THE RELATIONSHIP BETWEEN OUTREACH AND FINANCIAL PERFORMANCE FOR MICROFINANCE INSTITUTIONS IN BURUNDI

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DECLARATION

This research proposal is my original work and has not been presented for examination in any other University.

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DEDICATION

I dedicate this study to my dear family members for all the support given all the time as I prepared and worked on this project.

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ABSTRACT

The objective of this study was to establish the relationship between Outreach and Financial Performance of MFIs in Burundi. The study had three specific objectives of establishing how average loan size, number of active loan accounts and number of women borrowers affect profitability of MFIs in Burundi. The study adopted a descriptive research design which assisted to examine the relationship between outreach and financial performance of MFIs. The sample size as well as the population of the study was fifteen MFIs. The response rate was fifty three percent which comprised eight MFIs. Data was gathered using a data collection schedule and analysed using SPSS.

The overall finding and conclusion of the study was that all the measures of outreach used in this study are not significant predictors of profitability of MFIs in Burundi. The average loan size was found to be insignificant in explaining profitability of MFIs in Burundi. The number of active loan accounts and number of women borrowers were also found not to explain the profitability. Due to the fact that women empowerment is an ingredient of inclusive growth, the government should continue to enhance policies related to women empowerment. This will improve poverty reduction and continue to create a stable society and population in Burundi. Based on the findings another study can be conducted in Burundi but should expand the variables. Other variables that could be included are the interest rate, margin or spread, operating costs, competition from cooperatives and commercial banks. A study that measures outreach by the number of men borrowers would also be recommended. The findings of the study in some areas concur with past studies while in others it contradicts past findings by other scholars.

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ABBREVIATIONS & ACRONYMS

| BIF : | Burundi Francs |
|-----------|--|
| BRB: | Banque de la République du Burundi. |
| CECM: | Caisse Coopérative d'Epargne et de Crédit Mutuel |
| CODEC : | Coopérative d'Epargne et de Crédit |
| COOPEC: | Coopérative Solidarité avec les Paysans pour l'Epargne et le Crédit à |
| | CIBITOKE |
| COPED : | Conseil pour l'Education et le Développement |
| COSPEC : | Coopérative de Solidarité avec les Paysans pour l'Epargne et le Crédit |
| FENACOBU: | Fédération Nationale des COOPEC du Burundi |
| IMF: | International Monetary Fund |
| KWTF: | Kenya Women Finance Trust-Deposit taking |
| MFIs: | Microfinance Institutions |
| RIM: | Réseau des Institutions de Microfinance |
| SACCOs: | Savings and Cooperative Credit Organization. |
| WISE: | Women's Initiative for Self Empowerment |

CHAPTER ONE INTRODUCTION

1.1 Background of the Study

Microfinance is the provision of loans and other financial services to the supply of financial services to micro-enterprises and poor households. The microfinance institution (MFI) has evolved as a result of the efforts of committed individuals and assistance agencies to reduce poverty by promoting self-employment and entrepreneurship. The poor are typically not able to borrow from formal financial service providers. This lack of access can create persistent poverty traps and income inequality (Beck, Demirgüc-Kunt and Levine 2007). Throughout the world, poor people are excluded partially or nearly fully from formal financial systems.

Microfinance is therefore the solution that came up to offer the informal and formal arrangements offering financial services to the poor. It has been greeted with enthusiasm, as its innovative loan contracts have made them extension of small loans to the poor possible, and loan repayment rates have in general been very high, even close to 100 % (Armendáriz de Aghion and Morduch (2005). A number of authors have assessed the impact of Microfinance for the aspect of outreach which evaluates whether the MFI provides services to the poor in poor or excluded areas, women and persons often excluded from microfinance such as farmers or young people between 16-25 years of age. Traditional financial institutions have often considered serving the poor expensive and risky. The poor are often illiterate, with limited collateral and no official credit histories, and are often dispersed across a rural geography.

Portes & Haller (2005) point out that they operate in the informal economy and start businesses that are often unregistered and untaxed. This leads to agency and transaction cost problems that traditional banks have a hard time overcoming. Brau, Brigham and Woller (2004) provided a comprehensive review of the existing Literature in Microfinance methodology and those addressing the issues of MFI sustainability, products and services, management practices, clientele targeting, regulation and policy, and impact assessment, They identified particularly the influential study of Morduch (2000) who identified the debate

between institutionists and welfarists as the "microfinance schism". Driving the schism are competing perceptions of the implications for financial self-sufficiency on depth of outreach.

In Burundi, Microfinance institutions focus on providing credit to the poor who have no access to commercial banks. While microfinance institutions try to be financially sufficient and profitable, they appear to be often loss making. Morduch (2000) argued that MFIs are specifically expected not only to reach the poor but also to become financial viable. Indeed, MFI have been increasingly pressured to adapt more "business" practices and to become more self-sufficient. Most MFIs have achieved deep outreach to the underserved but most have not achieved sustainability, even though their micro-lenders are now well established and run efficiency operations.

1.1.1. Outreach

Outreach is defined as the social value of the output of a microfinance organization and is commonly proxied by the sex or poverty of borrowers, the size or the terms of loan contracts, the price and transaction costs borne by users, the number of users, the financial and organizational strength of the lender, and the number of products offered, including deposits.

The concept of Outreach is multidimensional and has 6 aspects (Meyer, 2002): depth, breadth, and worth to users, cost to users, length, and scope. Navajas, Schreiner, Meyer, & Gonzalez-Vega (2000) refer Depth of outreach to "the value the society attaches to the net gain from the use of the micro credit by a given borrower. This measure identifies the poor clients because the poor are the one who fail to get access to get credit from formal financial institutions since they fail to signal that they can repay their loan (Conning, 1997).

Breadth of outreach refers to the effort by MFIs to extend loans and financial services to an ever-wider audience and the major problem for expanding outreach in most countries is the lack of efficient MFIs to deliver services. Worth of outreach to users is how much a borrower is willing to pay for a loan. Worth depends on the loan contract and on the tastes, constraints, and opportunities of the user. With the cost to the user constant, more worth means more net gain. Cost of outreach to users is the cost of a loan to a borrower. Cost to users includes both price and transaction costs. (Meyer 2002). Length of outreach is the time frame in which a

microfinance organization produces loans. Length counts years of service and it matters because society cares about the welfare of the poor both now and in the future.

Without length of outreach, a microfinance organization may improve social welfare in the short term but may lack the ability to do so in the long term. Morduch, (1998) indicated that in theory, a perpetual source of support can allow a microfinance organization to achieve length of outreach without sustainability. Finally, Scope of outreach is the number of types of financial contracts offered by a microfinance organization. The ideal for attaining best outreach for a microfinance which offers both small loans and small deposits

In conclusion, the 6 aspects are interlinked because depth is the social value of worth to users minus cost to users and the total. Outreach is worth minus cost, weighted by depth, summed across breadth of users and scope of contracts, and discounted through length of time.

1.1.2. Financial Performance

MFIs earn financial revenue from loans and other financial services in the form of interest fees, penalties, and commissions. Financial revenue also includes income from other financial assets, such as investment income. An MFI's financial activities also generate various expenses, from general operating expenses and the cost of borrowing to provisioning for the potential loss from defaulted loans. Profitable institutions earn a positive net income i.e. operating income exceeds total expenses (Lafoucarde et al. 2005).

Policy makers and donors for Microfinance have started to call for profitability of MFIs from the 1980s and 1990s when the Microfinance sector began to grow (Cull et al. 2007). According to Christen (1997), even though the microfinance has been able to present a market-based solution to overcome the dearth of finance to the poor, and the poor proving themselves creditworthy as repayment rates climb over 95 %, microfinance institutions (MFIs) are still typically unable to reap profits from their operations and therefore rely heavily on subsidies. An important factor for the concern about financial performance for MFIs was the increasing criticism for failed subsidized credit programs. Especially the Rural Finance Program at the Ohio State University pointed that the building of lasting, permanent financial institutions requires that they become financially sustainable. (Armendáriz de Aghion and Morduch 2005).

1.1.3. Relationship between Outreach and Financial Performance

Meyer (2002) has formed "the Critical Microfinance Triangle". The triangle presents a conceptual framework for thinking about three overarching policy objectives: outreach to the poor, financial sustainability, and welfare impact. Performance criteria are required for each objective and all three must be measured to thoroughly evaluate microfinance performance.

The corners of this triangle are: outreach to poor; financial sustainability and welfare impact on them. The inner circle represents institutional innovations in technology, policies, and management. The outer one involves several factors related to environment such as the human and social capital possessed by the poor; the economic policies of the country; and the quality of financial infrastructure that supports financial transactions.

Figure 1: The Critical Microfinance Triangle



Von Pischke (1996) recognised that the progression from microfinance with small operations to large providers of banking services to the poor involves many risks. Unless these risks are managed successfully, the conflict between the objectives of outreach and sustainability becomes destructive to both. For Schreiner (1996), the relationship is encompasses in the term "sustainability of microfinance". He defines sustainable microfinance to mean a system with the ability to adapt while respecting the subsidiary goal of providing in a viable way

financial products and services to the poor. This definition however emphasizes on the capacity to expand outreach to the poor and ignores the role of financial sufficiency.

1.1.4. Microfinance sector in Burundi

The microfinance system includes three core sectors: formal, semi-formal and informal sector. The formal sector includes various kinds of banks such as commercial banks, development banks, specialized savings banks, cooperative banks, and unit and regional rural banks; postal savings system; insurance companies; social security schemes; pension funds, and in some countries, capital markets (Nagarajan et al., 2000). The formal sector is regulated and supervised by the regulatory authority.

The Microfinance sector in Burundi is made of Twenty-five Microfinance institutions licensed by the Central Bank of Burundi (Banque de la République du Burundi) at June 2012. However it is only Seventeen MFIs which have formed the Association of MFIs in Burundi (RIM) which has been created in 2002 with the objective of developing mechanism of ensuring professionalism and regulation of the Microfinance sector.

The financing is based primarily on savings from clients and members and contributions from projects and from NGOs involved in the sector. Apart from the experience of the National Bank for Economic Development (BNDE) who offered the microcredit products since 1967, Microfinance sector has began in Burundi with cooperatives institutions Coopec in 1985. Though the supply of microfinance services is still underdeveloped, it is increasing: from 1995, the number of organizations active in Microfinance increase at a fast rate, from May 2005 to January 2010, the number of operators increased from 20 to 25 for over 446,661 members with 360,166 savers. From a total Asset of 36 billion BIF (USD 29,268,293,) in 2007 noted in the Burundi Financial Assessment of the Word Bank in 2009, it mobilized out of 56,308,664,246 BIF million of the loans outstanding (USD 45,779,402) and 43,048,072,149 BIF million of Savings (USD 34,998,432) with 186 outlets (RIM, ZAMUKA bulletin num 2010, Exchange rate 1USD=1230). With a national poverty rate of 67 percent, with rates of 69% in rural areas and 34% in rural areas (IMF 2010) the Microfinance institutions have facilitated the provision of primarily for development of small business (52.24%), for agriculture (25%), for the purchase of land, housing, education, medication (RIM, 2010).

The main actors who are playing an important role in the area of MFIs in Burundi are the Regulatory Authority BRB (Central Bank of Burundi), second is the Ministry of Economy and Finance. Third is the Network of Institutions microfinance (RIM) which is the professional association which provides the framework for consultation with external institutional partners (government, donors, and banking) and the professionalization of the sector. Fourth, there is the National Council of Microfinance (CNM) whose mission consists of ensuring the implementation of policy and strategic orientations defined by national authorities and all parties involved, and to assist the government in the promotion of microfinance policy and harmonization of interventions of various actors in the sector.

1.2 Statement of Problem

Financial self-sufficiency is today the principal focus of the microfinance industry. The "institutionist" or "financial systems" approach that has become increasingly dominant officially in the World Bank and in much of the donor community, exhorts microfinance institutions to pursue sustainability through raising interest rates and lowering costs. However, advocates of what the "poverty" or "welfarist" approach disagree. Hulme and Mosley (1996) highlight the importance of focusing on targeted outreach rather than scale or sustainability. They contend that a narrow insistence on cost recovery and the elimination of subsidies would only force MFIs to shed the poorest from their portfolios of borrowers because they are precisely the most difficult and costly to attend

The general concern of theorists and practitioner in Microfinance is that there exists a tradeoff between financial self-sufficiency and depth of outreach because the focus on financial self-sufficiency will divert MFIs' attention and resources away from their core objective of poverty alleviation and away from their core poor market. This fear is based on several factors which are the lack of physical collateral, the delegation and monitoring costs of the lenders thus delivering financial services to the poor is comparatively costly, difficult and risky. Hence, there is that fear that financial self-sufficiency and depth of outreach are inherently dichotomous (Morduch, 1999). Other studies argued however, that financial selfsufficiency and depth of outreach are not inherently dichotomous. Shreirer and Woller (2000) rather considered that they have a complex, multidimensional relationship that depends on several factors, both direct and indirect. Moreover, financial self-sufficiency is itself driven by factors that may or may not facilitate deep outreach. The exact relationship between financial self-sufficiency and depth of outreach in a given situation will depend on the way in which all these factors interact with each other. Cull et al (2007) at the other side argued from the analyze of data of 124 institutions in 49 countries that the MFIs were approaching profitability and that simple correlations showed little evidence of agency problems, outreach-profit trade-offs, or mission drift. Lafoucarde et al. (1999) have confirmed for MFIs in Sub-Sahara that for those 20 larger, profitable MFIs that reach low-income clients also manage the smallest average loan balances per borrower.

Locally, Paul Kurgat (2009) studied the Role of Savings in Microfinance Institutions for the Kenya Women Finance Trust-Deposit taking in Kenya and analyzed if savings foster institution's financial performance and outreach and found a strong relationship between savings balances and active savings clients. In Burundi, Niyongabo (2006) studied three MFIs (FENACOBU, CECM and COSPEC) in terms of financial viability, institutional and social viability as well as efficiency. One of the key finding is that three institutions are reaching the benchmarking achieved by African MFIs. The debate on mission drift still remains unsettled, and there is a clear need for more empirical studies that attempt to identify the patterns of profitability and outreach of microfinance. This study therefore aims at adding to the empirical evidence on the trade-off or mutuality of the two objectives of MFIs which are to attain profitability and the outreach to the poor.

1.3 Objective of the study

This objective of the study is to establish the relationship between Outreach and Financial Performance for MFIs in Burundi

1.4. Importance of the study

This study is for importance to the Microfinance sector to gain understanding in the patterns of the financial performance and the objective of reaching the poor. It is also be of benefit to the number of players in the Burundi Microfinance arena such as donors likeWorld Bank and other International Financial Institutions in the implementation of the Poverty Reduction strategy through the support to the Microfinance sector as the study will contribute to the knowledge of outreach to the poor. The study will advance the literature on microfinance and is a basis for further research; few studies have been done assessing the outreach of MFIs in Burundi. Findings for this study will also help the Government of Burundi in enacting policies that pertain to the running of Microfinance.

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

The Chapter presents the relevant literature on the theories based on that have been brought forth by scholars explaining the three factors which determine the presence of financial intermediaries and Microfinance specifically: Agency theory, transaction costs and property of rights discussed in section 2 of this chapter. As well, empirical studies and evidence that relate to this topic will be looked in particular those that have been carried elsewhere world over and also ones carried in Burundi, Kenya and other countries of the East African Community. It will brings a closer look on how these studies have identified the patterns of outreach and profitability of MFIs while the section 4 examines two important approaches to the microfinance industry which are the Poverty Lending approach and the Financial systems approach. Section 5 concludes the chapter.

2.2 Theoretical Framework

2.2.1 Agency theory

Agency theory deals with two problems in agency relationship (Jensen and Mecling 1976). The first is the agency problem that arises when the goals of the principal and the agent are conflict and when it is difficult for the principal to verify what the agent is doing. The credit relationship can be likened to an agency relationship by which the creditor (the principal) "says" some of his wealth to debtors (agents) who are committed to him capital repayments and interest costs with the conditions established in a contract previously established between the two parties. One can thus infer a divergence of interest between creditor and debtor. The former want the repayment of capital borrowed and the latter want to maximize the profitability of it.

This problem is worse when information asymmetry is exaggerated. In the general finance system and in the microfinance sector in particular, information asymmetry problems are bigger than in other sectors. According to the theory of asymmetric information, raising

interest rates can exacerbate adverse selection and moral hazard problems, screening out the most reliable borrowers and undermining loan repayment rates (Stiglitz and Weiss 1981).

Information asymmetry occurs when one of the parties in a relationship or contract has incomplete information compared to the other party. Due to the very nature of microfinance activity, there may be situations in which the interests of an MFI's stakeholders –contributors, investors, customers, employees, and government– vary among them. For instance, managers may want to increase the MFI's profitability by investing in high-risk projects and/or projects that do not seek the corporate goal pursued by the institution's owners. This could result in excessive risks and/or distancing from the MFI's corporate purpose.

Asymmetric information problem may take place before and after a contract are signed causing adverse selection and moral hazard problems. In the context of microfinance, the former problem may exist if the intended use of fund is different from that applied for. The latter problem arises when funds are used for purposes other than it was sanctioned.

The lack of knowledge about the beneficiary's skills and expertise is also source of adverse selection therefore ascertaining the required skills of the beneficiaries before the funds are delivered to them can mitigate the problem. Credit reference bureau and Solidarity credits are used as such mechanism for solving problems related to information asymmetries. Both adverse selection and moral hazard could be solved if borrowers could credibly offer collateral to secure their loans (Armendariz de Aghion and Morduch 2005), which is however not possible for many borrowers and micro businesses that do not have many assets.

2.2.2 Transaction Cost theory

The transaction cost approach refers to the theory of the firm by Ronald Coase. In his paper "The Problem of Social Cost", Coase (1960) explicitly introduces the notion of 'Costs of Market Transactions'. He further clearly defined the concept as "the cost of using the price mechanism". From there a dichotomous literature began and has consistently focused on one part on the costs of trading across a market ('neoclassical' definition), and on the other part on the costs of establishing and enforcing property rights ('property rights' definition).

The neo-classical study of transaction costs focuses on costs appearing from exchange between actors (Hirshleifer, 1973). This economic theory assumes that the legal, political, and informational aspects of an economy are given. Therefore in a neoclassical world contracts do not imply any costs and property rights are secure. Following their definition, transaction costs are costs resulting from the process of market exchange between firms or individuals, i.e. the transfer of property rights. The neoclassical approach to transaction costs dominates in finance and pure theory.

It was later theoretical described and exposed by Williamson (1996). Transaction costs approach adopts a contractual approach to the study of economic organization. The unit of analysis in transaction cost theory is the transaction. Therefore, the combination of people with transaction suggests that transaction cost theory managers are opportunists and arrange firms' transactions to their interests (Williamson, 1996). The underlying assumption of transaction theory is that firms have become so large they in effect substitute for the market in determining the allocation of resources. In other words, the organization and structure of a firm can determine price and production.

Transaction costs are a primary factor explaining the presence of financial intermediaries. These costs represent the reason for operating for intermediate (Benston and Smith 1976). At exchanges between savers and small borrowers, the cost of research reveals prohibitive. Banks and other financial institutions can reduce transaction costs in the distribution of financial services. The trade-off between improving depth of outreach, i.e. reaching relatively poorer people, and achieving financial sustainability stems from the fact that transaction costs have a fixed cost component so that unit costs for smaller savings deposits or smaller loans are high compared to larger financial transactions. This law of decreasing unit transaction costs with larger size transactions generates this trade-off irrespective of the lending technology used.

2.2.3 Theory of property rights

The Property rights approach also referred as the transaction cost economics TCE emphasize that the creation, monitoring, and enforcement of long-term agreements are risky. Property rights are the ability to freely exercise a choice over a good or a service. Their definition of TC can be defined as transaction costs are the costs of establishing and maintaining property

rights. Since institutions evolve to minimize transaction costs, transaction cost economics "examine the search for institutions that reduce the costs of exchange. They argue that contract choice depends on the transaction costs of the different contracts.

Allen (1999) classifies the transaction cost in three types: search and information costs, bargaining costs, and policing and enforcement costs. Those are supposed to be globally applicable across various economic exchanges. MFIs are concerned about the cost of transactions involving the delivery of their service to customers. When the transaction costs associated with a particular contractual assembly of inputs are low, self-interested individuals are more likely to choose that method of organizing production. Microcredit programs vary in their transaction cost characteristics depending on their specific lending methodology and social contexts.

2.3 Approaches to microfinance

The origin of microfinance shows that there have been two separate goals in providing financial services to the poor: (i) for development goal such as SMEs development or poverty reduction and (ii) for profit. The first goal implies microfinance as a policy tool while the second one considers it as a business. Separate goals then result in two different approaches in microfinance, which in literature are mentioned as the *poverty lending approach* and the *financial systems approach* (Robinson 2001).

2.3.1. Poverty lending approach

Poverty lending approach or "welfarist" school states that microfinance programs often serve social objectives which justify ongoing donor support. Welfarists are concerned that in the push towards commercialization, influential donors are steering MFIs in a policy direction which is inconsistent with their underlying social objectives. They argue that profitmaximizing MFIs tend to move away from poor, high-risk client groups.

The microfinance literature in the past decade has produced volumes of impact studies on the general assumption that all MFIs are strictly poverty reduction oriented (Hulme and Mosley 1996). The PL approach argues that only the poorest of the poor should be targeted to provide them with assistance that would otherwise bypass them. It assumes that broad target group

definitions fail to extend benefits to the most marginal. The approach is motivated by equity concerns with bow best to assist the poor, and in particular, the poorest. Lending is considered only one of many variables that can be used to ameliorate abject poverty.

Credit is treated as the catalyst to the poor to organize to improve their socioeconomic welfare through very small, very short-term working capital loans that supply producers with cash flow to carry out subsistence-level economic activities. This series of loans provides a cash flow over a period of two to three years that the very poorest can invest to generate a surplus. Programs following this approach have a large socioeconomic development agenda, of which savings and loan services may be a critical, though not the sole, element. PL programs almost always include nutrition, education, training, and other components. However, Robinson (2001) identifies that these institutions are typically not sustainable, primarily because their interest rates on loans are too low for full cost recovery. In addition, they do not meet the demand among the poor for voluntary savings services. Cull et al. (2007) see microfinance as a vision of poverty reduction that centres on self-help rather than direct income redistribution.

2.3.2. Financial Systems approach

According to Robinson, Marguerite (2001), the financial systems approach focuses on financial intermediation between the poor borrowers and savers on commercial basis. This approach lays its emphasis on the institutional self-sufficiency. Since the mid-1990s, the dominant paradigm within microfinance has been the "financial systems" or "institutionist" approach, which considers an industry dominated by large, profit-seeking microfinance institutions (MFIs) which meet their costs from interest and fee revenue, and obtain their capital from savings mobilization and commercial finance markets rather than subsidized donor funds.

The Financial Systems approach argues that microenterprise finance should be treated as part of financial system development to reach large numbers of people without continuing subsidies as it treats microenterprises as market-oriented endeavors offering a product with attributes clients want at a price that covers costs. The approach aims for financial viability of lending institution and stresses that savings are equal in importance to credit. Today, it is recognized that there has been a significant shift from the poverty reduction to financial systems approach. Gonzalez Vega (2003) recognized that microfinance under poverty reduction approach which concentrates on reducing poverty reduction through subsidized credit programs cannot reach the poor households on a sustainable basis. The application of pure financial systems approach which emphasizes the financial sustainability may also result in the limited development of microfinance i.e. the exclusion of the very poor.

2.4 Measuring Outreach

Outreach is defined as the ability of an MFI to provide high quality financial services to a large number of clients. Two measures of outreach are considered into this study: and Breadth and Depth. Rosenberg (2009) stated that the number of active clients includes borrowers, depositors, and other clients who are currently accessing any financial services have to be considered as measure of breadth of outreach along with the share of women borrowers. The proxy for depth of outreach is the average loan size defined as the average gross loan portfolio divided by the number of active borrowers (Woller and Schreiner, 2000).

Lensink, Meesters and Hermes (2008) identified also Loan size as a proxy for the depth of outreach. Greater loan size usually means more profitability for the lender but less depth of outreach for the borrower. Of course, improvements in efficiency (or other innovations) can increase both depth of outreach and profitability. Because poorer borrowers cannot demonstrate and guarantee their creditworthiness as well as less-poor borrowers, however, efficient lenders must trade off depth of outreach against profitability.

Gonzalez-Vega (1998) recognized that innovations can remove the trade-off temporarily, but the trade-off will reappear once lenders reach the efficiency frontier. Breadth of outreach (in terms of number of clients) and depth of outreach (at present measured through the average loan size) are now regularly reported by Microfinance analysis databases, for instance in the Micro banking Bulletin and will be scrutinized for the objective of this study as also studied by Lafoucarde et al. (2005) in their overview of outreach and Financial Performance of Microfinance Institutions in Africa.

2.5 Measuring Financial Performance for MFIs

Different literatures noted that financial sustainability is one of the areas that we need to look at to assess the performance of micro finance institutions. Financial sustainability is the capacity to generate the resources necessary to achieve institutional and program sustainability. Meyer (2002) noted that the poor needed to have access to financial service on long-term basis rather than just a onetime financial support. Short-term loan would worsen the welfare of the poor (Navajas et al., 2000). The financial unsustainability in the MFI arises due to low repayment rate or un-materialization of funds promised by donors or governments. There are two kind of sustainability that we could observe in assessing MFIs performance: For nonsubsidized institutions, it is the Return on assets (ROA) which reflects the organization's ability to deploy its assets profitably and for subsidized institutions the Return on equity (ROE) which measures the returns produced on the owners' investment.

The Return on Assets (ROA = Adjusted net operating income - Taxes) / Adjusted average total assets) relates profits to the size of the institution, is also a typical measure in the literature concerning the profitability of microfinance. It makes it possible to compare MFI profitability with that of other commercial banks and projects, which typically do not use self-sufficiency measures for profitability analysis. ROA and ROE are valuable measures of an MFI's profitability since they are financial metrics that are well established and well understood across the commercial spectrum. As such, they are useful regardless of the legal status or mission of an MFI. The Return on equity (ROE), which is a typical measure in the banking sector, is not suitable for the microfinance industry, as it assumes that institutions among a peer group are fundamentally similar. For our study, we will focus on the ROA as a measure for the financial performance for MFIs.

The other measure of financial performance is the financial self-sufficiency. According to Morduch (1999) if the institution is not financially self-sufficient, it cannot survive without subsidies as it would not be able to cover its costs of capital at market rates. The Financial Self-Sufficiency ratio (FSS) = adjusted financial revenue / (adjusted financial expenses + adjusted loan loss provisions + adjusted operating expenses) measures the operating and financing costs of the MFI against the income generated from its operations. When adjusted income is lower than adjusted costs, the FSS measure is below 100% and the MFI is defined

as subsidy dependent. When adjusted income exceeds adjusted cost, the MFI is defined as self-sufficient (subsidy independent).

The other indicator of performance is the the Subsidy Dependence Index. Yaron and Manos (2007) defined the SDI as the measure of how much an MFI would have to increase its lending interest rate in order to cover all of its costs including adjustments. An SDI above zero means that the MFI still needs subsidy to operate—i.e., it has not achieved financial sustainability. They provided a two-stage calculation produces first the amount of annual subsidy and then the index.

$$(1) S = A (m - c) + [(E * m) - P] + K$$

(2)
$$SDI = S/LP * i$$

Where:

SDI = Index of subsidy dependence of MFI;

S = Annual subsidy received by the MFI (see above);

LP = Average annual outstanding loan portfolio of the MFI;

i = Weighted average interest yield earned on the MFI's loan portfolio.

S = Annual subsidy received by the MFI;

A = MFI borrowed funds outstanding (annual average);

m = Interest rate the MFI would be assumed to pay for borrowed funds if access to borrowed concessional funds were eliminated;

c = Weighted average annual concessional rate of interest actually paid by the MFI on its average annual concessional borrowed funds outstanding;

E = Average annual equity;

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

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

These FSS and SDI measures are more complex than ROA and ROE indicators and there are slight variations in the ways of calculating each of them. (UNCDF, 2006). Therefore the USAID Microenterprise Development Office in its "Microfinance Financial Reporting Standards" recommends the use of ROA and ROE as measures of MFI profitability.

2.6 **Review of Empirical studies**

Various studies have been made in regards to the outreach and the financial performance of MFIs. Woller and Shreiner (2000) examine the 13 sample village banks and the direction of these relationships and found that financial self-sufficiency and depth of outreach are not inherently dichotomous. Rather, they have a complex, multidimensional relationship that depends on several factors, both direct and indirect. Moreover, financial self-sufficiency is itself driven by factors that may or may not facilitate deep outreach. Contrary to widespread beliefs, the empirical examination finds a robust positive relationship between financial self-sufficiency and depth of outreach (as proxied by the ratio of the average loan to per capita GNP).

Hartarska (2004) using average loan size as a proportion of GNP per capita concluded that institutions tend to achieve both financial self sufficiency and better depth of outreach conditioned on the existence of an efficient board. Conning (1999) examines the contractual design issues faced by 72 microfinance organizations from the Microfinance bulletin an semiannual bulletin published in 1998 by the Economics Institute and found that tradeoffs between outreach, sustainability and financial leverage are shaped by the endogenous monitoring and delegation costs that arise within a chain of agency relationships subject to moral hazard between borrowers, loan staff, MFO equity-owners, and outside investors. He argued that reaching the poorest of the poor is more costly than reaching other segments of the market even when there are no fixed lending costs, and that leverage may be much harder to achieve for MFOs that target the "low-end" of the market.

Further, Cull, Asli Demirgüç-Kunt and Morduch (2009) used the most extensive dataset in analyzing the financial performance and outreach in a large comparative study for 124 microfinance institutions in 49 countries. The authors explicitly explore whether there is empirical evidence for a trade-off between the depth of outreach and profitability by examining whether more profitability is associated with a lower depth of outreach to the poor, and whether there is a deliberate move away from serving poor clients to wealthier clients in order to achieve higher financial sustainability (mission drift). Their findings are that some institutions in the sample have achieved both satisfactory outreach as well as profitability, and that simple correlations for the whole sample do not provide evidence of mission drift (correlation between average loan size and profitability measures is not statistically significant). Mersland and Strøm's (2007), use a self-constructed global data set on MFIs spanning 57 countries collected from third-party rating agencies. The authors study the effect of board characteristics, ownership type, competition and regulation on the MFIs outreach to poor clients and its financial performance. They conclude that there is no difference between nonprofits organizations and shareholder firms in financial performance and outreach. Unlike Cull, Asli Demirgüç-Kunt and Morduch (2007), Mersland and Strøm's (2007) do not disaggregate their analysis by lending methodology. They find that on an aggregate level, average loan sizes do not increase as the MFIs become older. They use average profits and average costs per credit client as regressors, and find that cost efficiency is important in determining outreach.

Lensik et al. (2008) focused on the relationship between outreach and efficiency of MFIs They used stochastic frontier analysis to examine whether there is a trade-off between outreach to the poor and efficiency of microfinance institutions. Using a sample of more than 1300 observations, the key finding is that outreach and efficiency of MFIs are negatively correlated and argued that efficiency of MFIs is higher if they focus less on the poor and/or reduce the percentage of female borrowers.

At country level, Bereket and Rani (2009) analyzed the existence of a tradeoff between outreach and financial sustainability for MFIs based on data on 85 Indian MFIs using correlation matrix. In this regard, the finding of this study did not support a tradeoff between outreach and financial sustainability more specifically the simple correlation between average loan size (proxy to depth of outreach) and operational sustainability was found to be weak.

In Africa, studies have also been done on matters related to performance of fund managers though not many. Adongo and Stork (2005) in a study of the factors influencing the financial sustainability of selected Microfinance Institutions in Namibia found that degree of financial unsustainability was lowest for term micro-lenders and was highest for multi-purpose cooperatives involved in the provision of microfinance. They did not find evidence that a lower per capita income in the microfinance target group will hinder the financial sustainability of the selected microfinance institutions. Annim (2009) studied the financial sustainability versus targeting the poor: evidence of microfinance institutions in Ghana using a total of 16 microfinance institution. The main finding of the study upheld skeptic's view of a trade-off and revealed the effect of source of funds and other institutional characteristics in targeting poor clients. The quantitative exposition clearly showed institutional inability to mutually operate competitively and reach poorer clients. In Kenya, a study made by Paul Kurgat (2009) on the Role of Savings in Microfinance Institutions for the Kenya Women Finance Trust-Deposit taking and analyzed if savings foster institution's financial performance and outreach. The results indicated strong relationship between savings balances and active savings clients at 1% level of significance (p=99.2%).Variation of savings balances (SB) have no significant influence on financial performance (ROA). He concluded that the KWTF demonstrates good outreach with improved performance.

For the Burundi case, there are few studies undertaken in relation to MFIs and the objectives addressed in these previous studies are different, insuring the value added of this study. Niyongabo (2006) examines from three case studies (FENACOBU, CECM and COSPEC) three dimensions of durability that are financial viability, institutional and social viability as well as efficiency. One of the key finding is that three institutions are reaching the benchmarking achieved by African MFIs.

Ashcroft M. et al. (2007) of the Women's World Banking did a study on the state of MFIs institutions in Burundi. They sampled 13 institutions members of RIM (the official association of MFIs institutions in Burundi). The sector have difficulty in funding because the interest rate paid to MFIs by banks is around 18 to 24% which is too high for MFIs which have not reached financial sustainability for the majority of MFIs with a low geographical coverage between rural and urban areas. The other key remark is that the sector has a lack of national coordination. This study therefore is seeking to fill the gap in the knowledge of performance and outreach of MFIs in Burundi.

2.7 Conclusion

The literature reviewed above noted that MFIs could be examined through two main polar: outreach to the poor, financial sustainability. The term financial performance is mostly used interchangeably with other concepts like profitability, financial self-sustainability, financial efficiency, self-sufficiency, financial viability, financial performance (Ledgerwood, 1999; Hulme and Mosley, 1996). This study uses the term financial performance to mean the ability of MFIs to exist indefinitely by generating returns ("ceteris paribus") while providing financial services

The empirical studies identified that the shift in emphasis of MFIs into viable financial institutions while maintaining greater outreach to the poor is considered as the main challenge to MFIs. Studies have been done on the area of assessing financial performance of MFIs and the relationship between Outreach and Financial Performance for Asia MFIs, for Namibia, Ethiopia (Kereta , 2007) and Uganda and Kenya for KWTF institution (Kurgat, 2009). MFIs giving varied results, some showing a strong relationship between the two objectives (Bereket and Rani, 2009) but disapproved by other scholars. The Poverty Reduction Mission of Microfinance or the 'win-win' proposal, where increased institutional sustainability leads to increased alleviation of poverty, has created significant debate within the sector (Morduch, 2000).

For Burundi, only few studies related to the factors of sustainability of MFI have been done (Niyongabo, 2006) but did not examine in view of the outreach. Thus this study is justified by this lack of empirical study at the country level on the relationship between outreach and Financial Performance of MFIs.

CHAPTER THREE RESEARCH METHODOLOGY

3.1 Introduction

This Chapter describes how the study was conducted, explaining steps and procedures involved in Research Design, Study Population and sample. This chapter as well explain the data collection methods and the instruments involved.

3.2 Research Design

Research Design is a logical and systematic plan for directing a research study. It specifies the objectives of the study, the methodology and techniques to be adopted for achieving the objective(s) (Mugenda and Mugenda, 2003). The study adopted a descriptive research design which assisted to examine the relationship between outreach and financial performance of MFIs.

3.3 Population and Sample

The target population was Seventeen MFIs members of RIM (the official association of MFIs institutions in Burundi) registered at end June at the Central Bank of Burundi (BRB) which supervise the activities of Microfinance sector in Burundi. Among them, 2 institutions which are group lending are excluded as the analysis on average loan sizes and share of women borrowers is limited to MFIs using individual lending only. This is because there is some inconsistency in reporting the numbers of group clients, making the total number of clients an unreliable measure for those with any group clients. Ylinen (2010) explained that the total number of clients and the outreach indicators (average loan size and share of women borrowers) cannot be reliably determined for MFIs that have reported any group clients. The sample size was therefore 15 institutions.

3.4 Data Collection Methods

Secondary data was collected for the purpose of analyzing the relationship between the relationship between outreach and financial performance for Microfinance institutions. The patterns in the data were identified and useful inferences were studied with a regression approach. These dataset included:

- Return on Assets as a proxy for the profitability of the MFIs.
- The average loan size as proxy for the depth of outreach as smaller average loan size is taken as an indication of better outreach to the poor (Robert Cull et al., 2007).
- The number of active borrowers and the share of women borrowers as a proxy for breadth of outreach.

The dataset was drawn from the Financial Statements of each of the MFI under study throughout the period of study 2007 to 2010 and sourced from the Management of the institutions. The computer aided analysis for this study was done using the statistical package for the social sciences (SPSS) version 16.

3.5 Data Analysis

The regression model used was the following:

 $ROAi = \beta 0 + \beta_1 NABi + \beta_2 ALSi + \beta_3 WBi + E$

Where:

The Dependent variables. The key dependent variable in our analysis of profitability is ROA which is the measure of financial performance in period *i*

The Explanatory variables that were used

NAB is the number of active borrowers (measure breadth of outreach) for period *i*.

ALS is the average loan size (measure for depth of outreach) for period *i*.

WB is the number of women borrowers (measure for depth of outreach) for period i

B is the coefficient of sensitivity of the independent variable on the dependent variable Ei is the error term of the test equation.

The explanatory variables contain extreme values as summarized in Table 4.1. The ROA is similarly correlated with the three explanatory variables with the highest correlation with the average loan per borrower. Number of women borrowers and number of active

accounts had the highest correlation of 94%. Regression analyses allowed then us to investigate the strength of those correlations.

Using SPSS, the regression model was tested on how well it fits the data. The significance of each independent variable was tested. Fischer distribution test called F-test was applied. It refers to the ratio between the model mean square divided by the error mean square. F-test was used to test the significance of the overall model at a 95 percent confidence level. The p-value for the F-statistic was applied in determining the robustness of the model.

3.6 Data Reliability and Validity

The reliability of the published statistics has been checked by using multiple sources: a database for MFIs, central bank data as well as the financial statements and cross-checked as confirmation of one another.

The study has also been careful, when making use of secondary data, of the definitions used by those responsible for its preparation and on how each MFI has defined the variables concepts in order to ensure construct validity.

CHAPTER FOUR DATA PRESENTATION AND ANALYSIS

4.1 Introduction

Raw data, descriptive statistics and data analysis are presented on this chapter. This study was quantitative in nature and used analysis of secondary data to arrive at various conclusions in order to address the research objectives.

4.2 **Response Rate**

The sample of the study was fifteen Micro Finance Institutions (MFIs) which are registered by the Association of MFIs of Burundi. The focus of this study was only those MFIs registered by the association. This study managed to get data for eight MFIs which represent 53% of the MFIs. Data was gathered by use of data collection schedule which was sent to all the fifteen MFIs. Corroborative data was gathered from the website of Microfinance Information Exchange (MIX) which is a World Bank sponsored site for MFI data. Some MFIs took long to respond while others failed to respond completely despite some follow-up reminders. Most of the secondary data on the Microfinance Information Exchange (MIX) website was not up-to date and hence the use of data collection schedules. These MFIs that responded are also the largest in terms of asset size and they constituted 95% of the total assets of the fifteen sampled MFIs.

4.4 Data Presentation

The data that was collected was for four years for the period 2007 to 2010. Raw data is presented first then followed with correlation and regression analysis.

4.4.1 Descriptive statistics

Table 3.1 shows the average of the dependent and independent variables over a period of four years (2007 -2010). The data shows that return on assets for RECECA-INKINGI had the highest average of 0.04% and the lowest being -1.46% of HOPE FUND BURUNDI. The MFIs with average negative return on assets indicates that there was an average of a loss for

the four years while a positive returns on assets shows that there was an average profit for the period.

RECECA-INKINGI has the highest average loan per borrower for the four year with US\$918 while the lowest was TURAME COMMUNITY FINANCE with US\$40. TURAME COMMUNITY FINANCE had the highest number of active borrowers with 14,711 while RECECA-INKINGI had an average of 247 borrowers. This means that RECECA-INKINGI has high loan values compared to other MFIs. TURUME COMMUNITY FINANCE had the highest average number of women borrowers of 13,425 compared to COSPEC which had the lowest women borrowers of 36.

| Name of MFI | Mean | Mean Loan | Average | Average |
|--------------------------|---------|-----------|---------|---------|
| | ROA | Balance – | Active | Women |
| | | US\$ | Members | Members |
| CECM | 0.03 | 248 | 11,060 | 7,859 |
| COPED | 0.03 | 132 | 548 | 61 |
| COSPEC | -0.08 | 312 | 277 | 36 |
| FENACOBU | 0 | 283 | 12,794 | 2,716 |
| HOPE FUND BURUNDI | -1.46 | 135 | 2,834 | 1,474 |
| RECECA-INKINGI | 0.04 | 918 | 247 | 187 |
| TURAME COMMUNITY FINANCE | -0.38 | 40 | 14,711 | 13,425 |
| WISE | -0.2 | 139 | 1,140 | 460 |
| AVERAGE | -0.2525 | 276 | 5,451 | 3,277 |

 Table 4.1: Four Year Mean of Dependent and Independent Variables

The following section discusses the raw data for the respective variables for each of the MFIs.

Table 4.2 shows the trend of returns on assets. RECECA-INKINGI had the best trend of return on assets and also had steady improvement over the four years moving from 0.00 in 2007 to 0.07 in 2010. CECM had positive return on assets over the four years although it has been steady which indicates that either profits have not been growing or assets have been increasing at a higher rate than profits. COPED had a declining trend of return on assets.

COSPEC, FENACOBU, HOPE FUND Burundi, TURAME and WISE have had negative return on assets and with some years experiencing declining trend.

| 2010 | 2009 | 2008 | 2007 |
|-------|--|--|---|
| 0.03 | 0.03 | 0.03 | 0.04 |
| 0.02 | 0.03 | 0.04 | 0.02 |
| -0.10 | -0.06 | -0.08 | -0.08 |
| -0.03 | -0.04 | 0.04 | 0.04 |
| -2.21 | 1.17 | -2.22 | -2.58 |
| 0.07 | 0.06 | 0.03 | 0.00 |
| -0.28 | -0.39 | -0.48 | -0.37 |
| -0.22 | -0.26 | -0.16 | -0.14 |
| | 2010 0.03 0.02 -0.10 -0.03 -2.21 0.07 -0.28 -0.22 | 2010 2009 0.03 0.03 0.02 0.03 -0.10 -0.06 -0.03 -0.04 -2.21 1.17 0.07 0.06 -0.28 -0.39 -0.22 -0.26 | 2010200920080.030.030.030.020.030.04-0.10-0.06-0.08-0.03-0.040.04-2.211.17-2.220.070.060.03-0.28-0.39-0.48-0.22-0.26-0.16 |

 Table 4.2: Return on Assets Trend – Percentage

Table 4.3 shows the trend on average loan per borrower. CECM had a consistent growth over the years. This shows the loan disbursements have been growing over the years. The rest of the MFIs had unstable growth of average loan per borrower with some years increasing while in other years decreasing. This shows that loan disbursements have been intermittent or it could also mean that loan pay-offs occur in some years hence reducing the average loan per borrower.

| Name of MFI | 2010 | 2009 | 2008 | 2007 |
|--------------------------|------|------|------|------|
| CECM | 232 | 337 | 204 | 221 |
| COPED | 132 | 122 | 106 | 169 |
| COSPEC | 302 | 295 | 348 | 301 |
| FENACOBU | 263 | 285 | 306 | 278 |
| HOPE FUND BURUNDI | 121 | 163 | 144 | 112 |
| RECECA-INKINGI | 975 | 677 | 884 | 1137 |
| TURAME COMMUNITY FINANCE | 31 | 38 | 43 | 47 |
| WISE | 141 | 133 | 144 | 139 |
| | | | | |

Table 4.3: Average Loan Balance per Borrower – in US Dollars

Table 4.4 shows the trend of active borrowers over the four year period. TURUME MFI had the highest number of active borrowers as well as the highest growth over the four years with 17,089 in the year 2010 compared to RECECA-INKINGI which had 234 borrowers. The lowest loan accounts were with RECECA-INKINGI with 234.

| Name of MFI | 2010 | 2009 | 2008 | 2007 |
|-------------------|--------|--------|--------|-------|
| CECM | 14,169 | 11,819 | 10,015 | 8,237 |
| COPED | 692 | 484 | 542 | 473 |
| COSPEC | 329 | 307 | 281 | 192 |
| FENACOBU | 14,329 | 14,112 | 12,862 | 9,871 |
| HOPE FUND BURUNDI | 4,454 | 2,690 | 2,445 | 1,745 |
| RECECA-INKINGI | 234 | 244 | 389 | 122 |
| TURAME COMMUNITY | 17.090 | 16 925 | 15 205 | 0.614 |
| FINANCE | 17,089 | 10,833 | 15,505 | 9,014 |
| WISE | 1,824 | 1,023 | 774 | 937 |
| | | | | |

 Table 4.4: Number of Active Loan Accounts

Table 4.5 shows the trend of women borrowers. TURAME COMMUNITY FINANCE had the highest number of women borrowers of 15,720. COSPEC had the lowest women borrowers of 39 women. All the eight MFIs experienced growth in women borrowers over the four years.

| Name of MFI | 2010 | 2009 | 2008 | 2007 |
|--------------------------|--------|--------|--------|-------|
| CECM | 9,777 | 8,292 | 7,611 | 5,755 |
| COPED | 73 | 58 | 60 | 53 |
| COSPEC | 39 | 43 | 22 | 40 |
| FENACOBU | 3,496 | 2,842 | 2,258 | 2,270 |
| HOPE FUND BURUNDI | 2,673 | 1,480 | 1,100 | 645 |
| RECECA-INKINGI | 183 | 185 | 288 | 93 |
| TURAME COMMUNITY FINANCE | 15,720 | 15,388 | 13,844 | 8,748 |
| WISE | 829 | 426 | 309 | 275 |

Table 4.5: Number of Women Borrowers

During the four periods the trend of percentage of women borrowers to the total active borrowers has been slightly below 50%. Bearing the socio-economic limitations that women face, the average percentage of women in the eight MFIs is commendable. TURAME COMMUNITY FINANCE has the highest percentage of women borrowers with a four year trend of over 90%. This is followed by RECECA-INKINGI which has a four year trend of above 75%. COPED has the lowest women proportion of 11%.

| Name of MEI | 2010 | 2009 | 2008 | 2007 | Mean |
|--------------------------|------|------|------|------|-------|
| | 2010 | | | | Trend |
| CECM | 69% | 70% | 76% | 70% | 71% |
| COPED | 11% | 12% | 11% | 11% | 11% |
| COSPEC | 12% | 14% | 8% | 21% | 14% |
| FENACOBU | 24% | 20% | 18% | 23% | 21% |
| HOPE FUND BURUNDI | 60% | 55% | 45% | 37% | 49% |
| RECECA-INKINGI | 78% | 76% | 74% | 76% | 76% |
| TURAME COMMUNITY FINANCE | 92% | 91% | 90% | 91% | 91% |
| WISE | 45% | 42% | 40% | 29% | 39% |
| AVERAGE | 49% | 48% | 45% | 45% | 47% |

Table 4.6: Percentage of Women Borrowers

4.4.2 Correlation Coefficient

Correlation coefficient indicates the degree of linear relationship between two variables. Table 4.6 shows the Pearson correlation coefficients between the variables. Returns on assets had the highest correlation (29.5%) with the average loan per borrower. Number of women borrowers and number of active accounts had the highest correlation of 94% and significant at 1%. The rest of the correlations were negative and not significant. Return on assets and number of active accounts had a negative -14% (negative) correlation while return on assets and number of women borrowers had – 19.9% (negative) correlation.

Table 4.7: Pearson Correlation Coefficients

| | Return on Assets | Loan Balance Per Borrower | Active Loan Accounts | Women Borrowers |
|---------------------------|---------------------|---------------------------------|-------------------------|--------------------|
| Return on Assets | 1 | | | |
| Loan Balance Per Borrower | 0.295 | 1 | | |
| Active Loan Size | -0.141 | -0.519 | 1 | |
| Women Borrowers | -0.199 | -0.448 | 0.940 | 1 |

4.4.3 Regression Analysis

The key test for the study used a regression equation model in the form of $ROA = \beta 0+\beta_1 NAB+\beta_2 ALS+\beta_3 WB+ E$. Table 4.7 shows the output for model fitness. The R coefficient of 0.377 indicates that the predictors of the model which are average loan size, number of active loan accounts and the number of women borrowers have a correlation of 37.7% with the dependent variable of return on assets. The R square also called coefficient of determination of 0.142 indicates that the model can explain only 14.2% of the variations in the return on assets of the eight MFIs and that there are other factors which can explain 85.8% of the variations in return on assets. This shows that the independent variables (average loan size, number of active accounts and the number of women borrowers) of this study are not significant predictors of the performance of the eight MFIs.

| Indicator | Coefficient | |
|----------------------------|-------------|--|
| R | 0.377 | |
| R Square | 0.142 | |
| Adjusted R Square | -0.502 | |
| Std. Error of the Estimate | 0.55713 | |
| | | |

Table 4.8: Model Summary – Goodness of Fit

Table 4.8 shows that variations in the performance (return on assets) can be explained by the model to the extent of 0.205 out of 1.447 or 14.2% while other variables not captured by this model can explain of the 85.8% (1.242 out of 1.447) of the variations in return on assets. The

F value of the model produces a p-value of 0.878 which is significantly different from zero. A p-value of 0.878 is greater that the set level of significance of 0.05 (5%) for a normally distributed data. This means that the model is not significant in explaining performance of the eight MFIs. This calls for a further study which can include other determinants of performance.

| | Sum of Squares | df | Mean Square | \mathbf{F} | Sig. |
|------------|----------------|----|-------------|--------------|-------|
| Regression | 0.205 | 3 | 0.068 | 0.22 | 0.878 |
| Residual | 1.242 | 4 | 0.31 | | |
| Total | 1.447 | 7 | | | |

Table 4.9: Analysis of Variance - ANOVA

The regression output is laid on Table 4.9. The beta coefficients to be used in this study are the unstandardized coefficients. The results indicate that a unit change (1%) in the loan balance per borrower causes 0.172 (17.2%) change in the return on assets of the eight MFIs. This indicates that average loan per borrower does not have a major influence on profitability (return on assets) of the eight MFIs. The number of active loan accounts is also not a major predictor of profitability or return on assets. A unit change (1%) in number of active loan accounts leads to 0.181 (18.1%) unit change in profitability of the eight MFIs. Number women borrowers lead to decline in profitability. A unit change in number of women borrowers leads to a negative change of -0.143 (-14.3%) change in the profitability (return on assets) of the eight MFIs.

In terms of significance of each of the predictors, a t-test statistics has been used to generate a p-value or coefficient of significance. A scan of the p-values of all the three predictors shows that none of the p-values is less than 0.05. This means that loan balance per borrower (p-value = 0.566 > 0.05), number of active loan accounts (p-value=0.657 > 0.05) and number of women borrowers (p-value=0.641 > 0.05) are not significant in explaining profitability of the eight MFIs and by extension MFIs in Burundi. This is the key finding of this study which reveals that the overall Outreach is not significantly linked to profitability of MFIs thus the need to identify factors that have statistically significant associations with profitability like Portfolio at Risk, lending methodology, interest rates, etc.

| | Unstandardized | | Standardized | | Sia | |
|---------------------------|----------------|------------|---------------------------|--------|-------|--|
| Indicator | Coefficients | | Coefficients Coefficients | | Sig. | |
| - | В | Std. Error | Beta | - | | |
| (Constant) | -0.846 | 2.424 | | -0.349 | 0.745 | |
| Loan Balance Per Borrower | 0.172 | 0.275 | 0.342 | 0.625 | 0.566 | |
| Active Loan Accounts | 0.181 | 0.379 | 0.686 | 0.479 | 0.657 | |
| Women Borrowers | -0.143 | 0.284 | -0.69 | -0.504 | 0.641 | |

Table 4.10: Regression Coefficients

4.5 Summary and Discussion of Findings

The main objective of this study was to establish whether Outreach has relationship with the Financial Performance for the MFIs in Burundi. Outreach is the efforts undertaken by an MFI to extend microfinance services to the underserved by financial Institutions. It has the proxies in the study by the number average loan size, the number of active loan accounts and women borrowers in an effort to offer financial services to low income clients. Financial Performance was measured by the Return on Assets of each MFI. The first objective was to establish how the average loan size had a relationship with profitability of MFIs in Burundi. The study finds a positive weak relationship between average loan size (depth of outreach) and profitability of MFIs in Burundi. These findings corroborate the results of a study done by Bereket and Rani (2009) in India where it was concluded that the relationship between loan size and performance was weak among 85 Indian MFIs which were studied and concluded the higher Loan Size, the less focused the MFI on the poor. Lensink, Meesters and Hermes (2008) had contrary findings because their study concluded that greater loan size usually means more profitability for the lender.

The second objective was to establish whether the number of borrowers determined profitability of MFIs in Burundi. It was found out that number of borrowers had a weak negative relationship and weak significance with profitability of MFIs in Burundi. These findings agrees with a study done by Lensik et al. (2008) using 1300 observations where it was concluded that higher percentage of female borrowers is associated with a lower financial efficiency of MFIs.

The third objective of the study was to test how the numbers of women impact on the financial performance of the MFIs in Burundi. In terms of significance testing, it was found that number of women in MFIs in Burundi was not a significant factor in explaining profitability. These findings are inconsistent with a study that was done in Kenya by Kurgat (2009) who concluded that outreach was a key factor to the profitability of Kenya Women Finance Trust (KWFT). Kurgat (2009) study could have suffered a shortcoming of basing his results on a case study and hence the need for a Kenyan study which uses a large sample. Lensik *et al.* (2008) study also had similar findings when they concluded that efficiency of MFIs is higher if they focus less on the poor and/or reduce the percentage of female borrowers.

CHAPTER FIVE SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The objective of this study was to establish the Relationship between Outreach and Financial Performance of MFIs in Burundi. The study had three specific objectives of establishing how average loan size, number of active loan accounts and number of women borrowers affect profitability of MFIs in Burundi.

The study adopted a descriptive research design which assisted to examine the relationship between outreach and financial performance of MFIs. The sample size as well as the population of the study was fifteen MFIs. The response rate was fifty three percent which comprised eight MFIs. Data was gathered using a data collection schedule, also analysing financial statements of MFIs from 2007 to 2010 and the data was analysed using SPSS. The findings of the study in some areas concur with past studies while in others it contradicts past findings by other scholars.

The descriptive statistics revealed during the four periods the trend of percentage of women borrowers to the total active borrowers has been slightly below 50% but all the MFIs are experienced growth in women borrowers .The Mean ROA for the MFIs for the four years has is a negative rate with some years experiencing declining trend. The average loan size is USD 200 which indicates that the MFIs provide small loans in general, reaching the very poor. The Correlation analysis revealed that there is a little correlation among the independent variables and the Regression results has shown that average Loan size and Number of borrowers are positively and not significantly related to the Financial Performance of MFIs while the number of women borrowers is negatively and not significantly related the profitability measured the Return on Assets of MFIs.

5.2 Conclusions

Based on the findings of this study some few key conclusions can be deduced. On a general point of view it can be concluded that Average Loan size, number of active Loan accounts and number of women borrowers do not explain profitability of MFIs in Burundi.

Average Loan size (proxy to depth of outreach) may not explain the profitability due to the fact that the underlying interest charge on the loan may explain the kind of profit skimmed from the borrower. Margin may also be another predictor that may be used to drill into the quality of the loan. Many MFIs in the world are run on subsidised facilities and hence some loans may be huge but they could be on concessional basis and hence fail to produce higher margin or profit.

Number of active borrowers (proxy to breadth of outreach) has shown that it does not explain profitability. Some accounts could be active but they could be having default component and hence may not generate the required profit. Also it is possible to have active borrowers but the size of the loans and interest may not be very significant to produce a reasonable profit.

The negative weak relationship between the Number of women borrowers (proxy to breadth) and Financial Performance of MFIs in Burundi may partly be due to the fact that women are borrowing small loans and hence micro loans can yield little profits. This is consistent to previous studies which found that MFIs with a high proportion of women are less profitable. This could also be due to the fact that most women are faced with socio-economic challenges especially related to culture and family. These could lead women to be prone to defaulting loans when confronted to the various cultural or social stigmas.

5.3 **Policy Recommendations**

Women are key pillars of society and by extension pillars to financial prosperity. It is therefore important for the Government of Burundi to develop policy and legal environment that is conducive to women entrepreneurship, lending and borrowing. It is recommended that large micro credit schemes specifically for women be developed like the Women Enterprise Fund for Kenya. MFIs are constrained with funds for lending and hence limiting their level of profitability. Management teams and directors of MFIs in Burundi require being more innovative on how to raise additional funds for onward lending. This can be done by structuring loans with favourable terms from international organizations and also local commercial banks. This will enable them to improve their outreach and hence profitability.

Women empowerment is an ingredient of inclusive growth and the government should continue to enhance policies related to women empowerment. This will improve poverty reduction and continue to create a stable society and population in Burundi. It has been proved in previous studies that the poverty reduction incidence of a dollar lent to a woman is high that to a man. MFI in Burundi are many and competing for a small range of clientele. This could be one of the reasons that most of them have very few customers or borrowers and hence low profitability or even losses in some years. It is advisable if the MFIs could consider creating mergers and acquisitions which could give them the opportunity to synergise in terms of financial resources, human resources and other physical resources. This will help to reduce unhealthy competition and also to management their costs.

Financial specialists will be able to appreciate the challenges that may influence profitability of MFIs. Many specialists may assume that all financial institutions have uniform set of factors that influence profitability. This study offers a set of factors that can always be tested which conducting financial appraisal of MFIs. The auditors also carry out several financial tests during their audit works. Many auditors carry out straight tests and calculations on the contribution of various components of the income statement to the profits. It would be much better for the auditors to use more advanced analysis like the one used in this study and they will be able to provide more informed guidance in their work. They can use the correlation analysis and the regression analysis to enhance the output of their work.

5.4 Limitations of the Study

One key limitation for this study was the non-availability of current data. This study could have been better with the use of statistics as recent as 2011 or 2012 but this proved to be challenging because many MFIs have not filed their financial returns. Some few MFIs were not willing to provide their data and hence posed challenge of constraining the sample size. This challenge was mitigated by doing constant follow up and creating good rapport and was therefore able to get data up to the year 2010.

The response rate of fifty three percent was not the initial target sample of the study. This was occasioned by having some organisations either delaying or failing to provide the requested data. This limitation constrained the sample although the sample that was used for analysis was also good. This sample of fifty three percent was made possible by establishing contacts with some officials of the MFIs who assisted to get data from other MFIs. It is advisable if the association of MFIs in Burundi (RIM) could create a strong research and development department which could be responsible for data gathering and they will benefit from such research arising from such data.

Distance of the researcher from the research site created some logistical challenges. At the initial stages of data collection it was quite difficult to get data. This was resolved by the researcher travelling to the research site and created some ground contacts and engaged a research assistant to follow up on the data. The distance was also mitigated by used of electronic communication through email with the research assistants and some officials of the MFIs.

Data provided was in Burundi francs (BIF) and some were in US Dollars and this posed a problem of multi-currency reports. This challenge was mitigated by converting all figures into a uniform unit of measure of US dollars. A rate of one thousand two hundred and thirty (1230) Burundi francs to one US dollar was used. To also take care of any multi fluctuations in the data the regression was done on the figures after converting them into natural logarithms.

5.5 Suggestions for Further Studies

According to Shreirer and Woller (2000) sustainability of MFIs is rather considered to be complex with multidimensional relationship that depends on several factors, both direct and indirect. This therefore means that this study is not exhaustive in explaining the determinants of MFIs performance. Further studies will therefore be of great use in explaining what determines profitability of MFIs.

Another study can be conducted in Burundi but should expand the variables. Other variables that could be included are the interest rate, margin or spread, operating costs, competition from cooperatives and commercial banks. This kind of study will have an advantage of having many variables.

A study that measures outreach by the number of men borrowers would also be recommended. This is because men are also key borrowers and may have aspects that could explain profitability of MFIs.

It has been noted that most of the sampled MFIs are loss making. It would be advisable to have a study that uses a combination of instruments in order to appreciate this kind of phenomena. The study could use a combination of field observations, face to face interviews and questionnaires. This will provide better understanding on the determinants of financial performance of MFIs in Burundi as compared to use of secondary data only.

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APPENDICES

Γ

Appendix I: Data Collection Schedule

| Name of MFI | | | | |
|----------------------------|------|------|------|------|
| Indicator/Year | 2010 | 2009 | 2008 | 2007 |
| Return on Assets | | | | |
| Average Loan per Borrower | | | | |
| Number of Active Borrowers | | | | |
| Number of Women Borrowers | | | | |

Appendix II: List of MFIs

- 1. Caisse Coopérative d'Epargne et de Crédit Mutuel (CECM).
- Coopérative Solidarité avec les Paysans pour l'Epargne et le Crédit de Cibitoke (COSPEC).
- 3. Fédération Nationale des Coopératives d'Epargne et de Crédit du Burundi (FENACOBU).
- 4. Union pour la Coopération et le Développement- Microfinance (UCODE-MF).
- 5. Mutuelle d'Epargne et de Crédit (Mutec s.a).
- 6. Hope Fund Burundi s.a (HFB)
- Caisse Coopérative Indépendante Organisation de l'Archidiocèse de Gitega (CCI-ODAG)
- 8. Ishaka Microfinance
- 9. Turame Community Finance (TCF)
- 10. Coopérative d'Epargne et de Crédit pour l'Auto-Développement (CECAD)
- 11. Twitezimbere Microfinance
- 12. Women's Initiative for Self Empowerment (WISE)
- 13. Réseau Communautaire d'Epargne et de Crédit pour l'Auto-Développement (RECECA-Inkingi)
- 14. Dukuze Ibibondo Microfinance
- 15. Solidarité pour l'Epargne et le Crédit et Services (SOLECS Coopers s.a)