assets need to be of high quality and/or readily marketable to ensure that they can be realised as required without significant loss. This implies that valuations of liquid assets needs to be regularly adjusted to reflect market conditions and that any liquid assets which are pledged to support borrowings should be deducted from both the numerator and the denominator in calculating the liquid assets ratio. A liquid assets ratio may not be sufficient in itself to manage liquidity because of its static nature, susceptibility to distortion by short term balance sheet movements and inability to take account of off-balance sheet obligations (Basel, 2006).

Calling temporary halt to lending until a problem is sorted out could cause havoc to MFIs since the credits and savings are the main activities that generate liquidity for the MFI's existence. It would jeopardise the

collectability of existing loans. A stop – lending order by MFI can wipe out the value of existing loans, because interest and fees on loans acts as a boost to liquidity level of MFIs (CGAP, 2000).

According to Mirza (2006), as MFIs grow and borrow, they will face the challenge of managing liquidity. MFIs may face liquidity risk when management borrows at a rate that might float up while the MFIs loans are at a fixed – rate or when the borrowing rates remains fixed while the MFIs loan portfolio yield is falling. Campion (2000) states that MFIs can increase interest rates on their deposits in order to remain competitive and continue to attract more deposits, if the institution's earning assets are concentrated in long term, fixed – rate loans, then it does not have the immediate option of increasing the interest rate it charges on these loans. Because MFIs can not increase its interest income from loans as fast as its cost of funds is rising, profitability will decrease and it could even face a shortfall in operating funds. Furthermore, if the market interest rate charged on loans drops, a MFI could be squeezed since it can not drop the rate it pays out on deposits below zero hence losses, which is a blow to sustainability (Micro Rate, 2004). As evidenced from above, unstable incomes of MFIs is a constraint to liquidity.

It should also be noted that Microfinance institutions are funded by either donors or the beneficiary members and hence, there is a limitation for the funding sources. On the contrary, higher level banks are funded by investors who are capable of assessing, on a commercial basis, the risk involved in the investment (Ledgerwood, 1999).

Lack of a sufficient financial depth too places microfinance institutions in a risky situation. They are usually able to draw funds from the donors, but the donors who are guided by their own internal policies may not be able to respond quickly to meet any urgent funding requirement on the required scale. As a result, the microfinance institutions will find it difficult to re-capitalize themselves along with their expansion in the market, therefore leading to liquidity shortage (Mosley & Paul, 1996).

Bhatt (2001) argues that one of the impediments to the growth of microfinance institutions is the limitation of their fund base. These institutions usually are started with funding provided by governments or donors. Then they mobilize deposits from their target groups or beneficiaries. Whatever the combination of funding source used by microfinance institutions, either the volume of funding available or the timeliness of their availability does not match the scale of operations they are expected to undertake or the timing of lending demanded by the microfinance borrowers. The former is a volume issue which is further exacerbated by the subsequent drying up of the fund sources. Shui-Yan (2001) states that the latter is a liquidity issue which seriously affect the reputation of the microfinance institution, on the one hand and the viability of the microfinance enterprises due to lack of working capital by their promoters, on the other. It further has the unintended consequence of driving the microfinance entrepreneurs to the informal money market thereby threatening to trap them in a debt trap.

2.6 Relationship between Loan Portfolio Quality and Financial Sustainability

As established by Tumusiime (2005) 'there has been little funding of MFIs' operations by donor community and access to commercial funding is limited. This has necessitated MFIs growth and transformation towards self – sustainability. By its very nature, the quality of loan portfolio promotes the sustainability level of MFIs. Poor portfolio quality is a drain on sustainability, if provisions for loan loss and write – offs are great, it affects the income of MFIs.

Long – term survival and sustainability is critical for an MFI in being able to reach its target clientele and cover administrative and other costs. While social goals of reaching the poorest and poverty alleviation are valid, sustainability – standing on ones own feet – is as true for a low – income household receiving microfinance, as for the microfinance institution itself (Bhagat, 2002). For MFIs to sustain significant returns, the portfolio yield must be high. Large range of portfolio at risk (PaR) of any MFI, limits its chances of sustainability (National Credit Council, 2006).

Further, portfolio risk can be alleviated by diversifying the portfolio into different types of economic activities and sectors. This is difficult with small borrowers who are concentrated in a given geographical area, but not totally impossible. Even in a given geographical area, it helps microfinance institutions to teach their clients that they should always diversify their activities into several areas, such as farming, trading, small manufacturing etc. For this purpose, it is necessary for the microfinance institutions to

periodically assess and review the risk factors inherent in individual customers (Woller, 2000).

Zeller & Meyer (2002) shows that relatively high repayment rates and fairly good portfolio quality increases self – sustainability of MFIs. MFIs seek to cover their operating expenses and achieve growth so as to further their outreach to the poor. Sustainability allows MFIs to expand their operations and increase the level of outreach (Drake & Rhyne, 2002). It's worth noting that high loan portfolio quality indicates increased outreach because of the good returns generated from the clients which can cover their administrative and other costs.

Campion (1998) argues that MFIs have both internal and external factors that contribute to its sustainability, these includes the collection performance, financial self – sufficiency, efficiency and outreach to poor communities that it intends to serve.

2.6.1 Outreach

Expanding the number of clients being served is an ultimate goal of almost all microfinance interventions. It has very seldom been useful for funders to pressure MFIs for rapid expansion. Outreach is manifested by number of borrowers, average loan size, client & portfolio growth which enables the MFI to become self – sustainable. Navajas *et al* (1998) states that microfinance outreach includes the breadth of outreach, depth of outreach, quality of outreach, length of outreach, and variety of outreach. Quality of outreach refers to worth, to how valuable microfinance products are for particular clients. Depth of outreach tells us how valuable it is to extend the supply of

microfinance products to particular target groups, not from the point of view of a given client, but from the point of view of society (Conning, 1998). Breadth of outreach counts the number of clients of a given depth who are supplied with a microfinance product of a given quality (worth) and a given cost. Only a small proportion of the target group have access to formal and semi – formal financial services, but the more numerous the clients reached, the better (Adams, 1998).

Funders who want to reach very poor clients should usually look for MFIs that are already committed to a low-end clientele, rather than trying to encourage higher-end MFIs to change their market. However, it should be noted that low loan sizes do not guarantee a poor clientele. Likewise, growth in average loan size does not necessarily mean that a MFI is suffering "mission drift." As an MFI matures and growth slows, a lower percentage of its clients are first-time borrowers, and average loan sizes will rise even if there has been no shift in the market it is serving (Rosenberg, 2003). The financial services and the delivery methods should be client-targeted and based on simple procedures. If the microfinance institution is spread over a wider geographical area, the selection of the target beneficiaries as well as the delivery method of the services should be decentralized. The microfinance institution should have a wide outreach and a financial sustainability so that it could accomplish its mission on a continuous basis. This would be ensured by attaining a significantly larger scale of operation and building a wide client base, including the underserved (e.g. women, minority ethnic groups etc). Schreiner & Yaron (2001) shows that rapid expansion sometimes proves to be unsustainable, especially during an MFI's early years when it needs to design

its products and build its systems. Rapid growth will temporarily depress an MFI's profitability because such growth requires new investments in staffs and facilities that take a period of time to become fully productive.

2.6.2 Collection performance

Repayment of an MFI's loans is a crucial indicator of performance. Poor collection of micro loans is almost always traceable to management and system weaknesses. The strongest repayment incentive for uncollateralized micro loans is not probably peer pressure, but rather the client's desire to preserve her future access to a loan service she finds very useful to her and her family. Thus, healthy repayment rates are a strong signal that the loans are of real value to the clients (Campion, 2003). The core performance area that should be tracked is especially collection performance (Diagne, Chimombo, Simtowe & Mataya, 2000).

Von Pischke (1988) argues that determining collection performance is crucial for revolving funds, because they are so prone to repayment problems. Even if the purpose of the activity is to get resources into the hands of the community rather than to set up a permanent financial facility, a revolving fund with high default is not a good vehicle for the resource transfer. The distribution of benefit is likely to be inequitable, because the defaulters appropriate most of the value of the fund.

Brandt, Natalya & Tatiana (2000) argue that loans that don't have to be repaid are much more likely to be captured by local elites. Furthermore, distributing loans that don't get repaid can do harm by creating a culture of non-payment that makes it difficult for responsible, sustainable lenders to serve the

population involved. For these and other reasons, no revolving funds should be set up without insuring at the very least that there is a system in place to track loan collection performance.

A good microfinance institution should always be willing to adopt an appropriate loan delivery mechanism so that its services are attractive and accessible to the relevant target groups, cover the different situations of their client-base and should be appropriately priced, so as to avoid subsidy elements from one side and be competitively attractive to minimize the transaction costs, while ensuring liquidity and rapid availability, on the other (Chimombo & Mataya, 2000).

It should be noted however, that if the institutions fail, their clientele too would fail. Such failures are too costly, because it would cause the poor to lose their confidence in the very system which is supposed to help them. Once the confidence is lost, regaining the same would not only be difficult, but also would take time. It would also drive the poor back to the 'dependency syndrome', one of the bottlenecks for alleviating poverty in a sustainable manner (Brand & Gerschick, 2000).

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents a description of research methodology that was used to carry out the study. It covers research design, study population, sampling design and size, data sources, data collection instruments, reliability and validity of research instruments, measurements of research variables, data processing/analysis and limitations encountered while carrying out the study.

3.2 Research Design

A cross – sectional survey combined with descriptive and analytical methods were considered appropriate for the study.

3.3 Study Population

The study population targeted 30 employees of FINCA Uganda Ltd as of March 2006, Lira branch. A population of 30 was used for the study.

3.4 Sample Size and Selection

The population included staff of FINCA Uganda Ltd. Purposive sampling design was used in choosing FINCA Uganda Ltd. The justification was because it serves the rural people. A total of 30 employees were used in the study.

3.5 Data Sources

- **Primary Sources**

  Primary data was collected from FINCA Uganda employees in the loaning department using Questionnaires.

- **Secondary Sources**

  Secondary data was collected from Association of Microfinance Union of Uganda Reports, Microfinance Support Centre Reports, MFIs' Annual Reports, FINCA Annual Reports and Bank of Uganda.

3.6 Data Collection Instruments

The researcher collected primary data using 5 point likert – type closed questionnaires. The questionnaires were self – administered.

Table 3.1: Response Rate

Respondents	**Instruments sent out**	**Instruments received**	**Response rate**
Employees	30	21	70%
Total	**30**	**21**	**70%**

Source: Primary data

3.7 Reliability and Validity of Research Instruments

Guidelines specified by Sekaran (2000) were adopted to develop closed questionnaire used in the study. Validity was measured basing on a factor analysis which confirmed the dimensions of the concept that was operationally defined, to ensure appropriateness of results. Reliability (internal consistency and stability) of the instruments was tested using Cronbach's Alpha Coefficient (Cronbach, 1946). All the variables under study had their cronbach alpha coefficient greater than the acceptable minimum of 0.50. This showed that the scales used were consistent and reliable as shown in the tables 3.3 below.

Table 3.2: Cronbach's Alpha (α) Coefficient for the study Variables

Variables	**Cronbach's Alpha (α)**
	Employees
Credit risk	0.7782
Liquidity risk	0.7102
Loan portfolio Quality	0.7303
Sustainability	0.7251

3.8 Measurements of the Research variables

Credit risk was measured by default rate, recovery rate of the loans, as adopted from Davis (2002).

Liquidity risk was measured by loan periods, loan loss provisions, and loan request by borrowers basing on Berger & Christian (2006).

Loan portfolio quality was measured by amount of loans in arrears, returns from loans, loan provisions and loan write – offs as adopted from CGAP (2001).

Financial sustainability was measured using financial self sufficiency (FSS), operational self sufficiency (OSS) and outreach as adopted from Marco Elia (2005).

FSS = Adjusted operating Income
Adjusted operating expenses

OSS = Operating Income
Total operating expenses

3.9 Data Processing and Analysis

Data collected from the primary source was compiled, sorted, cleaned, edited for accuracy and clarity, classified, coded into a coding sheet and analysed using a computerised data analysis package/tool known as SPSS 11.0. Regression analysis was used to predict the MFIs credit risk, liquidity risk and Spearman's correlation analysis was run to determine the existence and significance of the relationship between the independent variable and dependent variable respectively, and later conclusions to the study was drawn. Chi – square test was used to test the relationship between the variables under study.

3.10 Limitations to the Study

Different academics and policy makers have researched the areas of microfinance institutions in Uganda. This has created apathy by operators who were uncooperative because they viewed the research as an unproductive use of their time and with no serious positive impact to their ventures. This has had a big impact on the results.

In this study, the data used from existing microfinance and other archives may have not been accurate 100%, but it was amendable to acceptability of the results.

Further methodological limitations were experienced in this study, as the responses were with some errors.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

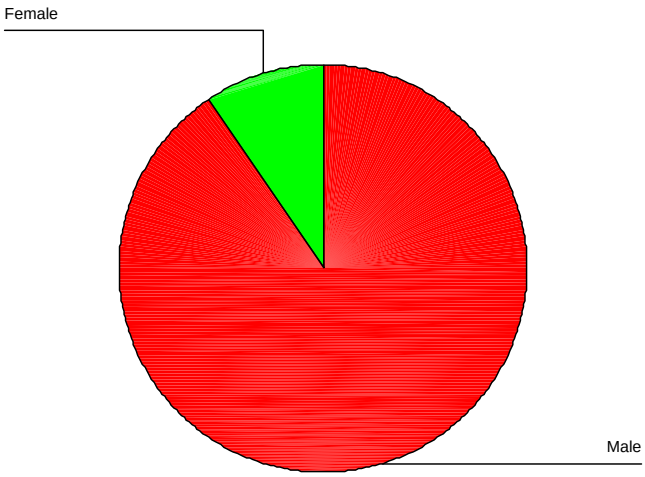
This chapter presents the results of data analysis and findings compiled from the field. It is divided into three main sections. The first section deals with the general/demographic characteristics of the respondents. The second section discusses the findings from the study. Section three analyses and discusses the relationship between the various variables in the study.

4.2 Demographic Characteristics of the Respondents

The demographic characteristics of the respondents include the gender, age, level of education, job position and work experience.

4.2.1 The Sex of the Respondents

Fig. 4.1: Sex of the Employees

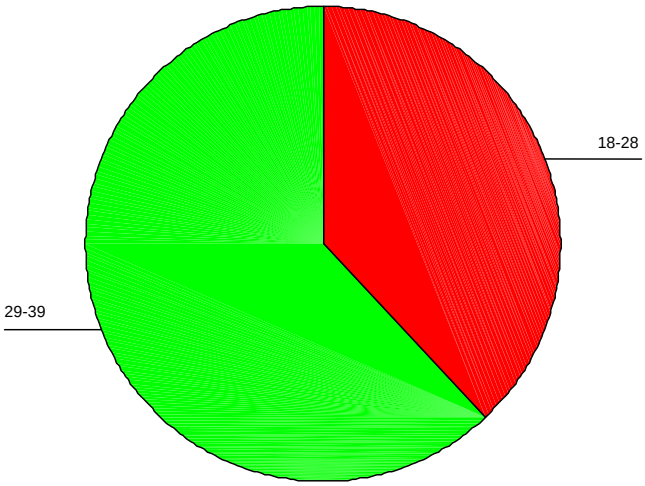


Source: Primary data

The majority of the employees (90%) of the microfinance were men as shown in fig.4.1 above, this showed male dominance in the institution. The women constituted small number (10%) of the employees.

4.2.2 The Age of the Respondents

Fig. 4.2: Age of the Employees

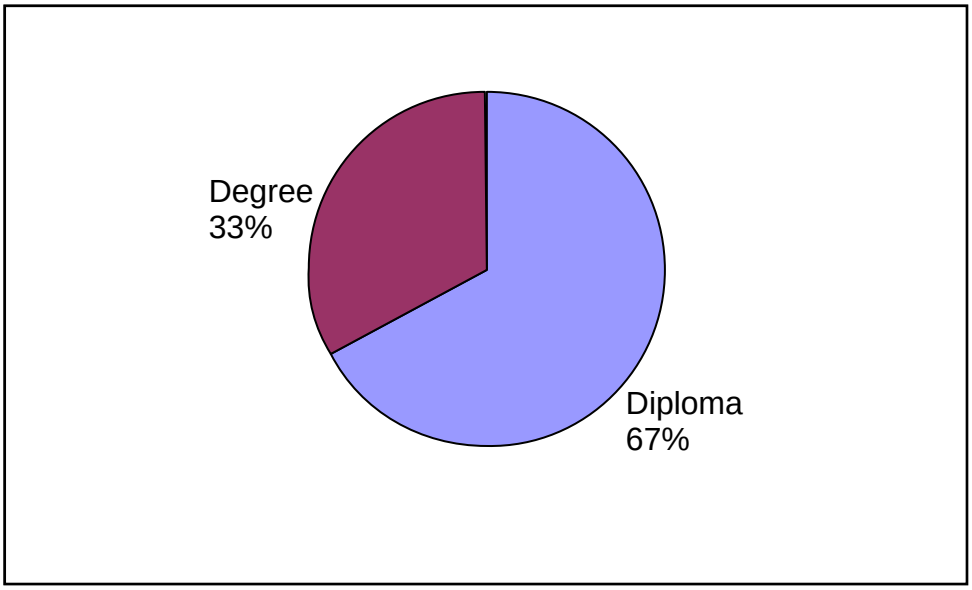


Source: Primary data

According to the findings in fig.4.2 above, majority of the employees of the microfinance (62%) were in the age bracket of 29 – 39 years. This could imply that this is the most active and mobile age group which a microfinance institution can use in the supervision and monitoring of its volatile loan portfolio. Those in the age bracket of 18 – 28 years were only 8 with a percentage of 38%.

4.2.3 The Level of Education of the Respondents

Fig. 4.3: Level of Education of Employees



Source: Primary data

The findings in fig. 4.3 above indicate that the majority of the employees (67%) were diploma holders and only 33% had attained university degree.

4.2.4 Number of Years with the Institution

Table 4.1: Number of years spent with the Institution by the Employees

Years	**Frequency**	**Percent**
Up to 2 years	10	48
3 – 5 years	6	29
6 – 10 years	5	23
Total	**21**	**100**

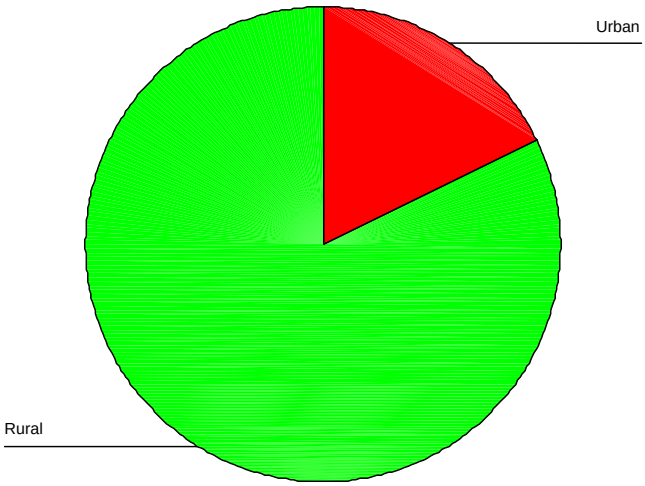
Source: Primary data

About 48% of the employees had worked for the institution for a period of up to 2 years. Those who had worked for the institution for between 3 - 5 years

were 29% while 23% had worked for 6 – 10 years as shown in table 4.1 above. This indicates that the respondents have had sufficient work experiences to know how the MFI operates hence their responses are reliable. This might also indicate either a higher turnover or a rapid expansion of employees.

4.2.5 Business Location of the Respondents

Fig. 4.4: Business Location of Borrowers



Source: Primary data

According to the findings in fig. 4.4 above, majority (82%) of the clients had their businesses being located and carried out in the rural areas, while 18% were operating their businesses within the urban areas. This confirms that most of the MFIs' loans target the majority rural poor of the poorest who have no access to commercial loans from formal financial institutions.

4.2.6 Rating of the Respondents basing on Repayment period

Table 4.2: Rating basing on Repayment Period of Borrowers

Rating	**Frequency**	**Percent**
Very good borrowers	4	19
Fairly good borrowers	11	52
Good borrowers	6	29
Total	**21**	**100**

Source: Primary data

The findings in table 4.2 above indicate that majority (52%) of the employees agreed that most of their clients were fairly good borrowers. Very good borrowers and Good borrowers constituted 19% and 29% respectively. It shows that majority of the borrowers were not excellent borrowers and could not repay their outstanding loans within the stipulated time. The borrowers were classified into the above groups based on the time that elapse before repayment of an outstanding loan by a borrower.

4.2.7 Ranking basing on Repayment Period of the Respondents

Table 4.3: Ranking basing on Repayment period of Borrowers

Range	**Frequency**	**Percent**	**Ranking**
40% - 60%	4	19	2
60% - 80%	15	71	1
80% - 100%	2	10	3
Total	**21**	**100**	

Source: Primary data

As shown in table 4.3 above, when ranked basing on range, respondents with repayment rate between 60% – 80% were ranked 1st (71%) while respondents with repayment rate between 80% - 100% (10%) were ranked 3rd. This shows that though many borrowers (71%) could pay their pending loans in time, this was still below the 100% repayment rate on loans that can sustain MFIs' operations.

4.2.8 Close Supervision of the Respondents

Table 4.4: Close Supervision of Borrowers

Duration	**Frequency**	**Percent**
Weekly	11	52
Fortnight	6	29
Monthly	4	19
Total	**21**	**100**

Source: Primary data

Further findings in table 4.4 above shows that majority of the employees (52%) confirmed that there was weekly supervision of borrowers. This could mean the most borrowers were likely to default if not reminded on their loan schedules. Fortnight and monthly supervision were confirmed by employees with 29% and 19% responses respectively.

4.2.9 Duration taken to easily turn MFI's Assets into cash.

Table 4.5: Ease of turning Mfi's assets into cash

Time	**Frequency**	**Percent**
12 hours	2	10
24 hours	2	10
More than 72 hours	17	80
Total	**21**	**100**

Source: Primary data

According to table 4.5 above the majority (80%) of the employees confirmed that it could take more than 72 hours to easily turn the MFI's assets into cash, while 10% confirmed that it took12 hours.

4.2.10 Type of Business Venture of the Respondents

Table 4.6: Types of Business Venture of Borrowers

Venture	**Frequency**	**Percent**
Retail trade	122	72
Service	33	19
Farming	15	9
Total	**170**	**100**

Source: Primary data

From table 4.6 above, it shows that 72% of the MFI's borrowers were in retail trade as their major business venture. This implies that most of microfinance borrowed funds are used for retail business venture which does not require

high initial capital compared to service and farming businesses. Others 19% and 9% were in service and farming business venture.

4.2.11 Business Status of the Respondents

Table 4.7: Business status of Borrowers

Status	**Frequency**	**Percent**
Fair	15	9
Good	33	19
Slow	122	72
Total	**170**	**100**

Source: Primary data

The findings in table 4.7 above indicate that majority (72%) of the borrowers' businesses had slow sales. This implies that this could be due to seasonality in demand for the products they deal in, which usually get high demand at the year end. Respondents with fair sales and good sales constituted 9% and 19% respectively.

4.2.12 Drop out of the Respondents

Table 4.8: Drop out of Borrowers

Response	**Frequency**	**Percent**
Neither agree nor disagree	3	14
Agree	14	67
Strongly Agree	4	19
Total	**21**	**100**

Source: Primary data

From table 4.8 above, majority (67%) of the employees agreed that there was high drop out of borrowers who had not paid their pending loans. This implies that they could have failed to repay their over due loans in order to be allowed to get subsequent loans by the MFI. Those who strongly agreed and neither agree nor disagree were 19% and 14% respectively.

4.2.13 Rate of Write – off of Bad Loans of the Respondents

Table 4.9: Rate of write – off of Bad loans of Borrowers

Response	**Frequency**	**Percent**
Disagree	5	24
Neither agree nor disagree	10	48
Agree	6	28
Total	**21**	**100**

Source: Primary data

As revealed by table 4.9 above, majority (48%) of the employees neither agreed nor disagreed on high rate of loan write – offs at the branch. This implies that they were indifferent. Those who disagreed and agreed were 24% and 28% respectively.

4.2.14 Provision Expenses for Loan Losses of the MFI

Table 4.10: Provision expenses for loan losses by the Mfi

Response	**Frequency**	**Percent**
Disagree	7	33
Neither agree nor disagree	10	48
Agree	4	19
Total	**21**	**100**

Source: Primary data

From the findings in the table 4.10 above, majority (48%) of the employees neither agreed nor disagreed that provision expenses for loan losses increased in the past years in their branch, while only 19% agreed.

4.2.15 Historical Repayment Behaviour of Respondents for Repeat Loans

Table 4.11: Historical Repayment Behaviour of Borrowers for repeat loans

Response	**Frequency**	**Percent**
Disagree	2	10
Neither agree nor disagree	11	52
Agree	8	38
Total	**21**	**100**

Source: Primary data

The findings in table 4.11 above indicate that majority (52%) of the employees neither agreed nor disagreed that there is high historical repayment behaviour of borrowers for repeat loans over the past years. This could imply that most borrowers did not pay their loans within the stipulated time frame stated in the

loan request form. Those who disagreed and agreed were 10% and 38% respectively.

4.2.16 Repayment Cycle of Loan Portfolio of the MFI

Table 4.12: Repayment cycle of Loan portfolio

Response	**Frequency**	**Percent**
Disagree	6	29
Neither agree nor disagree	9	43
Agree	6	29
Total	**21**	**100**

Source: Primary data

Table 4.12 shows that majority (43%) of the employees neither agreed nor disagreed that the repayment cycle of loan portfolio was longer. This implies that the loan repayment cycle is neither long nor shorter. Those who disagreed and agreed were 28% and 28% respectively.

4.2.17 Loan Portfolio at Risk (PaR) Less than 0% of the MFI

Table 4.13: Loan portfolio at Risk (PaR) less than 0%

Response	**Frequency**	**Percent**
Strongly disagree	6	28
Disagree	7	33
Neither agree nor disagree	6	28
Agree	2	10
Total	**21**	**100**

Source: Primary data

According to the findings in table 4.13 above, majority (33%) of the employees disagreed that their loan portfolio at risk is below 0%. This implies that the loan portfolio at risk of the MFI has never been below 0% which is a good avenue for long term sustainability, while 10% agreed that their loan portfolio at risk were below 0%.

4.3 INFERENTIAL STATISTICS

4.3.1 Factor Analysis

Factor analysis was used to extract the most important factors that measured the study variables. These factors explained patterns of correlation between the dependent and independent variables. The Principal Component Analysis extraction method and Varimax rotation methods were used to extract and reduce on the many items into few and relevant factors that can be worked on. Only factors with Eigen values greater than 1(one) were extracted and correlation coefficients of ± 0.3 were deleted from the rotated component matrix table. The extracted factors were used to fit the regression models. The rotated component matrix for each variable is outlined below.

4.3.1.1 Credit Risk Variable

The principal component analysis was used to analyse the twenty six (22) credit risk dimensions. This is shown in table 4.14 below.

Table 4.14: Rotated Component Matrix for Credit Risk (Employees)

	Credit Risk Components		
Credit Risk Dimensions	**Default Rate**	**Repayment Rate**	**Collection Policy**
All our borrowers pay their loan instalments promptly and on regular basis	0.808		
All our borrowers have well established capacity to repay leading to no default on our loans	0.795		
The amount of our existing old loans is more than the amount of approved new loans to borrowers	0.740		

All our borrowers have always exhibited higher repayment culture over the past years	0.695		
All our existing loan borrowers have very high on – time loan repayment history	0.626		
All our loans in arrears have been repaid without taking legal action on any borrower	0.597		
All our existing borrowers always have 100% on – time repayment initiatives	0.530		
There has always been no extension of repayment date on all our loans	0.527		
We have ever blocked guarantors' accounts due to failure by some borrowers to repay our outstanding loans			0.334
There is consistency and lesser variability in earnings of all our borrowers' businesses		0.808	
Most of our borrowers repay their loan instalments before the loan maturity date		0.794	
Repayments of late loans by our borrowers has never exceeded one day after the expiry of the loan period		0.758	
All our loans exposed to risk are fully covered by savings/deposits from borrowers		0.710	
The group members have always paid large		0.610	

amount of loans of their defaulting colleagues			
There is always large number of our borrowers who have ever received the weekly repayment period extension as a result of on time repayment of loans		0.607	
Our loan staffs always visit borrowers who have missed their repayment within 24 hours with reminding letters after expiry of their loan period		0.383	
The credit committee evaluates all potentially funded business ventures even after loan disbursement			0.849
The strongest repayment initiative for uncollateralized micro – loans is always peer – pressure			0.768
New loans are at times issued to borrowers before their old loans are fully paid back			0.750
All our borrowers have very good business status and planning period which has enabled them fulfil their loan repayments in – time without delay over the past years			0.683
Some group members have ever been denied loans due to failure of one member to repay			0.654
Solidarity groups retain the approval and administration of the loan from the			0.545

microfinance			
Eigen values	**4.475**	**4.111**	**4.047**
% of Variance	**20.341**	**18.687**	**18.395**
Cumulative Percentage explained	**20.341**	**39.028**	**57.423**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
A Rotation converged in 5 iterations

Source: Primary data

Twenty two (22) items constituting 57% of the Total Variance of Credit Risk. This implied that the three constructs/factors contributed 57% of Credit Risk. It was found out that default rate (20%) contributed more to credit risk, followed by repayment rate (18%) and collection policy (18%) respectively. Further analyses verify that the total success of microfinance operations is enhanced by default rate which highly contributes to its long term sustainability. This analysis is important to microfinance institutions in Uganda because it helps in defining the magnitude of the credit risk dimensions to the responsible policy makers.

4.3.1.2 Liquidity Risk Variable

The principal component analysis was used to analyse the seventeen (17) dimensions of liquidity risk. This is shown in table 4.15 below.

Table 4.15: Rotated Component Matrix for Liquidity Risk (Employees)

	Liquidity Risk Components		
Liquidity Risk Dimensions	**Repayment Cycle**	**Asset/Liability Management**	**Savings Mobilisation**
Part of our loan portfolio is funded by funds from commercial capital sources	0.859		

Our interest income from loans has always covered all our business expenses over the past years	0.820		
I am always fully facilitated with all resources that helps me in our loan business operations	0.734		
Some times we may postpone field visits due to other tied work schedules in office		0.450	
We have always projected the level of default of all our borrowers very accurately	0.565		
All our outstanding loans are always provisioned for by locally generated interest income	0.466		
Certain percentage of our loan portfolio is funded by medium term deposits	0.409		
Part of our business operations are at times funded by donations		0.810	
We always mobilise savings from surplus units very easily within less time		0.714	
The rate at which our microfinance		0.693	

borrows from commercial capital sources is always fixed			
At times we have to first satisfies our other urgent financial obligations such as facilitation of loan recovery from borrowers than issuing large amount of new loans		0.583	
Our borrowers have always had the highest level of saving culture		0.575	
Some items in our annual budget for our business operations have at times been supplemented by funds from other sources other than interest income		0.416	
There is lower reserves provisioning for losses on our loan portfolio			0.806
Our locally generated income from loans always cover all our daily business operations			0.792
There are large numbers of voluntary savers with their money in our branch			0.726
We always meet all loan request by borrowers immediately as fast as they need it			0.694

Eigen values	**4.000**	**3.043**	**3.041**
% of Variance	**23.528**	**17.899**	**17.886**
Cumulative Percentage explained	**23.528**	**41.427**	**59.313**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
A Rotation converged in 5 iterations

Source: Primary data

Three factors were extracted from seventeen (17) items constituting 59% of the Total Variance of Liquidity Risk. This implied that the three constructs/factors contributed 59% of liquidity risk. Repayment cycle (23.5%) contributed more to liquidity risk, followed by asset/liability management (17.9%) and savings mobilisation (17.8%) respectively. On further analysis of the three constructs/factors identified, it was possible to discover that the strongest component in liquidity risk was repayment cycle and weakest component was savings mobilisation. This affirms facts that what matters most in liquidity of microfinance institutions is repayment cycle.

4.3.1.3 Loan Portfolio Quality Variable

The principal component analysis was used to analyse the twelve (12) dimensions of liquidity risk. This is shown in table 4.16 below.

Table 4.16: Rotated Component Matrix for Loan Portfolio Quality (Employees)

	Loan Portfolio Quality Components			
Loan portfolio Quality Dimensions	**Returns from Loans**	**Loan Provisions**	**Loans in Arrears**	**Loans Write – offs**
The historical repayment behaviour of all our borrowers for repeat loans is very high	0.929			

The repayment cycles of our loan portfolio is longer	0.887			
Our loan portfolio generates higher returns that covers all our financial need	0.838			
All our loans have a portfolio at Risk (PaR) less than o%		0.887		
Our borrowers have never complained about our penalty interest charged on delayed loan repayment		0.880		
We always give all the full amount of loans requested by the borrowers		0.680		
The rate of write – offs of our bad loans has never increased at all over the past years		0.665		
There is constantly increasing rate of loan rotation amongst all our borrowers			0.900	
Provision expenses to cater for loan losses has never increased at all over the past years			0.825	
There has been constantly small number of our loans in arrears over the past years			0.700	
There has been drop out of our borrowers who have failed to pay their outstanding loans				0.942

We are aware that sometimes our clients borrow from other sources to repay a pending loan				0.791
Eigen values	**3.068**	**2.863**	**2.425**	**2.004**
% of Variance	**25.568**	**23.860**	**20.205**	**16.696**
Cumulative Percentage explained	**25.568**	**49.428**	**69.633**	**86.329**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
A Rotation converged in 5 iterations

Source: Primary data

Four factors were extracted from twelve items constituting total variance of 86% of loan portfolio quality. This implied that the four constructs/factors contributed 86% of loan portfolio quality. Returns from loans (25.6%) contributed more to loan portfolio quality compared to loans write – offs with 16.7%. The power of returns from loans here is highlighted, what is important to the microfinance institution in Uganda is to centre more attention and find ways of reducing amount of loan written – off to enable successful lending operations.

4.4 Relationship between the Study Variables

Table 4.17 Spearman's Correlation Matrix for the study Variables

	1	2	3	4	5	6	7	8	9	10
Repayment Rate (1)	1.000									
Default Rate (2)	0.584**	1.000								
Collection Policy (3)	-0.311**	-0.462**	1.000							
Credit Risk (4)	0.837**	0.626**	0.058	1.000						
Savings Mobilisation (5)	0.601**	0.610**	-0.097	0.765**	1.000					
Asset/Liability Mgt (6)	-0.195*	-0.273**	0.745**	0.151*	-0.018	1.000				
Repayment Cycles (7)	0.419**	0.371**	-0.551**	0.355**	0.548**	-0.319**	1.000			
Liquidity Risk (8)	0.517**	0.524**	-0.076	0.601**	0.968**	0.090	0.644**	1.000		
Loan Portfolio Quality (9)	0.683**	- 0.592**	0.439**	**-0.497****	0.472**	0.579**	0.564**	**-0.358****	1.000	
F. Sustainability (10)	0.753**	-0.643**	0.227**	- 0.609**	0.820**	0.319**	0.616**	-0.754**	0.199*	1.000

* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

4.4.1 Relationship Between Credit Risk and Loan Portfolio Quality

According to table 4.17 above, there is a significant negative relationship between credit risk and loan portfolio quality as shown by the Spearman correlation ($r = -0.497$, $p - value < 0.01$). This means that as credit risk increases, loan portfolio quality declines in a negative direction. Credit risk therefore affects the loan portfolio quality by reducing earnings generated by the loans.

4.4.2 Relationship Between Credit Risk and Financial Sustainability

From table 4.17 above, there is a significant negative relationship between credit risk and financial sustainability ($r = -0.609$, $p - value < 0.01$). This means that as credit risk increases, financial sustainability declines and moves in opposite direction as a result of the effect. Increase in credit risk creates a negative impact on sustainability, making it difficult to achieve it.

4.4.3 Relationship Between Liquidity Risk and Loan Portfolio Quality

According to table 4.17 above, there is a significant negative relationship between liquidity risk and loan portfolio quality ($r = -0.358$, $p - value < 0.01$). This means that as liquidity risk increases, loan portfolio quality declines and moves in opposite direction. The increase in liquidity risk reduces availability of funds which retards the ability of the MFI to meet its lending obligation which generates earnings.

4.4.4 Relationship Between Liquidity Risk and Financial Sustainability

From correlation table 4.17 above, there is a significant negative relationship between liquidity risk and financial sustainability of microfinance institutions ($r = -0.754$, $p - value < 0.01$).

This means that as liquidity risk increases, financial sustainability declines and moves in a negative direction. The increase in liquidity risk reduces the ability of the MFI in meeting its obligations as they fall due, therefore reducing sustainability.

4.4.5 Relationship Between Loan Portfolio Quality and Financial Sustainability

From correlation table 4.17 above, there is a significant positive relationship between loan portfolio quality and financial sustainability ($r = 0.199$, $p - value > 0.05$). This means that as loan portfolio quality improves, financial sustainability also improves in the positive direction. Improvement in the loan portfolio quality generates more income which then increases the financial sustainability.

4.5 Regression Analysis

Multiple regression analysis was used to find the influence of the independent variable on the dependent variable. The independent variables used were credit risk and liquidity risk. The dependent variable considered was financial sustainability of microfinance institutions. Table 4.18 below presents the regression model.

Table: 4.18: Regression of Credit risk, Liquidity risk with Financial Sustainability of Microfinance Institutions

Model	**Un standardized Coefficients**		**Standardized Coefficients**						
	B	**Std. Error**	**Beta**	**t**	**Sig.**	**R2**	**Adjusted R2**	**F**	**Sig.**
(Constant)	-4.823	0.626		-7.700	0.000	0.530	0.525	94.300	0.000
Credit Risk	1.827	0.343	0.499	5.321	0.000				
Liquidity Risk	0.633	0.229	0.260	2.769	0.000				

Source: Primary data

The regression result shows that about 53% of the variations in FINCA's financial sustainability is explained by a combination of credit and liquidity risks. This means about 47% of the variation in FINCA's financial sustainability remain unexplained.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a discussion of findings observed and inferred from the data presented in chapter four. The discussion of findings is based on the literature available in chapter two. This chapter also provides the conclusions, recommendations and suggestions of areas for further study. The study is divided into three sections; discussion of results, conclusion and recommendations.

The findings are discussed in terms of the research objectives in relation to literature in chapter two. The level of constructs of credit risk, liquidity risk, loan portfolio quality and financial sustainability and relationship between these variables are discussed.

5.1.1 Relationship Between Credit Risk and Loan Portfolio Quality

The Spearman's correlation coefficient shows that there is a significant negative relationship between credit risk and loan portfolio quality. This finding is consistent with Namatovu (1999) who contends that MFIs' clients with slow repayment culture increases the default rate on the loan, therefore causing a negative effect on the loan portfolio quality. It also confirms that the real challenge in lending is getting the money back in order to mitigate the default, as stated by Niamh (2001). Some of the MFIs' clients are slow payers therefore leading to default.

The negative relationship between credit risk and loan portfolio quality occurs when one or more member within a group decides to default due to default of other members. This is because clients will generally not be willing to repay loans of defaulting members.

Again inappropriate credit terms and conditions for each borrower as lending cycles continues with inherent matching problem as lending is repeated over time, results into increased drop out of clients, usually in search of larger loans by creating multiple borrowings, this leads to loan default.

5.1.2 Relationship Between Credit Risk and Financial Sustainability

The Spearman's correlation coefficient shows that there is a significant negative relationship between credit risk and financial sustainability. The relationship between credit risk and financial sustainability is negative because of impending delinquency problem in the MFI surveyed due to high drop out rate. Increased delinquency also means that loan portfolio monitoring is increased, which implies costs and this negatively affects sustainability. MFIs finds it difficult to achieve high returns because portfolio yields have sunk so low and also as a result of older delinquency of microfinance loans (USAID, 2005).

The small sizes of group loans do not enhance MFIs' incomes. The incomes generated from these small loans are further stressed by high operating costs, which explain the continued reliance on donor funds and subsequently compromise the long – term sustainability of MFIs. Sustainability requires that MFIs cover all lending costs, operational costs, commercial costs and generate profits. With small loan sizes that do not generate sufficient incomes to cover

these costs and increased incidences of client drop out, sustainability may not be possible hence the continued reliance on donor support.

The repayment of an MFI's loans is a crucial indicator of sustainability. This is in line with Pissari (2003) who highlighted poor collection of micro – loans as a blow to sustainability of MFIs because more cost is incurred in the supervision and monitoring of the loan portfolio.

5.1.3 Relationship Between Liquidity Risk and Loan Portfolio Quality

The findings of the study indicate that the relationship between liquidity risk and loan portfolio quality is significant with negative correlation. The finding of the significant negative relationship between liquidity risk and loan portfolio quality is in line with Bruett (2004) who states that changes in terms and conditions of loans and lack of liquidity leads to delaying loan disbursements, which as a result reduces interest income on the loans hence lowering the loan portfolio quality.

Rosenberg (2006) argues that as part of liquidity management strategies, MFIs should maintain a diversified funding base and strong and lasting relationships with depositors and other liability holders. From the findings, the MFI surveyed had only one product or funding market which generated income for its operations. Given MFIs loan portfolio volatility, risk profile and lending methods, borrowers have always delayed to pay within the expected time frame as agreed in the process of applying for the loan. This means funds operation of the MFI business is not always available every time. The quality of MFIs' loans depends on the repayment cycles.

5.1.4 Relationship Between Liquidity Risk and Financial Sustainability

The Spearman's correlation coefficient indicates a significant negative relationship between liquidity risk and financial sustainability. Llanto (2001) argues that liquidity is the lifeblood of microfinance operations and thus, the inability to track loan performance on a daily basis constraint the efficiency of the MFI. Asset quality should be monitored in order to determine the liquidity position of the MFIs. The MFI surveyed should have sufficient ability to determine a better liquidity position and track loan performance which can realise better returns.

The MFIs' discretionary liquid assets need to be of high quality and/or readily marketable to ensure that they can be realised as required without significant loss. This implies that valuations of liquid assets need to be regularly adjusted to reflect market conditions (Basel, 2006). Most of the assets of the MFI surveyed could not readily be marketable to realise cash.

MFIs' should have a wide fund base by mobilizing deposits from their target groups or beneficiaries. Whatever the combination of funding source used by microfinance institutions, the volume and timeliness of fund availability should match the scale of lending operations and demand for funds by the borrowers. MFIs should avoid relying on funding provided by governments or donors.

5.1.5 Relationship Between Loan Portfolio Quality and Financial Sustainability

There was a significant positive relationship between loan portfolio quality and financial sustainability. By its very nature, the quality of loan portfolio promotes the financial sustainability level of MFIs. Poor portfolio quality is a

drain on sustainability, if provisions for loan loss and write – offs are great, it affects the income of MFIs.

Relatively high repayment rates and fairly good portfolio quality increases financial self – sustainability of MFIs. MFIs seek to cover their operating expenses and achieve growth so as to further their outreach to the poor. In the survey carried out, the repayment rate and portfolio quality of the MFI was low. Financial Sustainability allows MFIs to expand their operations and increase the level of outreach (Drake & Rhyne, 2002). It's worth noting that high loan portfolio quality indicates increased outreach because of the good returns generated from the clients which can cover their administrative and other costs.

MFIs' loans are tiny and more expensive to make than large loans. Only a few extremely efficient MFIs have an operating expense ratio below 10 percent. Microfinance programs with high operating costs are less viable. If transaction costs on loan portfolio are very high relative to the loan size. If the resulting spread between interest rates on subsidised loans and rates paid on deposits is too low to cover the costs, MFIs faces the challenge of mobilising savings and delivering credit effectively.

5.2 Conclusion

It is observed from the study that there is a significant negative relationship between credit risk and loan portfolio quality. This confirms that the real challenge in lending is getting the money back from the borrowers, variations in late repayments and default on the loan portfolio causes the current recovery rate to decline. The study finding showed that loan portfolio generates little income to FINCA in Lira district.

The study also revealed that there is a significant negative relationship between credit risk and sustainability. Credit facilities with outstanding arrears are considered non – performing hence affecting the MFIs financial self sufficiency. Repayment of an MFI's loans is a crucial indicator of sustainability. Poor collection of micro – loans is a blow to sustainability of MFIs as more cost is incurred in the supervision and monitoring of the loan portfolio. Since more costs are incurred in operations of the MFIs, sustainability can not fully be achieved by FINCA in Lira district.

On the relationship between liquidity risk and loan portfolio quality, there was a significant and negative relationship. Given MFIs' loan portfolio volatility, risk profile and lending methods, most of FINCA's borrowers in Lira district have failed to pay within the expected time frame as agreed in the process of applying for the loan.

It is further noted that there was a significant negative relationship between liquidity risk and sustainability. Illiquidity of FINCA's borrowers in Lira district has affected the long term sustainability of its operations.

As a result of the study, the finding indicates that there was a significant positive relationship between loan portfolio quality and sustainability. Sustainability aims at mobilising deposits and savings, financial performance, staff motivation, reducing loan and administrative costs, availability of funds for loan disbursements, grants for community organising and training.

5.2 Recommendations

Since credit risk is likely to reduce financial sustainability of FINCA's operations in Lira district, the microfinance should create avenues of mitigating the risk of lending and the amount of risk taken in lending should be commensurate to the level of returns expected from the money lent to the borrowers. FINCA also needs to monitor and control the gaps between maturing assets and liabilities in various time bands in order to reduce on liquidity risk.

FINCA's Clients in Lira district should have adequate liquidity to separate business needs from household needs. Women are the most likely to get into trouble with loans, since they usually use liquidity for school fees, which is not an immediately productive activity. Loans received from the MFI should be used for the right purpose for which it was borrowed.

FINCA should establish a better and realizable incentive system that encourages on time repayments of loan instalments. Clients with good repayment history should be given larger loans amount and repayment period extended say by a week after the loan grace periods. Again loan products should suit the clients' needs, the delivery process, loan term and loan sizes should make repayment easy in order to reduce on repayment variation among borrowers in Lira district.

Borrowers in their respective groups should be required to save prior to receiving a loan and to continue saving during the loan cycles and loan terms should depend on the purpose of the loan. This enables the microfinance to withdraw funds from clients' savings accounts to cover the missed payment.

This will improve the loan collection performance and reduces the cost that can be incurred in follow – up and recovery of loans in arrears in Lira district.

FINCA should design a set of mechanisms such that it pays only to low risk borrowers in Lira district. In a group of safe borrowers there will hardly occur any case of many members not being able to repay. For one defaulting borrower, however, the MFI can be fairly sure that the rest of the group will be able to temporarily cover his/her instalments. FINCA should improve on client selection and group formation in Lira district.

5.4 Areas for Further Study

Why microfinance outreach remains very limited, and no significant programs are currently operating on a sustainable basis.

How microfinance programs can enhance their performance in the critical areas of outreach to the disadvantaged, viability and sustainability, resource mobilisation, and policy and macro factors.

How donor agencies and governments can best provide assistance for institutional strengthening and capacity building to see how microfinance institutions can better meet their objectives in terms of outreach and sustainability.

How microfinance institutions can adopt better risk management techniques that can both favour the borrowers and the MFI's sustainability.

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MAKERERE UNIVERSITY

Business School

GRADUATE RESEACH CENTRE

Credit Risk, Liquidity Risk and Sustainability of Microfinance Institutions in Uganda Questionnaire

(To be filled by Employees of FINCA Uganda Ltd, Lira District)

Dear Respondent,
A study on Credit Risk, Liquidity Risk and Sustainability of Microfinance Institutions in Uganda is being carried out. This study will enrich the understandings of various stake holders on the relationship between Credit Risk, Liquidity Risk and Sustainability of Microfinance Institutions.

In order to accomplish this study, we are requesting you to complete this questionnaire. The information provided will be treated with utmost confidentiality. In case you are interested in receiving a copy of the outcome of the study, please indicate your contact address.

Thank you for participating and making this study a success.

SECTION I

BACKGROUND INFORMATION

To help us form a picture of the background and experience of our informed respondents, please answer the following questions.

1. Gender (Tick one): Male _____ Female _____

2. How old are you? (18-28) (29-39) (40-50) Above 50

3. What is your level of education?

i) Primary _____ ii) Secondary _____ iii) Diploma _____ iv) Degree _____ v) Others (specify) _____

4. What is your job position at FINCA Uganda Ltd?

_____

5. For how long have you worked with FINCA Uganda Ltd (Years)?

_____

6. Have you ever worked for any microfinance institution before?

Yes _____ No _____

7. If yes in (6) above, in which district in Uganda?

_____

SECTION II

The following statements assess the individuals' credit worthiness and ability to repay back loans received from the microfinance institution. Please circle the most appropriate option.

Strongly Agree (5)
Agree (4)
Neither Agree nor Disagree (3)
Disagree (2)
Strongly Disagree (1)

Topic A	CREDIT RISK					
A01	The microfinance has a uniform standard applied to all loan applicants	1	2	3	4	5
A02	The credit rating system that we use varies from one borrower to another	1	2	3	4	5
A03	Repayments of late loans by our borrowers has never exceeded one day after the expiry of the loan period	1	2	3	4	5
A04	All our loans exposed to risk are fully covered by savings/deposits from borrowers	1	2	3	4	5
A05	The amount of our existing old loans is more than the amount of approved new loans to borrowers	1	2	3	4	5
A06	All our borrowers have very good business status and planning period which has enabled them fulfill their loan repayments in – time without delay over the past years	1	2	3	4	5
A07	The group members have always paid large amount of loans of their defaulting colleagues	1	2	3	4	5
A08	Most of our borrowers repay their loan installments before the loan maturity date	1	2	3	4	5
A09	All our existing loan borrowers have very high on – time loan repayment history	1	2	3	4	5
A10	We have never approved any loan at all before considering repayment cycles of the loan applicant	1	2	3	4	5
A11	Our loan staffs always visit borrowers who have missed their repayments within 24 hours with reminding letters after the expiry of their loan periods	1	2	3	4	5
A12	All our existing borrowers always have 100% on – time repayment initiatives	1	2	3	4	5
A13	Poor business experience of our loan borrowers increases default rate on our loans	1	2	3	4	5
A14	All our borrowers have well established capacity to repay leading to no default on our loans	1	2	3	4	5
A15	All our loans have been disbursed to borrowers only on provision of collateral and guarantor by the borrowers	1	2	3	4	5
A16	There is consistency and lesser variability in earnings of all our borrowers' businesses	1	2	3	4	5
A17	New loans are at times issued to loyal borrowers before their old loans are fully paid back	1	2	3	4	5
A18	Approval of all preceding loans to old borrowers is only determined by on – time repayment track records of the particular borrower	1	2	3	4	5
A19	We usually consider behavior of the loan applicant as a key factor before we approves all our loans	1	2	3	4	5
A20	All our loans in arrears have been repaid without taking legal actions on any borrower	1	2	3	4	5
A21	The credit committee evaluates all potentially funded business ventures even after loan disbursement	1	2	3	4	5
A22	Solidarity groups retain the approval and administration of the loan from the microfinance	1	2	3	4	5
A23	Some group members have ever been denied loans due to failure of one member to repay	1	2	3	4	5
A24	We have ever blocked guarantors' accounts due to failure by some borrowers to repay their out standing loans	1	2	3	4	5
A25	We always have some guarantors being contacted on repayment failure of some of our borrowers	1	2	3	4	5
A26	All our borrowers have always had the highest repayment culture over the past years	1	2	3	4	5
A27	The strongest repayment initiative for uncollateralized micro – loans is always peer - pressure	1	2	3	4	5
A28	There is always large number of our borrowers who have ever received the weekly repayment period extension as a result of on time repayment of loans	1	2	3	4	5
A29	There has always been no extension of repayment date on all our loans	1	2	3	4	5
A30	All our borrowers always pay their loan instalments promptly and on regular basis	1	2	3	4	5

a1) When rated basing on repayment period, most of our borrowers are

i) Excellent borrowers _____ ii) Very good borrowers _____

iii) Fairly good borrowers _____ iv) Good borrowers _____

v) Poor borrowers _____

a2) What percentage do you give your borrowers basing on your option in (a1)?

i) 1% – 20% _____ ii) 20% - 40% _____ iii) 40% - 60% _____

iv) 60% - 80% _____ v) 80% - 100% _____ vi) 100% and above _____

a3) How frequently and closely do you visit and supervise the borrowers in your option in (a1)?

i) Twice a week _____ ii) Weekly ____ iii) Fortnight _____

iv) Once in three weeks_____ v) Monthly _____ vi) Never _____

a4) Penalty interest is charged on all accounts with late repayment period of

i) 1 day _____ ii) 7 days _____ iii) 14 days _____

iv) 21 days _____ v) 30 days _____

Strongly Agree (5)
Agree (4)
Neither Agree nor Disagree (3)
Disagree (2)
Strongly Disagree (1)

Topic B	**LIQUIDITY RISK**					
B01	Some items in our annual budgets for our business operations have at times been supplemented by funds from other sources other than interest income	1	2	3	4	5
B02	We always meet all loan request by borrowers immediately as fast as they need it	1	2	3	4	5
B03	At times we have to first satisfy our other urgent financial obligations such as facilitation of loan recovery from borrowers than issuing large amount of new loans	1	2	3	4	5
B04	There are large numbers of voluntary savers with their money in our branch	1	2	3	4	5
B05	We have always projected the level of default of all our borrowers very accurately	1	2	3	4	5
B06	Part of our loan portfolio is funded by funds from commercial capital sources	1	2	3	4	5
B07	We have ever received new terms on funding that we get from commercial capital sources	1	2	3	4	5
B08	Our Locally generated income from loans always cover all our daily business operations	1	2	3	4	5
B09	Some times we change the terms and conditions of our loans	1	2	3	4	5
B10	The rate at which our microfinance borrow s from commercial sources is always fixed	1	2	3	4	5
B11	We are at times ordered to stop lending as we re – organise our business facilities	1	2	3	4	5
B12	Certain percentages of our loan portfolio is funded by medium term deposits	1	2	3	4	5
B13	Our interest income from loans has always covered all our business expenses over the past years	1	2	3	4	5

B14	We always mobilise savings from surplus units very easily within less time	1	2	3	4	5
B15	At times the office vehicle is too busy to transport us to the field to visit borrowers in time	1	2	3	4	5
B16	Some times we may postpone field visits due to other tied work schedules in office	1	2	3	4	5
B17	I am always fully facilitated with all resources that helps me in our loan business operation	1	2	3	4	5
B18	There is lower reserves provisioning for losses on our loan portfolio	1	2	3	4	5
B19	Our borrowers have always had the highest level of saving culture	1	2	3	4	5
B20	Part of our business operations are at times funded by donations	1	2	3	4	5
B21	There is always a limit on the amount of loans that we advance to particular borrowers	1	2	3	4	5
B22	All our outstanding loans are always provisioned for by locally generated interest income **b1 The maturity period of our loans from commercial capital sources is** i) 1 – 3 months___ ii) 3 – 6 months___ iii) 6 – 9 months____ iv) 9 – 12 months__ v) 12 months and above_____ **b2 All our existing assets can be easily turned into cash to meet our obligations as they fall due within** i) 12 hours_____ ii) 24 hours_____ iii) 48 hours iv) 72 hours_____ v) more than 72 hours_____	1	2	3	4	5

Topic C LOAN PORTFOLIO QUALITY

C01	All our loans have a Portfolio at Risk (PaR) less than 0%	1	2	3	4	5
C02	Our loan portfolio generates higher returns that covers all our financial needs	1	2	3	4	5
C03	The repayment cycles of our loan portfolio is longer	1	2	3	4	5
C04	Interest rates charged on our loan portfolio can easily be increased	1	2	3	4	5
C05	The historical repayment behavior of all our borrowers for repeat loans is very high	1	2	3	4	5
C06	We are aware that some times our clients borrow from other sources to repay a pending loan	1	2	3	4	5
C07	We always follow – up our defaulted loans immediately the day after the expiry of the loan date	1	2	3	4	5
C08	Provision expenses to cater for loan losses has never increased at all over the past years	1	2	3	4	5
C09	The rate of write – off of our bad loans has never increased at all over the past years	1	2	3	4	5
C10	There has been constantly small amount of our loans in arrears over the past years	1	2	3	4	5
C11	There is constantly increasing rate of loan rotation amongst all our borrowers	1	2	3	4	5
C12	There has been drop out of our borrowers who have failed to pay their outstanding loans	1	2	3	4	5
C13	Our borrowers have never complained about our penalty interest charged on delayed loan repayment	1	2	3	4	5
C14	All our loan staffs have at least worked with microfinance institution before joining FINCA	1	2	3	4	5
C15	We always give all the full amount of loans requested by the borrowers	1	2	3	4	5

c1 We always process all our borrowers' loans request within

i) 1 day _____ ii) 2 days _____ iii) 3 days _____

iv) 4 days _____ v) 5 days _____ vi) More than 5 days _____

Topic D	SUSTAINABILITY					
D01	All our borrowers satisfies the terms and conditions in order to access our loans	1	2	3	4	5
D02	The interest rates charged on loans has always covered all our operation costs over the past years	1	2	3	4	5
D03	The budget for recruitment and training staffs has ever been supplemented by funds from other sources over the past years	1	2	3	4	5
D04	Some borrowers have ever repaid their outstanding loans one day after the expiry of the loan date	1	2	3	4	5
D05	The funds generated by our loan portfolio is always in excess to cover all loans requested by borrowers	1	2	3	4	5
D06	Costs of allocating adequate information and appraisal of new borrowers has been high	1	2	3	4	5
D07	Our capital acquisition expenses has always been very high over the past years	1	2	3	4	5
D08	The period it takes to pay interest rate on our subsidized loans is shorter than the period we take to pay interest on our customers' deposits	1	2	3	4	5
D09	We have never experienced loan losses and write – offs in our branch over the past years	1	2	3	4	5
D10	Our branch has always experienced high annual increase in the number of new staffs over the past years	1	2	3	4	5
D11	Our staffs always provides leadership training and guidance to all borrowers on request	1	2	3	4	5
D12	Our loan size and numbers of poor borrowers have rapidly increased over the past years	1	2	3	4	5
D13	There has been high cost of transaction and loan supervision over the past years	1	2	3	4	5
D14	Growth of businesses of all our borrowers has led to rapid increase in repayment rate by all borrowers	1	2	3	4	5
D15	Certain categories of our loyal borrowers have always been allowed to negotiate for new loan terms and conditions to suit their financial situation	1	2	3	4	5
D16	We have always paid less in terms of interest expenses on our customers' savings/deposits	1	2	3	4	5
D17	All our cash requirements has been financed by high returns generated by our loan portfolio	1	2	3	4	5
D18	Budgets on our assets acquisition has ever been supplemented over the past years	1	2	3	4	5
D19	We have less range of Portfolio at Risk (PaR) amount given an ageing range	1	2	3	4	5
D20	Market interest rates in microfinance industry has always been stable with decreasing trends	1	2	3	4	5
D21	It has always been easy to track our loan portfolio performance with less costs	1	2	3	4	5
D22	All our loans are small in amount with the highest numbers of loyal borrowers	1	2	3	4	5
D23	All our loans do not exceed the clients' established borrowing days	1	2	3	4	5
D24	The repayment rate on all our loans is 100% on – time	1	2	3	4	5
D25	There has been no old delinquent loan of all our loans advanced to borrowers over the past years	1	2	3	4	5
D26	We have recently opened up new branches within Lira district	1	2	3	4	5
D27	Profits generated by our loan portfolio has always been enough to run all our business operations	1	2	3	4	5
D28	Our equity is always constantly high and it has covered all our borrowings over the past year	1	2	3	4	5
D29	Our main business venture is loan provision to borrowers	1	2	3	4	5
D30	Our business growth and expansion has been only financed by retained earnings from our loan portfolio over the past years	1	2	3	4	5

SECTION III

TO BE COMPLETED BY RESEARCH ASSISTANT:

Name of Research Assistant: ……

District: ……..

Date completed: _____ Respondent ID: |__|__|__|