LOAN PORTFOLIO MANAGEMENT AND PERFORMANCE OF MICRO FINANCE INSTITUTIONS IN UGANDA: THE CASE OF WAKISO DISTRICT

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DECLARATION

I, Steven Sven Karekaho, declare that this is my original work and has never been submitted before to any university for any award.

Sign.....

Date.....

STEVEN SVEN KAREKAHO

APPROVAL

This dissertation is with our approval as University Supervisors.

Sign.....Date.....

Dr. Nkote Nabeta

Sign.....Date.....

Mr. Nixon Kamukama

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DEDICATION

This dissertation is dedicated to my dear wife for the great care and love showed to me during the course and to my children in compensation of the fatherly love missed and as a sign of encouraging them to study passed this level of education.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The purpose of the study was to establish the relationship between loan portfolio management and performance of Microfinance Institutions (MFIs) in Wakiso district. This was prompted by the fact that most of the MFIs in Uganda were failing to achieve their portfolio performance; yet it was not clear whether this was due to how their loan portfolios were managed. The study was conducted as a cross sectional survey involving an analytical design. Its objectives were to establish and examine the relationship between: Loan portfolio planning, Client screening, Portfolio control and the performance of MFIs. Data was collected from 10 MFIs represented by their purposively selected managers, loan officers and clients. The data were collected using questionnaires and analyzed using quantitative techniques with the aid of the SPSS computer programme.

The findings show that there were significant relationships between loan portfolio planning, client screening, portfolio control and the performance of the MFIs. The variables also significantly predicted 65.2% of this performance with portfolio control as the best predictor. However, the conduct of each of these portfolio management variables had flaws that impacted adversely on the portfolio performance of the MFIs. The study was therefore concluded by stressing the need to improve the control, client screening, and planning of loan portfolio if the MFIs are to achieve the desired portfolio performance. Accordingly, it was recommended that MFIs should portfolio control, client screening and portfolio planning but putting more emphasis on ameliorating loan monitoring, taking credit decisions and linking portfolio planning to client screening.

CHAPTER ONE

INTRODUCTION

1.1 Background

Loan portfolio management involves loan portfolio planning, client screening and portfolio control. In micro finance institutions (MFIs), loan portfolio planning deals with coming up with policies by which loans are segmented, priced, and their sizes and associated risks determined. This is carried out in such a way that loans are profitably extended to group- guaranteed low-income individuals to help them realize their anticipated business or development goals (Kasibante, 2001; Kasekende and Aleema, 1999). Client screening focuses on analyzing and appraising the creditworthiness of applicants for loans in terms of their ability to service and repay the loans applied for. Yet loan portfolio control deals with loan disbursement, enforcing loan servicing, monitoring, repayment, and follow up actions (UNDP, 1997).

Loan portfolio planning, client screening and portfolio control are all conducted with the sole objective of achieving desired loan portfolio performance, which, itself is reflected in loan interest payment, loan repayment, realized profitability, and clients' goal attainment (Martin, 1996). Thus, when MFIs' targeted loan portfolio performance is not realized, questioning loan portfolio management becomes inevitable.

The situation with the loan portfolio performance of Uganda's MFIs generally and those in Wakiso district in particular, is not any different. Despite the ongoing Uganda government's policy of encouraging and supporting establishment of MFIs as vehicles for reducing poverty through helping the poor have easy access to capital, many of these institutions achieve poor loan portfolio performances (Ministry of Finance, Planning and Economic Development, 2004). This has hit them so much that a number of them have not only frustrated the achievement of their

clients' business goals but have themselves also failed to survive in business (Micro Finance Forum, 2003).

MFIs are meant to meet the financial needs of those populations excluded from formal financial services, especially the poor, through providing presumably affordable loans, easy access to loan securing, servicing and repayment facilities; and to help the poor reduce their vulnerability to capital deficiency, increase their incomes and build businesses. However, many of the MFIs in Uganda have instead done the opposite, thereby leading to increasing loss of client confidence in them. They have also demonstrated weaknesses such as failure to recover loans resulting into inadequate capital base (The New Vision, March 2004). Examples of MFIs that have suffered this fate are: Baliyo Agricultural Micro Finance, Rural Farmers Micro Finance, Bwaise Traders Micro Finance, Cooperative Micro Finance, and the defunct Uganda Commercial Bank Micro Finance Department that collapsed with shillings 115 billion in irrecoverable loans (Bank of Uganda, 2003; Micro Finance Report, 2004).

According to media reports both in the press and over radio stations, a growing number of MFI clients are expressing discontent about the high priced and quite exploitative loans extended by MFIs: That instead of pursuing a system in which both the MFI and its clients are achieving the goals for which they respectively extend and secure loans, the MFIs are in effect lending to benefit themselves alone (Radio Two, 2004). Not only does their loan servicing and repayment system erode all the profits made by the clients; it also reduces clients' capital base so much that at the end of the agreed repayment period, clients do not have the money required to repay, even when they have been recording effective business performance (Ibid). In such a scenario, questioning loan portfolio management in Uganda's MFIs becomes inevitable.

1.2 Statement of the Problem

Loan portfolio management is intended to ensure that the planned loan portfolio performance is achieved. Unfortunately, Uganda's micro finance institutions appear to have failed to achieve their planned loan portfolio performances because a number of them have not only caused discontent among their clients, but also failed to recover the loaned money, closing down ultimately (Bank of Uganda, 2000). Indeed, five MFIs, including UCB Micro Finance Department that was the largest of all, closed down between 2000 and 2004 citing the main causes as high rates of irrecoverable loans, averaging at 35.6% per annum and clientele declining at a rate of 39.5% per annum (Micro Finance Report, 2004; Ministry of Finance and Economic Development, 2005). This situation raises cause for concern, leading to the pressing need to investigate whether it can be attributed to loan portfolio management in these institutions. Accordingly, this study was an attempt to establish the empirical situation.

1.3 Purpose of the study

The study sought to examine the relationship between loan portfolio management and loan portfolio performance of MFIs in Wakiso district.

1.4 Objectives of the study

i) To establish the relationship between loan portfolio planning and performance of MFIs in Wakiso district

ii) To examine the relationship between client screening and performance of MFIs in Wakiso district

iii) To investigate the relationship between loan portfolio control and performance of MFIs in Wakiso district.

1.5 Research Questions

i) What is the relationship between loan portfolio planning and performance of MFIs in Wakiso district?

ii) What is the relationship between client screening and performance of the MFIs in Wakiso district?

iii) What is the relationship between the loan portfolio control and performance of MFIs in Wakiso district?

1.6 Scope of the study

- **Geographical Scope**

The study was conducted in Wakiso district.

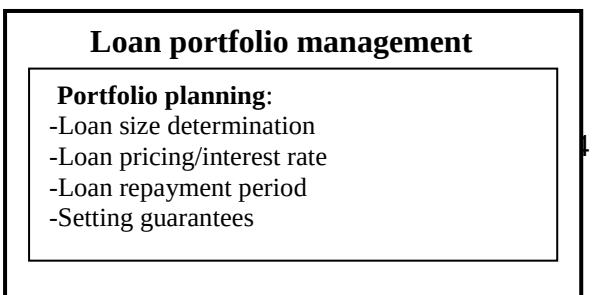
- **Subject Scope**

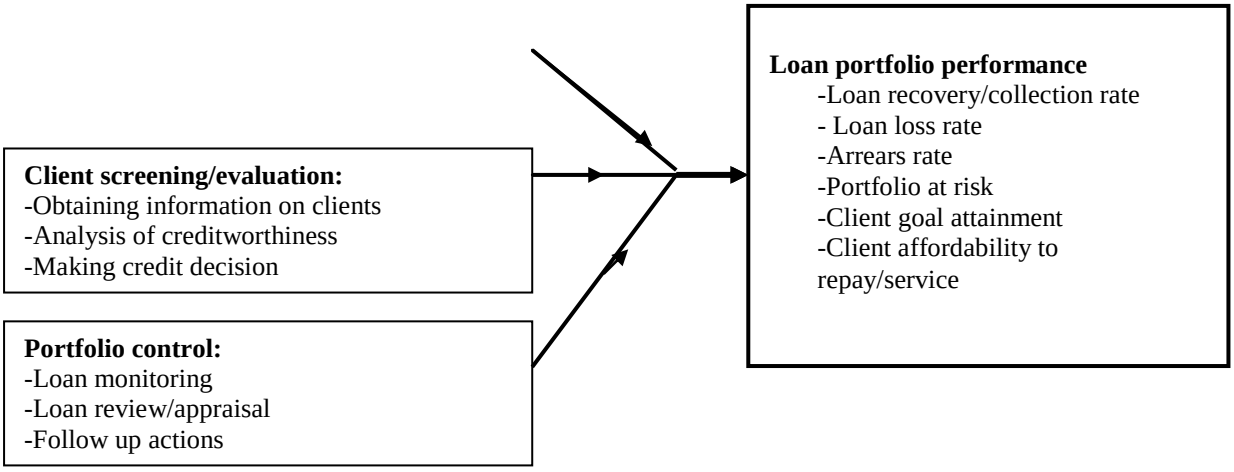
The content scope of the study was restricted to investigating the relationship between loan portfolio planning, client screening, portfolio control and performance in Uganda's MFIs.

1.7 Significance of the study

The significance of the study lies in the hope that its findings will benefit MFI managers, entrepreneurs, clients and the entire commercial finance sector in Uganda and elsewhere. This is because the study will establish the weaknesses in loan portfolio management and the level of loan portfolio performance, thereby providing a basis for each of these parties to appreciate and devise means and ways that can help solve the weaknesses for purposes of achieving improved loan portfolio performance in the eyes of both MFI managers and their clients.

1.8 Conceptual Framework





Source: Developed based on literature cited in Loan Analytics, 2004

Description of the conceptual framework

The diagram shows that the study is conceived in such a way that independent variable is loan portfolio management while the dependent variable is loan portfolio performance. Accordingly, as the Micro Finance Forum (2003) noted, loan portfolio performance of any MFI depends on how it plans, screens clients and controls its loan portfolio. The study recognizes that there are variables that intervene in loan portfolio management, thereby affecting loan portfolio performance. These variables are however, outside the scope of the study and will therefore be held constant.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter focuses on the review of literature relevant to the study. The literature is reviewed from relevant journals and dissertations but attempt is made to contextualize and fit it in the main themes of the study reflected as sections that make up the chapter.

2.1 Loan Portfolio Planning

According to Loan Analytics (2004), loan portfolio planning deals with portfolio policies such as loan segmentation, risk identification, cost allocation, and profit maximization. Loan portfolio segmentation focuses on segmenting the loan portfolio into homogeneous sub-portfolios, with each sub portfolio having customers and loans with similar risk characteristics. The aim is to create a risk efficient portfolio and to maximize the portfolio return at a given level of risk. However, the way Uganda's MFIs are vulnerable to risk of default, failing to recover loaned money from those they lend and to realize expected returns as pointed out by Bohnstedt (2000) casts doubts on how that their portfolio segmentation is conducted. Questions regarding how they come up with sub portfolios that do not support their stay in business remain unanswered; hence the need for this study to provide empirical answers.

Second policy in portfolio planning focuses on identification of sub-portfolio risk. The idea behind is that the foundation of effective loan portfolio performance is rooted in the probability of default and loss as estimated in accordance with the type and capacity of the businesses of customers in a given sub portfolio. Many sub portfolio risk estimation methods exist such as migration and sub portfolio stress testing, but for MFIs, the method usually employed to identify sub-portfolio volatility considers group guarantees determined according to the level of trustworthiness and cooperation that the MFI has with the customers in a particular sub portfolio. Kagwa-Pafula (2000) observes that the use of this method is based on the rationale that most clients targeted by MFIs are poor people expected not to have the collateral required to secure loans under conditions of minimized risks. Antonio (2000) adds that the method facilitates a decrease in portfolio risk through better risk identification and risk diversification, and increases portfolio profitability through the reduction of portfolio volatility and the increase in customer profitability.

The third policy in portfolio planning deals with the identification and allocation of loan origination costs, fixed overhead and servicing costs, and variable servicing and marketing costs over the total loan portfolio. These costs are allocated by loan type, loan size, and probability of default and loss given default. In other words, this step involves loan pricing, which itself focuses on setting or fixing the interest rate or the price a customer has to pay for using the loan extended by any lending institution and a MFI in particular (Ditcher and Kamuntu,1997; Garber, 1997; Kasekende and Aleema, 1999).

The fourth policy involves the maximization of stockholder value by creating a risk-efficient portfolio, which according to Meeker (1998), is that portfolio that maximizes the expected return for a given level of risk.

From the above policies, it can be concluded that loan portfolio planning is a very critical process in the business life of a lending institution and a MFI in particular. It sets the all the loan terms and conditions upon which the success or failure of a MFI depends. It is therefore the basis of loan screening, control and performance.

2.2 Client Screening

Van Horne (1996, 2002) noted that client screening involves obtaining information on loan applicants, and then using the information to analyze and determine the creditworthiness of the applicants so as to make credit decisions. Van Horne (1996, 2002) went on to show that the information is obtained from the applicants' financial statements, credit ratings and reports, trade checking, and experience in business. He observed that this information helps in the analysis of not only the creditworthiness and ability of the applicant to meet the minimum standards for

qualifying for the loan being applied for, but also the probability of bad debts. All this is done so as to take an informed decision as to the extension of any loan. Van Horne was, however, general dealing with the management of financial policy in general but not with particular reference to micro finance institutions. None the less, his observations can guide a study into how these institutions go about their client screening and how this affects their portfolio performance.

Hartmut (1997) looked at client screening from the perspective of loan demand and potential to repay. He noted that client screening deals with assessing the credit demand based on the repayment potential of loan applicants. For MFIs, it basically focuses on the repayment capacity of the applicants based on the analyzed degree of credit worthiness, trustworthiness, type of business engaged in, and the level of faith that the MFI derives from the information given by the applicants.

According to ACCA (2005), historical financial indicators can be used to screen clients. These indicators can be calculated from previous financial statements and used to assess past trends in liquidity, solvency, profitability, efficiency, and debt repayment capacity. This information is important to lenders as they evaluate the borrower's current financial position and how well the borrower has performed in recent years. These indicators should then be compared to the lender's underwriting standards to assess the individual borrower's creditworthiness. ACCA (2005) added that if an applicant's balance sheet shows that the applicant has more loans than assets, that is, if the applicant's equity to assets ratio is low, lending the applicant is at a greater risk of not recovering the loan extended. This is because low equity to assets ratio indicates that the applicant is at a greater risk of collapsing any time. On the other hand, a high equity to assets ratio indicates that the applicant is in a sound position and can service and repay the loan, regardless of whether the applicant has made profits or not. ACCA (2005) was however dealing

with general assessment of the financial position of a firm but not how this assessment impacts on portfolio performance of MFIs.

Martin *et al* (2006) observed that many potential or targeted clients of MFIs do not always the financial statements necessary to assess their credit worthiness and potential to repay. These authors therefore suggested that other parameters have to be considered. The pointed out in order to remain competitive in the market, MFIs have to continually consider the changing business characteristics and needs of loan applicants. The foundation for their success is built on sound customer screening systems that clearly recognize and understand the changing nature of the businesses of applicants. They have to look at issues like: Is the applicant a full-time business operator; is he in a sustainable business; and if the applicant wants start up capital, is the business likely to succeed and continue in operational existence until the loan is paid? A clear understanding of these issues can help a great deal in identifying successful and less risky applicants. Martin et al (2006) concluded by noting that based on the answers to these questions, successful MFIs tend to group loan applicants according to their business characteristics, and to extend loans to only those whose likelihood of default is very low. In view of these observations, it is important to establish how MFIs in Uganda go about their client screening.

According to the Ministry of Finance, Planning and Economic Development (MFPED) (2005), even when most MFI clients do not have financial records to support their applications for required loans, prudent screening should not be based on verbal explanations. Loan applicants have to submit the details regarding why they need the loans. To Martin *et al* (2006), these details are usually submitted in form of project proposals explaining the nature of the business for which a loan is required. Therefore, the analysis of the creditworthiness of an applicant is

based on the submitted project proposal. Many methods of analysis exist, including viability and reliability analysis.

According to Meeker (1998), the problem with most of the MFIs, especially those dealing in lending to farmers is that their client evaluation process is still rigid, despite all the more realistic considerations available to these institutions from the market conditions of agricultural outputs. All commercial lenders, including MFIs institutions, establish and maintain a basic process for making credit decisions. In particular, their evaluation of agricultural loans has traditionally been based on analysis of the five primary credit factors, often called the "five Cs of credit" for capacity, capital, collateral, character, and condition. For analytical purposes, these institutions typically assign a relative weight to each of these factors based on the specific circumstances for each individual borrower.

Meeker (1998) added that while the foregoing five-factor-analysis model is a useful tool, credit analysis should increasingly emphasize the evaluation of the applicant's future debt repayment capacity. This analysis should be based on various sources of information about the borrower that become more reliable and sophisticated as the complexity and size of business operation increase. This information can be accessed from historical financial indicators, credit bureau reports, an assessment of the borrower's managerial abilities, and a demonstrated willingness to repay the loan. In general, client screening ensures that only those applicants with the least likelihood of defaulting are considered for loans. The question to pose here is therefore whether the MFIs in Uganda consider all these details when screening loan applicants before extending loans to them.

2.3 Loan Portfolio Control

Kagwa-Pafula (2000) observed that loan portfolio control, involves loan monitoring, loan review and supervision to enforce loan servicing and repayment, and other follow up actions. According to Oketch (1998) and UNDP (1997), loan control in MFIs also involves ensuring that loans are not disbursed anyhow but in accordance with the agreed terms for each prescribed sub portfolio. The Uganda Micro Finance Union (2001) indicates that the disbursed loans differ in size and charged interest rates from one sub loan portfolio to another and from one MFI to the next. Loan disbursement is also based on the guarantees availed to the MFI by the clients and on the agreed terms regarding loan repayment and servicing (Meeker, 1998). When all this is well catered for, it is bound to lead the MFI to its planned loan portfolio performance. Otherwise, disbursement has to be brought into question.

Further, loan portfolio control involves loan monitoring, which according to Berger and Gregory (2004), focuses on keeping a close and sometimes supervisory eye on the way the disbursed loans are utilized. This is intended to minimize the risk of default resulting from misuse of the disbursed loans. It is also intended to advise and give clients information regarding how best they can put loaned money to business use. This means that portfolio control is necessary not only to benefit the lending institution but also to ensure that clients succeed in the business pursuits for which they seek loans. Control should therefore ideally ensure that loans are serviced, recovered and repaid in a manner that also helps the clients not to run out of business. According to the Uganda Micro Finance Union (2001), this tends to be carried out in accordance with the interest and repayment terms agreed on earlier between the MFI and the client. The terms are based on periods ranging from a weekly, bi-weekly, monthly, or quarterly arrangement.

According to MFPED (2005), loan repayment and grace periods, especially for micro finance institutions that lend to agricultural clients, should be set and enforced in accordance with the

period taken to get the first harvest of the crops invested in. It is unfair to expect a farmer of a crop that takes a year to be harvested to start servicing and repaying the loan before a year ends. Any lending institution that does not take this into consideration simply exists to exploit but not to help farmers and itself to survive in profitable business. These observations imply that prescriptive, concurrent and post facto forms of control have to be based grace and repayment periods set in accordance with the gestation periods. Do the MFIs in Uganda consider this?

Furthermore, portfolio control involves what Kagwa-Pafula (2002) called follow up actions. For MFIs, these actions involve enforcing ways and means of loan recovery in case a client begins to show signs of defaulting or late repayment. Since MFI have no collateral to seize, they usually recover their loaned money by sharing out the defaulted amount of loan to all the members in the group that guaranteed the defaulter, and it is by effectively doing this that they can recover the money (Garber, 1997).

According to Mullineux and Murrinde (2002), optimal portfolio control strives to avoid unacceptable loans while making the right ones. More specifically, good portfolio control seeks to reduce risk while increasing growth and profits through high-quality loan volume. Reducing risk may be accomplished by evaluating credit applications against underwriting standards. These authors also added that maintaining a consistent control mechanism is most often achieved through effective communication of board direction through plans, policies, procedures, and underwriting standards, including appropriate checks and balances over the lending operations. There must also be an internal control policy that provides adequate direction for establishing effective controls over and accountability for the institution's operations, programs, and resources. This policy should be comprehensive and provide guidance for all operations.

Mullineux (1996) observed earlier that because of the inherent risk in lending operations, the regulation specifically calls for an internal control program to routinely review and assess the institution's assets. If properly designed and implemented, the board's policy and its system of internal controls provide an effective framework to accomplish management objectives, safeguard assets, maintain accurate financial reporting, and ensure compliance with laws and regulations. Effective internal controls prevent or guard against undesired actions and provide continuing reasonable assurance that the institution is operating in a safe and sound manner. If an internal control policy or system is weak or lacking, risk exposure increases substantially, and the chances for effective performance and desired results are significantly reduced.

Mullineux (1996) added that an institution's lending operations should be controlled by a number of internal control components, which generally include a combination of both "preventive" and "detective" controls. In portfolio management, preventive controls ensure that transactions and activities are performed in compliance with set objectives. They can be implemented in a variety of ways, including: working within the established policies and procedures; risk parameters; loan underwriting standards; risk identification and classification systems; performance standards and appraisals; management information and reporting systems.

Detective controls, however, focus on completed transactions (Keirungi, 2006). The purpose is to identify actions or activities that fall outside policy, procedure, or risk parameters and, therefore, are not in compliance with the set objectives or direction for portfolio management. Conditions identified through detective controls generally warrant management attention through remedial corrective actions or through plans that correct weaknesses. Detective controls generally include several processes such as: supervision, reviews of operations; internal loan review and

classification systems; independent internal audit, appraisal, and credit reviews; external audits or examinations; management's corrective action (Duku, 2004).

From the above-cited observations, it is clear that the planned loan portfolio performance is realized in accordance with the level of enforcing loan servicing and repayment. When there is failure to realize this performance, it is therefore not wrong to investigate the enforcement of loan servicing and repayment.

2.4 Loan Portfolio Performance

Loan portfolio performance is reflected in a number of variables depending on whether it is the financial institution or the client investigating it. Although clients investigate loan performance in terms of the achievement of the goals (such as capital increase, efficiency and effectiveness) for which they secure the loans, MFIs focus on it in terms of variables such as: arrears rate, loan repayment/collection rate, portfolio at risk, and loan servicing through interest payment in a set period (Martin, 1996).

Interest paid indicates the loan servicing performance. A micro finance institution is therefore said to be achieving excellent loan servicing performance once the interest it charges on the loans it disburses to its clients is paid as scheduled. Kagwa-Pafula (2002) indicates that because of using the system of group guarantees instead of collateral, most MFIs are able to register excellent loan servicing performances. This is because all the members within the guarantee group monitor and ensure that each of them is up to date as far as loan servicing is concerned (Yunus, 1996). This is done because in case one of the members fails to pay, all others are bound by their membership to pay on his/her behalf.

Yunus (1996) observed that loan repayment indicates portfolio performance and as the case is with loan servicing, most MFIs get their loans paid back because of the group guarantee system that is used instead of collateral. Members of the guarantee group ensure that each of them repays the loan so that it does not become a burden on them as individuals. Antonio (2000) puts it clearly that although group members guarantee each other, each individual in the group does not want to pay for others. He/she therefore has to encourage others to pay. In the end, the MFI benefits by registering sound loan repayment performance. These observations show that if the group guarantee system is functioning as it should, any MFI is bound to register planned loan portfolio performance. As such, failure to register a planned level of loan portfolio performance has direct implications on how the group guarantee system is supervised and monitored.

It must be noted that loan repayment performance is time-based in that loans have to be repaid within an agreed period of time. If loan repayment occurs beyond the agreed period of time, this tends to raise managerial concern that takes the form of invoking loan recovery measures executed through loan follow-up actions such as sending reminders, monitoring the clients, and making other group members pay for the defaulting member (Martin, 1996).

Loan portfolio performance is also shown by the level of profits or losses realized in a given accounting period (Mullineux, 1997). According to Kasibante (2001), the profits or losses realized by MFIs are computed on the basis of loan servicing versus all the costs incurred on loan management. The costs include the cost of personnel, administration, loan loss provision, and capital growth. There are also other overhead expenses that tend to be factored in. When the loan management costs are less than the interest paid, the MFI is said to have realized profit. When this not the case, the MFI is said to have made a loss. The fact that a number of MFIs in

Uganda have been making losses therefore, casts doubts on how they manage the mix between the costs they incur in loan management and the interest paid.

2.5 Relationship between Loan Portfolio Planning and Loan Portfolio Performance

Loan portfolio planning affects portfolio performance through the outcomes of the planning policies employed to plan for loan portfolio. Indeed, the portfolio segmentation planning policy aims at creating a risk efficient portfolio and to maximize the portfolio return at a given level of risk (King & Levine, 1994). The goal is to reduce portfolio risk and volatility while maintaining and/or increasing portfolio risk-adjusted returns. In so doing, it examines risks involved in extending particular loans, thereby predicting the extent of the likely default and loan repayment both of which are clear components of portfolio performance. Therefore, when portfolio performance is not as expected, especially with regard to loan repayment, and as Kagwa-Pafula (2002) noted for the Uganda's MFIs, the situation, as Bohnstedt (2000) noted, casts doubts on how that their portfolio segmentation is conducted.. The failure to recover loaned money and to realize expected returns, therefore, sets in the need to establish how the MFIs come up with sub portfolios.

In addition, Getubig (1987) regarded risk identification, which is also a loan planning policy, as the foundation of effective loan portfolio performance. He noted that this policy centres on minimization of risk through accurate estimation of probability of default and loss in view of the type and capacity of the businesses of customers in a given sub portfolio. Antonio (2000) added that the method facilitates a decrease in portfolio risk through better risk identification and risk diversification; that it also increases portfolio profitability through the reduction of portfolio volatility and the increase in customer profitability. Clearly, all the variables the policy focuses

are performance-indicator variables. Determining them is therefore the same as determining loan portfolio performance.

Furthermore, the planning policy involving identification and allocation of costs is essentially about loan pricing. It focuses on setting or fixing the interest rate or the price a customer has to pay for using the loan extended by the MFI (Hartmut, 1997). This way, this policy affects on loan performance since the interest rates it comes up with determine the extent of loan servicing.

2.6 Relationship between Client Screening and Loan Portfolio Performance

Berger and Gregory (2004) observed that client screening is carried out for purposes of ensuring that the loaned money will be recovered with minimum default. They added that the proper accomplishment of client screening requires management to have adequate knowledge about loan applicants. This helps to establish whether applicants will afford to service and repay the loans. In essence, effective client screening is the only way client ability to service and repay the loan is established and likely default is minimized. When it is well carried out, the MFI is bound to achieve its planned loan portfolio performance. These observations suggest that once portfolio performance is not realized as desired, it is not far fetched to investigate whether the cause is related to the manner in which client screening is conducted.

Indeed, Kasibante (2001) observed that proper client screening establishes which client is worthy lending, since it is based on financial statements that show not only the financial position of a client but also his/her state of income, inflows and outflows. In any case, ACCA (2005) noted that when a client's financial position indicates that his business is more financed by loans, extending more loans to such a client is tantamount to making him more indebted, thereby increasing his likelihood of failure to service and repay the loans.

In addition, Martin *et al* (2005) noted that the success of any MFI depends on how best it carries out client screening regarding the market potential and characteristics of the business for which the loan is sought. Poor client screening leads to poor portfolio performance and vice-versa.

2.7 Relationship between Portfolio Control and Performance

Antonio (2000) observed that portfolio control is intended to minimize the risk of default resulting from misuse of the disbursed loans. To Yunus (1996), it is intended to advise clients and give them information regarding how best they can put loaned money to business use required to service, recover and repay the loan without having to run out of capital. This way, control helps to ensure that loan servicing and repayment are achieved in a manner that does not overwhelm clients (Martin, 1996).

According to the Uganda Micro Finance Union (2001), control follows the interest and loan repayment terms agreed on earlier between the MFI and the client. The terms are based on periods ranging from a weekly, bi-weekly, monthly, or quarterly arrangement (Loan Analytics, 2004). It also involves enforcing ways and means of loan recovery in case a client begins to show signs of defaulting or late repayment. Since MFI have no collateral to seize, they usually adopt control measures that recover loaned money by sharing out the defaulted amount of loan to all the members in the group that guaranteed the defaulter, and it is by effectively doing this that they can recover the money (Garber, 1997). All these observations indicate that when loan portfolio control is well carried out, the desired portfolio performance is realized. Therefore, when there is failure to realize this performance, it is in order to investigate the enforcement of loan servicing and repayment.

2.8 Relationship between Loan Portfolio Planning, Client Screening, Portfolio Control and Performance

The relationship between loan portfolio planning, client screening, portfolio control, and loan portfolio performance has already been indirectly reviewed in the previous sub sections. In this section however, attempt is made to make it more precise by highlighting a number of authors that have dealt with it. To begin with, Kagwa-Pafula (2002) observed that this relationship is such that loan portfolio planning, client screening and portfolio control must be conducted effectively if any MFI is to realize any level of loan portfolio performance. For it is through the process of carrying out all these loan management functions that all the variables that reflect loan portfolio performance are determined. In particular, UNDP (1997) observed that the paid interest, which measures loan-servicing performance, is established in accordance with the interest rate determined at the planning stage. Indeed, as Martin (1998) observed, interest rate charged is a result of the loan pricing process carried out as management conducts the factoring in of costs to determine the price at which loans are to be extended to customers. The determined price is actually the interest rate charged.

In addition, as Mullineux and Murrinde (2002) observed, loan repayment, which is another measure of loan portfolio performance, is also a variable whose terms and conditions are all determined through portfolio planning and client screening, and then enforced through portfolio control as exercised by CEOs and loan officers. It is through portfolio planning that the periods for loan repayment, the installments to be paid and when to complete the payment, are all set (Murrinde, Agang and Mullineux, 2000). Yet it is through portfolio control that the realization of all these is pursued (Murrinde and Eng, 1994). It is still through portfolio control monitoring and follow-up actions to enforce clients' adherence to set terms and conditions are achieved for purposes of getting the desired loan repayment performance (Ditchter and Kamuntu, 1997;

Getubig, 1987). So when MFIs register poor performances, it is in order to question the planning, client screening and control of their loan portfolios.

Further more, the profits or losses-another measure of loan portfolio performance-are realized by any MFI as a difference between the costs of loan portfolio and the value of the loan price (interest rate) both of which are determined by the loan pricing mechanism that management conducts through cost allocation and factoring (Micro Finance Forum, 2001; Martin, 2001).

Loan portfolio management also determines even client goal attainment, which reflects loan performance on part of the clients. This is because it is this management that comes up with the interest rates that tend to erode client business profits as an expense; it is management that sets loan repayment schedules and values all of which affect the client's capital base and therefore, level and capacity of business operation (Dinnizer, 1997).

To recap, the fore-cited literature shows that loan portfolio management determines loan portfolio performance of any MFI. The literature also shows that there is still a vacuum regarding the manner in which this management affects loan portfolio performance in Uganda's MFIs. It is in the light of this gap that such a manner was given attention. This was done using the methodology described in the next chapter.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the process by which the study was conducted. It describes the adopted research design, survey population, sample size, sampling techniques; and data sources, collection methods, instruments, measurement, and analysis.

3.2 Research Design

The study adopted an analytical and cross sectional survey focusing on both qualitative and quantitative data. Qualitative data were obtained from the selected managers, loan officers and clients. Quantitative data were obtained on loan portfolio management and performance of the selected MFIs for the period 2000-2005.

3.3 Study Population

The population comprised of 22 MFIs operating in Wakiso district, according to the Ministry of Finance, Microfinance Department (2006). These MFIs have 223 employees and a clientele of 1509 giving a total of 1732.

3.4 Sampling Design and Size

The sample size was determined using Krejcie & Morgan's (1970) Sample Determination Table cited in Amin (2005: 454). Based on this table, the sample is 19 for a population of 22 MFIs. The table indicates further that if the population of the study is 1700, the representative sample size should be 313. Section 3.3 of this chapter indicates that the size of this study's population was 1732. The expected sample was therefore considered as 313 because the population size was close to 1700. However, those who participated in the study were 114.

- **Selection of MFIs**

The MFIs that took part in the study were selected using simple random sampling. This sampling technique is used to avoid bias because it gives each respondent an equal chance of being selected to participate in a study (Sekaran, 2000). It was therefore used to give each MFI in Wakiso district an equal chance of being selected to take part in the study. Selection involved writing the name of each MFI on a piece of paper and putting the piece in an urn. After putting together all the pieces of paper in the urn, they were shuffled a number of times. After each

shuffle, one piece of paper was selected from the urn without replacement. The MFI whose name appeared on the selected piece was then selected to take part in the study.

- **Selection of Respondents**

The managers, loan officers, and clients of the selected MFIs were themselves selected using purposive and convenience sampling. Purposive sampling is used to enable selection of only those respondents considered as key informants (Sekaran, 2000). It was therefore used to select MFI managers because these were the respondents considered as the key informants of the study.

Convenience sampling is used to select respondents who can be located and accessed without difficulty (Sekaran, 2000). It was therefore applied to select loan officers and clients. These respondents were selected this way because there was a possibility of going to a selected MFI and finding some of its loan officers already gone to the field. Due to lack of records about residential and workplace locations of most of the people in Uganda, there was also a high likelihood of failing to locate MFI clients anywhere else apart from at the MFIs. Convince sampling therefore appropriate to use to select only the loan officers and clients who were at the MFIs. Another reason was that attempts were made not to inconvenience the clients who did not have time or were hurrying to go back to their businesses and therefore not willing to participate in the study. Only the clients who were willing to participate in the study were selected. Another consideration was that a loan officer or customer had to have been with the MFI for at least one year.

3.5 Data Sources

Data were collected from both primary and secondary sources.

Primary Sources: These were the selected respondents. To collect data from this source, semi-structured questionnaires were designed according to the objectives of the study. Copies of the administered questionnaires appear in appendices 1, 2, and 3.

Secondary Sources: These consisted of the documents that included MFI loan portfolio planning and performance records. The documents were accessed to obtain the financial data required to investigate the relationships on which the study was focused.

3.6 Data Collection Instruments

Primary data were collected using semi-structured questionnaires that were designed according to the objectives of the study. Copies of the administered questionnaires appear in appendices 1, 2 and 3.

3.6 Measurement

Variables of the study were measured qualitatively and quantitatively as explained below:

(a) Loan portfolio planning: This was measured using the determined loan sizes, interest rates, repayment periods, and set group guarantees as described by Loan Analytics (2004).

(b) Client screening: This was measured based on Van Horne (2002) approach, which focuses on the level at which financial institutions such as the MFIs follow the standards set for analyzing loan applicants. Measurement was carried out using a five-point-scale of responses, ranging from strongly agree to strongly disagree. The interpretation of this scale is covered in chapter four.

(c) Loan portfolio control: This was measured using such indicators identified by Kagwa-Pafula (2000) as: level of loan monitoring, supervision, and extent of follow up actions such as loan reviews and client reminders. Again, a five-point-scale of responses mentioned above was used to measure this variable.

(d) Loan portfolio performance: This was measured basing on loan collection rate, loan loss rate, arrears rate, portfolio at risk, client goal attainment, and client affordability to service and repay loans. Silwal (2003) gives the following as the formulae that the study adopted to measure portfolio performance:

$$\text{Loan collection rate} = \frac{\text{Amount paid on time during a given period}}{\text{Amount due in the period}} \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$\text{Loan loss (per year)} = \frac{1 - \text{loan collection rate}}{\text{Loan term in years}} \times 2 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

$$\text{Arrears rate} = \frac{\text{Late payments}}{\text{Total loans disbursed}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

$$\text{Portfolio at risk} = \frac{\text{Outstanding balance of loans with overdue payment(s)}}{\text{Total outstanding balance}} \ldots\ldots\ldots\ldots (4)$$

The determined interest rates, loan sizes and repayment periods were measured in financial terms and years, respectively.

3.7 Validity and Reliability of Research Instruments

- **Validity**

The validity of administered questionnaire items was tested using a content validity test. This test involved consulting the supervisor and asking two other colleagues who were knowledgeable about the themes of the study to rate each item in each questionnaire as either relevant or irrelevant. Using the ratings, Content validity indices (CVI) were computed as shown in Table 3.1.

Table 3.1 Content Validity Indices (CVI)

Questionnaire items for;	**CVI**

MFI managers	0.772
MFI loan officers	0.772
MFI clients	0.811

Table 3.1 indicates that all the validity indices were considerably greater that 0.5. This implies that all the administered questionnaires items were highly valid.

- **Reliability**

The reliability of the items was tested using the Cronbac alpha coefficient method of internal consistency. The CVI and alpha coefficients (α) obtained are shown in Table 3.1.

Table 3.2 Reliability Coefficients (α)

Questionnaire items for;	**α**
MFI managers	0.801
MFI loan officers	0.801
MFI clients	0.832

Table 3.2 indicates that all the reliability coefficients were considerably greater that 0.5. This implies that all the administered questionnaires items were highly reliable.

3.8 Data Analysis

Data were analyzed using quantitative methods and techniques of analysis. These included the formulae given in section 3.6, factor analysis, ANOVA, and correlation and regression analysis.

The formulae in section 3.6 were used to compute the loan collection rate, loan loss, arrears rate, and portfolio at risk using the collected secondary data. To compute these rates, the mid-points of the intervals appearing in the managers' questionnaire (See section E of Appendix 1) were used as proxies for the exact amounts of loans or time periods. Intervals were used for purposes of encouraging some managers who could have hesitated to divulge their actual figures. In some cases, however, managers gave actual amounts of loans and time periods, and these were used instead of mid-points.

After obtaining the required rates, they were each directly entered in the SPSS computer programme as numerical values corresponding to the data obtained from managers, loan officers and clients selected from each MFI. The logic was that a computed MFI rate, such as a loan collection rate, was applicable to all the data obtained from respondents drawn from the MFI. This enabled establishing whether there were relationships between these rates (as measures of loan portfolio performance-the dependent variable) and the independent variables of the study.

Data collected using the strongly agree-strongly disagree scale of responses were considered as qualitative data and entered into the SPSS programme using coding. Codes were assigned to the responses as follows: Strongly Agree was assigned code '5', agree '4', not sure '3', disagree '2' and strongly disagree '1'. None response was assigned '0'. Then all the data were entered into the programme according to how each respondent answered each questionnaire item. It should be noted that each respondent was represented by the questionnaire he/she filled. After data entry, the above-mentioned methods of data analysis were applied to analyze the data.

3.9 Problems Encountered

The study was conducted in a financially sensitive area. It was therefore limited by fact that some managers concealed some of the data that was needed to enrich the findings. They noted that the management policies of their companies did not permit them to divulge some of the data about their business performance. In addition, a number of would-be resourceful respondents (particularly the managers) failed to answer the questionnaires citing their busy schedules as the major reason. However, some were convinced to fill in the questionnaires by giving them the time that they had requested for. This time ranged between three days and a week. Actually, statements such as "come back after a week or after three days", 'the manager is in the meeting", "the appropriate person to fill this questionnaire is now on leave", "I am busy now", were very common. These statements meant that one had to be persistent and patient if one was to get the required data. However, this delayed data collection to a large extent.

As a result of falling to have the questionnaires filled in time, and due to loss of the administered questionnaires by some of the respondents (as a result of misplacing or losing them) a lot more than budgeted expenses were incurred on photocopying more copies and on transport to and from the selected MFIs more than twice.

There was also the problem of getting clients at the selected MFIs. A number of them were in a hurry, rushing to do their businesses. They looked at filling questionnaires as wastage of time. Some of them were sceptical about the intentions of study. Extra effort was needed to convince and get the required number of clients.

In general, due to the encountered problems, it took a lot longer time and funds than had been budgeted to collect enough data for the study. The results are presented in the next chapter.

CHAPTER FOUR

DATA PRESENTATION AND INTERPRETATION

4.0 Introduction

This chapter centres on presentation and interpretation of findings analyzed as described in the previous chapter. The findings are presented according to the research questions of the study. The chapter, however, begins with findings on the relevant characteristics of the selected sample, quantitative results about portfolio planning and performance, and how respondents qualitatively assessed the variables of the study.

4.1 Sample Characteristics

This section contains results obtained about the response rate and the characteristics of the sample that were considered relevant for the study

4.1.1 Response Rate

The results showing the response rate are presented in Table 4.1

Table 4.1 Response Rate

	Target	Actual	Response Rate = Actual/Target x

			100%
MFIs	19*	10*	52.6%
Managers	19	10	52.6%
Loan officers	38	18	47.4%
Clients	256	86	33.6%
Total respondents	313	114	36.4%

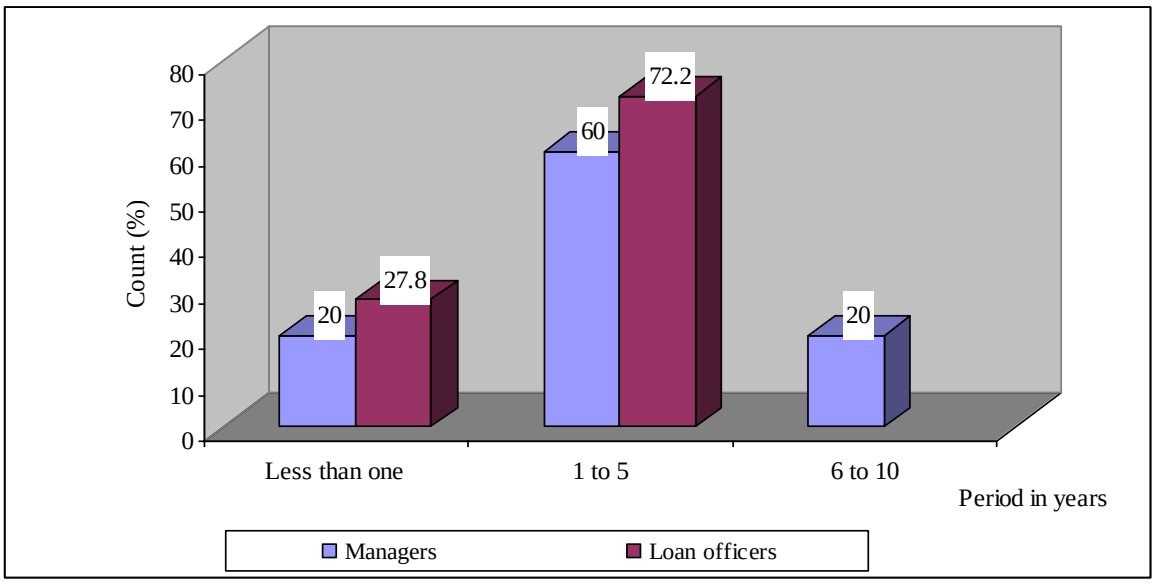
* Not included in the total
Source: Primary Data

The response rates in table 4.1 indicate 52.6% of the targeted MFIs responded. In addition, 52.6% of the targeted MFI managers, 47.4% of loan officers and 33.6% of clients responded. This gave a total response rate of 36.4%, which indicates a low response rate. The reasons explaining this low response rate were discussed in section 3.9 of chapter three. To note is that despite the overall low response rate, most of the managers who were the key informants, responded. This suggests that the data that was needed to accomplish the study was largely collected.

4.1.2 Employment by Period

Results obtained about the period the selected employees had spent in the selected MFIs are shown in Figure 1.

Figure 1 Employees by period spent working with selected MFIs



Source: Primary Data

Figure 1 indicates that 80% of the selected MFI managers and 72.2% the loan officers had spent at least one year working with their respective MFIs. Spending at least one year working with a MFI is enough for any employee to be well acquainted with the operations of the MFI. As such, the selected managers and loan officers divulged the required data from an informed point of view. The data can therefore be considered largely reliable as far as revealing the MFIs' loan portfolio management and performance is concerned.

4.1.3 Nature of Client Business

Results obtained about the nature of businesses/projects for which clients applied for loans and the period for which their business were in operation are shown in Table 4.2.

Table 4.2 Clients by Businesses for which Loans are Applied and Period of Business Operation

Business/Projects		Number of MFI Clients	
Category	Type	Count	%
Agriculture	Poultry	11	12.8
	Piggery	3	3.5
	Maize milling	2	2.3
	Tomato growing	3	3.5
	Fish rearing	2	2.3
	Cattle rearing/zero grazing	1	1.2
	Vegetable growing	1	1.2
	Honey production	2	2.3
Trade	Shoe and Dress retailing	1	1.2
	Retail shop	20	23.3
	Stationery shop	6	7.0
Education	School	3	3.5
Commercial services	Secretarial services	4	4.7
	Tailoring	3	3.5
	Boda boda (motor cycle transport services	9	10.5
	Saloon	6	7.0

	Telephone selling and repair	1	1.2
	Special hire	1	1.2
	Restaurant and outside catering	3	3.5
Health	Pharmacy	2	2.3
	Medical clinic	2	2.3
	Total	86	100.0

Source: Primary Data

Table 4.2 indicates that most of the clients were in trade and operating retail shops (23.3%), in agriculture carrying out poultry (12.8%), and in commercial services offering boda boda [commercial motor cycle services] (10.5%).

4.1.4 Business by Period

Results obtained about the period that selected MFI clients had spent in their respective businesses are shown in Figure 2

Figure 2 Clients by period spent in business

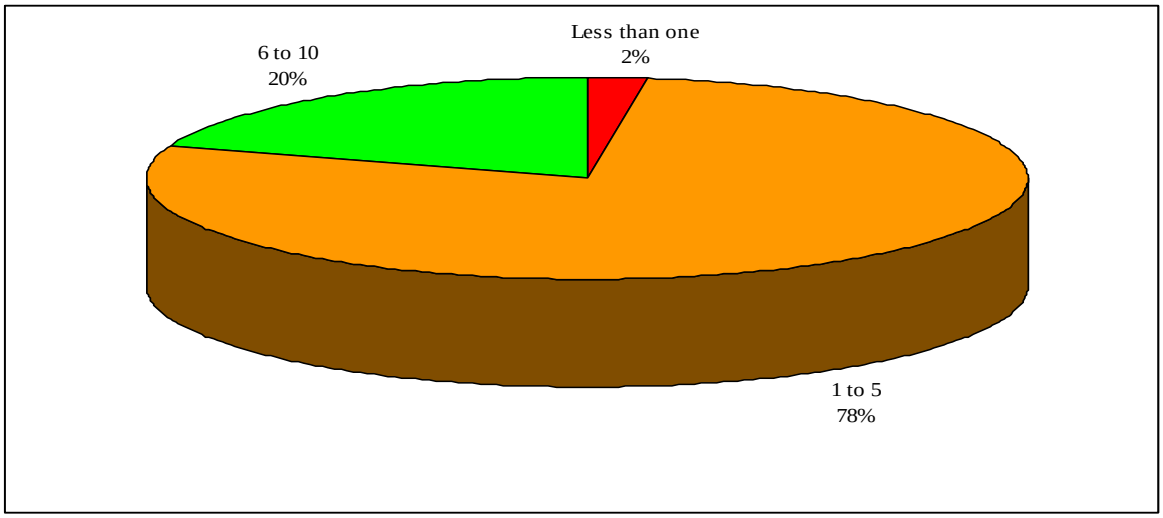


Figure 2 indicates that 98% of the clients had been in their businesses for at least one year. Being in a business for over a year indicates that clients had gained enough acquaintance with effects of the loans extended by the MFIs. They were therefore in a position to assess how the received loans had affected the performance of their businesses. The results obtained from them can therefore be considered reliable as far as this effect is concerned.

4.2 Factor Analysis

Factor analysis was used to reduce the various questionnaire items into fewer and reliable principal components, which helped to generate the global or main variables of the study out of the items. The generated components were considered as dummy variables representing the sub variables of independent variables of the study. The independent variables (portfolio planning, client screening and portfolio control) were also considered as dummy variables taking up a value of '1' in case a respondent agreed or strongly agreed to the its constituent principal component, or '0' in case the respondent disagreed, strongly disagreed or was not sure. Accordingly, results obtained are presented forthwith.

4.2.1 Factor Analysis Results on MFI Portfolio Planning

When the responses on how MFIs carried out their portfolio planning were factor analyzed, results obtained are shown in Table 4.3.

Table 4.3 Rotated matrix of MFI portfolio planning principal components

Questionnaire items	Components			
	Setting loan repayment period	Setting guarantees	Determining loan sizes	Loan pricing/ determining interest rate
Repayments set by the MFI at each interval are fair to the clients	.983			
The grace period allowed to clients is enough	.930			
The loan repayment period is determined when putting the client's business payback period in consideration	.919			
It is mainly portfolio administration costs that are considered when determining the interest on loans	.851			
Repayment interval allowed to clients is enough	.791			
The guarantees required by the MFI from clients are fair		.843		
MFI considers client's guarantors before it extends a loan		.820		
MFI considers the nature of the client's guarantors		.811		
MFI takes all clients to be of the same risk characteristics		.767		
MFI takes clients to be operating businesses of same sizes		.672		
Size of loans disbursed is enough to help clients achieve business goals			.843	

MFI considers client's business plan before determining the size of the loan to extend to the client			.806	
The fixed interest rate is attractive to clients			.755	
The size of the loan is determined before analyzing the applicants ability to repay			.696	
The interest rate charged by MFI is fair to clients				.643
The fixed interest helps the MFI to operate profitably				.674
Eigen values	5.305	4.980	4.542	1.657
Alpha	.883	.879	.832	.678
Variance explained	33.153	26.747	26.514	10.354

Source: Primary Data

Table 4.3 indicates that five principal components were generated out of how respondents reported about loan planning by the selected MFIs. These were identified as: setting loan repayment period; setting guarantees; determining loan sizes; and loan pricing or determining interest rate. The percentage of the variance explained refers to the extent to which a component explicates variation in loan planning. For instance, the setting of the loan repayment period accounted for the largest variation (33.153%) in portfolio planning. In other words, the effectiveness of portfolio planning depended so much on how loan repayment periods were determined by the MFIs. Eigen values explain the summed contribution of questionnaire items to each generated component. Since the largest Eigen value of 5.305 corresponds to setting of the loan repayment period, this is the component that claimed most of the items.

The alpha values in Table 4.3 indicate the reliability of the generated components in measuring loan planning. Since all the alpha values are greater than 0.5, they indicate that the generated components are all reliable measures of loan planning. Each of the figures at the intersection between a questionnaire item and a generated component is called a factor loading. It indicates the correlation between each item and the generated component. Such correlation indicates that the extent to which an item measures an identified principal component. For instance, the correlation between the fairness to clients of repayments set by the MFI at each interval and

setting loan repayment period as a measure of portfolio planning was 0.983. This implies that the best measure of setting loan repayment period was showed by most respondents as the fairness to clients of repayments set by the MFI at each interval. Similarly, the fairness of guarantees required by the MFI from clients was perceived as the best measure of setting guarantees (Factor loading = 0.843) and so forth.

4.2.2 Factor Analysis Results on MFI Client Screening

The factor analysis of the responses to how MFIs carried out their client screening led to results shown in Table 4.4.

Table 4.4 Rotated matrix of MFI Client screening principal components

Questionnaire items	Components		
	Analysis of creditworthiness	Obtaining information on clients	Making credit decisions
The MFI insists on establishing the creditworthiness of a client before advancing a loan	.972		
The MFI considers client experience in business before approving the loan applied for	.962		
MFI considers what the guarantors of loan applicants do	.938		
The MFI ensures that loan applicants have reliable guarantors	.894		
MFI extends loans according to business capacity of clients			

The MFI looks into the future success of a client's business before extending a loan .792 MFI establishes the creditworthiness of a client before extending the loan .785 The MFI considers the present business status of a loan applicant when extending a loan .741 The MFI considers the market trend of the business for which a loan is applied .689 MFI puts attention on the type of business of the loan applicants .672 MFI considers loan applicants' experience in business .659 Loans are disbursed based on competence of clients in business .546 The MFI uses clients' financial statements to extend a loan .897 Clients are required to apply for loans with back up financial statements .792 The MFI considers the applicants' credit history .598 Loans are disbursed according to clients' project proposals .538 Applicants of loans submit all the information as required by MFI .352 The MFI uses oral interviews and discussions with loan applicants to approve of loans applied for .763 The MFI can extend a loan to a client without guarantors .677 The MFI uses oral interviews to approve loan

applications
explained

Table 4.4 indicates that three principal components of client screening were generated. These were identified as: analysis of creditworthiness; obtaining information on clients and making credit decisions. The Alpha values were all greater than 0.5, which implies that all the components were reliable measures of client screening. It is important to note that the analysis of creditworthiness accounted for the largest variation (43.075%) in client screening as a variable. In other words, the effectiveness of client screening depended so much on how the analysis of creditworthiness was conducted by the MFIs. The best indicator of analysis of creditworthiness was perceived by most of the respondents as MFIs insisting on establishing the creditworthiness of a client before advancing a loan (Factor loading = 0.972).

4.2.3 Factor Analysis Results on MFI Loan Portfolio Control

The factor analysis of the responses to how MFIs carried out loan portfolio control led to results shown in Table 4.5

Table 4.5 Rotated matrix of MFI Portfolio control principal components

Questionnaire items
carries out regular internal audits of portfolio performance
clients
to utilize the loans
expected:
the MFI
guidelines that the MFI follows when disbursing loans
repayment
audits of portfolio performance
evaluates client performance of loan utilization:

loans

clients
action when recommended from loan performance appraisals
rate:
explained

Table 4.5 indicates that three principal components were generated and identified as: loan monitoring; loan review or appraisal; and follow up actions. The Alpha values were all greater that 0.5, implying that all the components were reliable measures of loan portfolio control. Table 4.5 indicates further that of the identified components, loan monitoring claimed the largest variation (49.194%) which means that the effectiveness of portfolio control depended in a large measure on how the MFIs conducted portfolio control. The best indicator of loan monitoring was perceived by most of the respondents as MFIs' regularity in conducting internal audits of portfolio performance (Factor Loading = 0.975).

4.2.4 Factor Analysis Results on MFI portfolio performance

When the responses obtained the performance of the selected MFIs were factor analyzed, results obtained are shown in Table 4.6

Table 4.6 Rotated matrix of MFI portfolio performance principal components

Questionnaire items

succeeds in recovering loans from defaulters
increasing
loss
schedules
MFI
extended by the MFI is progressing successfully
values
Primary Data

Table 4.6 indicates that three principal components were generated and these were identified as: portfolio performance of the MFI itself, goal attainment by MFI clients; and client affordability to repay and service the loans. The Alpha values corresponding to these components were all greater that 0.5, which implies that the components were all reliable measures of loan portfolio control. Table 4.6 indicates further that of the identified components, the portfolio performance of the MFI itself claimed the largest variation (47.664%) which means that the general effectiveness of MFI performance depended in a large measure on its portfolio performance. The best indicator of the MFI performance was perceivably clients' meeting of their loan repayment schedules as required (Factor loading = 0.996).

4.3 Correlation Analysis

This method was applied to establish whether relationships existed between the investigated variables of the study. It was applied after generating the principal components of each variable of the study and the subsequent global or main variables of the study. Specifically, bivariate correlation analysis was carried out and the results obtained appear in Table 4.7.

Table 4.7 Relationship Loan portfolio management and performance of the MFIs in Wakiso District

Variables	Potfolio planning	Client screening	Portfolio control	MFI portfolio performance
Potfolio planning	1.000 .			
Client screening	.267** .000	1.000 .		
Portfolio control	.382** .000	.807** .000	1.000 .	
MFI portfolio performance	.568** .000	.522** .000	.659** .000	1.000 .

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

For the correlation analysis for all the main variables and their measures, see Appendix 4.
Source: Primary Data

4.3.1 Loan Portfolio planning and Performance of MFIs

The first objective and research question of the study were intended to establish the relationship between loan portfolio planning and performance of MFIs in Wakiso district. According to Table 4.7, the correlation coefficient between loan portfolio planning and MFI portfolio performance was significant ($r = 0.568$, $P < 0.01$). This indicates that there was a significant relationship between portfolio planning and performance of the MFIs in Wakiso district. This implies that the performance of the MFIs was significantly affected by the manner in which the MFIs carry out their loan portfolio planning.

4.3.2 Client Screening and Performance of MFIs

The second objective and research question of the study focused on examining the relationship between client screening and performance of MFIs in Wakiso district. From Table 4.7, the correlation coefficient between client screening and MFI portfolio performance is significant ($r = 0.522$, $P < 0.01$). This implies that there is a significant relationship between client screening and loan portfolio performance of the MFIs in Wakiso district. Accordingly, the portfolio performance of the MFIs in Wakiso District is significantly dependent on the way the MFIs conducted client screening.

4.3.3 Loan Portfolio Control and Performance of MFIs

The third objective and research question of the study centred on investigating the relationship between loan portfolio control and performance of MFIs in Wakiso district. From Table 4.7, the correlation coefficient between portfolio control and MFI portfolio performance is significant ($r = 0.659$, $P < 0.01$). This implies that there is a significant relationship between portfolio control and loan portfolio performance of the MFIs in Wakiso district. Therefore, the portfolio performance of the MFIs in Wakiso District depends very significantly on how they control their loan portfolio.

4.4 Regression Analysis

This method was used to determine whether and how the study's independent variables and their sub components predicted MFIs' portfolio performance. Results obtained are shown in Table 4.8.

Table 4.8 Prediction of the MFI portfolio performance by the independent variables of the study

Independent variables
MFI portfolio performance
Adjusted R-Square = 0.652
F-value = 14.237
Sig. = 0.000

Client screening

Portfolio control

	0.268		
	0.509		
		2.831	
		7.725	
	0.005		
	0.000		

Source: Primary Data

Results in Table 4.8 indicate that the independent variables explain 70.1% (R-Square = 0.701) of the variation in the MFIs' loan portfolio performance. The results also show that at $P < 0.01$ level of significance, the variables linearly predict 65.2% of this performance (Adjusted R-Square = 0.652).

Looking at the individual predictor variables, loan portfolio control is the best linear and positive predictor of the MFIs' portfolio performance since it forecasts up to 50.9% of this performance (Beta = 0.509, t = 7.725, $P < 0.01$). This is followed by client screening, which predicts 26.8% of this performance (Beta = 0. 0.268, t = 2.831, $P < 0.01$) and lastly by loan portfolio planning that predicts 17.5% of the performance (Beta = 0.175, t = 2.520, $P < 0.01$). These results suggest that if MFIs are to achieve the desired portfolio performance, they need to put more emphasis on their loan portfolio control, especially on loan monitoring, and on the setting of their interest rates and guarantees for loans disbursed to clients. The implications of these results are discussed in the next chapter.

4.5 Other Findings

This section contains results that were considered relevant to the study but do not fall directly in any of the research questions. After identifying the principal components of the studied variables, the one-way Analysis of Variance (ANOVA) test was conducted to establish whether or not there are differences, on average, in the assessment of the studied variables across the selected MFIs and the different respondent categories.

4.5.1 ANOVA Results for MFIs

Analysis of variance (ANOVA) was applied to establish whether respondents significantly differed or not in their assessment of the variables of the study. Results obtained with regard to the MFIs are shown in Table 4.9.

Table 4.9 Variables of the study as assessed in the selected MFIs

Performance indicators

determination
interest rate determination
repayment periods
guarantees

clients
creditworthiness
decisions
control
monitoring

loan

0.05 Abbreviations: A-J represent the selected MFIs
Source: Primary Data

Table 4.9 indicates that there was a significant difference in the assessment of the MFIs' portfolio planning ($F = 3.557$, $P < 0.01$), client screening ($F = 4.250$, $P < 0.01$), obtaining information on clients ($F = 7.296$, $P < 0.01$), making credit decisions ($F = 3.236$, $P < 0.01$), loan monitoring ($F = 8.931$, $P < 0.01$), loan review/appraisal ($F = 3.296$, $P < 0.01$), follow up actions ($F = 4.464$, $P < 0.01$), client affordability to repay/service a loan ($F = 2.723$, $P < 0.05$), and portfolio performance ($F = 3.440$, $P < 0.01$). There was no significant difference in the assessment of the MFIs with respect to other variables.

From the scoring of the strongly-agree-strongly-disagree response scale used to assess the MFIs, the higher the mean value, the more satisfactory were the MFIs relative to the variables and vice versa. Therefore, a significant difference in the assessment of MFIs with respect to the variables implies that MFIs which scored higher mean values are more satisfying at the conduct of portfolio management and achievement of desired portfolio performance than those that attained middle and lower mean values.

As an illustration, results obtained with regard to portfolio performance indicate that the mean score for MFI B is (Mean = 4.82), which when rounded off equals '5' the score for 'strongly agree'. This means that the portfolio performance for MFI B was reportedly very satisfactory. The mean scores for MFIs A (Mean = 4.01), C (Mean = 4.00), and F (Mean = 3.90) are rounded off to the score '4' a score for 'agree'. This means that these MFIs' portfolio performance was reportedly satisfactory.

Further, the mean scores of MFIs E (Mean = 1.83) and I (Mean = 2.31) approximate to '2' the score for 'disagree'. This implies that these microfinance institutions were reported to be performing unsatisfactorily. The mean scores for MFIs: D (Mean = 2.83), G (Mean = 2.58) and H (Mean = 2.83) approximate to '3', the score for 'Not sure'. This means that these two MFIs were reportedly not sure about their portfolio performance. Lastly, the mean score (Mean = 1.40) for microfinance J approximates to '1' the score for 'strongly disagree'. This implies that this MFI's portfolio performance was reportedly very unsatisfactory. Clearly, these results explain why MFIs differed significantly in the assessment of their portfolio performance. Other variables are similarly interpreted.

It is important to note that despite the differences in the assessment of the variables, total mean values in Table 4.6 indicate that, on average, all the MFIs were reportedly satisfactory in the conduct of their portfolio planning, especially with regard to setting loan repayment periods; and client screening, particularly with respect to obtaining information on clients and analysis of creditworthiness.

4.5.2 ANOVA Results from Respondent Categories

ANOVA results regarding how the selected respondent categories assessed the variables of the study are in Table 4.10.

Table 4.10 Variables of the study as assessed by the selected respondents

Performance indicators	
	n = 10
	n = 18
	n = 86
	N = 114

determination
periods
screening
clients
creditworthiness
decisions
control
review/appraisal

loan

Note: Loan collection rate, loan loss rate, arrears rate and portfolio at risk do not appear because clients did not answer since they were expected not to be in a position to respond to them reliably.
Source: Primary Data

Table 4.10 summarizes the manner in which selected respondent categories assessed the variables of the study. A critical comparison of the means of the respondent categories reveals that where the categories differ significantly, the assessment of the variables lowers progressively from managers through loan officers to the clients of the MFIs.

In particular, Table 4.10 shows that respondent categories significantly differed in their assessment of such variables as portfolio planning ($F = 61.330$, $P < 0.01$) and its sub variables of loan size determination ($F = 170.931$, $P < 0.01$), loan pricing/interest determination ($F = 351.740$, $P < 0.01$) and setting loan repayment periods ($F = 168.714$, $P < 0.01$). In addition, the categories also differed in the assessment of analysis of creditworthiness, making credit decisions. They also significantly differed in the assessment of portfolio control (and all its sub variables of loan monitoring, loan review/appraisal, and follow up actions). Respondent categories further differed in the assessment of portfolio performance and its sub variables of

client affordability to repay/service a loan and client goal attainment.

To illustrate how the respondents differed, take a critical look at the results obtained about portfolio performance. These results show that the mean for managers (M = 4.80) can be rounded off to '5', which is the score for 'strongly agree'. The mean for loan officers (M = 3.89) can also be rounded off to '4', the score for 'agree'. The mean for clients (M = 1.42) can be rounded off to '1' a score for 'strongly disagree'. These means indicate that whereas the managers strongly agreed, loan officers merely agreed while clients strongly disagreed that the MFI portfolio performance was satisfactory to them, respectively.

4.5.3 Quantitative results about portfolio planning and performance of MFIs

To establish the relationship between loan portfolio planning and performance of the MFIs in Wakiso district, it was necessary to collect data on both the qualitative and quantitative measures of these two variables. The considered quantitative measures of portfolio planning were the outcomes of this process, which included: the set interest rates, loan sizes, grace periods, and repayment periods. Data on each of the aspects were collected from the MFI managers and the findings obtained are shown in Table 4.11.

Table 4.11 Portfolio planning of MFIs in Wakiso district as revealed in the set rates

Portfolio planning indicators
(%)
shs)
(months)
(months)
manager, mid-points of the intervals used in the administered questionnaires were taken as proxies of the required figures. The specified amounts are marked by asterisks (*)
Source: Primary Data

Table 4.11 indicates the interest rates charged by the selected MFIs in Wakiso district range from a minimum of 18% to a maximum of 28%. Loan sizes that the MFI disburse to clients for the first time range from a minimum of 75,000 to a maximum of 225,500 Uganda shillings with grace periods and loan repayment period ranging from a minimum of one month to a maximum of 12 months. As to how these set figures affect the MFIs' portfolio performance was also investigated but results will be presented later. To note however, is that the set interest rates appear to be high and therefore do not seem to favour the clients of the MFI.

The considered quantitative measures of loan portfolio performance included: loan collection rate, loan loss rate, arrears rate, and portfolio at risk. These were calculated using the formulae shown in Section 3.6 of Chapter three. To use the formulae, data were collected from MFI managers on: outstanding loans with overdue payments, loans disbursed to clients in 2006, total loans disbursed to clients up to 2006, loans paid on time, loan amount due in 2006, late payments, total outstanding loan balance, and loan terms. Results obtained are shown in Table 4.12.

Table 4.12 Loan portfolio performance of MFIs in Wakiso district

Portfolio indicators

(M)
(M)

(M)
(M)
(M)
(M)
(Years)

(%)
(%)
(%)
(%)
the manager, mid-points of the intervals in the questionnaires were used to estimate the rest of the amounts. The specified amounts are as marked by asterisks (*).
Abbreviations: M-Million Uganda shillings.
Source: Primary

Table 4.12 indicates that most of the MFIs registered above average loan collection rates with two of them going as high as over 84%. The MFIs' loan loss and arrears rates were generally low but their rates of portfolio at risk were generally high ranging from a minimum of 24.9% to as high as 88.8%. These results suggest that though most of the MFIs performed reportedly well as regards their loan collection, loss, and arrears rates, their performance with respect to portfolio at high risk is generally worse.

It is important to note that these results reflect portfolio performance based only on managers' responses on the quantitative measures of this performance.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains the discussion of findings, and the conclusions and recommendations that can be drawn from the findings. It focuses on examining the detailed implications of the findings presented in the previous chapter, and on conclusions and recommendations that can be drawn from the results.

5.2 Loan Portfolio Planning and Performance of MFIs

The first objective of the study was to establish the relationship between loan portfolio planning and performance of the MFIs in Wakiso district. Results indicate that this relationship was significant. This implies that the manner in which the MFIs in Wakiso district conduct their loan portfolio planning affects their portfolio performance in a significant way. Actually, results show further that portfolio planning was a significant positive predictor of the MFIs' portfolio performance. The results therefore support the observations made by Loan Analytics (2004), Antonio (2000), Bohnstedt (2000), Getubig (1987), Kagwa-Pafula (2002), and King and Levine (1994). Each of these scholars underscores the fact that portfolio performance depends on how a microfinance institution plans its portfolio.

It is worth noting at the outset that results in Appendix 8 indicate that implicitly, planning relates more strongly with loan size determination and pricing than with setting guarantees. This indicates when most of the MFIs are planning their portfolio; they concentrate more on setting loan sizes and determining interest rates than on establishing criteria for determining guarantees. Results show that MFIs were indeed giving less attention to setting of guarantees.

Failure to give each of the fore-mentioned portfolio-planning components equal attention may result into adverse consequences to the MFIs' portfolio performance. This is because each of the components has a strong and significant relationship with the MFIs' portfolio performance. Moreover, the setting of guarantees, which has a relatively weak relationship with portfolio planning, has a very strong and significant relationship with the MFIs' portfolio performance, particularly with portfolio at risk. This is consistent with the studies of Hartmut (1997) and Kagwa-Pafula. (2000) that show that the success of MFIs depends on the guarantees they set for the loans disbursed to clients. The setting of guarantees was actually established as a better

predictor of the MFIs' portfolio performance than even the other two variables emphasized by the MFIs. In the final analysis, this boils down to the fact that MFIs need to give more attention than they seem to be giving to how they set guarantees for their loans.

Zeroing in on the relationship between portfolio planning and the performance of the MFIs, results indicate that portfolio planning correlates significantly and very strongly with such indicators of the MFIs' portfolio performance as loan loss rate, portfolio at risk and arrears rate. The results show further that despite the fact that this planning relates significantly with other portfolio performance indicators such as client goal attainment and client affordability to service and repay loans, the relationship with these indicators is generally weak given the magnitudes of the correlation coefficients. Accordingly, these results suggest that MFIs' portfolio planning is more concerned with the performance of the MFIs themselves than with the performance of the institutions as viewed from the client side.

In essence, such results indicate that the MFIs' portfolio planning does not give enough attention not only to the attainment of the goals for which clients apply for loans but also to client affordability to service and repay the loans. This means that MFIs determine their loan sizes, interest rates, grace periods, loan repayment periods, and guarantees based not so much on whether or not clients will use the loans to attain their goals and be able to service and repay the loans. Rather, they do so by considering largely their own portfolio performance. This explains why most of the MFIs set high interests rates, short grace and repayment periods and loan sizes that clients find difficult to fulfil. However, to achieve desired portfolio performance, MFIs need not ignore clients' goals and affordability to service and repay loans since this has serious consequences on the rationale and success of their business.

Regarding the rationale, such less attention defeats the very purpose of micro finance institutions put forward by the Micro Finance Forum (2003) and Mullineux and Murrinde (2002) that these institutions are established to provide finance that supports small-scale clients to achieve their business goals. Micro finance institutions, therefore, need to wake up to their ultimate purpose and plan their portfolios when considering that they are expected to conduct business successfully while also supporting their clients to attain the goals for which they apply for loans.

In fact, putting less attention to client goal attainment is exacerbated when portfolio planning does not give due attention to the affordability of clients to service or repay the loans. For such planning implies that the MFIs do not come up with criteria required to conduct effective client screening. This not only explains why portfolio planning correlates weakly with client screening; it is also very likely to result into giving loans of sizes bigger than those clients are able to service and repay effectively. This is so especially when clients are not able to use the loans and realize their business goals. Results indicate that, on average, clients strongly disagreed that they realized the goals for which they received loans from MFIs. They also strongly disagreed that they afforded to service and repay received loans.

The net consequence of client failure to service and repay loans comes back to the MFIs as an adverse effect on their portfolio performance. For it essentially means that the MFIs' portfolio at risk gets high. Moreover, MFIs' performance suffers more when such failure is combined with weak consideration and therefore subsequent support for client goal attainment. According to Micro Finance Forum (2003), the success of any business depends very significantly on the extent to which a business organization considers the importance of clients as a core factor to their survival and growth in business. This factor is even more crucial to MFIs because, as Hartmut (1997) observed, their success in business depends almost entirely on the success of

their clients. If clients fail to achieve their goals as desired, the MFIs will eventually run out of business. This is true even when these institutions may be doing well on many of their portfolio performance indicators.

Client failure to attain intended goals means that clients are not realizing any return on investment, which in effect implies that they are servicing and repaying the loans using capital invested, including the very finances borrowed from the MFIs. When all the borrowed money is eventually remitted back to the MFIs, the clients run out of enough capital and close down. This means that even if the MFI may recover any remaining amounts through the guarantee system, it loses the client. It is therefore clear that the future of most of the MFIs in business is bleak.

The satisfactory MFI performance reported by managers and loan officers with respect to loan collection rates, loan loss rates and arrears rates, is therefore a short term portfolio performance; more so because results were generated from data for just one year (2006). It is difficult to imagine that the portfolio performance of these MFIs can continue to be satisfactory when clients do not realize business goals for which loans are extended. It is even more difficult to think of these MFIs having a bright future when most of them are reportedly exposed to large proportions of portfolio at risk. Essentially, this means that their long term position in business is very vulnerable. Thus, the future of the MFIs in business is uncertain if they do not put deserving attention on planning how they can help clients attain the goals for which they apply for loans. It is therefore not surprising that some of the MFIs have already quit business.

In general, results indicate that loan portfolio planning is a significant predictor of the portfolio performance of MFIs in Wakiso district. Results also show that although portfolio planning carried out in most of the MFIs puts more emphasis on loan pricing and loan size determination,

the setting of guarantees, which is less emphasized, is the most significant predictor of their portfolio performance.

5.3 Client Screening and Portfolio Performance of MFIs

Results established a significant relationship between client screening and loan portfolio performance of MFIs in Wakiso district. In addition, the results showed that this relationship was not superfluous since client screening predicted this performance in a significant manner. Results indicated that client screening was significant to the achievement of desired loan portfolio performance. They therefore support the observations of Martin *et al* (2005), Van-Horne (2002), and Uganda Micro Finance Union (2004). Each of these authors noted that client screening is critical to the success of a financial institution and a microfinance institution in particular.

It is important to note that although client screening was established as a significant predictor of the MFIs' portfolio performance, not all its sub variables were significant predictors of this performance. This is so despite the fact that the sub variables related significantly with portfolio performance. The sub variable of client screening that was established as a significant and positive predictor the MFIs' portfolio performance was the making of credit decisions. This implies that MFIs should have been more careful when taking decisions to extend loans to clients. However, this was largely not the case. Instead, almost all MFIs put more emphasis on getting information from loan applicants and analyzing their creditworthiness both of which were not significant predictors of portfolio performance.

As Van-Horne (2002) argued, one would expect the obtained client information and analysis of

creditworthiness to have helped the MFIs to make prudent credit decisions. However, the contrary was the case. Results in Appendix 8 indicate that there was no significant relationship between information obtained from loan applicants, analysis of creditworthiness and making credit decisions. Results indicate further that most of the MFIs were not taking due care when making credit decisions. Indeed, most of the clients and loan officers disagreed, thereby indicating that credit decisions in most of the MFIs were made in an unsatisfactory way.

An unsatisfactory credit decision implies consequences that are below expectations. In essence therefore, results indicate that in most of the MFIs, credit decisions were taken in manner that led these institutions to achieving below expected portfolio performance. It is therefore clear that most of the MFIs were not prudent as far as the making of credit decisions was concerned. This explains why an increasing number of them were failing to achieve their expected portfolio performance to the extent that some closed down.

It is even highly doubtful whether MFIs were obtaining relevant information from clients or even carrying out the analysis of creditworthiness in an effective manner. From results, clients disagreed that they afforded to service and repay loans. Extending loans which clients could not afford to service and repay implies in effect that these two client screening processes were not effectively carried out in most of the MFIs. This suggests that the MFIs were conducting client screening using inappropriate analysis methods. Effective client screening methods would have determined the affordability of clients to service and repay loans, thereby reducing the already heavy portfolio at risk reported by MFI managers.

Overall, results indicate that client screening is a factor that positively predicts a significant proportion of the loan portfolio performance of the MFIs in Wakiso district. Among its sub

variables, making credit decisions was established as the only significant and positive predictor of this performance.

5.4 Portfolio Control and Performance of MFIs

Results indicate that that there was a significant relationship between portfolio control and the loan portfolio performance of the MFIs in Wakiso district. Actually, loan portfolio control was established as the most significant predictor of the MFIs' portfolio performance. This implies that loan portfolio control is very central to achieving the desired loan portfolio performance. Results are therefore consistent with the observations of Yunus (1996), Martin (1996), Uganda Micro Finance Union (2001), Garber (1997), and Loan Analytics (2004) that portfolio performance is largely determined by the manner in which financial institutions control their portfolio.

Although portfolio control is carried out through loan monitoring, loan review or appraisal and conducting follow up actions, results indicate that not all of these control measures were significant predictors of portfolio performance. Only loan monitoring was found to be a significant predictor of a considerable proportion of portfolio performance. This implies that for MFIs to achieve desired portfolio performance, they needed to be vigilant at monitoring their portfolio.

However, some of the MFIs were not effectively monitoring their portfolios. They emphasized more of loan reviews, appraisals and follow up actions, which, unfortunately, were not significant predictors of their portfolio performance. The fact that their level of loan portfolio monitoring was low was clearly demonstrated by the fact that even clients were not sure whether the MFIs carried out monitoring or not. As a consequence, poor loan monitoring adversely

affected the overall portfolio control of most of the MFIs. Given the proportion of portfolio performance predicted by portfolio control, the reportedly unsatisfactory nature of this control explains why most MFIs were performing poorly and eventually closing down.

To recap, results show that loan portfolio control was established as the most significant predictor of the portfolio performance of MFIs in Wakiso district. Its sub variable of loan monitoring was the best predictor of the institution's performance, and because it was poorly conducted, the overall portfolio control was unsatisfactory.

Overall, results reveal that despite the fact that portfolio planning, client screening and portfolio control related significantly with the portfolio performance of MFIs, the strongest relationship was between portfolio control and this performance. In addition, results indicate that although all the independent variables predicted a significant proportion of this performance, the most significant individual predictor was again portfolio control dominated by loan monitoring. The results, therefore, indicate that if MFIs are to achieve the desired portfolio performance, they have to consider all these independent variables but putting more emphasis on their loan portfolio control generally and loan monitoring in particular.

5.5 Conclusions

The following conclusions are reached based on the foregoing discussion of findings:

- Results indicate that loan portfolio planning has a significant relationship with the performance of the microfinance institutions in Wakiso district. This planning is also a significant factor, predicting up to 17.5% of the portfolio performance of MFIs. Results show that although most of the MFIs conducted their portfolio planning by putting more

emphasis on loan pricing and loan size determination, the less emphasized setting of was the most significant predictor of their portfolio performance.

- Findings indicate that client screening has a significant relationship with the portfolio performance of the microfinance institutions in Wakiso district. It is also a significant of 26.8% of the loan portfolio performance of the MFIs in Wakiso district. However, it effectively carried out in most of the MFIs. Among the sub variables of client screening, credit decisions was established as the only significant and positive predictor of 10% of performance. However, credit decisions were imprudently made in most of the MFIs.
- Results show that loan portfolio control has a significant relationship with the portfolio performance of the microfinance institutions in Wakiso district. It was also established as significant predictor of up to 50.9% of the portfolio performance of MFIs in Wakiso sub variable, loan monitoring, was established as the best predictor of 41% of the MFIs' performance. However, the overall portfolio control was unsatisfactory because loan was poorly carried out.

5.6 Recommendations

The following recommendations are drawn directly from the findings and in accordance with the conclusions reached in the previous section. They are ranked according to their order of importance.

- MFIs should improve their loan portfolio control generally and loan monitoring in This will help them reduce their heavy portfolio at risk.
- Micro finance institutions should give more attention to setting of the guarantees for the extended to clients especially if they are to improve their portfolio performance generally portfolio at risk in particular.
- MFIs should recognize the importance of client goal attainment to their success in

because when clients fail to achieve the goals for which they apply for loans, the MFIs' at risk increases, thereby putting the success of the MFIs in business in jeopardy.

- MFIs should plan their portfolio not selfishly but while putting into account that they are to help clients attain goals for loans are applied for.
- MFIs should improve its effectiveness so as to make prudent credit decisions based on analysis of creditworthiness using relevant information obtained from loan applicants.
- The analysis of a client's creditworthiness that does not establish whether clients can service and repay loans is untenable and should be discouraged by adopting proper and analysis methods.
- The making of credit decisions not related to the analysis of creditworthiness based on client information should also be discouraged.

5.7 Recommendations for further Research

The study has established that loan portfolio planning, client screening and portfolio control predict up to 65.2% of the portfolio performance of the MFIs in Wakiso district. This means that these are not the only variables affecting this performance.

- A study is therefore recommended into other factors affecting the MFIs' portfolio
- A study is also needed into the methods of client screening that can be adopted to process as conducted by microfinance institutions in Wakiso district
- The study covered only MFIs in Wakiso district. A more elaborate study covering all microfinance institutions in Uganda is needed so as to come up with a more empirical regarding all microfinance institutions in Uganda
- The study has not covered the performance of the MFIs relative to their profitability or investment. This gap needs to be bridged.

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APPENDICES

APPENDIX 1

QUESTIONNAIRE FOR MANAGERS

Dear Sir/Madam,

An academic study is being conducted on **"LOAN PORTFOLIO MANAGEMENT AND PERFORMANCE IN MICRO FINANCE INSTITUTIONS IN UGANDA".** In your position as a manager, you have useful information to contribute to the success of the study. You have therefore been selected to participate in the study by answering the questions in this instrument as honestly as possible. The views you express shall be valued as very important and treated with confidentiality.

Note: MFI stands for Micro Finance Institution and "Your" means the MFI in which you are a manager

SECTION A: BIODATA

(i) Name of the MFI……..……(Optional)

(ii) Period spent as manager (Years): ☐ < 1 ☐ 1-5 ☐ 6-10 ☐ 11+

SECTION B: PORTFOLIO PLANNING

1. Fill in the table below as honestly as possible

Statement	
	10
time (000's Ug shs)	
disbursed loans in months	
	11

2. Use the scale below to answer the questions that follow:
Scale: Strongly Disagree (SD), Disagree (D), Not Sure (NS), Agree (A), Strongly Agree (SA)

No.	
the applicants' ability to repay	
before determining the size of the loan to extend to the client	
fixed by the MFI is attractive to clients	
operate profitably	
loan	
clients' payback period	
gestation period of their businesses	
same risk characteristics	
same size	

on loans

SECTION C: CLIENT SCREENING

No.
as required by the MFI
approving the loan
approving the loan
loan
extending a loan
loan is applied
of loans applied for
proposals
business

SECTION D: PORTFOLIO CONTROL

No.
when disbursing loans
regularly
the work standards of the MFI
assessment

performance
performance
loan performance appraisals
are utilizing the loans as expected:
loans
repayment

SECTION E: PORTFOLIO PERFORMANCE

1. Fill in the table below as honestly as possible (Tick the interval corresponding to what applies to your MFI)

30
20
30
50
40
50

2. Respond to the statements in the table below using the scale given in section (B)

No.
required
puts in efforts to recover loans from defaulters
from defaulters
their objectives
MFI does not make loan losses
loans

APPENDIX 2

QUESTIONNAIRE FOR LOAN OFFICERS

Dear Sir/Madam, ☐ ☐ ☐ ☐

An academic study is being conducted on **"LOAN PORTFOLIO MANAGEMENT AND PERFORMANCE IN MICRO FINANCE INSTITUTIONS IN UGANDA".** In your position as a loan officer, you have useful information to contribute to the success of the study. You have therefore been selected to participate in the study by answering the questions in this instrument as honestly as possible. The views you express shall be valued as very important and treated with confidentiality.

Note: MFI stands for Micro Finance Institution

SECTION A: BIODATA

(i) Name of the MFI……..……(Optional)

(ii) Period spent as a loan officer (Years): < 1 1-5 6-10 11+

SECTION B: LOAN PLANNING

1. Basing on your experience as a loan officer, respond to the following questions using the following scale (Tick the option that best suits your opinion).

Scale: Strongly Agree (SA) Agree (A) Not Sure (NS) Disagree (D) Strongly Disagree (SD)

No.					
fair to the clients					
client goals					
repayment					

enough
clients
fair to them

SECTION C: CLIENT SCREENING

1. Use the scale given in section (B) to answer the following questions.

No.
applications
statements

MFI considers client experience in business before approving the loan applied for
for
advancing a loan
before extending a loan
business to advance a loan

SECTION D: PORTFOLIO CONTROL

Use the scale given in (B) to respond to the following questions

No.

established to guide loan disbursement:
portfolio regularly
members comply with work standards
performance assessment
portfolio performance
portfolio performance
from loan performance appraisals
clients
loan appraisals
repayment
utilization:

SECTION E: PORTFOLIO PERFORMANCE

1. Fill in the table below as honestly as possible

No.
required
puts in efforts to recover loans from defaulters
from defaulters
their objectives
MFI does not make loan losses
loans

APPENDIX 3
QUESTIONNAIRE FOR CLIENTS

Dear Sir/Madam,

An academic study is being conducted on **"LOAN PORTFOLIO MANAGEMENT AND PERFORMANCE IN MICRO FINANCE INSTITUTIONS IN UGANDA".** In your position as a client, you have useful information to contribute to the success of the study. You have therefore been selected to participate in the study by answering the questions in this instrument as honestly as possible. The views you express shall be valued as very important and treated with confidentiality.

Note: MFI stands for Micro Finance Institution

SECTION A: BIODATA

(i) Name of the MFI……..……..…..…… (Optional)

(ii) Name of the project for which you applied for the loan…….……..….. (Optional)

Period spent the project has spent (Years): < 1 ☐ 1-5☐ 6-10 ☐ 11+ ☐

SECTION B: LOAN PLANNING

1. Use the scale below to respond to the following questions by ticking the option that best suits your opinion

Scale: Strongly Agree (SA) Agree (A) Not Sure (NS) Disagree (D) Strongly Disagree (SD)

No.
clients
goals

set by the MFI at each interval are fair to the clients
the MFI from the clients are fair

1. Use the scale given in section (B) to answer the following questions.

No.
applications
statements

MFI considers client experience in business before approving the loan applied for

for
advancing a loan
before extending a loan
business to advance a loan

SECTION D: LOAN PORTFOLIO CONTROL

1. Answer the following questions using the scale given in Section B (Respond by ticking the option that best suits your opinion):

No.
are utilized:
effectively
clients:
schedules
performance:
defaulters

SECTION D: PORTFOLIO PERFORMANCE

1. Answer the following questions as honestly as possible using responses given in section (B)

No.
MFI

successfully:

Details relationships between the variables of the study and their measures

Variables		Potfolio planning	Determining loan size	Loan pricing/interest determination	Setting loan repayment period	Setting guarantees	Client screening	Obtaining information on clients	Anakysis of creditworthiness	Making credit decisions	Portfolio control	Loan monitoring	Loan review/appraisal	Follow up actions	Loan loss rate (%)	Arrears rate (%)	Portfolio at risk (%)	Client goal attainment	Client affordability	MFI portfolio performance
Potfolio planning	r	1.000																		
	P	.																		
Determining loan size	r	.923**	1.000																	
	P	.000	.																	
Loan pricing	r	.983**	.666**	1.000																
	P	.000	.000	.																
Setting loan repayment	r	.976**	.434**	.455**	1.000															
	P	.000	.000	.000	.															
Setting guarantees	r	.679**	.384**	.434**	.739**	1.000														
	P	.000	.000	.000	.000	.														
Client screening	r	.267**	.243**	.260**	.656**	.683**	1.000													
	P	.000	.000	.000	.000	.000	.													
Obtaining information	r	.321**	.196**	.225**	.581**	.678**	.872**	1.000												
	P	.000	.000	.000	.000	.000	.000	.												
Credit worthiness	r	.239**	.171**	.177**	.422**	.628**	.894**	.288**	1.000											
	P	.000	.002	.001	.000	.000	.000	.000	.											
Making credit decisions	r	.394**	.268**	.284**	.717**	.638**	.881**	.108	.106	1.000										
	P	.000	.000	.000	.000	.000	.000	.567	.586	.										
Portfolio control	r	.382**	.258**	.274**	.678**	.618**	.807**	.622**	.443**	.684**	1.000									
	P	.000	.000	.000	.000	.000	.000	.000	.000	.000	.									
Loan monitoring	r	.387**	.260**	.280**	.479**	.468**	.358**	.303**	.262**	.439**	.872**	1.000								
	P	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.								
Loan review/ appraisal	r	.277**	.223**	.201**	.388**	.395**	.249**	.238**	.199**	.329**	.861**	.635**	1.000							
	P	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.							
Follow up actions	r	.389**	.292**	.290**	.576**	.728**	.367**	.364**	.239**	.394**	.882**	.521**	.523**	1.000						
	P	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.						
Loan loss rate (%)	r	.822**	.745**	.777**	.571**	.568**	.358**	.327**	.230**	.383**	.572**	.675**	.649**	.387**	1.000					
	P	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.					
Arrears rate (%)	r	.592**	.581**	.697**	.429**	.373**	.238**	.200**	.166**	.261**	.552**	.694**	.586**	.571**	.679**	1.000				
	P	.000	.000	.000	.000	.000	.000	.000	.003	.000	.000	.000	.001	.000	.000	.				
Portfolio at risk (%)	r	.761**	.601**	.661**	.501**	.790**	.301**	.259**	.201**	.326**	.616**	.539**	.696**	.543**	.798**	.572**	1.000			
	P	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.			
Client goal attainment	r	.208**	.672**	.573**	.733**	.298**	.154**	.137*	.136*	.200**	.190**	.124*	.203**	.206**	.455**	.372**	.389**	1.000		
	P	.000	.000	.000	.000	.000	.006	.015	.015	.000	.001	.027	.000	.000	.000	.000	.000	.		
Client affordability	r	.323**	.469**	.657**	.402**	.376**	.215**	.208**	.181**	.262**	.274**	.285**	.187**	.259**	.616**	.625**	.539**	.477**	1.000	
	P	.000	.000	.000	.000	.000	.000	.000	.001	.000	.000	.000	.001	.000	.000	.000	.000	.000	.	
MFI portfolio performance	r	.568**	.530**	.660**	.510**	.689**	.522**	.186**	.504**	.527**	.659**	.656**	.503**	.281**	.857**	.826**	.860**	.917**	.962**	1.000
	P	.000	.000	.000	.000	.000	.000	.001	.002	.000	.000	.000	.003	.000	.000	.000	.000	.000	.000	.

APPENDIX 5

Prediction of the MFI portfolio performance by the independent variables and their sub-components

Independent variables
MFI portfolio performance
Adjusted R-Square = 0.652
F-value = 14.237
Sig. = 0.000

Client screening

Portfolio control

Loan size determination
Loan pricing/setting interest
Setting loan repayment period
Setting guarantees

Obtaining client information
Analysis of creditworthiness
Making credit decisions

Loan monitoring
Loan review/appraisal
Follow up actions

0.039

0.212		
0.013		
0.415		
0.268		
0.053		
0.096		
0.100		
0.509		
0.410		
0.044		
0.032		
		0.656
		2.738
		0.125
		2.285
		2.831
		0.639
		0.761
		1.057
		7.725
		2.165
		0.623
		0.441
0.512		
0.010		
0.901		
0.007		
0.005		
0.523		
0.289		
0.009		
0.000		
0.008		
0.534		
0.660		

Appendix 5 indicates that the sub variables that significantly and best positively predict the

MFIs' portfolio performance are the setting of guarantees (Beta = 0.415, t = 2.285, P < 0.01), followed by loan monitoring (Beta = 0.440, t = 2.165, P < 0.01), and loan pricing or interest rate determination (Beta = 0.212, t = 2.738, P < 0.01). Making of credit decisions is also a significant and positive predictor of portfolio performance (Beta = 0.100, t = 1.057, P < 0.009).