MICROFINANCE AS A TOOL FOR FINANCIAL SERVICES RECONSTRUCTION IN POST-CONFLICT COMMUNITIES

A STUDY OF POST-CONFLICT MICROFINANCE IN THE DEMOCRATIC REPUBLIC OF CONGO

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DEDICATION

To the PEOPLE OF CONGO who have gone through atrocities and deceptions of all kinds, may this work be a path to recovery and reconstruction of a just, presperous, and democratic society.

And

To BONIFACE MATABISI, my Father, who passed away in 2003. He would be proud in seeing his Son accomplishing this endeavor. Wherever his spirit is, might he celebrate with me and the entire family at this moment of joy.

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ABSTRACT

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Since its inception in the 1970s, modern microfinance has emerged as a strategy to reduce vulnerability of the poor and promote microenterprise. This dissertation proposes that microfinance plays an additional role as a tool for reconstructing financial services in post-conflict communities.

During major conflicts, the provision of financial services is usually disrupted; and financial institutions are often targets of lootings by militia or military of factions in conflicts; resulting in weak, insolvent, and non-operational financial services sectors when post-conflict reconstruction begins. The Democratic Republic of Congo (DRC)'s financial services system was greatly disrupted by years of conflicts that ended in 2003. In the post-conflict DRC, the provision of financial services has shown some improvement, and an important share of this improvement can be attributed to microfinance. The central question becomes whether microfinance is an effective tool for post-conflict reconstruction of financial services.

Using financial data from the DRC and surveys; this study, first, performed a trend analysis of outreach (employment, clientele, loans, savings/deposits) and financial performance (assets, profitability, efficiency, risk) of financial institutions using a microfinance approach; and second, compared the level of outreach and financial performance by financial institutions using a microfinance approach to those using a traditional financial approach; and third, compared the reconstruction level (business development, education, assets acquisition, and standard of living) of microfinance clients to the level of non-clients of financial institutions.

This study found that, in post-conflict communities, microfinance - as a mode of financial services provision is active, agile, and is a better tool than traditional financial services in terms of outreach and some aspects of financial performance, at least in the early interim phases of reconstruction. When compared to non-clients, this study found that clients of microfinance institutions experienced greater business development, acquired more assets, saved more, and enjoyed a higher standard of living. All these reconstruction variables performed significant differences. The only non-significant difference between clients and non-clients was found in the area of education. Microfinance should therefore be considered as a tool for post-conflict reconstruction of financial services and be emphasized as an intervention in the early stages of reconstruction of financial services.

1. Introduction

This study evaluates whether microfinance serves as a tool for rebuilding the financial services sector in post-conflict communities. It seeks to determine the extent to which (a) microfinance institutions show increases in outreach and financial performance during consecutive years in a post-conflict situation, which serves as evidence of their post-conflict rebuilding role; (b) microfinance financial services translate into reconstruction in post-conflict communities and do it faster than traditional financial services; and (c) microfinance institutions display a faster reconstruction of financial services than do traditional financial services at the earlier stage of post-conflict period by displaying higher comparative increases in outreach and performance. This study's findings may offer a path to speedy reconstruction of financial services in post-conflict, using the agility of microfinance approach in providing financial services.

Preliminary evidence of microfinance as a post-conflict reconstruction tool has been reported in the areas of microenterprise development (Frasier & Saad, 2003; Santos, 2003; Tucker & al., 2004); household reconstruction (Matul & Tsilikounas, 2004); social capital enhancement (Meissner, 2005); ethnic conflict mitigation (Marino, 2005; Meissner, 2005); and housing development (Cain, 2007). Previous studies have also recognized that microfinance can play the role of financial services reconstruction (Kuehnast, 2001; Frasier & Saad, 2003). This study aims to provide additional evidence that microfinance serves as a financial services reconstruction tool.

Using data from the Democratic Republic of Congo (DRC), this study analyzes post-conflict levels of outreach (employment, clientele, lending, savings/deposits) by providers of financial services and their financial performance (assets, profitability, efficiency, risk). It also compares providers using a microfinance approach (MF) and those using a traditional financial services (TFS) approach. A survey is used to assess whether microfinance services are translated into reconstruction (clients' business development, education, assets, and standard of living) by comparing MF clients versus non MF clients.

This study's main hypothesis is that MF is a financial service reconstruction tool in post-conflict communities. It displays more rapid and profound increases in outreach and financial performance during consecutive years in post-conflict situation; and its services translate into reconstruction. MF is a better tool than TFS particularly at the earlier stages of post-conflict reconstruction because MF displays more rapid increases in outreach and financial performance during the immediate years post-conflict when compared to TFS.

DRC recently emerged from thirteen years of political and armed conflicts (1990 to 2003) that claimed over 4 million lives (Fonseca, 2004) and the country's financial services system was greatly disrupted during those years of conflicts (Santos, 2003). Today, however, DRC seems to show some improvement in the provision of financial services, and an important share might be attributed to microfinance. For instance, Procredit Microfinance Bank showed a 517% net profit, 105% income, and 170%

account deposits increases in 2006 when compared to its 2005 level (Central bank of Congo, Annual Report 2006).

> Armed conflicts have devastating consequences on the development, not only in terms of depleting economic and organizational capital, but also in decreasing social capital through loss of trust, diminished interaction and increased tensions between ethnic groups, and in declining human capital through death and displacement, loss of self-esteem; and trauma (Marino, p., 2005, p.1).

In most cases, financial services structures and infrastructures are targeted, looted and destroyed (Williams, 2002). In a developing context such as the DRC, the majority of the population is poor and most often excluded from access to financial services offered by traditional financial institutions. Moreover, in a post conflict situation, there is greater probability for the poor majority to be more excluded from accessing financial services (Santos, 2003). Microfinance programs have been embraced around the world as an important strategy for poverty alleviation, although their contribution to poverty alleviation on a global level remains limited (Hishigsuren, 2004). Yet, microfinance institutions might play another important role: they offer a tool for financial services reconstruction in post conflict communities. Kuehnast (2001); Frasier & Saad (2003); and Barr (2005) suggested that microfinance can play this role in financial services reconstruction. Be that as it may, the literature reveals that the impact of microfinance in post-conflict communities has not been completely addressed, particularly its significance in reconstructing sustainable financial services and its reconstruction contribution from the standpoint of a financial provider. This study aims to fill this gap.

The literature review chapter defines post-conflict reconstruction and its linkage with development issues such as growth, inclusiveness, stability, and sustainability. This study approaches the activities of financial services providers as subdivided into three sectors: the Traditional financial sector (TFS) or the formal financial sector, the Microfinance sector (MF), and the Informal financial sector (IFS). Microfinance is discussed with an emphasis on its role as a tool for post-conflict reconstruction. The link between microfinance and the informal sector, women, government and aid policy is also addressed. The literature review concludes with a discussion on the provision of financial services in the DRC. The conceptual framework chapter proposes a research framework, reseach questions, and hypotheses. The methodology chapter presents the research design and emphasizes on the constraints of data collection in the DRC. Data collection procedural and souces are discussed; the analysis process of data, validity, reliability, limitations, and the significance of this study are also discussed. Financial data from various financial institutions, 95 structured interviews, and 16 unstructured interviews provide this study with a set of quantitative and qualitative data. The findings are discussed; conclusions and recommendations are made.

The DRC's post-conflict reconstruction of financial services appears to be a success story. Still, there is a lot to be done by the providers to maintain it success. A summary of complaints and suggestions by clients of financial services providers is attached as Appendix 5.

2. Literature Review

2.1. Post-conflict reconstruction

There is a period between the formal end of a conflict and the return to normality usually called the *post-conflict* era, or *transition* period (Kumar, 1997). “Post-conflict reconstruction refers generally to the set of strategies and efforts to rebuild societies destroyed by war.” (Steifel, 1999, p.4).

> Post-conflict reconstruction was defined by the World Bank in 1995 as the rebuilding of the socioeconomic framework of society and the reconstruction of the enabling conditions for a functioning peacetime society [to include] the framework of governance and rule of law (Hamre & Sulivan, 2002, p. 89). John Hamre and Gordon Sulivan expanded this definition to include justice, reconciliation, and security, which according to them are central (ibid). (Zenkevicius, 2007, p.30).

Stiefel (1999) argues that the challenge of rebuilding after war is essentially a development challenge in the special circumstances of a war-torn society, pointing out that problems faced by different societies emerging from war are similar to development issues. They are related to growth, inclusiveness, stability, and sustainability that are amplified and compounded by the multiple impacts and legacies of the conflict. Development is therefore related to post-conflict. Barbanti (2004) said:

> Development should be understood as a process, not a product because societies are always changing: some improve, while others fail. Development theory aims at explaining both processes while development practice intends to provide tools that can be applied to entire societies or specific communities; development interventions are intended to move communities or societies from a situation in which they are believed to be worse off to a situation in which they are assumed to be better off. Current links between development and conflict theory stress the provision of aid in cases of violent conflict. Peace-building interventions after violent conflict address the same concerns as development interventions; therefore development is at the core of post-conflict interventions (p.1).

Wedgwood & Jacobson (2001) stated that there exist many aspects of post-conflict reconstruction, including the return of refugees, the reshaping of school curricula and public culture, the structure and mandate of peacekeeping forces, and the appropriate international structures for consultation among interested powers. Reconstructing financial services after conflict is another important aspect of the reconstruction process. Wilson (2001) claims that in many armed conflict settings, financial institutions are targets of lootings by militia or military of factions in conflicts. In the case of Cambodia, for instance, the entire financial infrastructure and the local currency were destroyed during the Khmer regime (Wilson, 2001; Addison, Geda, Le Billon & Murshed, 2005). “The protracted civil wars experienced in Mozambique and Angola damaged the entire rural banking system…” (Addison et al. 2001; cited by Wilson, 2001, p. 44). In other cases, the financial sector is non-operational due to insolvency as in the case of Afghanistan:

> At the end of 2001, Afghanistan's formal financial system was virtually non-operational, with insolvent public financial institutions, and no private banks. Hence dependency on informal sources of finance (such as family and friends, moneylenders and shopkeepers, traders, and landlords) increased. In Afghanistan, microfinance had limited outreach (approximately 10,000 clients at the end of 2001) and weak institutional structures. Savings services were limited to few informal schemes and in kind savings such as opium in poppy-growing areas. (CGAP, 2002 cited by Marino, 2005, p. 3).

2.2. Financial Services Sector

Financial services refer generally to the range of activities of the finance industry which includes lending, savings, insurance, investments, pension/retirement, payment services, mortgage, and money transfer. Financial institutions are organizations that provide financial services. Major financial institutions are commercial banks, investment banks, investment companies, brokerage and clearing companies, and insurance companies (Liaw, 2004). In addition, "most countries have a central bank that serves as the bank of both the government and the banking system. Although each central bank has a slightly different range of activities, all central banks play a key role in determining the availability and cost of money and credit." (Liaw, 2004, p. 15). These financial institutions are generally considered as part of the "formal financial sector", while a range of other providers of financial services (money lenders, pawn brokers, rotating savings and credit associations or ROSCAs, friends and relatives, and community groups) are known as the "informal financial sector". Formal and Informal financial sectors have been subject to various definitions and demarcations; still, their *raison-d'être* is not always clear.

> The coexistence of formal and informal credit markets is a widespread phenomenon in developing nations. Within the literature, there are two competing views as to why formal and informal credit markets coexist. The first is a policy-based explanation: government interest rate ceilings and other regulations create an informal market that develops at uncontrolled interest rates. The alternative hypothesis is that differences in the cost of screening, monitoring, and control enforced across lenders leads to a fragmentation in credit markets. (Mohieldin & Wright, 2000, p. 1).

Aryeetey (2008, p.1) also argues that “most African economies are characterized by a financial system that has both formal and informal segments.” Mohieldin and Wright (2000); and Morris, Lobao and Wavamunno (1995) distinguished a third segment they called “Semi-formal finance” in their study on the role of such a third segment in Uganda. The Semi-formal finance segment combines characteristics of both the formal and informal finance (Morris et al., 1995).

This study approaches the activities of financial services providers as subdivided into three sectors: the Traditional financial sector (TFS) or the formal financial sector, the Microfinance sector (MF), and the Informal financial sector (IFS). This approach adheres to Barr (2005, p.286) where “microfinance institutions can position themselves as intermediaries between the formal and the informal sectors.”

Considering microfinance as a separate segment of a country’s financial sector might be a subject of controversy since some studies and reports (Germidis, 1991; Srinivas, 1991) have classified microfinance activities as part of the informal sector. The consideration of microfinance as a separate sector contrary to the classical dualism known as formal and informal sectors can be justified by the tremendous change that microfinance institutions or “MFIs” have brought to the finance field during the last four decades, starting with the pioneering work of the economist Mohamed Yunus of Bangladesh:

> The modern origins of microfinance date back to the mid-‘70s. Among the key innovators was Professor Muhammad Yunus of Bangladesh. He had the idea of making loans to the very poor, especially women. He started the Grameen Bank Project in 1976, and transformed it into a bank in 1983. According to the bank, it now has nearly 6 million borrowers - 96% of them women – and almost 2,000 branches in some 64,000 villages. The repayment rate for loans is 98%, and the bank has earned a profit every year but three since its inception. (Farrell, 2006,p.1).

Gonzalez and Rosenberg (2010) have consolidated data from various sources and concluded that the microfinance industry includes around 2600 MFIs servicing approximately 94 million borrowers. The Mix Markets (2010) reported that as of 2008, consolidated data of 1690 MFIs indicated that they had $39.1 billion in Gross Loan Portfolios; $ 22.5 billion in deposits; 75.2 million borrowers; and an average loan per borrower of $557.2.

2.3. Microfinance

In this study, modern microfinance is traced as originating from a combination of elements of development and finance theories and practices. Indeed, Muhamed Yunus was able to come up with a model that mixed finance ideas (loan, saving, interest rate, risk mitigation) with development issues (access, housing, nutrition, production, health, education) to create and promote the modern microfinance industry.

> I first began to see societal problems being solved, one Grameen family at a time, during annual workshops…These workshops gathered together center leaders to review their problems and achievements, to identify areas of concerns, and to look for solutions to social and economic challenges… At our second national session in 1982, we concluded the workshop with Ten Decisions. These ten decisions were increased to sixteen in our 1984 workshop… (Yunus, 2003, p. 135).

The major development goals found in the Grameen's sixteen decisions to be mixed with the financial tools were: bring prosperity to families; stop living in dilapidated houses; grow and eat plenty of vegetables all year around; maximize production during plantation seasons; family planning resulting in fewer children; Healthy environment; assure children's education; use clean water; commitment to societal justice; collective investments for higher incomes (Yunus, 2003).

> Grameen Bank is also pioneering a low-cost cooperative health insurance scheme, in which an annual fee of $1.25 provides half of the health costs for an entire family for a variety of services. The Grameen housing program can lend up to 30,000 takas (about $500) as home loans. To date there have been more than half million Grameen-financed houses built or rebuilt, adding iron roofs, cement pillars, and sanitary latrines… The houses are substantial in size, with an electric fan overhead and usually other basic appliances in electrified villages. Grameen has also started offering higher education loans for its members… It is a remarkable transformation. (Todaro & Smith, 2006, p. 247).

“Microfinance generally refers to the provision of financial services to poor and low-income households which are deprived access to mainstream financial institutions.” (Daley-Harris & Awimbo, 2006, p. 3). “Financial services provided by MFIs include one or any combination of the following: lending, savings, and deposits. Increasingly, mature microfinance institutions also provide diverse products, such as housing loans, insurance and pension.” (Hishigsuren, 2004, p. 14). Barr (2005) approaches microfinance as a form of financial development aimed to alleviate poverty by giving the poor access to financial services. “Most people think of microfinance, if at all, as being about micro-credit, lending small amounts of money to the poor. Microfinance is that, but it is also broader, including insurance, transactional services, and importantly savings.” (Barr, 2005, p. 278).

> Microfinance practice is generally guided and defined by two competing paradigms: financial self-sustainability and poverty alleviation. The poverty alleviation approach (also referred to as the welfarist approach) claims that the overall goals of microfinance should be poverty reduction and empowerment. The financial self-sustainability approach (also referred to as the “profit” or “financial systems” or institutionalist approach) views the overall goal of microfinance as the provision of financial services to low-income people, but not to poorest among them. (Hishigsuren, 2004, pp.17-18).

According to Hulme & Moore (2006), microfinance programs and institutions have become an increasingly important component of strategies to reduce poverty or promote micro and small enterprise development. However, knowledge about their achievements remains partial and, in some cases, contested.

The impact of microfinance has been the topic of an increasing number of studies. These studies have ranged from a `proving impact' approach, seeking answers for donors and policy makers on the positive impact of microfinance; to an 'improving practice' approach, trying to give insight on how programs can better respond to client needs and improve productivity. Those studies normally look at how programs contribute to alleviating poverty and reducing vulnerability of the poor through analysis of different units such as the individual, household, enterprise, and the economy." (Santos, 2003, pp. 20-21).

2.4. Microfinance as a Post-Conflict Reconstruction Tool

Previous studies have brought preliminary evidence of microfinance as a reconstruction tool in post-conflict in the area of microenterprise development (Frasier & Saad, 2003; Santos, 2003; Tucker et al., 2004); household reconstruction (Matul & Tsilikounas, 2004); social capital enhancement (Meissner, 2005); ethnic conflict mitigation (Marino, 2005; Meissner, 2005); and housing development (Cain, 2007); and financial services reconstruction (Kuehnast, 2001; Frasier & Saad, 2003).

Post-conflict microfinance as a microenterprise development tool: Post-conflict microfinance helps reconstruct small enterprises destroyed by armed conflict by providing the necessary capital to consolidate existing business or create new business. Santos (2003) suggested that in the post-conflict DRC, microfinance should seize the opportunity to finance small, medium and micro enterprises. Matabisi, Beyene, and Kiremidjan (2007) found that almost all FINCA-DRC clients are owners of some kind of microenterprise; 3.6% of clients in the sample used their loan to start a new activity while 94.5% borrowed to continue their existing businesses. They also found that 37.1%

of all businesses had at least one additional employee beside the business owner, an indication of job creation. FINCA DRC and other major MFIs are today the most important providers of capital and financial services to small, medium and micro enterprises in the post-conflict DRC. Frasier and Saad (2003) also found that in the case of post-conflict Mozambique, microfinance enabled the self-employed to resume their economic activities. Learning from previous post-conflict experiences, Tucker, Nurse, Gailey, Park and Bauman (2004) suggested that in post-conflict Liberia, microfinance emphasis had to be put on building an entrepreneurial sector though well structured grants and loans programs to maximize the positive impact for microenterprise development.

Post-conflict microfinance as a household reconstruction tool: Matul & Tsilikounas (2004, p.1) found that "micro-enterprise credit in Bosnia-Herzegovina stimulated household reconstruction as it provided an efficient and long lasting coping mechanism for household after war". Accordingly, after looking at the impact of post-conflict microfinance between 1996 and 2002 in Bosnia-Herzegovina, microfinance proved to be a tool for household reconstruction by providing individual clients and their families with the resources needed to jumpstart household economies destroyed by years of armed and ethnic conflicts. At the end of the conflict, households were highly vulnerable to risks as shown in Matoul and Tsilikounas (2004) due to the financial, physical, human and social capital destruction. "Income generated from micro-enterprises was perceived during the research as the most efficient coping mechanism among households affected by conflict so as to fill some of their most important needs over the reconstruction period" (Matul & Tsilikounas, 2004, p.1). These findings corroborate the fundamentals of microfinance that emerged as a tool for poverty alleviation through the provision of financial services to the poor bypassed by formal financial services. From the Grameen, Aka Khan, ACCION, FINCA lending approach through recent innovation of OXFAM, CARE and many other programs using a savings-led approach, microfinance's major and ultimate goal has been the reduction of vulnerability to risks experienced by the poor and the poorest. This has been proven true in peaceful areas of intervention and it should even be truer in conflict and post-conflict zones of intervention, using microfinance as a tool.

Microfinance as a social capital enhancement and ethnic mitigation tool: Heen (2005) conducted a study in Cameroon to answer the question whether the microcredit process in Foyet decreases conflict among clients. She concluded that her study did not provide evidence to sustain this claim. However, Heen's study is very limited and subject to serious threats to validity. Indeed, her study is based on only 30 interviews: 20 with members of the microfinance institution and 10 non-members used as a control group. In addition, she used a non probability sample, considerably diminishing the credibility of her findings. Nevertheless, she speculates and suggests that greater availability and access to credit can resolve ethnic tensions through direct mitigation, indirect mitigation, and process mitigation. However, other studies (Meissner, 2005; Marino, 2005) have found some evidence of microfinance playing a role in conflict mitigation and social capital enhancement. In a study conducted in Guatemala among women village banking clients ten years after the end of thirty-six years civil war, Meissner (2005) concluded that post-conflict microfinance had positive outcomes that include: social capital construction, rekindling of social interaction, women empowerment, smoothing refugee re-entry into communities, and reconciling ethnic groups. Meissner's study is a qualitative study and has its own limitations: non probability sample and convenience focus groups; more emphasis on MFIs and practitioners' goals. However, Meissner's preliminary evidence corroborate the work of Doyle (1998) and Larson (2001) who provided substantial evidence of microfinance as a tool for reconciliation and conflict resolution.

Marino (2005) provides a comprehensive survey of literature on the contribution of microfinance to post-conflict recovery in Asia and the Pacific. He draws from his own experience and the works of Forster and Pearce (2002) in Afghanistan; Collier et al. (2003) and Nagarajan (1999) in Cambodia; Wilson (2001) in India; Wehnert & Shrestha (2003) and Shrestha (2004) in Nepal; Newsroom (2004) in Papua Guinea; Rivera (2003) in Philippines; and Sheehan (2003) in Sri Lanka. He concluded that "microfinance promotes conflict resolution, encourage democratic procedures that help people surmount conflicts, while providing a way to bring people together, focusing on economic activities and cooperation rather than differences" (Marino, 2005, p.1).

Post-conflict microfinance as a tool for housing development: When an MFI starts operations in a new area, whether in a peaceful, conflict or post-conflict region, savings (deposits) and loans are usually the main products of their portfolio. Remittance, insurance and housing are additional products that mature MFIs offer. Among all these products, micro-housing seems most challenging to provide because it requires long-term commitment, a greater amount of loan capital that becomes a mortgage, and the legal issues related to land tenure and ownership in developing countries. Grameen Bank of Yunus initiated its housing program in 1984 and six years later had a portfolio of almost 80,000 housing micro-loans financed. The initial amount financed was $500 per unit and repayment was scheduled over a 20-year period at a 5% interest rate on a weekly basis, making it less than a dollar per week (Anzorena, 1994). “Housing microfinance is a growing part of the portfolios of many MFIs. Among ACCION’s partners, institutions in the Dominican Republic, Peru, Nicaragua, El Salvador, Ecuador, Haiti, Paraguay, Mexico, Bolivia, Guatemala and Honduras have introduced housing loans. As of December 2008, affiliates in these countries had housing microfinance products with a portfolio of more than $230 million and nearly 108,000 borrowers”. (ACCION, 2010, p. 1). Angola offers a case of post-conflict housing microfinance through the work of Development Workshop (DW) Angola, a development organization operating in Angola since 1981. According to Cain (2007), DW’s ‘kixiCasa’ program, a housing microfinance initiative has been able to rehabilitate the housing of its clients in post-conflict Angola. Starting in 2005, the program offered $2,500 to its graduate micro-entrepreneur clients to own a house. The success of this program with its micro-entrepreneurs clients led DW to extend this program to civil servants and salaried employees.

Microfinance as a tool for post-conflict financial services reconstruction:

Barr (2005) approaches microfinance as a form of financial development and explores how it can contribute to the development of the financial sector. He extends the original understanding of microfinance as a poverty alleviation tool into a broader role of a specific financial development tool that has to be understood in a larger context of a country's entire financial sector.

> The financial services commonly available to the poor in developing countries often have serious limitations in terms of cost, risk, and convenience. Microfinance institutions play a complementary role to the banking system by extending credit to borrowers whom banks view as too costly or too risky to reach. Lacking collateral, and often living far from banks, poor households often turn to expensive informal moneylenders when confronted with urgent credit needs… Microfinance institutions attempt to compete with moneylenders by offering credit to a broader range of households on more favorable terms. (Barr, 2005, p. 279).

Kuehnast (2001) and Frasier & Saad (2003) suggest that microfinance can play the role of financial services reconstruction in a post-conflict context.

> There are specific reasons why microfinance may be appropriate in post-conflict situations: providing liquidity to facilitate the resumption of economic activity in the informal sector; fulfill a strong demand for financial services during periods of reconstruction; an alternative to humanitarian relief for a long-term development; also the establishment of microfinance programs in the early stages after the conflict may give practitioners the ability to influence future policies regarding microfinance and microenterprise development more generally and to contribute to the overall reconstruction of the financial system. (Foundation for Development Cooperation, 1999, pp. 6-7).

Barr (2005, p. 284) also adds that "microfinance might be an important financial development strategy in… post-conflict reconstruction efforts". Examining evidence provided by microfinance studies, Morduch (1999, p. 1586) pointed out that "most theoretical propositions are supported with anecdotes from particular programs, but they have not been established as empirical regularities. Better research is needed to sharpen both the growing body of microfinance theory and ongoing policy dialogues." Ten years later, Petrikova (2008) observed that "the field of post-crisis microfinance is still young but the existing literature has already defined the roles of microfinance in crises in an extensive and fairly congruent manner." Indeed, Petrikova (2008) characterized the literature on post-conflict microfinance (PCM) as showing an 'ideological unity' going from country case-studies in the 1990s to best-practices recommendations nowadays. Still, Petrikova (2008) suggests that:

> Authors interested in contributing to the pool of post-crisis microfinance literature should strive to improve the best-practice set on one hand by carrying out case studies of countries that have been thus far ignored, and on the other hand by conducting comprehensive impact and financial evaluations of the case studies already published. Researchers have thus far evaded the conduct of more analytical evaluations of the post-crisis activities of MFIs and thus many conclusions they reached have been based more on observations and perceptions than on firm evidence. This problem has been further exacerbated by the omission of protracted conflicts and disasters from the sample, as well as the exclusion of developing-world views on the topic. Incorporation of the critiques into the design of recommendations for MFIs in post-conflict and post-disaster settings would undoubtedly generate a more reliable collection of best practices. (Petrovika, 2008, p.7).

Clearly, the impact of microfinance in post-conflict communities has not been completely addressed, particularly its significance in reconstructing sustainable financial services and its reconstruction contribution from the standpoint of a financial provider.

When discussing microfinance and post-conflict reconstruction, other variables are closely related to the subject: (1) informal sector, (2) women, (3) government policy, and (4) aid policy. In this study, however, none will be considered as a dependent or independent variables but treated instead as intervening variables that need to be controlled and explored.

2.5. Microfinance and Informal Sector

There is a direct link between the existence of the informal sector and microfinance. Indeed, the very existence of microfinance appears to be the need to provide financial services to operators of the informal sector and those in rural areas. Todaro and Smith (2006, p. 333) assert that “the lack of capital is a major constraint on activities of the informal sectors and the provision of credit would therefore permit these enterprises to expand, produce more profit, and hence generate more income and employment”. In developing countries, the size of the informal sector is important and can reach up to 80% of the national economy. Todaro & Smith (2006) argue that “In many developing countries, about half of the employed urban population works in the informal sector” (Todaro & Smith, 2006, p. 328).

2.6. Microfinance and Women

Traditional and modern microfinance have been dominated by women. One reason is that most women have been operating in the informal sector.

> Women often represent the bulk of the informal sector labor supply, working for low wages at unstable jobs with no employee or benefits. The increase in the number of single female migrants has also contributed to the rising proportion of urban households headed by women, which tend to be poorer, experience tighter resource constraints, and retain relatively high fertility rates… The vast majority of institutional credit is still channeled through formal sector agencies, and as a result, women generally find themselves ineligible for even small loans. Government programs to enhance income in poor households will inevitably neglect the neediest households so long as governments continue to focus on formal sector employment of men and allocation of resources through formal sector institutions. To solve the plight of poor urban women and their children, it is imperative that efforts be made to integrate women into the economic mainstream. (Todaro & Smith, 2006, pp. 333-334).

Grameen Bank reached 6 million borrowers in 2006 and 96% of them were women (Farrell, 2006). Saving for Change, a saving-led microfinance project of Oxfam-America has reached 221,900 households in Mali, West Africa and almost all clients are women (Ashe, 2009). In 2007, women comprised 95% of clients of FINCA-DRC, a national program of FINCA International (Matabisi, Beyene, and Kiremidjan, 2007). The Internationla Labor Organization (ILO) argues also that women are targeted by MFIs because they appear to be better borrowers than men.

2.7. Microfinance and Government Policy

A government's attitude and approach towards economic actors in its nation's boundaries are critical factors in the development of economic activities of a country. Unfortunately, in many developing countries where microfinance operates, governments are an obstacle to economic development. Governments can be enablers or obstacles in the development of a country's financial sector. The microfinance industry recognizes the key role that governments play in the development of MFIs:

> Growth is unlikely to succeed if at least one arm of the government does not effectively give its blessing to the existence and growth of microfinance…Bank prudential regulation and supervision become necessary when MFIs start mobilizing deposits from the public or when microfinance activities pose systemic risks to the financial sector, and not before that. (Counts, Zafar & Connor, 2006, p. 52).

The Grameen Bank is an illustration of the role a government policy can play to promote microfinance. Yunus worked closely with the government of Bangladesh from the inception of his idea in 1976 to the chartering of the Bank in 1983. "Yunus began the operation in 1976 after convincing the Bangladesh agricultural development bank to provide initial loan money, the first loans guaranteed personally by Yunus" (Todaro & Smith, 2006, pp. 241-242). Special provisions to the banking sector policies of Bangladesh had to be adopted by the government to allow the Grameen project to operate as a Bank.

2.8. Microfinance and International Aid Policy

Todaro and Smith (2006) argue that there are two main forms of international flow of financial resources: (a) private foreign direct and portfolio investment and (b) public and private development assistance or foreign aid that has two sources: first, individual national governments and multinational donor agencies and second, private nongovernmental organizations (NGOs). In most developing countries, formal and informal financial sectors depend in their majority on foreign money. Most microfinance programs have started their activities using grants from foreign institutions. Morduch (1999) sustains that most programs continue to receive subsidies of some sort, either as grant or soft loans and that many programs are not yet able to break even. In the DRC case, the majority of traditional financial services (TFS) institutions are owned by foreigners or foreign corporations (e.g. Citibank Congo, Stamic bank, Rawbank). The microfinance industry is also fueled by foreign money, at least at the beginning of the programs.

2.9. DRC and the Provision of Financial Services

In 2003, DRC emerged from thirteen years of a multiform conflict (political, ethnic, military, and regional) that started at the beginning of the 1990s. When, in 1990, the former dictator Mobutu announced the end of one-party rule and opened the country to a multi-party system, political turmoil started in the DRC. In 1991 and 1993, the former Zairian national army revolted against the Mobutu regime and looted civilian assets and businesses, including banks and credit unions. In 1994, Hutu and Tutsi tribes in Rwanda could not agree on their national leadership. The civil war that erupted resulted in the genocide of some 800,000 Tutsi, the death of many Hutu and their ejection from their country, bringing to Eastern DRC millions of Hutu refugees whose unexpected arrival disrupted the life of Congolese already going through their own political conflict and economic debacle. The Tutsi-led power in Rwanda feared that Hutu refugees in the DRC would get support from the Mobutu regime and renew civil war in Rwanda. A coalition formed by Rwanda, Uganda, and Burundi decided to invade the DRC and supported a civil war led by Laurent Kabila starting in 1996. During a year, the entire DRC experienced a civil war that ended up with the end of thirty two years (1965-1997) of a brutal, corrupted, incompetent and destructive regime by Mobutu. As soon as the new Congolese government started some type of reconstruction, the new coalition (Rwanda, Uganda, Burundi and Angola) supporting Laurent Kabila could not agree on the management of the new DRC under Laurent Kabila. New armed conflicts erupted in 1998 and soon became a regional war involving officially six nations: Rwanda, Uganda, Burundi, Angola, Zimbabwe and Namibia. The first three supported the new rebellions while the last three supported the DRC government under Laurent Kabila. In January 2001, Laurent Kabila was assassinated but the war kept continuing until 2003 when the Sun City Agreement in South Africa brought together all major belligerent factions to agree to share power (one President and 4 Vice-Presidents) in prelude of free elections in 2006. Although minor tribal and armed conflicts still occur time to time in the DRC, the Sun City Agreement of 2003 put an end on major wars and is therefore considered the beginning of the post-conflict DRC.

The DRC has suffered enormously from the thirteen years of conflict in its myriad forms: political, ethnic, regional, military, psychological and so on. The conflict claimed over 4 million lives (Fonseca, 2004).

> Economic and financial mismanagement, corruption, political turmoil, civil strife, and war have contributed to extremely low and falling per capita income, appalling living conditions, human rights violations, and dismal prospects for human development. The brutal war that broke up in 1998 put major pressure on public finances and public enterprises, with the economy sinking into hyperinflation and the currency becoming worthless, savings and investment plummeting, and financial intermediation collapsing. (Del Castillo, 2003, p.5).

The DRC financial services system was greatly disrupted by these years of conflicts, as depicted by Santos (2003):

> When major conflicts in DRC ended in 2003, banks operated in survival mode… the diversity of banking services available is very small and outreach (geographic and client types) is minimal, concentrated in the few urban centers and on some large clients… In the DRC, there are currently 9 banks accredited with the central bank (the BCC – *Banque Centrale du Congo*), of which only 5 to 6 work properly… the number of total bank accounts in the country is ridiculously small, estimated at around 35,000. Savings are, unsurprisingly at an extremely low level, estimated at only USD 150 million for the whole of the Congolese banking sector. Credit activity represents less than 1% of the GDP. The DRC's banking sector activity consists of currency exchange service and trade financing (around 80% of bank revenues on average). Corporate banking and other only account for 20% of total bank revenues. (Santos, 2003, pp.50-51).

When major conflict ended in DRC, only a few cooperatives and credit unions which survived the long conflict period were functional and the informal financial sector emerged as the dominant financial sector when the DRC started its post-conflict reconstruction process. Today, DRC seems to show some improvement in the provision of financial services, and an important share of this improvement can be attributed to microfinance. According to the Banque Centrale du Congo (BCC), DRC commercial banks deposits showed a 250% increase in 2006 from their 2005 level (BCC, 2008, p. 159). Procredit Microfinance Bank showed a 517% net profit, 105% income, 170% account deposits increases during the same period (Procredit Annual Report, 2007).

In its 2009 Annual Report (BCC, 2010), the Central Bank of Congo published a list of all financial institutions recognized to operate in the DRC, as of December 2009. The complete list is displayed in **Appendix 1** (page 142). The list includes 19 banks, 101 nonbanking financial institutions, 17 microfinance institutions, 12 change agencies, and 30 money transfer agencies.

3. CONCEPTUAL FRAMEWORK

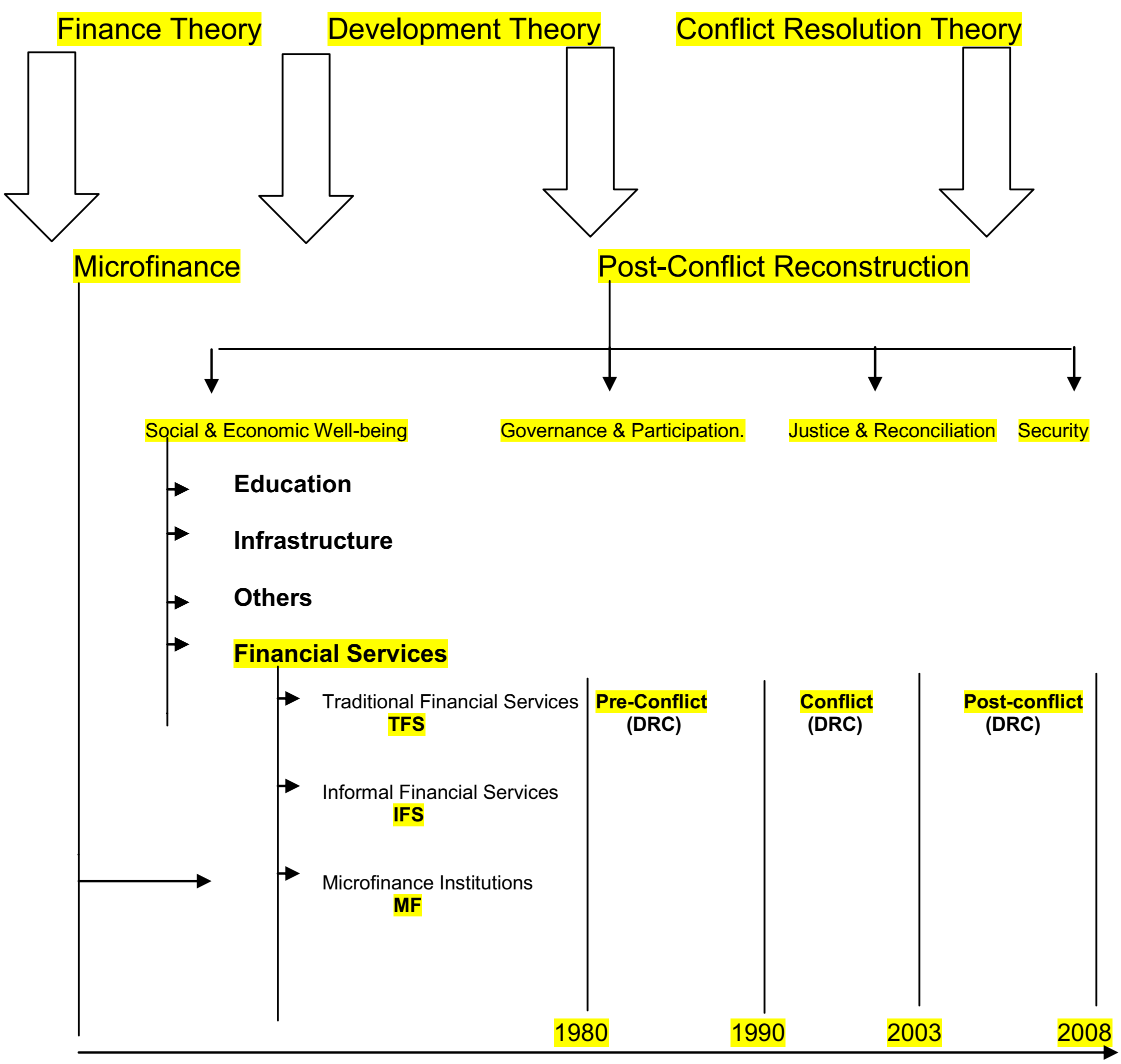
3.1. Research Framework

Post-conflict reconstruction is approached in this study as resulting from two constructs: economic development and conflict resolution. Understanding those constructs helps to conceptualize post-conflict and contextualize the theoretical stream of that concept. Economic development is interested in processes and policies that increase or decrease economic, political, and social well-being of nations and their people (O'Sullivan, 2003). Conflict resolution diverges from power-based conflict and focuses on needs-based conflict resolution, emphasizing the fundamental human needs and the essential goodness of humanity (Mills, 2006). According to Hasic (2004), the body of knowledge related to post-conflict reconstruction lacks a strong and cohesive theory. Nevertheless, Hamre & Sulivan (2002) identified four main domains of post-conflict reconstruction: security, justice and reconciliation, governance and participation, social and economic well-being. This study aims to address one of the four domains of post-conflict reconstruction: social and economic well-being. The study concentrates in one specific area, which is financial services reconstruction in post-conflict settings. "Social and economic well-being addresses fundamental social and economic needs. In particular, it addresses the provision of emergency relief, restoration of essential services to the population in areas such as health and education, laying the foundation for a viable economy, and initiating an inclusive and sustainable development program." (Hamre & Sullivan, 2002, p. 91). The study of microfinance as a financial services reconstruction tool in post-conflict communities fits the social and economic domain of post-conflict reconstruction because the restoration of financial services that work for the majority of the population in post-conflict is essential to layout the basis for a viable modern economy. Pischke (1999) observes that:

> Finance matters in economic development (Fry, 1995), without which human development is retarded in the long run (UNDP, 1996; World Bank, 1990)… Financial services supplied broadly and efficiently accelerate economic growth, increase the efficiency of resource allocation, and improve the distribution of wealth…Schumpeter (1911) claimed that financial intermediaries mobilizing savings, evaluating projects, diversifying risk, monitoring managers of indebted firms, and facilitating transactions are essential for technology innovation and economic growth." (Pischke, 1999, p. 7).

At the end of major armed conflicts, microfinance had played a crucial role of filling the vacuum left by formal finance and a growing informal sector (Pearce, 2003 cited by Marino, 2005). This study approaches modern microfinance as a combination of development and finance theories and practices. Muhamed Yunus developed a model that mixed finance ideas (loan, saving, interest rate, risk mitigation) with development issues (access, housing, nutrition, production, health, education) to create and promote the modern microfinance industry. The impact and utility of microfinance in post-conflict communities has not been fully addressed, particularly its significance in reconstructing sustainable financial services and its reconstruction role as a financial provider. This study aims to fill this gap by undertaking an assessment of the role that microfinance has played in the reconstruction of financial services. This assessment rests on three groups of variables related to outreach, financial performance, and reconstruction. This study seeks to analyze the role of microfinance in reconstructing financial services in the post-conflict DRC. This study also rests on the assumption that in a post-conflict situation, characterized by mass poverty, weak capacity of financial services and diminished trust in the traditional financial services system, microfinance can work as a better tool in reconstructing financial services in the earlier stage of post-conflict period. Figure 3.1 bellow summarizes the conceptual framework of this study.

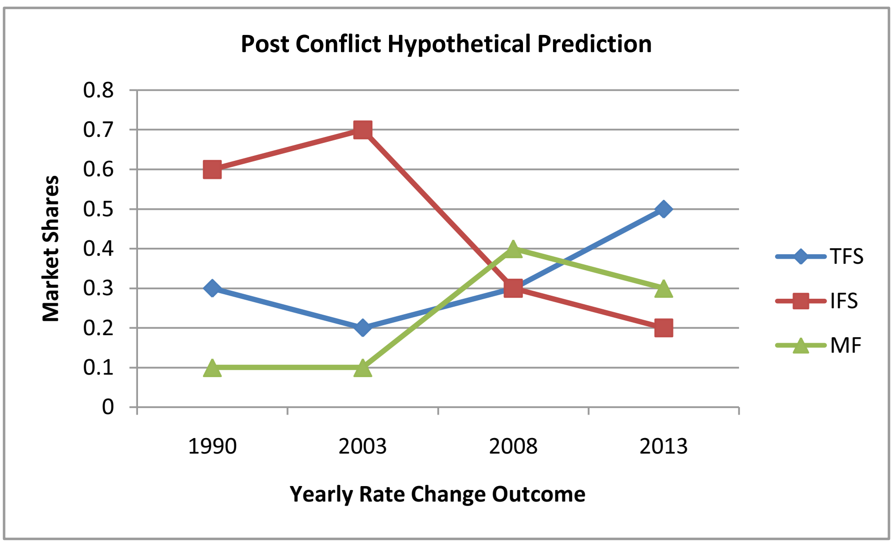
Figure 3.1: Conceptual Framework



The role of Microfinance in post-conflict reconstruction of financial services is investigated in this study using the DRC case, where three sectors have been identified as forming the financial services industry: the traditional financial services sector (TFS), the microfinance sector (MF), and the Informal financial sector (IFS). The traditional financial sector (TFS) encompasses providers of financial services using commercial lending methodology. They are not proactive and have rigid underwriting policies which always require collateral. They are recognized by the Central bank of Congo as legal providers of financial services and include commercial, development, and agricultural banks. The microfinance sector (MF) encompasses providers of financial services using micro lending methodology such as village banking, solidarity group, and individual lending. They are proactive and have flexible underwriting policies which often do not require collateral. They are recognized by the Central bank of Congo as legal providers of financial services and include non-profit organizations, credit unions, and banks. The informal financial sector (IFS) encompasses all financial transactions occurring -and institutions operating - outside the regulatory framework of the Central Bank of Congo. They operate within a framework of trust and have no guiding policies. They include a myriad of socio-cultural practices and associations (Likelemba, Moziki, Tontine, susu, social insurance, and ROSCAS), not-for-profit organizations, and private lenders.

The informal financial sector emerged as the dominant financial sector when conflict ended in 2003, followed by the traditional financial sector and finally the microfinance sector. This study's assumption is that the informal financial sector will grow during an armed conflict period; however, throughout the post-conflict period, it will show a decrease in market share, which become mostly part of the microfinance sector. The argument is consistent with that of Barr (2005, p. 287) who argues that “in financially underdeveloped countries, microcredit can serve to reduce prevailing high interest rates in the informal sector through bringing increased levels of competition”. The Traditional financial sector will more or less maintain the same level during the early stage of post-conflict. This is graphically represented in exhibit 3.2 below.

Figure 3.2: Post-Conflict Hypothetical Predication



Pre-Conflict	Conflict	Post-Conflict Short-term
MF<IFS<TFS	**MF<TFS<IFS**	**TFS<IFS<MF**

Typically, it is expected that in the pre-conflict period TFS will surpass MF in market share. During conflict, both TFS and MF will experience a decline. At the end of the conflict period and the beginning of the post-conflict era, IFS will emerge as the larger sector among the three, followed by TFS and last MF. Due to its agility, it is expected that MF will grow faster in the earlier stage of post-conflict and eventually surpass TFS.

In the long term however, TFS will regain its position as the major component of the financial services industry, follow by MF. IFS will continue its decline as the country continues to return to normality.

While the Informal Financial Sector (IFS) is undoubtedly a player, there are no objective means to reliably measure its relevance pre and post conflict as no reliable records exist. As a result, quantitative analyses in this research will only look at Microfinance (MF) and Traditional Financial Services (TFS). The role of IFS in this equation pre/post conflict will be explored through secondary data from previous studies and integrated whenever possible into the analyses of MF and TFS in post conflict reconstruction.

3.2. Research Questions and Hypotheses

- **Question 1**: Is microfinance an effective tool in post-conflict reconstruction?

  Sub-Question 1.1: Does MF show an increase in outreach as measured by employment, clientele, lending, and deposits during the post-conflict period?

  Sub-Question 1.2: Does MF show an increase in financial performance as measured by assets, profitability, efficiency, and risk mitigation during the post-conflict period?

- **Question 2**: Is microfinance a more effective tool than traditional financial services in the earlier stage of a post-conflict construction?

Sub-Question 3.1: Does MF perform better than TFS in a post-conflict period when it comes to outreach as measured by employment, clientele, lending, and deposits?

Sub-Question 3.2: Does MF perform better than TFS in a post-conflict period when it comes to financial performance as measured by assets, profitability, efficiency, and risk mitigation?

Sub-Question 3.3: Does MF show a faster reconstruction than TFS in post-conflict communities in terms of client's business development, education, assets, and standard of living?

- **Question 3**: Are financial services provided by microfinance institutions translated into post-conflict reconstruction in terms of client's business development, education, assets, and standard of living?
- **Exploratory Question 4**: Is microfinance an alternative to informal financial sector in post-conflict period so that IFS loses more of its market share than TFS in favor of microfinance in post-conflict?

Assessing the role of Microfinance (RQs 1 and 2) will identify whether it is active or not and the extent of its activity in this national case study (DRC). The question of its effectiveness and its relevance in relation to TFS will be addressed by RQ3, which compares MF to TFS before and after conflict. The core expectation of this research is that MF is more agile at the earlier stages of reconstruction, which will be reflected in the relevant rates of activity and expansion between these financial service modalities. RQ4 is explorative and will use secondary data from previous studies. Figure 3.3 summarizes the research framework.

Figure 3.3: Research Framework Summary

Dependent Variables	**<u>Outreach</u>** ▪ Employment ▪ Clientele ▪ Loans ▪ Deposits	**Financial <u>Performance</u>** ▪ Assets ▪ Profitability ▪ Efficiency ▪ Risk	**<u>Reconstruction</u>** ▪ Business ▪ Education ▪ Assets ▪ Standard of living
Intervening Variables	• Gender • Informal Sector • Government Policy • Aid Policy		
Independent Variables	**Traditional Financial Services (TFS)**	**Microfinance (MF)**	
Comparison Groups	**Financial Services Providers (Microfinance vs. Traditional FS)**		

This study is a comparative study with two groups: financial services providers using a microfinance approach and those using a commercial or traditional approach. Each approach provides the study with an independent variable: traditional financial services (TFS) for providers using a commercial approach; and microfinance (MF) for providers that use a microfinance approach. Three constructs are used as dependent variables: outreach, financial performance, and reconstruction. Outreach is measured by the level of employment of the financial institution, the number of clients it serves, the volume of loans to clients and the volume of deposits or savings clients bring to the financial institution. Financial performance is measured by the volume of assets of the financial institution, its profitability, its efficiency and risk. While outreach and financial performance are measured at the institutional level, the reconstruction variable is measured at the client and the household levels. Reconstruction is measured by the level of clients' business development, and the access to education by family members of the client, household's assets acquisition, and household's expenditures. This study recognizes that there exist intervening variables that have effect on the dependent variables, mainly gender, informal sector, government policy and aid policy. This study will assume that intervening variables are constant.

Hypotheses

Hypothesis 1.1: Outreach as measured by employment, clientele, lending, and deposits of MF (O_{MF}) will display consecutive yearly increases from their 2003 levels through year 2008 or:

$$\mathbf{O_{MF2003} < O_{MF2004} < O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008}}$$

Hypothesis 1.2: Financial Performance as measured by assets, profitability, efficiency, and risk mitigation of MF (FP_{MF}) will display consecutive yearly increases from their 2003 level through year 2008 or:

$$\mathbf{FP_{MF2003} < FP_{MF2004} < FP_{MF2005} < FP_{MF2006} < FP_{MF2007} < FP_{MF2008}}$$

Hypothesis 2.1: Outreach as measured by employment, clientele, lending, and deposits of MF (O_{MF}) will display higher yearly increases between 2004 and 2008 when compared to the outreach of TFS (O_{TFS}) or:

$$\mathbf{O_{MF2003} < O_{TFS2003}; O_{MF2004} > O_{TFS2004}; O_{MF2005} > O_{TFS2005}; O_{MF2006} > O_{TFS2006};}$$
$$\mathbf{O_{MF2007} > O_{TFS2007}; O_{MF2008} > O_{TFS2008}}$$

Hypothesis 2.2: Financial Performance as measured by assets, profitability, efficiency, and risk mitigation of MF will display higher yearly increases between 2004 and 2008 when compared to the financial performance of TFS.

$$\mathbf{FP_{MF2003} < FP_{TFS2003};\ FP_{MF2004} > FP_{TFS2004};\ FP_{MF2005} > FP_{TFS2005};\ FP_{MF2006} > FP_{TFS2006};\ FP_{MF2007} > FP_{TFS2007};\ FP_{MF2008} > FP_{TFS2008}}$$

Hypothesis 2.3.: Reconstruction's level of MF clients (R_{MF}) as measured by their business development, assets, and standard of living will be faster than reconstruction's level of TFS clients (R_{TFS}) or:

$$\mathbf{R_{MF} > R_{TFS}}$$

Hypothesis 3: Reconstruction's level of MF clients as measured by their business development, assets, and standard of living before and after they become MF clients will display a significant difference between their Pre-MF membership levels ($R_{PRE\text{-}MF}$) and their Post-MF membership levels ($R_{POST\text{-}MF}$) or:

$$\mathbf{R_{PRE\text{-}MF} < R_{POST\text{-}MF}}$$

Explorative hypothesis 4: Microfinance is an alternative to the informal financial sector in post-conflict period and IFS loses most of its market share in favor of microfinance and less in favor of Traditional financial services in post-conflict period.

4. Methodology

4.1. Research Design

To assess outreach and financial performance of MF, the dissertation proposal planned to use Time Series analysis of data related to post-conflict level of outreach (employment, clientele, lending, savings/deposits) and of data related to post-conflict level of financial performance (assets, profitability, efficiency, risk) of microfinance institutions. To assess reconstruction level of MF clients, the dissertation proposal planned to use data from a survey of clients and non-clients of MF. To comparing outreach, financial performance, and reconstruction of MF and TFS, the dissertation proposal planned to use Time Series analysis and data from a survey of MF and TFS clients. To explore IFS behavior in comparison to MF and TFS, reliance on secondary data from previous studies on the subject and data from the Central Bank of Congo was proposed.

Data collection was very challenging in the DRC. Data availability emerged as one among the challenges. As a result, only six microfinance institutions were used to answer the question of whether microfinance is an effective tool in post-conflict reconstruction. While the original intention was to collect data from 2003 to 2008; there was no complete data set for this timeframe. Instead, almost complete data set were found for four institutions for the period of 2005-2009. A fifth institution had complete data for 2004-2007, while a sixth had data for 2002-2006. The last two sets of data have been used flexibly and integrated in some analyses while excluded in others. The most important purpose here was to see the trend of the data and see how close they are to the predicted patterns.

Two commercial banks and two microfinance institutions were selected to answer the question of whether microfinance is a more effective tool than traditional financial services in the early stage of post-conflict reconstruction. Here too, while the original intention was to compare data from 2003 to 2008, unfortunately, the two providers applying a microfinance approach had no complete data set for this timeframe and therefore the period of 2005-2009 was used for the sake of comparison between MF and TFS.

In the implementation of the survey, financial institutions were not very cooperative and did not provide the sample frame (lists of their clients), except for one microfinance bank. The main reasons evoked have been bank secrecy customs to protect clients' identity, security of clients, and confidentiality. In some cases, financial institutions' managers said they were too busy to deal with this request. This attitude resulted in delays in collecting data and prolonged the data collection period (six months instead of three months as planned) and required two overseas trips to get additional funding to do research in Congo. Faced with these challenges, an alternative method of collecting data was applied: 5 random clusters of market places were selected and vendors were randomly selected to identify their category (MF, Non Client, or TFS). After consent, interviews were conducted. Ninety-five structured interviews were conducted between 6/2/2010 and 11/11/2010, using the "MFI Clients Post-Conflict Reconstruction Survey" attached in Appendix 2. Forty-six interviews were conducted among clients of MF; forty-seven interviews were conducted among non- clients of either microfinance institutions or commercial banks (Non Client); and only two clients of commercial banks (TFS) were found and interviewed. Obviously, only the MF vs. Non Client comparison was feasible and not the MF vs. TFS comparison, due to insufficient data collected in this category (TFS). The two interviews with clients of commercial banks (TFS) were considered as outliers and were excluded from the data set that serves for analyses. These circumstances resulted in some modifications of the dissertation proposal's research design. The research design used in this dissertation is displayed below as Figure 4.1.

Figure 4.1: Dissertation's Research Design Annotation

Time Series Analysis

N	$\mathbf{O}_{2005}$	X_{MF}	$\mathbf{O}_{2006}$	X_{MF}	$\mathbf{O}_{2007}$	X_{MF}	$\mathbf{O}_{2008}$	X_{MF}	$\mathbf{O}_{2009}$
N	$\mathbf{O}_{2005}$	X_{TFS}	$\mathbf{O}_{2006}$	X_{TFS}	$\mathbf{O}_{2007}$	X_{TFS}	$\mathbf{O}_{2008}$	X_{TFS}	$\mathbf{O}_{2009}$

Survey

N	$\mathbf{O}_{PRE}$	X_{MF}	$\mathbf{O}_{POST}$
N	$\mathbf{O}_{PRE}$		$\mathbf{O}_{POST}$

Legend

N : Non Equivalent
XMF : Microfinance approach in the provision of financial services
XTFS : Traditional approach in the provision of financial services
O : Observation

The time series part of this study is designed as a retrospective longitudinal "Nonequivalent-Groups Design" (NEGD). It's a NEGD because of nonrandom assignment of groups which cannot be considered as similar. It is also a "Repeated Measures Design" (Trochim, 2007, p. 6) with less than 20 waves of measurement over time. Time series analysis is an ordered sequence of values of variables that are recorded at equal periods of time and can be used to “obtain an understanding of the underlying forces and structure that produced the observed data; and to fit a model and proceed to forecasting, monitoring or even feedback and feedforward control” (Prins, 2009, p.1). Time series in this study shall help to determine whether MF has been active (yearly scale up) and agile (faster than TFS) during the post-conflict period. Using time series to look at outreach and financial performance variables of financial institutions (MF and TFS) on a yearly basis will determine whether variables changed over time and whether these changes were significant. This study’s survey is a cross-sectional inquiry because it takes place in a single point in time. It is designed as a Proxy Pretest Design (Trochim, 2007, p. 228) because the pre-test is collected after the program has already been implemented.

4.2. Procedure, Sampling and Instrumentation

Exhibit 4.2 below uses a chart presenting different variables (independent, dependent); a detailed operationalization of each group of variables; specific data gathering techniques for each group of variables and the sources from where the data will be collected. This study uses secondary data from various sources (The Microfinance Information Exchange Markets “MIX Markets”, DRC Central Bank, microfinance institutions, commercial banks, the World Bank, and the United Nations) to answer the first and part of the third research questions, while primary data from a survey will be used to answer the second research question and part of the third research question.

Table 4.1: Procedural Chart

Variable Type	Operationalization	Data Gathering Technique	Data Source
Dependent 1. **Outreach** Employment	Number of people employed by the financial institution.	Secondary data review	The MIX Markets; DRC Central Bank; MFIs; TFSIs
Clientele	• Number of clients • Woman Borrowers (%)	Secondary data review	The MIX Markets; DRC Central Bank; MFIs; TFSIs
Loans	• Gross Loan Portfolio (US$) • Number of Borrowers • Average loan balance per Borrower (US$)	Secondary data review	The MIX Markets; DRC Central Bank; MFIs; TFSIs
Deposits/Savings	• Amount Deposits • Number of Savers/Depositors • Average savings/deposits balance per client (US$)	Secondary data review	The MIX Markets; DRC Central Bank; MFIs; TFSIs
2. **Financial Performance** Assets	• Total Assets (in US$) • Total Equity (in US$) • Total Debt (in US$)	Secondary data review	The MIX Markets; DRC Central Bank; MFIs; TFSIs
Profitability	• Capital/Asset ratio • Debt/Equity ratio • Return on equity (%) • Operational self-sufficiency (%) • Profit Margin (%) • Total expense ratio (%) • Operating expense ratio (%)	Secondary data review	The MIX Markets; DRC Central Bank; MFIs; TFSIs
Efficiency	• Operating expense/Loan portfolio (%) • Cost per borrower Borrowers / staff member • Savers per staff member • Borrower per staff	Secondary data review	The MIX Markets; DRC Central Bank; MFIs; TFSIs
	• Portfolio at risk > 30 days ratio (%).	Secondary	The MIX Markets;

Risk	• Portfolio at risk > 90 days ratio (%). • Loan loss reserve ratio (%). • Risk coverage ratio (%) • Write off ratio (%)	data review	DRC Central Bank; MFIs; TFSIs
3. <u>Reconstruction</u> Business Activities	• Number of businesses • Loan amount (in US$) • Loan term (in weeks) • Annual Interest rate (%) • Loan purpose • Main business • Duration of business • Job creation • Profitability of business	Primary Data from Survey & Focus Group	Survey; Focus Group; Secondary data
Education	• Children at school age • Attendance of children • Financing education • Household members literacy.	Primary Data from Survey & Focus Group	Survey; Focus Group; Secondary data
Assets	• Agricultural land ownership • Agricultural items • Livestock • Communication • Means of transportation • Electronics • Kitchen Items • Furniture • Savings • Home ownership • Others		
Standard of living	• Home (rent/mortgage) • Furniture/Appliances • Utilities • Cooking fuel cost • Food purchase expense • Household production of food • Household/Personal products expense • Clothing & shoes • Total School/education expenditures • Transport expense • Total health expense • Charitable giving expenditures • Money to family/friends expenditures • Taxes/bribes expenditures	Primary Data from Survey & Focus Group	Survey; Focus Group; Secondary data

	• Special events expenditures • Leisure expense • Other expenses		
Independent Microfinance (MF)	Any provider of financial services using micro lending methodology through village banking, solidarity group, and individual lending, including: • Non-Profit (NGO) • Non-Bank financial institution • Cooperative/Credit Union • Bank		The MIX Markets; DRC Central Bank; MFIs; TFSIs
Traditional Financial Services (TFS)	Any provider of financial services using commercial lending methodology, including: • Commercial banks • Agricultural banks		The MIX Markets; DRC Central Bank; MFIs; TFSIs

4.3. Data

Three sources of data were planned for this study: first, financial data from financial services providers of both types: MF and TFS; second, data from the survey; and third, secondary and archival data from various sources (Mix Markets, Central Bank of Congo, International Monetary Funds, UNDCF, World Bank, DRC commercial banks) related to both MF and TFS. Only financial institutions with reliable data could be included in the time series analyses, recognizing that this could create a source of bias. As depicted in exhibit 4.2, data related to employment, clientele, loans and deposits were used to measure the effect of the independent variables on Outreach; data related to assets, profitability, efficiency, and risk were used to measure the effect of the independent variables on Financial Performance; finally, data related to business development, education, assets, and standard of living were used to measure the effect of the independent variables on Reconstruction.

4.4. Analysis

Time Series Analysis of Outreach and Financial Performance

Time Series Analysis pursues two main goals: (1) Identify the nature of a phenomenon the data represented; and (2) forecast or predict a pattern based on observed data (Prins, 2009). This study is concerned with the first goal only and intends to measure and identify the nature of MF and TFS behaviors in post-conflict situations. There are several types of data analysis for Time Series. Each is related to the specific purpose pursued by the study. This study principally used a systemic pattern identification and trend analysis. As suggested in the Post-Conflict Hypothetical Prediction, this study hypothesizes a “monotonous or consistently increasing trend” from the Time Series Analysis.

To analyze research question 1.1 (Does MF show an increase in outreach as measured by employment, clientele, lending, and deposits during the post-conflict period?), time series analysis was designed to look at the four measures of the construct *outreach* as described in exhibit 4.2 by looking at consecutive yearly increases from their 2005 levels through year 2009. Percentage change from each year would illustrate the trend using measures of central tendency (mean, median, and mode) and measures of dispersion (standard deviation, and variance).

To analyze research question 1.2 (Does MF show an increase in financial performance as measured by assets, profitability, efficiency, and risk mitigation during the post-conflict period?), time series analysis would look at the four measures of the construct *financial performance* as described in exhibit 4.2 by looking at consecutive yearly performance of each measure from their 2005 levels through year 2009. Yearly totals or percentage change from each year would illustrate the trend, using measures of central tendency (mean, median, and mode) and measures of dispersion (standard deviation, and variance).

To analyze research question 3.1 (Does MF show a better performance in comparison with TFS in a post-conflict period when it comes to outreach as measured by employment, clientele, lending, and deposits?), a comparison between MF and TFS was proposed, using time series analysis of each independent variable by looking at the four measures of the construct *financial performance* as described in exhibit 4.2. Time series would compare yearly outcome from 2005 levels through year 2009. Yearly totals or percentage change of each measure would illustrate the trend using graphs.

To analyze research question 3.2 (does MF show a better performance in comparison with TFS in a post-conflict period when it comes to financial performance as measured by assets, profitability, efficiency, and risk mitigation?), a comparison between MF and TFS was proposed, using time series analysis of each independent variable by looking at the four measures of the construct *financial performance* as described in exhibit 4.2. Time series would compare yearly outcome from 2005 levels through year 2009. Yearly totals or percentage change of each type of providers would illustrate the trend using graphs.

Analysis of Reconstruction Level of MF Clients

Checking for differences between the three groups (MFI clients, TFS clients, and non-clients) is a starting point for understanding how they are different. Henry et al. of the CGAP (2003) suggested that t-tests of differences between means and the chi-square test for cross tabulations are appropriate tests for determining such differences. Cross tabulations were used as a means of identifying relationships. Some of data were parametric and therefore parametric correlation coefficients were used to measure the strength of the relationships between variables. Some variables produced non-parametric data and therefore non parametric correlation coefficients were used. Significance tests used generally accepted social science standard.

As depicted in exhibit 4.2, data related to business development, education, assets acquisition, and standard of living were used to measure the effect of the independent variables on reconstruction. To test the business development hypothesis, three variables were tested statistically: number of businesses, profit, and number of employees. To test the education hypothesis, two variables were submitted to inferential analysis: number of children currently sent to school and number of children sent to school before microfinance. To test the asset acquisition hypothesis, one score summarizing assets acquisition was submitted to statistical analysis. That variable was the Total value of all of goods acquired. To test the standard of living hypothesis, two variables were submitted to statistical analysis: individual income of interviewees and their households' expense. Savings emerged as another key measure of reconstruction during data collection. To test the savings hypothesis, one variable was submitted to statistical analysis: amount saved. Prior to executing statistical tests, some descriptive information was provided for each of these variables.

Following Field's (2005) recommendation, the first step of the analysis of each variable was testing for normality (Kolgomorov-Smirnov "K-S" and Shapiro-Wilk "S-W" tests). After testing normality, a test of homogeneity of variance (Levene statistic) was conducted. The two tests intended to provide the study with a decision whether to use parametric or nonparametric tests. The second step applied the correct (parametric or nonparametric) test to check if there was any correlation between the independent and the dependent variables (Pearson, Spearman and Kendall tau, Biserial, or Point-Biserial). When correlation was found, then the independent t-test (parametric) and the Mann-Whitney U Test (nonparametric) were applied to the data. The conclusion has been to reject or retain the null hypothesis. However, again following Field (2005), a decision has been made to apply both parametric and nonparametric tests to the data to make sure that all tests resulted to the same outcome (correlation and significance). The rationale for this double-testing can be justified by Field argument that "tests of normality (Kolmogorov-Smirnov and Shapiro-Wilk) have their own limitations because with large sample sizes, it is very easy to get significant results from small deviations from normality, and so a significant test doesn't necessarily tell us whether the deviations from normality is enough to bias any statistical procedures that we apply to the data. I guess the take-home message is: by all means use these tests, but plot your data as well as try to make an informed decision about the extent of non-normality" (Field, 2005, 93).

This study also computed the DPCE (Daily Per Capita Expenditure) Score. The DPCE is a score used by FINCA Client Assessment Tool (FCAT) to determine the poverty level of an MFI client (FINCA, 2007). The methodology is based on widely accepted indicators of poverty scaled (FINCA, 2007) as following:

a. Less than $1/day of total household consumption indicates "Severe Poverty".
b. $1-$2/day of total household consumption indicates "Moderate Poverty".
c. Above $2/day of total household consumption indicates "Vulnerable or Non-Poor".

Using collected data from the variable "Expenditures" of the survey resulted in computing a DPCE for each category of clients. Using the DPCE score to determine their consumption level should provide a good indication of the reconstruction effect on clients. FINCA utilizes comprehensive annual household expenditure data to compute the total household expenditures which is then divided by the total number of household members. In this study, a comprehensive monthly household expenditure data was used instead. Indeed, when using the FCAT in 2007, it appeared very challenging to clients to remember their expenses an annual basis. A monthly approach appeared to be a more practical one.

4.5. Validiy, Reliability and Limitations

Quasi-experiments are vulnerable to internal validity threats primarily because of non-randomization. Proxy Pretest Design is susceptible to threats to internal validity because it is based on either recollection or archives. This study is aware of these threats and every effort will be made to minimize the threats through data collection and analysis. Multiple sources (financial institutions, World Bank, MIXMarkets, DRC Central Bank) will be used to reduce errors from archival sources. Recollection errors will be reduced by repeating the same questions in diverse forms during the interviews.

Another limitation is the reliability of data from DRC, a country that just emerged from a regional civil war seven years ago. The study will try to avoid and correct such problems whenever possible. Fortunately, however, institutions such as CGAP, the World Bank, International MFIs and the MIXMarkets provide data that can be approached with some level of trust.

4.6. Significance

This study expected to find that microfinance, as a mode of financial services provision, is more agile and is a better tool than traditional financial services in a post-conflict reconstruction, at least in the early interim phases of reconstruction. MF takes less time for to set-up after conflict than TFS; it reaches more people faster through its proactive methodology, which induces MF to employ more people than do TFS. MF also reaches out to a portion of the population that has been excluded from TFS even in peace time. MF may therefore act as an entry level for this portion of the population, and for the general population, to access financial services after a significant conflict. Moreover, MF can work as a bridge between the informal sector and the commercial banking sector.

The policy implication, thereby the significance of this research, is that if MF is more agile than TFS, it should then be emphasized as intervention in the early stages of reconstruction. If proved that microfinance is more agile and positions itself as a bridge between the informal financial sector and the commercial financial sector, then a potential solution to the exclusion of some segments of the population in accessing mainstream financial services encountered in many developing countries may be addressed. The divide between the poor majority and the rich in accessing financial services can be addressed and reduced. While inequality in accessing financial services may always exist, it can be reduced by using a hybrid model of financial services provision following a conflict.

5. Results

This chapter presents the results of data collected at two levels: the institutional level and the individual (client) level. Data collected at the institutional level aim to test research questions one and two, while data collected at the individual level aim to test research question three.

First, a sample of six microfinance institutions was used to answer the question of whether microfinance is an effective tool in post-conflict reconstruction. Operationally, the data collected indicate whether microfinance institutions show an increase in outreach as measured by employment, clientele, lending, and deposits during the post-conflict period; and whether they show an increase in financial performance as measured by their assets, profitability, efficiency, and risk mitigation during the post-conflict period. The original intention was to collect data from 2003 to 2008; however, there was no complete data set for this timeframe. Instead, almost complete data was found for four institutions for the period 2005-2009. A fifth institution had complete data for 2004-2007, while a sixth had data for 2002-2006. The last two sets of data will be used flexibly and are integrated in some analyses while excluded in others. The most important purpose here is to see the trend of the data and see how close they are to the predicted patterns.

Second, a total of 111 interviews (95 structured and 16 unstructured) were conducted among micro-entrepreneurs, microfinance institution personnel and bankers operating in Kinshasa, the capital city of the DRC. Sixteen unstructured interviews were conducted among bankers and microfinance institutions' personnel. Ninety-five structured interviews were conducted between 6/2/2010 and 11/11/2010, using the "MFI Clients Post-Conflict Reconstruction Survey" attached in Appendix 1. These interviews provided a set of primary quantitative data and a set of primary qualitative data obtained by probing and asking unstructured questions when collecting quantitative data. Forty-five interviews were conducted among clients of microfinance institutions; fifty among non-clients of microfinance institutions. These data aim to check whether or not financial services provided by microfinance institutions are translated into post-conflict reconstruction in terms of clients' business development, education, assets, and standard of living.

Third, two commercial banks and two microfinance institutions were selected to answer the question of whether microfinance is a more effective tool than traditional financial services in the early stage of post-conflict reconstruction. Operationally, a comparison of data collected from the two categories of financial services providers is used to determine whether microfinance institutions show higher increases than commercial banks in outreach as measured by employment, clientele, lending, and deposits during the post-conflict period; and whether microfinance shows better financial performance than commercial banks as measured by their assets, profitability, efficiency, and risk mitigation during the post-conflict period. The original intention was to survey data from 2003 to 2008, however the two providers applying a microfinance approach had no complete data set for this timeframe and therefore the period of 2005-2009 was used.

This study did not collect enough data to determine whether the microfinance approach leads to faster reconstruction than the commercial approach; nor can it answer the question of whether microfinance is an alternative to the informal financial sector in the post-conflict period. The two questions will be addressed in further research.

5.1. Financial Institutions Surveyed

This chapter focuses on the results of outreach, financial performance, and reconstruction by microfinance institutions. Eight financial institutions (six institutions applying a microfinance approach and two institutions applying a commercial approach to financial services provision) were selected to provide data to assess outreach and financial performance, while interviews provided data to assess reconstruction. A profile of the eight institutions included in the sample should provide a context for the subsequent data analysis. The eight financial institutions are: PAIDEK, HEKIMA, FINCA DRC, PROCREDIT BANK CONGO, HOPE DRC, BOSANGANI, BCDC, and RAWBANK.

5.1.1. PAIDEK

PAIDEK stands for “Programme d’Appui aux Initiatives de Développement Economiques du Kivu” (“Program to Support Economic Development Initiatives of Kivu”). PAIDEK was established in 1996 under the name “Programme Credit Zaire” or PCZ (“Zaire Credit Program”). The project was a result of a request by the Congolese National Association of NGO to foreign Non Profit Organizations (NGO) to help the country to establish microfinance institutions in Zaire. The new microfinance program would be a response to the failure of the Zairian cooperative system that occurred at the end of the Eighties and the early Nineties.

SOS Faim, a European NGO, helped with the initial funding and initially co-managed the program with local teams. At the end of 1997, the PCZ failed and was restructured and renamed PAIDEK, operating under the direct supervision of SOS Faim. On May 19, 2005 PAIDEK became an NGO and obtained later its legal status as a Congolese NGO (Authorization No. 0066/CAB/MIN/J/2006 of March 23, 2006). PAIDEK is recognized by the Central Bank of Congo (BCC) as a microfinance institution under the new DRC microfinance law as provided in Instruction No.1 to Microfinance Institutions of December 18, 2005 published July 5, 2006 in the Official journal of the DRC. By December 2006, PAIDEK had provided 14,023 total loans to its target population (SOS Faim, 2011).

As of December 2009, PAIDEK had a Gross Loan Portfolio of US$ 1.8 million; 10,835 active borrowers; an average of US$ 169 per borrower; US$ 0 deposit; 38 employees, 9 offices; and total assets of US$ 2.4 million (MixMarkets, 2010). PAIDEK operates essentially in the Eastern part of the DRC, specifically in the Kivu provinces, where the DRC had experienced most conflicts during the last twenty years.

PAIDEK was established when the first civil war started in the Kivu provinces in 1996. The region experienced another major civil war in 1998. Even though major conflicts have ended, still PAIDEK operates in an unstable region where militia from DRC and Rwanda operate and terrorize rural populations with rapes and lootings. PAIDEK is a credit-led microfinance organization providing mostly loans to urban populations of the Kivu provinces.

5.1.2. HEKIMA

HEKIMA is a microfinance institution established in April 2004 by World Relief, a well-known international NGO. According to World Relief (2011) "HEKIMA was established to provide affordable financial services to underserved communities and help strengthen the entire microfinance sector in Congo." (http://worldrelief.org/Page.aspx?pid=1697, p.1). Upon creation, HEKIMA started operating in the city of Goma, capital of the Nord-Kivu Province in Eastern DRC and later in 2006 expanded to Bukavu, the capital city of the neighbor Sud-Kivu province.

> HEKIMA has barely begun to meet the vast needs for financial services that exist in Congo's eastern communities. The success seen to date, however, promises great change in the financial landscape. As HEKIMA expands, it will continue to provide hope to entrepreneurs in Goma and other communities in Eastern Congo. As in Burundi, World Relief and USAID have supported the development of a sector association capable of improving financial service delivery across the microfinance sector of Eastern Congo (World Relief, 2011, 1).

HEKIMA is recognized by the Central Bank of Congo (CBC) as a microfinance institution under the new DRC microfinance law. HEKIMA engages in credit-led microfinance providing loans and collecting deposits from its clients. As of December

2009, HEKIMA had a Gross Loan Portfolio of US$ 740,366; 9,229 active borrowers; an average of US$ 80 per borrower; US$ 598,123 deposits; 41 employees; 3 offices; and total assets of US$ 1.7 million (MixMarkets, 2010). HEKIMA operates essentially in the Eastern part of the DRC, specifically in the Kivu provinces, where the DRC had experienced most conflicts during the last twenty years. HEKIMA was established when major armed conflicts ended and the DRC entered the post-conflict era. KIVA (2010) describes the environment in which HEKIMA operates as follows:

> HEKIMA operates in an area that has been marked by over a decade of wars as well as social, economic and institutional collapse. A complex legal and regulatory environment is further complicated by widespread corruption and market flooded with poor quality of microfinance suppliers. In the city of Goma, where HEKIMA is based, many people are still recovering from 2002 eruption of the Nyragongo volcano which destroyed much of the city, and left over 100,000 people homeless. (KIVA, 2011, p.1).

5.1.3. FINCA DRC

FINCA DRC is one among 21 national microfinance programs forming the FINCA International network. FINCA International is one of the largest microfinance programs in the world, founded by John Hatch.

> In 1984, while working in a USAID project with farmers in Bolivia, John Hatch conceived a small loan program for low-income farmers that put them in charge. The program allowed them to obtain loans without collateral at interest rates they could afford. It brought groups of neighbors together giving them the power to collectively disburse, invest and collect

> loan capital as they saw fit. His program became known as village banking (FINCA, 2011, 1).

FINCA International is based in Washington, DC. Worldwide, FINCA reaches over 700,000 clients, has provided US$ 320 million in outstanding loans, and is on pace to disburse US$ 800 million in loans by year end (FINCA, 2011).

> In 1992 FINCA entered Africa to see whether it could duplicate success in Latin America on the continent where poverty was [more] severe. FINCA Uganda opened in 1992 and later programs in Malawi, Tanzania, Zambia, and the DRC were established. FINCA's programs in Africa have proven among the most successful in the region… In 2009, FINCA partnered with Deutsche Bank to secure capital commitments of US$ 212 million to provide FINCA affiliates, including the DRC, the financial flexibility to lend an estimated US$ 100 million in additional loan capital, as well as make investments in staff, branches and other infrastructures to support its expanding microfinance lending and deposit-taking programs (FINCA, 2011, 1).

FINCA DRC was established in May 2003 thanks to a grant from USAID in order to provide financial services to DRC poor families so that they can create their own jobs, enhance their existing businesses or create new businesses, increase their household incomes and improve their standard of living. FINCA DRC entered the DRC's financial services market when major armed conflicts ended and the DRC entered the post-conflict era. FINCA DRC "is a regulated and deposit-taking microfinance institution, which permits it to better support the economic and human development of Congolese families trapped in poverty" (FINCA, 2011, p.1). FINCA is recognized by the Central Bank of Congo (CBC) as a microfinance institution under the DRC microfinance law.

As of December 2009, FINCA DRC had a Gross Loan Portfolio of US$ 10.4 million; 44,532 active borrowers; an average of US$ 232 per borrower; US$ 4.2 million deposits; 342 employees; 5 branches; and total assets of US$ 16.5 million (MixMarkets, 2010). FINCA DRC operates essentially in the Western part of the DRC, with most of its activities based in Kinshasa, the capital city of DRC. FINCA DRC started its expansion outside Kinshasa in 2007 with its first office opening doors in the province of Bas-Congo, specifically in Matadi, the capital city of Bas-Congo. In six years of operations (2004-2009), FINCA DRC has emerged as the DRC's largest provider of loans and had 44,532 outstanding loans as of December 2009 versus 13,577 for MECRECO and 10,273 for PROCREDIT for the same period (Mecreco, 2010; MixMarkets, 2010; Procredit, 2010). As of 2009, FINCA DRC was the second largest non bank financial institution in terms of total clients (44,532) behind MECRECO (49,675). However, as of December 2010, FINCA reported servicing 59,005 clients which makes it also the largest microfinance institution in terms of total clients. PROCREDIT had however the largest portfolio of deposit accounts (109,183 as of December 2009). In 2005, 100% of FINCA DRC clients were women, while in 2009 women were still the majority group but represented only 76% of borrowers (MixMarket, 2010). In addition, though FINCA DRC's early focus was on Village Banking (VB), it has quickly embraced the Individual Loan (IL) methodology and already by 2007, 52% of its loan portfolio was IL and only 48% VB (Matabisi and al., 2007). VB clients have access to small loans while IL clients have access to larger loans. As a result FINCA DRC's individual loan size varies from an average of US$ 50 to above US$ 5,000.

5.1.4. PROCREDIT BANK CONGO

ProCredit Bank Congo is one of 21 banks operated by the ProCredit Group, led by the ProCredit Holding AG, a holding company based in Europe, specifically in Germany.

> The ProCredit group consists of 21 growing banks operating in transition economies and developing countries in Eastern Europe, Latin America and Africa. Procredit Holding, the majority shareholder in the group, defines its purpose as to provide strategic guidance and management for these banks, which are growing rapidly (Procredit, 2011, 1).

ProCredit Group is emerging as one of the strongest financial institutions applying a microfinance approach to financial services provision. ProCredit can be considered as an adapted model of Grameen Bank or, better, a hybrid financial institution mixing microfinance and some classical banking methods that result in a faster development of both the financial institution and its client base.

> The group is committed to both social and commercial objectives. All 21 institutions are locally registered and most are regulated by the local banking supervisory agency. These features distinguish the ProCredit group from microfinance NGOs (non-governmental organizations). Lacking commercial criteria, such institutions tend not to be profitable and therefore not sustainable except through continued grants and donations. Their capacity for growth is typically limited, as is their outreach. As a result, they usually remain quite small and localized… ProCredit banks focus on providing financing for small business… the reason for this emphasis is that small enterprises and family-run businesses are the most effective means of combating marginalization and poverty in the difficult

> economic environments in which they operate. It is widely recognized that such enterprises are the engines of economic growth and provide much of the formal employment and informal employment in our countries of operation (ProCredit, 2011, 1).

ProCredit Bank launched its operations in the DRC in August 2005 with the goal of providing financial services to medium and small businesses as well as to micro-entrepreneurs operating in the DRC. ProCredit Congo is a regulated financial institution, bearing the status of a local bank subject to the supervisory activities of the Central Bank of Congo. ProCredit Congo entered the DRC's financial services market when major armed conflicts ended and the DRC entered the post-conflict era. As of December 2009, ProCredit Congo had a Gross Loan Portfolio of US$ 33.7 million; 10,273 active borrowers; an average of US$ 3,283 per borrower; US$ 108.5 million in deposits; 109,183 depositors; 455 employees; 11 branches; and total assets of US$ 122 million (MixMarkets, 2010). In six years of operations (2004-2009), when compared to its peers applying a microfinance approach to financial services provision, ProCredit has emerged as the largest provider of loans in term of volume (US$), has the largest portfolio of deposit accounts; the largest total amount of deposits, is the number one employer, and has the highest volume in total assets. ProCredit Congo operates essentially in the Western part of the DRC, with most of its activities based in Kinshasa, the capital city of DRC.

5.1.5. HOPE DRC

HOPE DRC is one among 14 national microfinance programs forming the HOPE International microfinance network with programs in Afghanistan, Burundi, China, DRC, Dominican Republic, Haiti, India, Moldova, Philippines, Republic of Congo, Romania, Russia, Rwanda and Ukraine.

> Hope was founded in 1997 by Jeff Rutt, a Lancaster, Pennsylvania [USA] based homebuilder. Following the fall of the Soviet Union, Mr. Rutt traveled to Ukraine…transporting containers of food, clothing, and medical supplies. After several visits, a local pastor pulled Jeff aside and told him honestly that the shipments were not helping… though people were accessing needed supplies they had become dependent on American charity… Mr. Rutt returned from the trip with strong drive to find a solution. He plunged into research and eventually discovered the concept of microfinance. He applied this tool with great success in Ukraine…As Mr. Rutt and Hope's staff realized the enormous impact they could have on the poor through microfinance, they expanded to other countries (HOPE International, 2011, 1).

HOPE International's microfinance programs seem to differ from other programs in its emphasis on religious faith and values added to business efficiency and effectiveness goals.

> The mission of HOPE International microfinance program is to provide sustainable financial services and training which have a positive impact on the physical and spiritual health of the poor in a way that strengthens the church and brings honor and glory to Jesus Christ (Mixmarkets, 2010, 1).

HOPE DRC was established in 2004 and started disbursing loans in Kinshasa, the capital city of DRC. While most microfinance institutions concentrate their activities in one area and then expand later, HOPE DRC chose from start to establish its activities in the three main cities of DRC (Kinshasa, Kisangani and Lubumbashi) separated by thousands of miles within a country emerging from decades of political and armed conflicts without basic infrastructures. “The main challenges include creating efficiencies in an environment with underdeveloped infrastructures and managing multiple branches separated by large geographic distances” (Mixmarkets, 2010, p.1). HOPE DRC entered the DRC’s financial services market when major armed conflicts ended and the DRC entered the post-conflict era. HOPE is a regulated microfinance institution recognized by the Central Bank of Congo (BCC) as a microfinance institution under the new DRC microfinance law. As of December 2007, HOPE DRC had a Gross Loan Portfolio of US$ 868,225; 11,160 active borrowers; an average of US$ 78 per borrower; US$ 0 deposit; 100 employees; and total assets of US$ 1,506,001(MixMarkets, 2010).

5.1.6. BOSANGANI

BOSANGANI is a mutual saving and credit institution (Mutelle d’Epargne et de Credit) established in 2002 with the mission of providing its members with financial services that increase their coping mechanism against poverty. BOSANGANI started its activities one year before Congo entered the post-conflict era when major political and armed conflicts were still occurring in the Eastern part of the country. BOSANGANI is a regulated microfinance institution recognized by the Central Bank of Congo (BCC) as a microfinance institution under the new DRC microfinance law as provided in Instruction

No.1 to Microfinance Institutions of December 18, 2005 published July 5, 2006 in the Official journal of the DRC. As of December 2006, BOSANGANI had a Gross Loan Portfolio of US$ 46,876; 258 active borrowers; an average of US$ 182 per borrower; 1,230 depositors; US$ 47,974 in deposit; 7 employees; and total assets of US$ 86,368 (MixMarkets, 2010).

5.1.7. BCDC

BCDC stands for "Banque Commerciale Du Congo" ("Commercial Bank Of Congo"). BCDC is the oldest commercial bank of the DRC. BCDC started its activities on January 11, 1909 under the denomination of "Banque du Congo Belge". This happened one year after the former Independent State of Congo, personal property of King Leopold II, became a colony of Belgium. Branches were opened in Matadi (1909), Kinshasa (1910) and Lubumbashi (1910). For over 40 years, BCDC fulfilled some prerogatives of the Central Bank of Congo, including the emission of the country's currency. The status of the bank changed in July 1, 1952 upon the creation of the "Banque Centrale du Congo Belge", the old version of the current Central Bank of Congo. A new incorporation was therefore needed.

> BCDC was incorporated by the deed of 16 September 1952 in the form of a joint stock company with limited liability. It is established according to the banking legislation of DRC as stipulated by Order in Council No. 72/004 of 14 January 1972 relating to the protection of savings and the control of financial intermediaries as modified by law No. 003/2002 of 2 February 2002 relating to the activity and the control of financial institutions. According to its articles of association, BCDC's corporate object is to carry

> out any banking, stock market, exchange, finance, cash, commission… (BCDC, 2006, 5).

BCDC has gone through the highs and lows of the Belgian Congo (1908-1960), the new independent Congo (1960-1965), the Mobutu era and the State of Zaire (1965-1997) during which major financial world crises occurred, three civil wars, and the looting of financial institutions in 1991 and 1993; the armed conflicts of the DRC under the Kabilas (1997-2003); and now the post-conflict DRC since 2003. As of 2009, BCDC had US$ 300.3 million in total assets; US$ 30.2 million as own funds; USD 192 million in deposits; US$ 101.1 in loans; 183.1 million financial income; US$ 50.9 million in net income on banking operations; and 461 employees (BCDC Annual Report 2009, p. 7). At its highest, BCD had 2,952 employees (1987) and in its lowest it had only 279 employees (2002). Throughout its existence, BCDC's focus has been on corporate banking with its clients being essentially large private and state companies. This category of clients is still the lion's share of BCDC activities. "BCDC commercial activities are oriented in priority to large companies, international organizations and institutions, performing Small and Medium Businesses, salaried employees of large private and public companies" (BCDC, 2010, 32). However, the post-conflict DRC has brought new opportunities and a new environment in the provision of financial services by BCDC. As a result, BCDC has established since 2003 three divisions: corporate banking; financial institutions and banks; and retail and personal banking. This strategy represented a shift in the BCDC's strategy and approach to financial services provision in a DRC entering the post-conflict period. As stated in their 2009 annual report, BCDC claims that with the new commercial organization designed in 2003 and oriented towards “clients”, BCDC has shown again leadership and innovation in providing financial services in the DRC (BCDC, 2010). BCDC has the largest geographical coverage of DRC with branches in all but three of the country’s Bandundu, Equateur, and Maniema provinces.

5.1.8. RAWBANK

RAWBANK S.A.R.L. was established in May 2001and authorized to conduct commercial banking activities following the Presidential decree No. 040/2001 of August 2001. As of December 31, 2009, the bank’s capital was leveled at US$ 11.13 million shared between RAWHOLDING S.A. and six members of the Rawji family (RAWBANK, 2010). RAWBANK is an initiative of the Rawji family, doing business in the DRC since 1922. The bank was established according to the banking legislation of DRC as stipulated by Order in Council No. 72/004 of 14 January 1972 and the control of financial intermediaries as modified by law No. 003/2002 of 2 February 2002 relating to the activity and the control of financial institutions.

> RAWBANK defines itself as a world-class, global, innovative bank that creates and distributes highly effective and profitable banking, financial and electronic banking systems for all its Congolese and international customers, private and public enterprises, international organizations, embassies, NGOs and private customers (RAWBANK, 2007, 4).

RAWBANK started its activities two years before Congo entered the post-conflict era when major political and armed conflicts were still occurring in the Eastern part of the country. However, the bank came to life when a climate of business renewal started to take roots in Congo with ongoing negations between rebel factions and the new political leadership in Kinshasa led by Joseph Kabila. Kabila replaced his father, who was assassinated in January of 2001.

> Since it was established, RAWBANK has been primarily a corporate bank, but we are now developing a retail customer base of individual employees and well-established businesspeople. This commercial development is in anticipation of changes in Congolese society which, with the return of political normalization and economic recovery is gradually seeing the rebirth of middle-class who are both savers and consumers. We will continue to introduce new savings and loans products to the market for the benefit of these demanding customers (RAWBANK, 2007, 5).

The shift in its strategy, from a primarily corporate bank to a diversified bank with an important retail division, has brought tremendous growth of the new established commercial bank positioning it as a fierce competitor of the oldest and centennial commercial bank, the BCDC. As a result, RAWBANK went from under 5,000 bank accounts in 2007 to over 20,000 in 2008, a five times increase in one year. As of 2009, RAWBANK had around US$ 308.1 million in total assets (compared to US$ 300.3 million for BCDC); US$ 32 million in own funds (compared to US$ 30.2 million for BCDC); US$ 238.2 million in deposits (compared to US$ 192 million for BCDC); US$ 99.2 in loans (compared to US$ 101.1 million for BCDC); US$ 22.8 million financial income (compared to US$ 183.1 million for BCDC); US$ 3.1 million in net income on banking operations (compared to US$ 50.9 million for BCDC) ; and 433 (compared to 461 for BCDC) employees (BCDC Annual Report 2009; RAWBANK Annual Report 2009). At inception, RAWBANK concentrated its operations in the capital city of Kinshasa but started expanding geographically within the vast territory of the DRC.

5.2. Outreach by Microfinance Institutions

5.2.1. Employment

Four microfinance institutions in our sample had complete data on the number of employees their specific institution employed from 2005 to 2009. Table 5.1 summarizes employment by MF from 2005 to 2009.

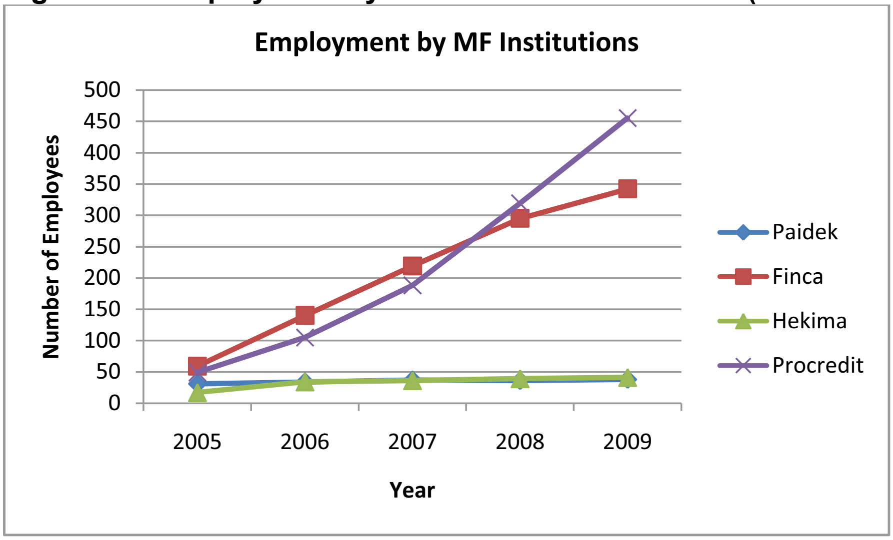
Table 5.1: Employment by Microfinance Institutions (2005-2009)

Institutions Name	2005	2006	Hired 2006	2007	Hired 2007	2008	Hired 2008	2009	Hired 2009	% Chg 05-09
Paidek	31	34	3	37	3	36	-1	38	2	23%
Finca	59	140	81	219	79	295	76	342	47	480%
Hekima	17	34	17	36	2	39	3	41	2	141%
Procredit	49	105	56	188	83	319	131	455	136	829%
Total	**156**	**313**	**157**	**480**	**167**	**689**	**209**	**876**	**187**	**462%**

Source: Mixmarkets, 2010; Procredit, 2008.

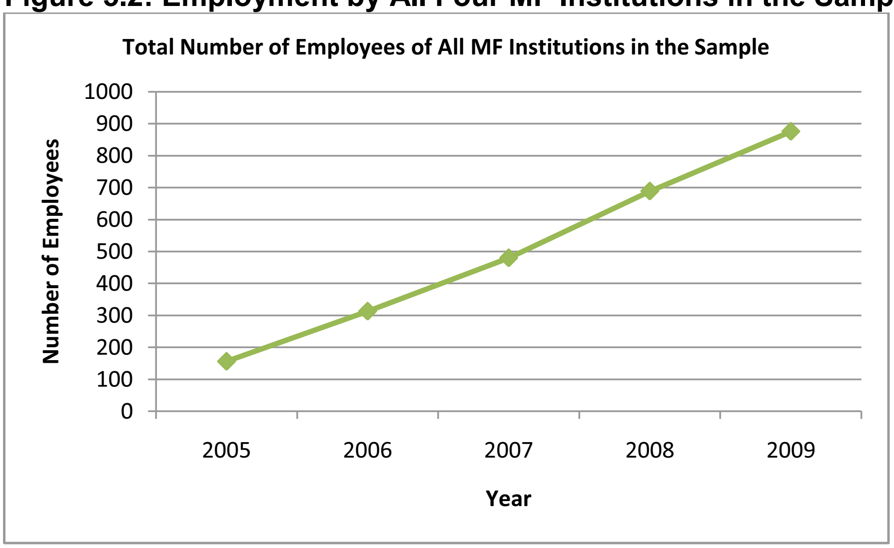
As of 2009, Procredit had the highest number of employees, followed by Finca, Hekima and finally Paidek. Procredit and Finca had also the highest employment rate from 2005 to 2009 while Hekima and Paidek had a slow increase in the number of people hired during the same period. Figure 5.1 provides the time series trend of employment by each microfinance institution.

Figure 5.1: Employment by Microfinance Institutions (2005-2009)



Overall and as an industry, the sample shows steady yearly increases in the number of people hired from 2005 to 2009 which is over 500% increase for the five year period. Figure 5.2 provides the time series trend of employment by all microfinance institutions.

Figure 5.2: Employment by All Four MF Institutions in the Sample (2005-2009)



As hypothesized, outreach, as measured by the level of employment by microfinance institutions, displays consecutive yearly increases from 2005 through year 2009. The increases occurred at the institutional level and at the industry level. Clearly, two institutions have greatly impacted the trend line, Procredit and Finca. Nevertheless, Hekima and Paidek have also shown increases (except for Paidek in 2008) even though far below the level shown by Procredit and Finca.

5.2.2. Clientele

The number of loans recipients was used as an indicator of clientele for Paidek, Finca, and Hekima while the number of depositors was used for Procredit. Up until recently, the former three institutions were essentially loan providers. In the case of Finca, what was considered a deposit was the compulsory saving of a borrower. Recently, Finca has officially launched its deposit/saving program. Paidek has no depositors reported while Hekima reported the same number except for year 2009. Procredit instead has been providing loans and collecting deposits since it began operations. Table 5.2 summarizes the outreach of microfinance institutions in terms of clientele.

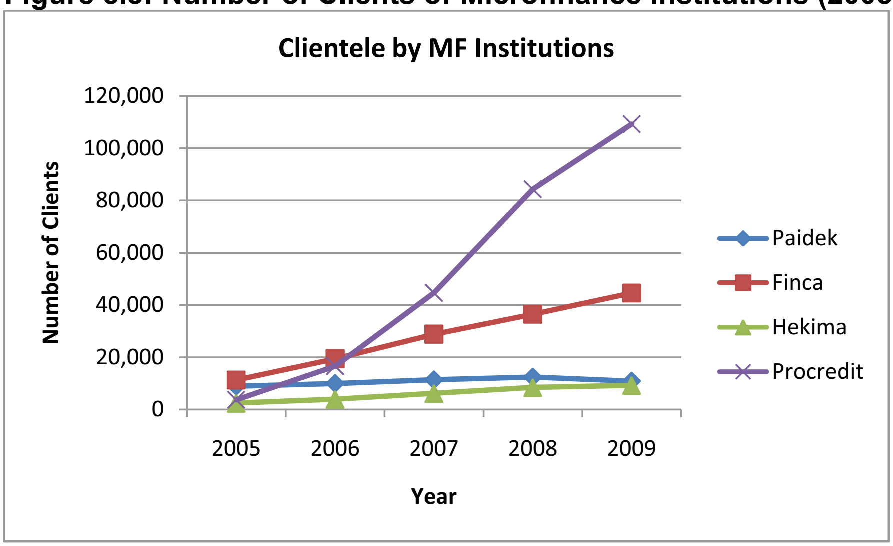
Table 5.2: Number of Clients of Microfinance Institutions (2005-2009)

Institutions Name	2005	2006	New Clients 06	2007	New Clients 07	2008	New Clients 08	2009	New Clients 09
Paidek	8,872	9,936	1,064	11,298	1,362	12,351	1,053	10,835	-1,516
Finca	11,292	19,454	8,162	28,802	9,348	36,414	7,612	44,532	8,118
Hekima	2,390	3,913	1,523	6,163	2,250	8,413	2,250	9,229	816
Procredit	3,679	16,512	12,833	44,584	28,072	84,227	39,643	109,183	24,956
Total MF	**26,233**	**49,815**	23,582	**90,847**	41,032	**141,405**	50,558	**173,779**	32,374

Source: Mixmarkets, 2010; Procredit, 2008.

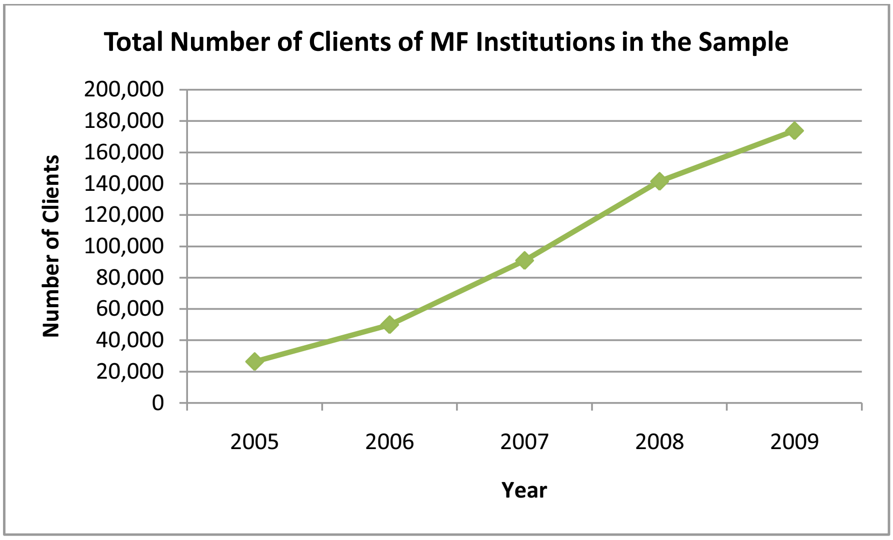
As of 2009, Procredit had the highest number of depositors (109,183), followed by Finca (44,532), Paidek (10,835), and then Hekima (9,229). It should be mentioned that Hekima reported 11,013 in 2009, which if considered should place it ahead of Paidek. As with the number of employees, Procredit and Finca have the greatest shares of clients. The two microfinance institutions have been very attractive to micro and small entrepreneurs in the city of Kinshasa. When looking at the data, except for Paidek, all microfinance institutions have shown an increase in the number of clients for the five consecutive years (2005-2009), as depicted on figure 5.3.

Figure 5.3: Number of Clients of Microfinance Institutions (2005-2009)



As hypothesized, outreach, as measured by the number of clients joining microfinance institutions, displays consecutive yearly increases from 2005 through year 2009. The increases happened at the institutional level (figure 5.3), dominated by Procredit and Finca; and at the industry level (figure 5.4). As with the number of employees hired during the five years period, two institutions have greatly impacted the trend line, Procredit and Finca. Nevertheless, Hekima and Paidek have also shown some increases (except for Paidek in 2009) even though far below the level shown by Procredit and Finca. Figure 5.4 below depicts the time series trend of all microfinance included in this study.

Figure 5.4: Number of Clients of All MFI in the Sample (2005-2009)



5.2.3. <u>Lending</u>

In a post-conflict setting, every person brought to the formal financial services sector is critical for the reconstruction process of this sector. Nevertheless, one of the key indicators of microfinance institutions' outreach is the volume of money they lend to their clients. Indeed, lending without harsh conditions and/or collateral is the cornerstone of the microfinance industry in general and particularly for lending-led microfinance institutions. While the ultimate goal of microfinance institutions is the provision of financial services to those excluded by the mainstream financial services providers, micro-credit is generally the starting point of a lending-led microfinance institution. Exhibit 12 provides details of loans disbursed by the institutions of the sample during five years (2005-2009).

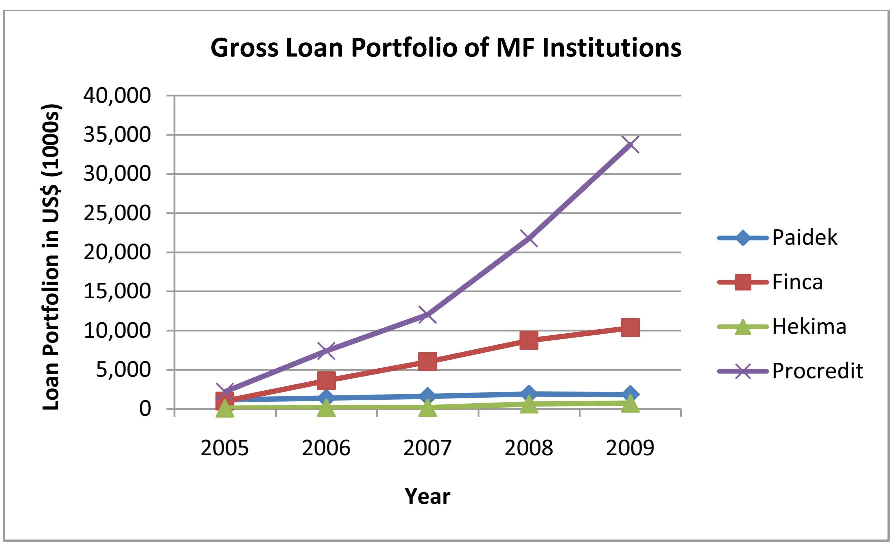
Table 5.3: Loan Portfolio of MF in Thousands of US Dollars (2005-2009)

Institutions Name	2005	2006	% Chg 05-06	2007	% Chg 06-07	2008	% Chg 07-08	2009	% Chg 08-09
Paidek	1,152	1,369	19%	1,584	16%	1,895	20%	1,837	-3%
Finca	1,006	3,595	257%	6,032	68%	8,735	45%	10,352	19%
Hekima	110	183	66%	183	0%	631	245%	740	17%
Procredit	2,197	7,392	236%	12,021	63%	21,772	81%	33,733	55%
Total MF	**4,465**	**12,539**	**181%**	**19,820**	**58%**	**33,033**	**67%**	**46,662**	**41%**

Source: Mixmarkets, 2010; Procredit, 2008.

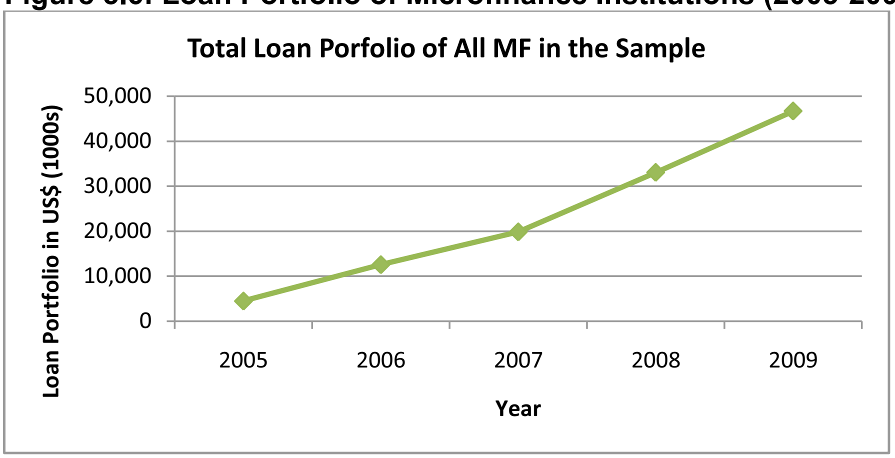
Procredit has tripled its loan volume from 2005 to 2006, and doubled it in 2007 and 2008. Finca has shown the same trend by tripling its loan's volume in 2006 and doubling it in 2007. As a whole, the four institutions have increased their loan portfolios consecutively (except for Paidek in 2009). Figure 5.5 depicts the time series of loan portfolios of microfinance institutions from 2005 to 2009.

Figure 5.5: Loan Portfolio of Microfinance Institutions (2005-2009)



As hypothesized, outreach, as measured by the volume (dollar amount) of loans disbursed by microfinance institutions, displays consecutive yearly increases from 2005 through year 2009. The increases occurred at the institutional level (figure 5.5), although dominated by Procredit and Finca; and at the industry level (figure 5.6). As with the number of employees hired and the number of clients served during the five years period, two institutions have greatly impacted the trend line: Procredit and Finca. Nevertheless, Hekima and Paidek have also shown increases (except for Paidek in 2009) in their portfolios' volume.

Figure 5.6: Loan Portfolio of Microfinance Institutions (2005-2009)



5.2.4. <u>Deposits</u>

Four out of the six microfinance institutions in this study's sample collect deposits from their clients: Finca, Hekima, Procredit, and Bosangani. Two others do not collect deposits: Paidek and Hope. However, Bosangani has data from 2002 to 2006 and they do not fit the type of analysis applied in this section. Therefore, only three institutions have been considered in this section's analysis: Finca, Hekima, and Procredit. Exhibit 15 presents data related to deposits by clients of MF institutions from 2005 to 2009.

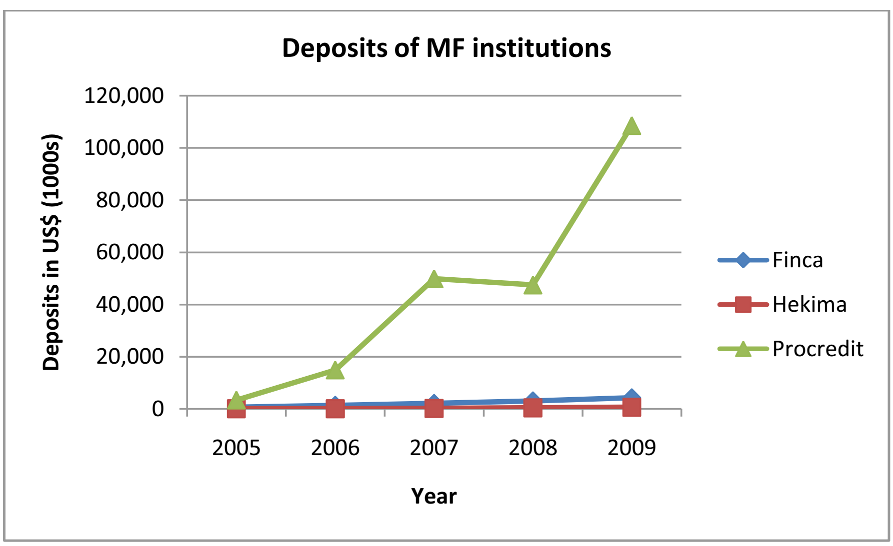
Table 5.4: Deposits of MF in Thousands of US Dollars (2005-2009)

Institutions Name	2005	2006	% Chg 05-06	2007	% Chg 06-07	2008	% Chg 07-08	2009	% Chg 08-09
Finca	670	1,340	100%	2,059	54%	3,018	47%	4,197	39%
Hekima	21	35	64%	108	205%	369	239%	598	62%
Procredit	3,306	14,841	349%	49,800	236%	47,394	-5%	108,529	129%
Total MF	3,997	16,216	306%	51,967	220%	50,781	-2%	113,324	123%

Source: Mixmarkets, 2010; Procredit, 2008.

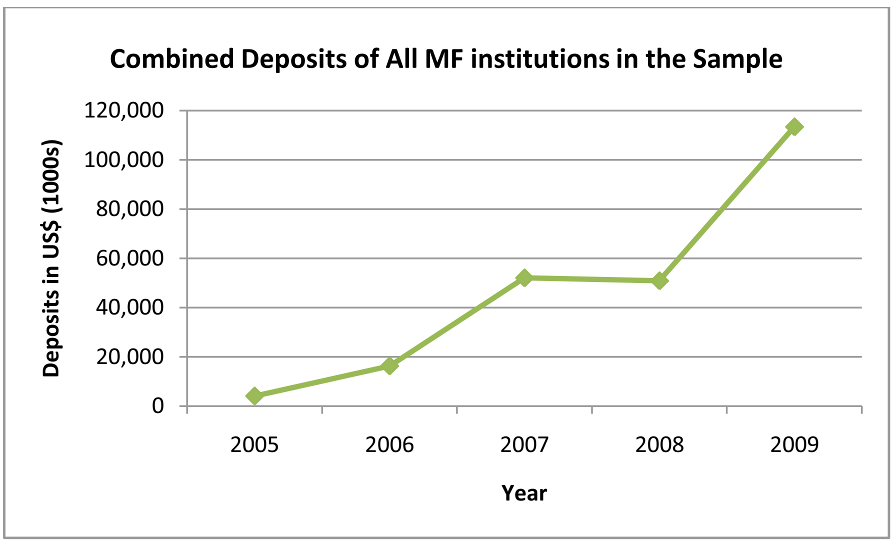
For the three institutions combined, total deposits shot up by over 2800% between 2005 and 2009. The slowest-growing institution, Finca, grew by 626% from 2005 to 2009. The fastest-growing, Procredit, grew by over 3000% during the same period. Year-to-year changes for individual institutions were positive in all but one instance (Procredit from 2007 to 2008), and frequently exceeded 100%. Figure 5.7 depicts the time series of the dollar amount collected by microfinance institutions from 2005 to 2009.

Figure 5.7: Deposits of Microfinance Institutions (2005-2009)



Outreach, as measured by the dollar amount of deposits of clients, displays consecutive yearly increases from 2005 to 2007, a slight decrease between 2007 and 2008, and again a shape increase through year 2009. Figure 5.8 depicts the time series of all MF institutions. Procredit was the institution with the highest dollar amount in deposits among the three institutions considered here, its 2007-2008 result has impacted the entire sample which shows a break in the upward trend between 2007 and 2008. Overall, however, the hypothesized trend occurred at the institutional level and at the industry level.

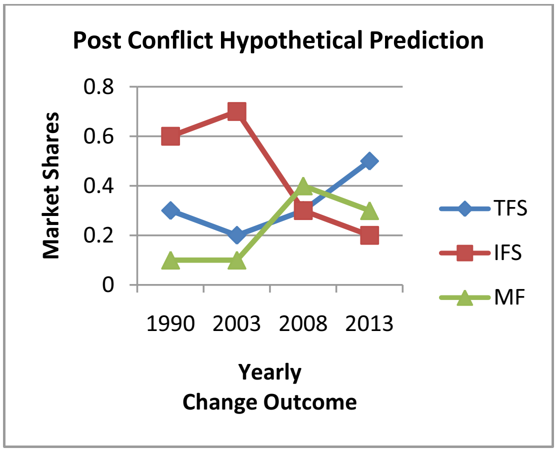
Figure 5.8: Combined Deposits of All MF Institutions in the Sample (2005-2009)



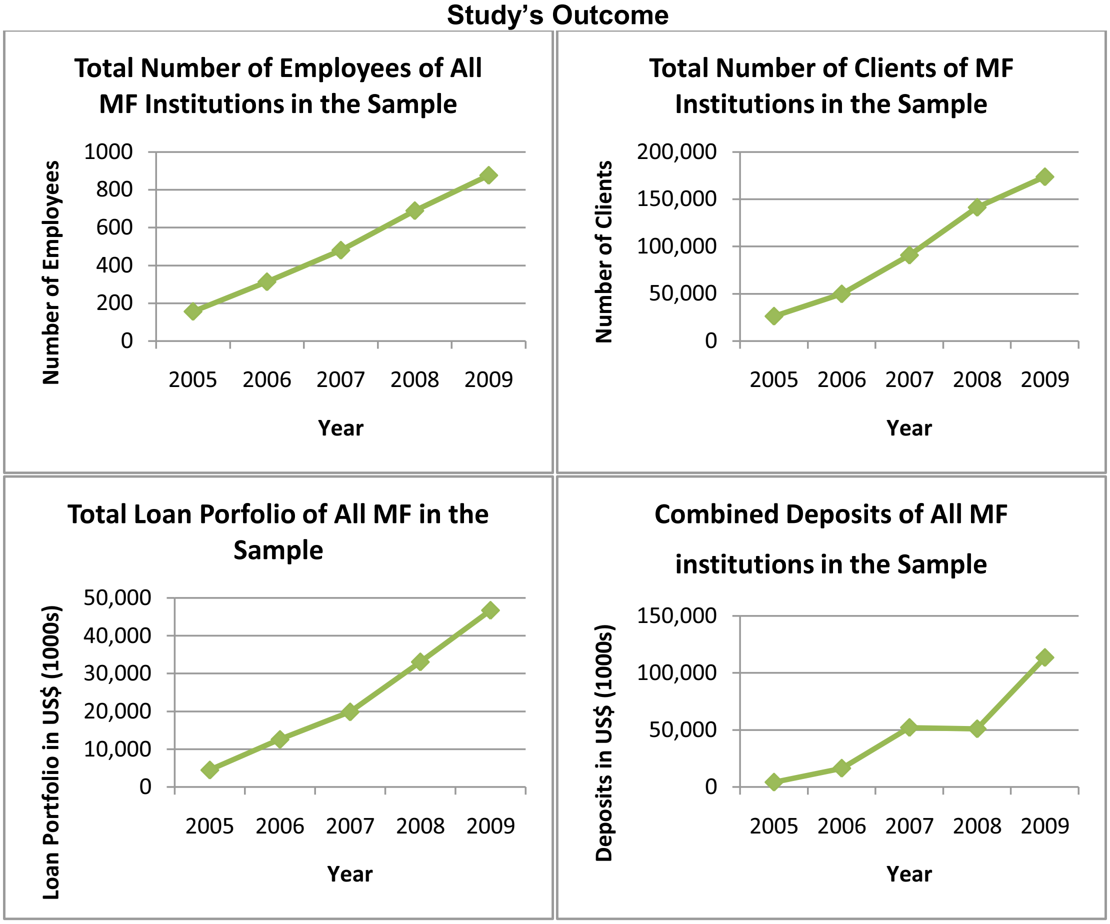
5.2.5. <u>Outreach Hypothesized vs. Study's Outcome</u>

When planning this study, it was proposed that microfinance serves as a tool for rebuilding the financial services sector in post-conflict communities, and one way of determining whether or not the phenomenon occurs in the DRC case was to determine that microfinance institutions show increases in outreach during consecutive years in post-conflict situation. Four variables were proposed for that purpose: employment, clientele, lending, and savings/deposits by providers of financial services. Time series analysis was suggested to look at the trend displayed by the four variables. Originally, this study intended to plot percentage change from each year to illustrate the trend. It was also suggested that measures of central tendency (mean, median, and mode); measures of dispersion (standard deviation, and variance); and some significance tests be applied. Unfortunately, data collected were very limited and could not support many of the proposed analyses. Fortunately, however, this study was able to plot the data for each of the four institutions and their total outcome, which provided this study with an analysis tool to understand the phenomenon under study. Figure 5.9 below summarizes the findings related to outreach by microfinance institutions.

Figure 5.9: Outreach Hypothesized Pattern vs. Study's Outcome



Study's Outcome



The first three measures of outreach by microfinance institutions—employment, number of clients, and loan volume, each display the expected pattern of $\mathbf{O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008} < O_{MF2009}}$, as hypothesized. This is true at the institutional level as well as the industry level. The fourth measure of outreach by microfinance institutions – dollar amount of deposits of clients, displays consecutive yearly increases from 2005 to 2007, but slightly decreases between 2007 and 2008, but regains its increase throughout year 2009. The overall trend fits the hypothesized pattern of $\mathbf{O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008} < O_{MF2009}}$.

As noted above, two institutions, Procredit and Finca, have greatly impacted the time series trend lines of the four variables (employment, clientele, loans, savings /deposits). Nevertheless, Hekima and Paidek have also shown increases in the number of people hired during the five consecutive years (except for Paidek in 2008) and therefore fit the trend as individual cases of the sample. In term of people brought in the industry as clients, Procredit, Finca and Hekima have increased their number for the entire period while Paidek experienced a slight decrease in 2009. The same feature has been displayed with the last two variables (loans and deposits) with a clear dominance by Procredit, followed by Finca and lastly by Hekima. Paidek was not included in the last analysis (deposits) because it was not collecting deposits and/or savings as of December 2009.

5.3. Financial Performance by Microfinance Institutions

5.3.1. Assets

Table 5.5 summarizes total assets of microfinance institutions from 2005 to 2009.

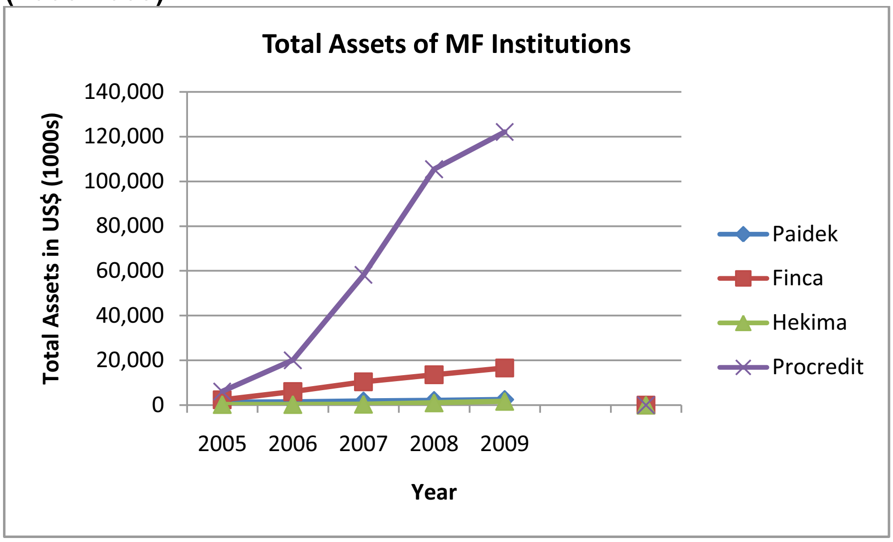
Table 5.5: Total Assets of Microfinance Institutions in '000 US Dollars (2005-2009)

Institutions Name	2005	2006	% Chg 05-06	2007	% Chg 06-07	2008	% Chg 07-08	2009	% Chg 08-09	% Chg 05-09
Paidek	1,251	1,412	13%	1,750	24%	2,016	15%	2,430	21%	94%
Finca	2,336	5,987	156%	10,383	73%	13,556	31%	16,542	22%	608%
Hekima	252	252	0%	370	47%	999	170%	1,665	67%	561%
Procredit	6,077	19,980	229%	58,149	191%	105,382	81%	122,012	16%	1908%
Total MF	**9,918**	**27,633**	**179%**	**70,653**	**156%**	**121,955**	**73%**	**142,651**	**17%**	**1338%**

Source: Mixmarkets, 2010; Procredit, 2008.

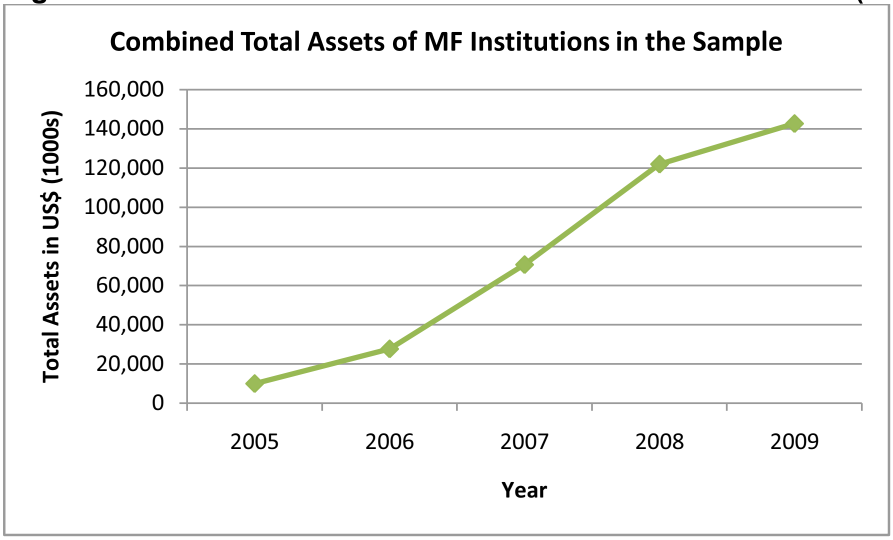
As with the outreach variables, Paidek, Finca, Hekima, and Procredit had complete data on financial performance variables (assets, efficiency, profitability, and risk) while Hope and Bosangani had data that did not fit the time series analysis. When looking at table 5 above, Paidek had a million and a quarter US dollars in 2005 and had slow but steady increases until 2009. Paidek doubled its assets during the five-year period (1.2 US$ million in 2005 and 2.4 US$ million in 2009). Finca's total assets in 2009 (16.5 US$ million) happened to be seven times what they were in 2005 (2.3 US$ million). Hekima had almost the same trend as Finca and saw its total assets increase almost seven times from 2005 (0.25 US$ million) to 2009 (1.6 US$ million). Procredit is the institution that showed the highest and tremendous growth in total assets during the five years period, going from US$ 6 million in 2005 to US$ 122 million in 2009, a twenty times increase. Overall and as an industry, the sample shows also steady yearly increases in total assets, representing a fourteen times increase from 2005 (US$ 9.9 million) to 2009 (US$ 142.6). Figure 5.10 provides the time series trend of total assets of microfinance institutions in the sample.

Figure 5.10: Total Assets of Microfinance Institutions in Thousands of US Dollars (2005-2009)



As hypothesized, financial performance, as measured by the increase in total assets of microfinance institutions, displays consecutive yearly increases from 2005 through year 2009. All the institutions in the sample experienced increases going from twice to sixteen times during the five-year period. When taken together, their total assets increased fourteen times. The increases happened at the institutional level (Figure 5.10) and at the industry level (Figure 5.11). Procredit and to some extent Finca have greatly impacted the trend line. Hekima and Paidek have also shown steady growth in assets.

Figure 5.11: Total Assets of All MF Institutions in US Dollars (2005-2009)



5.3.2. <u>Efficiency</u>

In finance, efficiency can be conceptualized in different ways: efficient frontier, efficient markets, efficient portfolio, or efficient set (Smart, Megginson, and Gitman, 2004). Efficient frontier is used in the case of portfolios maximizing expected returns in any given level of volatility. The efficient markets hypothesis is related to financial asset prices and available information. An efficient portfolio is one that maximizes returns for any given level of volatility; and efficient set generally refers to a group of efficient portfolios (Smart, Megginson, and Gitman, 2004). In business administration, efficiency and effectiveness are two related concepts but differ in that effectiveness is related to goals' achievement, while efficiency is more related to the costs (money, time, energy) in implementing a program or plan to reach planned goals. The self-sufficiency rate of microfinance emerged as a good indicator of efficiency compared to other measures such as nominal or real yield on portfolio. Indeed, microfinance institutions are often criticized for their dependence on grants and donations. This study determined therefore that self-sufficiency (use of proper funds to operate) is the preferred measure of efficiency of microfinance as a tool for financial services reconstruction. Table 5.6 provides the self-sufficiency rates of each microfinance institution from year 2005 to year 2009.

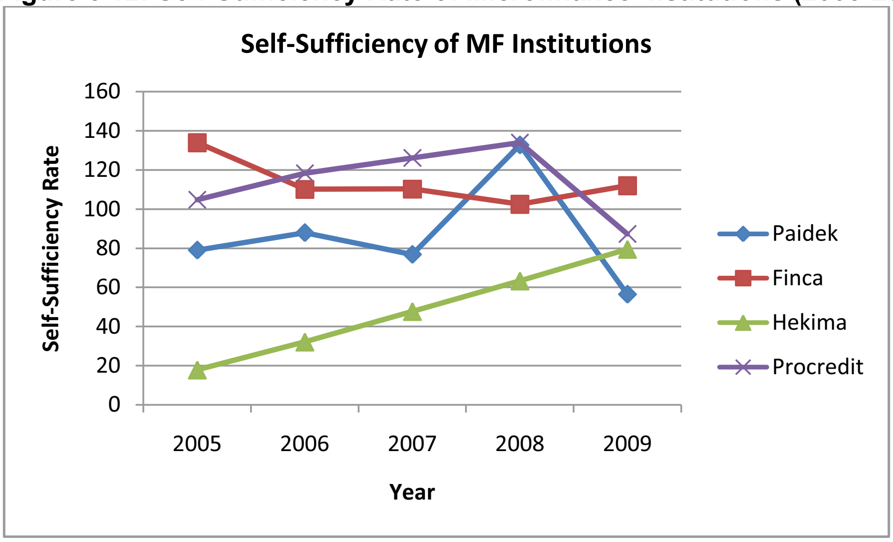
Table 5.6: Self-Sufficiency Rate of Microfinance Institutions (2005-2009)

Institutions Name	2005	2006	2007	2008	2009
Paidek	78.93	87.86	76.72	132.71	56.34
Finca	133.83	109.99	110.17	102.39	111.91
Hekima	17.78	32.05	47.62	63.19	79.34
Procredit	104.75	118.27	126.09	133.91	87.29
All MF	83.82	87.04	90.15	108.05	83.72

Source: Mixmarkets, 2010; Procredit, 2008.

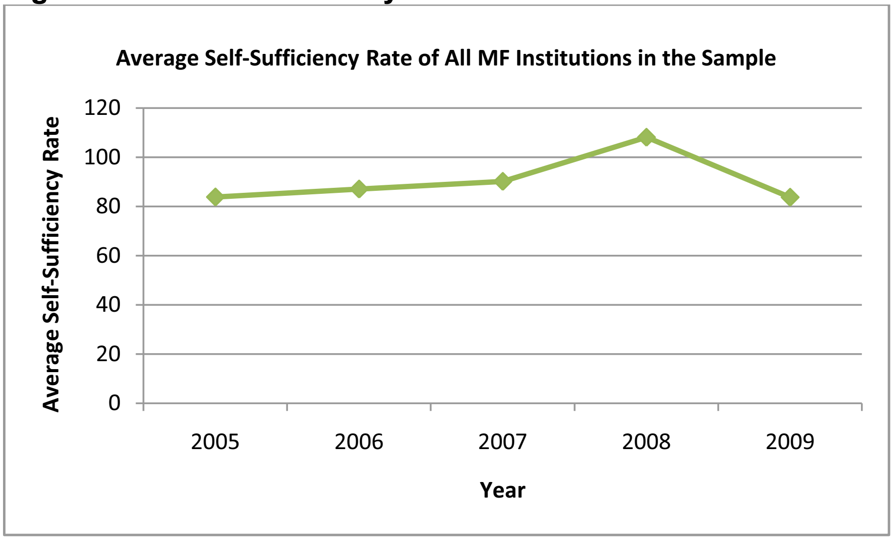
From exhibit 22 above, it can be depicted that Finca has maintained full self-sufficiency (above 100%) for the five consecutive years (2005-2009). Procredit has maintained full self-sufficiency for four years (2005-2008) but fell to 87% self-sufficiency in 2009. Paidek reached full self-sufficiency in 2008 (133%) but decreased sharply at 56% in 2009. Hekima had never yet reached full self-sufficiency as of 2009 but has shown steady progress, going from only 18% in 2005 to almost 80% self-sufficiency in 2009. Figure 5.12 depicts the time series of microfinance institutions.

Figure 5.12: Self-Sufficiency Rate of Microfinance Institutions (2005-2009)



This study hypothesized that financial performance, as measured by efficiency of microfinance institutions, will display consecutive yearly increases from 2005 through year 2009 (that is $\mathbf{O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008} < O_{MF2009}}$). When looking at figure 5.13 below, different institutions present different patterns but as an industry the pattern occurred as hypothesized from 2005 to 2008 - but the pattern deviates from the hypothesis in 2009. The outcome is indeed $\mathbf{O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008} > O_{MF2009}}$ as expressed on Figure 5.13. The overall trend matches the hypothesis but deserves more investigation. Further study could follow up the trend and see if, for instance, Procredit will recover from its fall of 2009 and regain its full self-sufficiency. The same attention should be also directed to Paidek which went from 133% self-sufficiency in 2008 to 56% in 2009.

Figure 5.13: Self-Sufficiency Rate of All Microfinance in the Sample (2005-2009)



5.3.3. Profitability

Return on Equity (ROE) and Return on Assets (ROA) are two measures of profitability of a portfolio or business. Smart et al. (2004) defines ROA as “a measurement of the overall effectiveness of management in generating returns to common stockholders with its available assets” (p. G-16) and ROE as “a measure that captures the return earned on the common stockholders’ investment in a firm” (p. G-16). When looking at the data collected, ROE and ROA presented the same trend and it was decided that only one will be subject to analysis, and in this case it is the return on total assets (ROA). Table 5.7 below presents the ROA rates of each microfinance institution of the sample and the sample average.

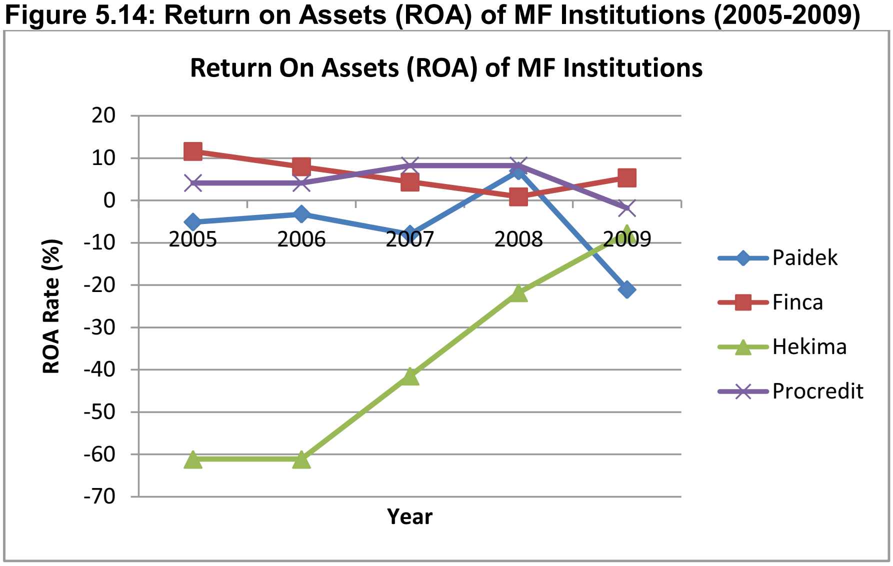
Table 5.7: Return on Assets (ROA) of Microfinance Institutions (2005-2009)

Institutions Name	2005	2006	2007	2008	2009
Paidek	-5.15	-3.26	-8	6.91	-21.09
Finca	11.56	7.95	4.34	0.86	5.33
Hekima	-61.14	-61.14	-41.47	-21.8	-7.75
Procredit	4.09	4.09	8.18	8.18	-1.82
Industry Average	-12.66	-13.09	-9.24	-1.46	-6.33

Source: Mixmarkets, 2010; Procredit, 2008.

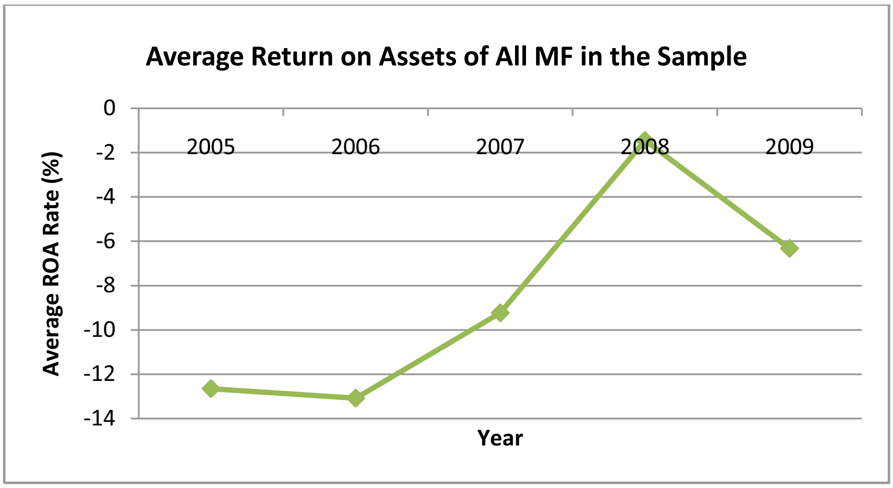
In table 5.7, there is a clear divide between, on one side Finca and Procredit, and on the other side Paidek and Hekima. Finca and Procredit operations are profitable while Paidek and Hekima struggle and are not profitable, as indicated by their ROA. Finca is the only institution to maintain a positive ROA during the entire five-year period. Procredit maintained positive returns on assets during four years (2005-2008) but experienced a negative ROA in 2009 (-1.82). Paidek had a positive ROA in only one year (2008) but has been in the negative for the other four years. Hekima has shown some improvement, going from (-61.14) in 2005 to (-7.75) in 2009, but overall its ROA had been negative for the entire study period (2005-2009). Overall, the averages from 2005 to 2009 for the four institutions in the sample have been negative.

Figure 5.14: Return on Assets (ROA) of MF Institutions (2005-2009)



This study hypothesized that financial performance, as measured by profitability of microfinance institutions, will display consecutive yearly increases from 2005 through year 2009 (that is **$O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008} < O_{MF2009}$**). When looking at figure 5.14, different institutions present different patterns but as an industry the pattern did not occur as hypothesized but deviates from the hypothesis. The outcome is therefore **O$_{MF2005}$ > O$_{MF2006}$ > O$_{MF2007}$ > O$_{MF2008}$ >O$_{MF2009}$**. The overall trend has not matched the hypothesis pattern as depicted by the time series lines on Figure 5.15.

Figure 5.15: Return on Assets (ROA) of Microfinance Institutions (2005-2009)



Providing loans to poor and vulnerable micro and small entrepreneurs is the cornerstone of microfinance. In this study, gross loan portfolio has been selected as one of the variables measuring outreach. For the sake of sustainability of microfinance institutions in general and in particular in a post-conflict reconstruction context, it is essential for financial institutions to have healthy portfolios and make money when providing loans in order to maintain revolving funds that will continue to help the poor and vulnerable to create or maintain their micro and small enterprises. For this reason, an additional indicator of profitability has been analyzed, the “yield on gross portfolio” to check if microfinance institutions are making money from the loans disbursed. Exhibit

28 presents data from 2005 to 2009 showing the yields different institutions had on outcome from their portfolios.

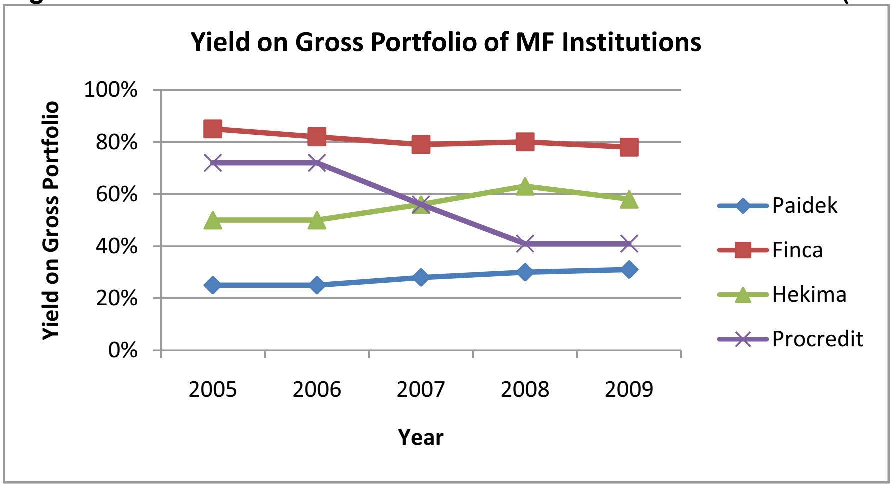
Table 5.8: Yield on Gross Portfolio of Microfinance Institutions (2005-2009)

Institutions Name	2005	2006	2007	2008	2009
Paidek	25%	25%	28%	30%	31%
Finca	85%	82%	79%	80%	78%
Hekima	50%	50%	56%	63%	58%
Procredit	72%	72%	56%	41%	41%
All MF Average	58%	57%	55%	53%	52%

Source: Mixmarkets, 2010; Procredit, 2008.

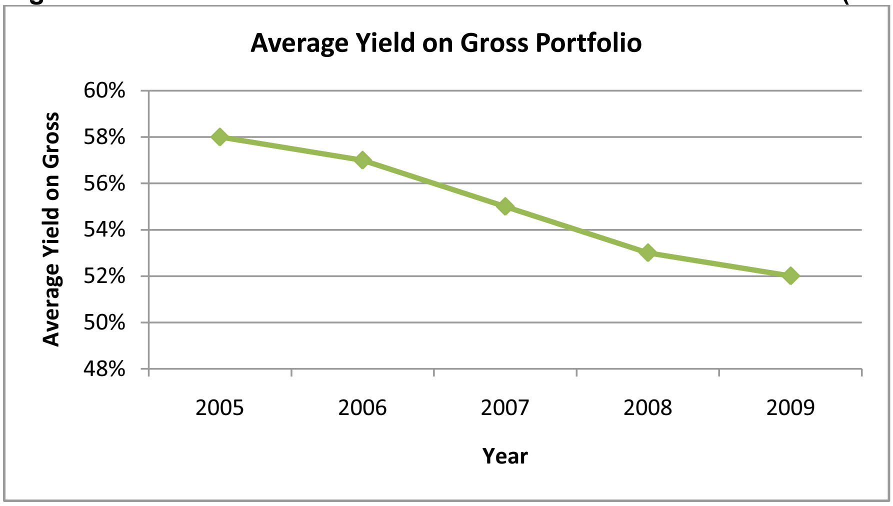
On Table 5.8, all microfinance institutions in the sample display positive yields on their gross portfolio, ranging from a low of 25% to a high of 85%. Finca emerged as the institution with the most stable YGP during the five-year period (2005-2009), displaying an average of 80% YGP with values ranging from 78% to 85%. Procredit shows a descending pattern with higher YGP in 2005 and 2006 (72%) but lower YGP (41%) in 2008/2009. Hekima and Paidek overall displayed an ascending pattern with lower YGP in 2005 but a higher one in 2008/2009. Figure 5.16 depicts the time series trends of each microfinance institution.

Figure 5.16: Yield on Gross Portfolio of Microfinance Institutions (2005-2009)



Overall, when looking at the entire sample, YGP shows a descending but stable pattern with an average of 55% YGP with extreme values ranging from 58% (2005) to 52% (2009). This study hypothesized that, financial performance, as measured by profitability of microfinance institutions will display consecutive yearly increases from 2005 through year 2009 (that is **$O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008} < O_{MF2009}$**). When looking at Figure 5.17 below, different institutions present different patterns, but as an industry the pattern did not occur as hypothesized but deviates from the hypothesis. The outcome is indeed **$O_{MF2005} > O_{MF2006} > O_{MF2007} > O_{MF2008} > O_{MF2009}$**. The overall trend has not matched the hypothesis pattern as depicted by the time series lines on Figure 5.17.

Figure 5.17: Yield on Gross Portfolio of Microfinance Institutions (2005-2009)



5.3.4. Risk

Post-conflict microfinance institutions operate in a risky environment due to the flexibility of their methodology (non-rigorous lending conditions) compounded by the legacy of conflict. As said earlier, for the sake of sustainability of microfinance institutions in general and in particular in a post-conflict reconstruction context, it is essential for financial institutions to have healthy portfolios, which means that they have to minimize risk. Portfolio at Risk (PAR) is generally considered a good indicator of the level of a financial institution's portfolio risk. Table 5.9 presents a thirty days PAR of microfinance institutions in this study's sample.

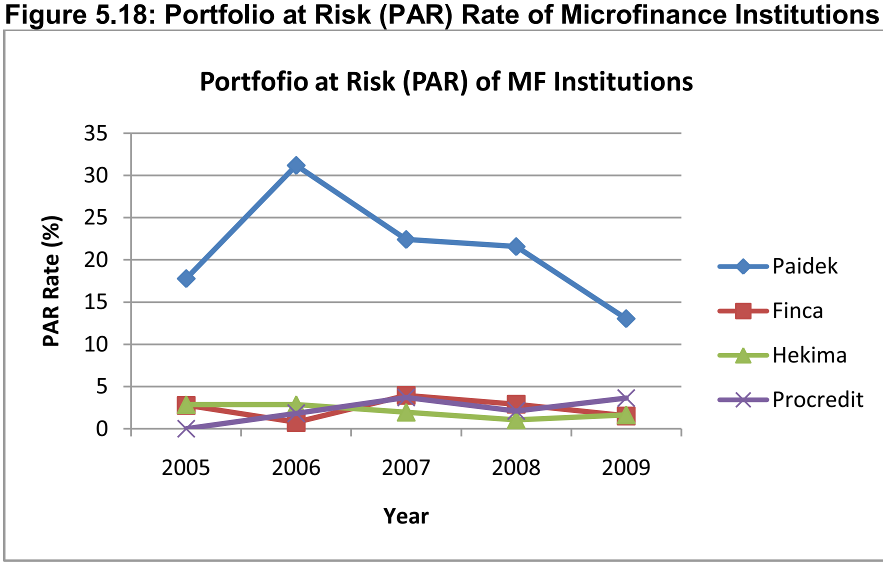
Table 5.9: Portfolio at Risk (PAR) 30 Days (%) of Microfinance Institutions (2005-2009)

Institution Name	2005	2006	2007	2008	2009
Paidek	17.77	31.17	22.4	21.56	13.03
Finca	2.77	0.74	3.94	2.90	1.50
Hekima	2.85	2.85	1.95	1.04	1.64
Procredit	0	1.83	3.7	2.11	3.64
Average Industry	5.85	9.15	8.00	6.90	4.95

Source: Mixmarkets, 2010; Procredit, 2008.

From Table 5.9 above, it can be depicted that Hekima has maintained the most efficient risk management of its portfolio during the five consecutive years (2005-2009), going from its highest of 2.85% in 2005 to its lowest of 1.04% in 2008, before climbing a bit in 2009 with a 1.64% PAR. Finca and Procredit have also demonstrated good risk management of their portfolio. Finca's highest PAR occurred in 2007 (3.94%) but the trend has been a descending pattern during the last two years. Procredit has experienced ups and downs but has also maintained a strong portfolio with a maximum PAR of 3.64% in 2009. Paidek has deviated from the pattern displayed by the other three microfinance institutions of the sample (all below 4% PAR). Indeed, Paidek's highest PAR reached 31% in 2006 but it has improved in 2007 (22%), 2008 (22%) and 2009 (13%). Figure 5.18 below depicts the time series trends of each case.

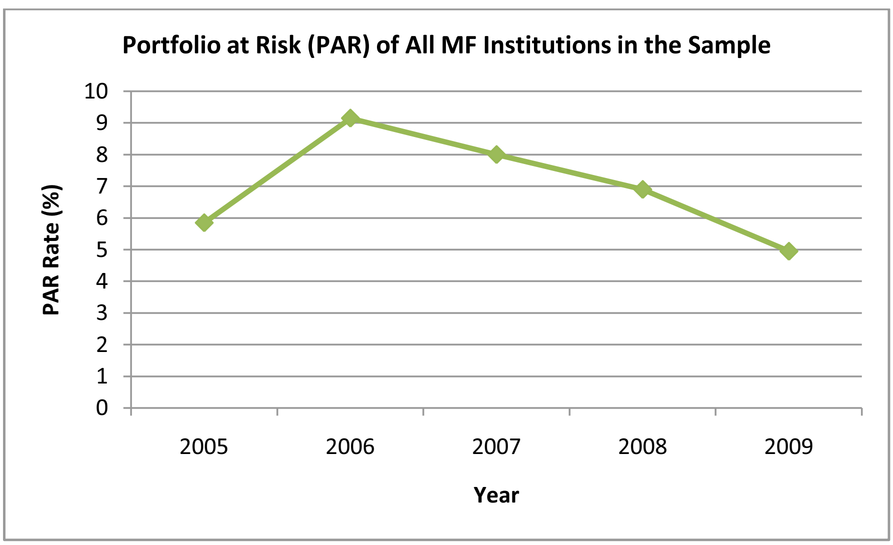
Figure 5.18: Portfolio at Risk (PAR) Rate of Microfinance Institutions (2005-2009)



This study hypothesized that, financial performance, as measured by the risk level of microfinance institutions will display consecutive yearly improvement (decreases in this case) from 2005 through year 2009 (that is $\mathbf{O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008} <}$

O_{MF2009}). When looking at figure 5.18 above, different institutions present different patterns but as an industry the pattern generally occurred as hypothesized from 2006 to 2006 but deviated from the hypothesis in 2006. The outcome is indeed **$O_{MF2005} > O_{MF2006} < O_{MF2007} < O_{MF2008} < O_{MF2009}$**. Exhibit 33 depicts the time series trend. The overall trend has matched the hypothesis pattern but it should be mentioned that the time series trend has been largely impacted by Paidek. While this study could consider Paidek as an outlier in this section, it has been included in the analysis to reflect the divide between microfinance institutions with some being well managed in term of risk while others keep losing money and continue to depend on grants and donations.

Figure 5.19: Portfolio at Risk Rate of All Microfinance Institutions (2005-2009)

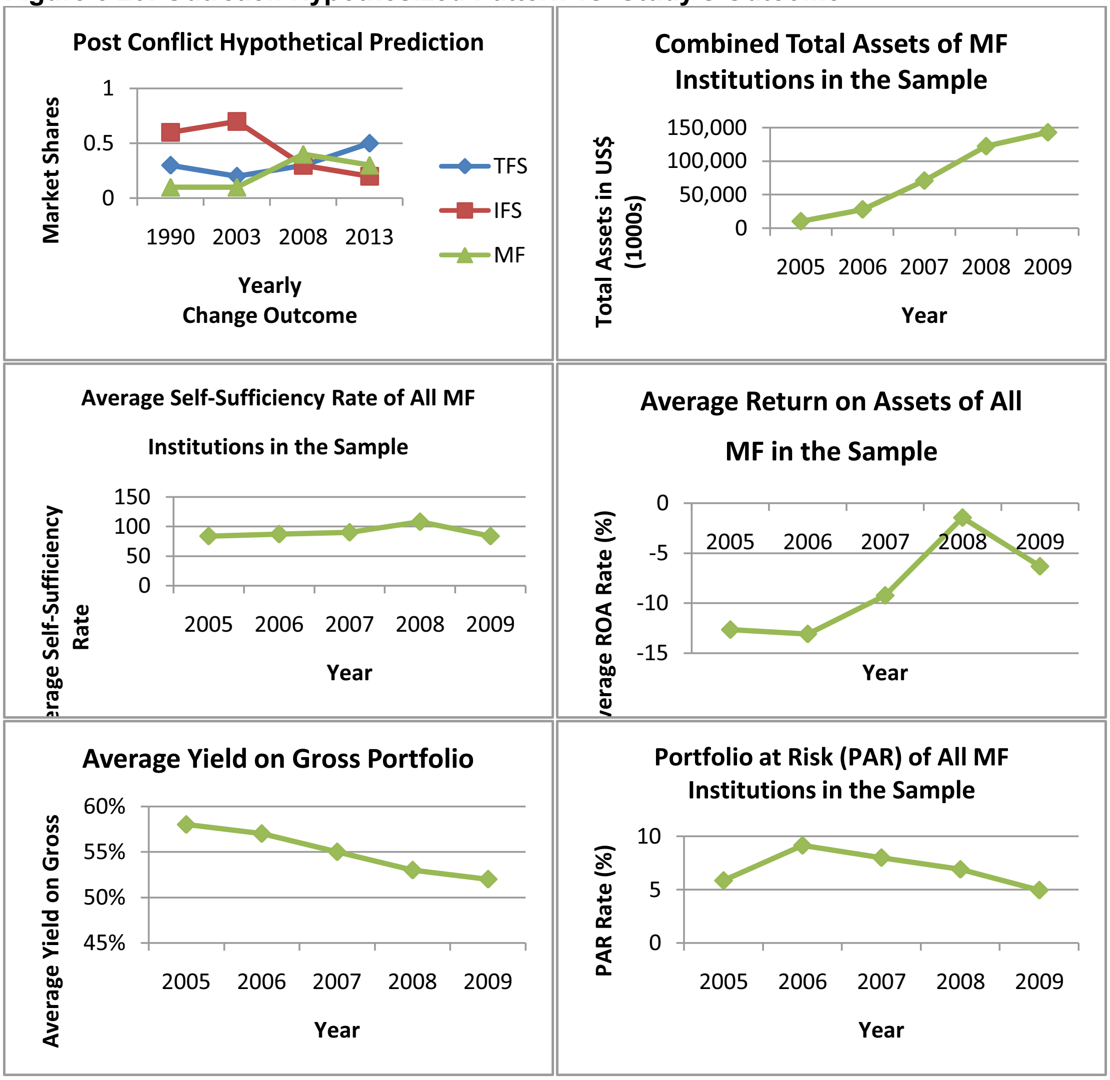


5.3.5. <u>Financial performance Hypothesized vs. Study's Outcome</u>

This study proposed that microfinance serves as a tool for rebuilding the financial services sector in post-conflict communities, and one way of determining whether or not the phenomenon occurs in the DRC case was to examine whether that microfinance institutions show improvements in their financial performance during consecutive years in post-conflict situation. Four variables were proposed for that purpose: assets, efficiency, profitability, and risk. Time series analysis was suggested to look at the trend displayed by the four variables. As with the outreach hypothesis, this study intended originally to plot percentage change from each year to illustrate the trend and expected to be able to run statistical analyses such as significance. Unfortunately, data collected were very limited and could not fit many of the proposed analyses. Fortunately, however, this study was able to plot the data for each of the four institutions and their total outcome, which provided this study with an analytical tool to depict the trend of the phenomenon under study. Figure 5.20 below summarizes the findings related to financial performance of microfinance institutions.

First, as hypothesized, financial performance, as measured by total assets of microfinance institutions, displays consecutive yearly increases from 2005 through year 2009 and fits the formula $\mathbf{O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008} < O_{MF2009}}$ as hypothesized. The increases happened at the institutional level and at the industry level. The time series depicted in figure 20 demonstrates the predicted trend. Second, as hypothesized, financial performance, as measured by efficiency (self-sufficiency) of microfinance institutions, displays consecutive yearly increases from 2005 through year 2008 but deviated from the hypothesis in 2009, displaying the following outcome $\mathbf{O_{MF2005} < O_{MF2006} < O_{MF2007} < O_{MF2008} > O_{MF2009}}$. The overall trend has matched the hypothesized pattern. Third, financial performance, as measured by profitability of microfinance institutions, did not occur as hypothesized but deviates from the hypothesis and resulted as $\mathbf{O_{MF2005} > O_{MF2006} > O_{MF2007} > O_{MF2008} > O_{MF2009}}$. The overall trend has not matched the hypothesis pattern as depicted by the time series on figure 5.20 below. The same result was found with another indicator of profitability, the Yield on Gross portfolio, which result was $\mathbf{O_{MF2005} > O_{MF2006} > O_{MF2007} > O_{MF2008} > O_{MF2009}}$. While all microfinance institutions in the sample display positive yields of their gross portfolio, ranging from a lowest of 25% to a highest of 85%, their time series trend still deviated from the hypothesized pattern. Fourth, as hypothesized, financial performance, as measured by risk (PAR) of microfinance institutions, displays consecutive yearly improvement from 2006 through year 2009 but deviated from the hypothesis in 2005, displaying the following outcome $\mathbf{O_{MF2005} > O_{MF2006} < O_{MF2007} < O_{MF2008} < O_{MF2009}}$. The overall trend has matched the hypothesized pattern.

Figure 5.20: Outreach Hypothesized Pattern vs. Study's Outcome



5.4. Comparing Outreach of Traditional Financial Services (TFS) to Outreach of Microfinance Institutions (MF).

5.4.1. Employment

Additional insight can be gained by comparing the performance of microfinance institutions (MF) to that of traditional financial institutions (TFS). To that end, two financial institutions applying a traditional approach to financial services provision

(Rawbank and BCDC) and two financial institutions applying a microfinance approach to financial services provision (Finca and Procredit) were subjected to comparative analysis relative to the number of workers in each institution and each category (TFS vs. MF) from 2005 to 2009. The study looks at both the total number of employees during the five-year period as well as the number of employees hired during consecutive years. Table 5.10 summarizes employment by TFS vs. MF from 2005 to 2009.

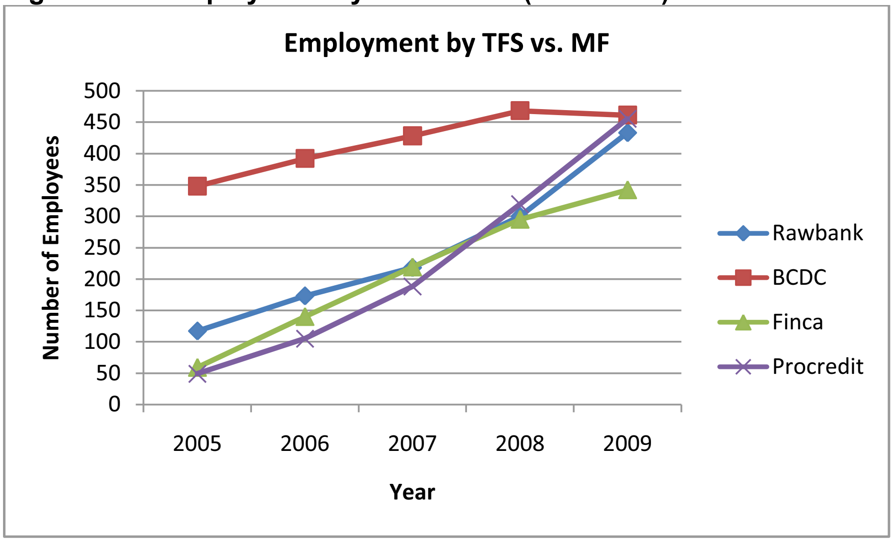
Table 5.10: Employment by TFS vs. MF (2005-2009)

Institutions Name	2005	2006	Hired 2006	2007	Hired 2007	2008	Hired 2008	2009	Hired 2009
Rawbank	117	173	56	218	45	300	82	433	133
BCDC	348	392	44	428	36	468	40	461	-7
Total TFS	465	565	100	646	81	768	122	894	126
Finca	59	140	81	219	79	295	76	342	47
Procredit	49	105	56	188	83	319	131	455	136
Total MF	108	245	137	407	162	614	207	797	183

Source: BCDC Annual Reports 2005, 2006, 2008 & 2009; Mixmarkets, 2010; Procredit Annual Reports 2008 & 2009; Rawbank Annual Reports 2005, 2006, 2007, 2008 & 2009.

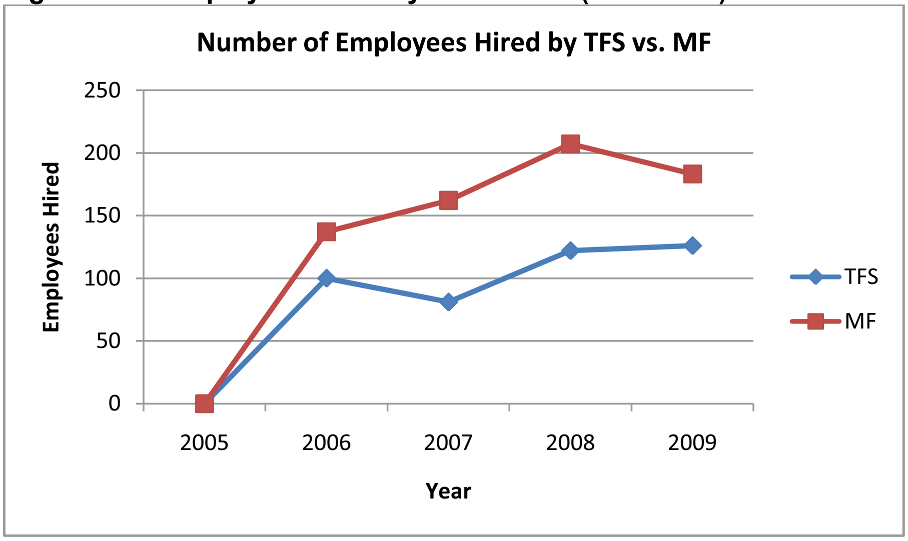
All four institutions increased their total number of workers from 2005 to 2009, except for BCDC that experienced a slight drop (-7) in 2009. As of 2009, BCDC had the highest number of total employees (461), followed by Procredit (455), Rawbank (433), and Finca (342). The largest employer in the sample, BCDC experienced the lowest hiring curve for the five consecutive years when compared to the other three financial institutions. Figure 5.21presents the time series trend of the four financial institutions under study.

Figure 5.21: Employment by TFS vs. MF (2005-2009)



While the total number of employees provides us with valuable information, it is the number of people hired by each institution and each category (TFS vs. MF) that should determine the effectiveness of each institution and each category when comparing them. When looking at table 10, all four institutions have hired new employees from 2005 to 2009, except for BCDC in 2009. However, MF has dominated TFS in hiring during the entire study period. In 2007 and 2008, Procredit employed more than Rawbank and BCDC together (83 vs. 81; 131 vs. 122). When considering the two categories (TFS vs. MF), MF scored higher than TFS consecutively from 2005 to 2009 (137 vs. 100; 162 vs. 81; 207 vs. 122; 183 vs. 126). Figure 5.22 depicts the time series trend of extra employees hired by each category from 2005 to 2009.

Figure 5.22: Employees Hired by TFS vs. MF (2005-2009)



This study's hypothesis was that outreach of financial services institutions applying a microfinance approach (MF), as measured by employment, will display higher yearly increases between 2005 and 2009 when compared to the outreach of TFS (O_{TFS}). As hypothesized, MF employed more than TFS and when comparing the two categories, the pattern bellow has indeed occurred as hypothesized:

$\mathbf{O_{MF2005}<O_{TFS2005}}$; $\mathbf{O_{MF2006}>O_{TFS2006}}$; $\mathbf{O_{MF2007}>O_{TFS2007}}$; $\mathbf{O_{MF2008}>O_{TFS2008}}$; $\mathbf{O_{MF2009}>O_{TFS2009}}$;

The increases happened at the institutional level and at the industry level as depicted by Figures 5.21and 5.22.

5.4.2. Clientele

Only three financial institutions (Rawbank, Finca and Procredit) had reliable data related to clientele; BCDC's clientele data was not available. Table 5.11 summarizes clientele TFS vs. MF from 2005 to 2009.

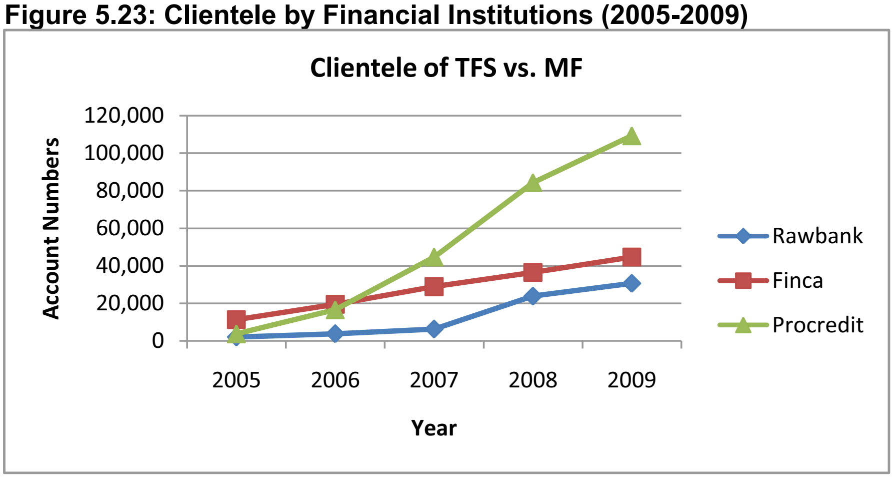
Table 5.11: Clientele by Financial Institutions (2005-2009)

Institutions Name	2005	2006	New Clients 06	2007	New Clients 07	2008	New Clients 08	2009	New Clients 09
Rawbank	1,978	3,726	1,748	6,212	2,486	23,743	17,531	30,570	6,827
Finca	11,292	19,454	8,162	28,802	9,348	36,414	7,612	44,532	8,118
Procredit	3,679	16,512	12,833	44,584	28,072	84,227	39,643	109,183	24,956

Source: Mixmarkets, 2010; Procredit Annual Reports 2008 & 2009; Rawbank Annual Reports 2005, 2006, 2007, 2008 & 2009.

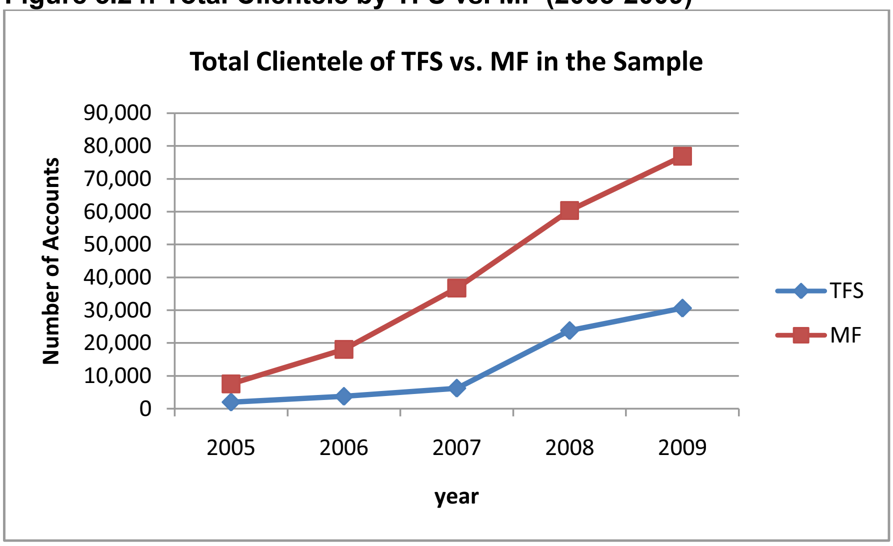
All three institutions increased their clientele, expressed as the number of bank accounts held. As of 2009, Procredit experienced fast increases as well as Finca for the entire five-year period. Rawbank had a slower curve during the first three years but sharply increased in 2008 (almost quadrupled) and 2009 (around six thousand new accounts). Figure 5.23 depicts the time series trends of the three financial institutions with reliable data.

Figure 5.23: Clientele by Financial Institutions (2005-2009)



This study's hypothesis was that outreach of financial services institutions applying a microfinance approach (MF), as measured by their clientele, will display higher yearly increases between 2005 and 2009 when compared to the outreach of financial institutions applying a traditional approach to services delivery (TFS). As hypothesized, MF attracted more clients (as expressed by the number of accounts) than TFS and when comparing the two categories, the pattern below has indeed occurred as hypothesized: $\mathbf{O_{MF2005}<O_{TFS2005}}$; $\mathbf{O_{MF2006}>O_{TFS2006}}$; $\mathbf{O_{MF2007}>O_{TFS2007}}$; $\mathbf{O_{MF2008}>O_{TFS2008}}$; $\mathbf{O_{MF2009}>O_{TFS2009}}$. The increases happened at the institutional level and at the industry level as depicted in Figures 5.23 and 5.24.

Figure 5.24: Total Clientele by TFS vs. MF (2005-2009)



5.4.3. <u>Lending</u>

Rawbank, BCDC, Finca, and Procredit had all their loan portfolios data for the study's period. This study was able to analyze their individual numbers as well as the category's trend from 2005 to 2009. The study looks at the total size of respective loan portfolios during the five-year period, but especially at the increase rates of the portfolios, which is a better way to detect the size of the effect of MF and TFS as interventions. Table 5.12 summarizes the evolution of financial institutions portfolios.

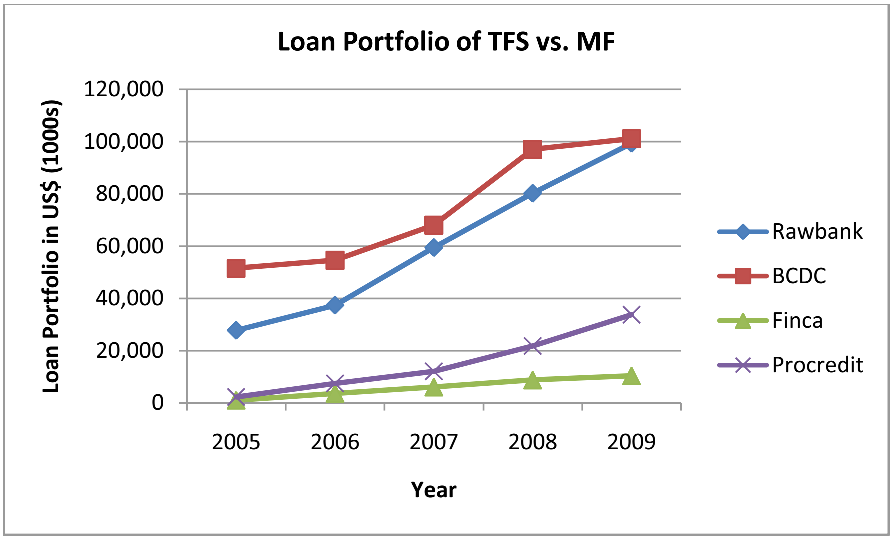
Table 5.12: Loan Portfolio of TFS vs. MF in Thousands of US Dollars (2005-2009)

Institutions Name	2005	2006	% Chg 05-06	2007	% Chg 06-07	2008	% Chg 07-08	2009	% Chg 08-09
Rawbank	27,728	37,363	35%	59,385	59%	80,163	35%	99,276	24%
BCDC	51,500	54,600	6%	68,000	25%	97,000	43%	101,100	4%
Total TFS	79,228	91,963	16%	127,385	39%	177,163	39%	200,376	13%
Finca	1,006	3,595	257%	6,032	68%	8,735	45%	10,352	19%
Procredit	2,197	7,392	236%	12,021	63%	21,772	81%	33,733	55%
Total MF	3,204	10,987	243%	18,053	64%	30,508	69%	44,086	45%

Source: BCDC Annual Reports 2005, 2006, 2008 & 2009; Mixmarkets, 2010; Procredit Annual Reports 2008 & 2009; Rawbank Annual Reports 2005, 2006, 2007, 2008 & 2009.

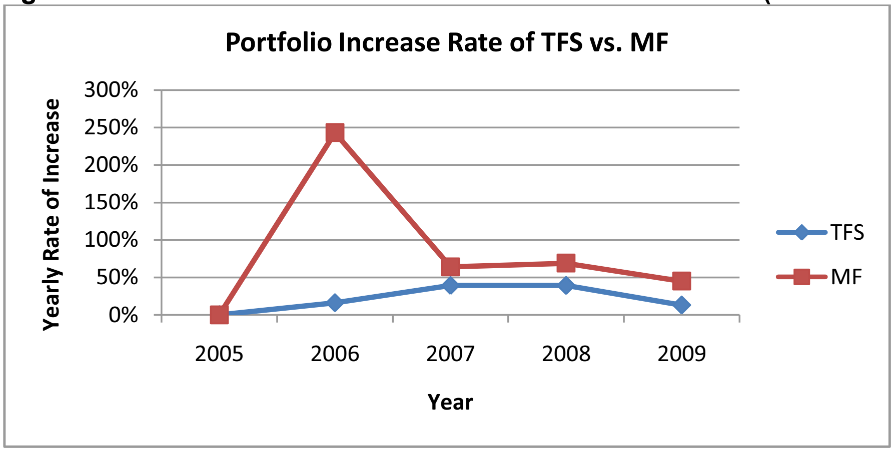
Figure 5.25 demonstrates that all four institutions have increased their loan portfolios from 2005 to 2009. As of 2009, BCDC had the largest loan portfolio (US$ 101 million), followed by Rawbank (US$ 99 million), Procredit (US$ 33 million), and Finca (US$ 10 million). Figure 5.25 captures the time series of each institution's trend in terms of loan portfolios from 2005 to 2009. While having the largest loan portfolio, BCDC lends higher amounts to state and big private companies; Rawbank had the same target as BCDC until recently when it opened up its portfolio to small and medium enterprises. Procredit and Finca have more individual clients accessing loans through their portfolio, and many of them are micro and small entrepreneurs.

Figure 5.25: Loan Portfolio of TFS vs. MF in US Dollars (2005-2009)



While the total portfolio amount provides us with valuable information, it is the rate of increase of each institution and each category (TFS vs. MF) that should determine the effectiveness of each institution and each category to reconstruct the financial services in a post-conflict context. When looking at table 12 above, all four institutions in one side, and both TFS and MF on the other side, have positive increase rates, ranging from 4% to over 200%. However, Procredit and Finca show a faster reconstruction in this area at both the institutional and the individual levels. Figure 5.26 depicts the time series trend of TFS vs. MF loan portfolio from 2005 to 2009.

Figure 5.26: Increase Rates of Loan Portfolio of TFS vs. MF (2005-2009)



This study's hypothesis was that outreach of financial services institutions applying a microfinance approach (MF), as measured by their loan portfolio, will display faster growth between 2005 and 2009 when compared to the outreach of TFS (O_{TFS}). As hypothesized, MF loan portfolios experienced higher rates of increase than TFS and when comparing the two categories, the pattern bellow has indeed occurred as hypothesized $\mathbf{O_{MF2005}<O_{TFS2005}}$; $\mathbf{O_{MF2006}>O_{TFS2006}}$; $\mathbf{O_{MF2007}>O_{TFS2007}}$; $\mathbf{O_{MF2008}>O_{TFS2008}}$; $\mathbf{O_{MF2009}>O_{TFS2009}}$. The increases happened at the institutional level and at the industry level as depicted by Figures 5.25 and 5.26.

5.4.4. Deposits

As in the case of loan portfolios, Rawbank, BCDC, Finca, and Procredit had all their deposit data collected and this study was able to proceed to the analysis of their individual numbers as well as the category's trend from 2005 to 2009. The study looks at both the total amount of respective deposits during the five years period but also the increase rates of deposits. Table 5.13 summarizes the volume of deposits clients brought to their respective financial institutions.

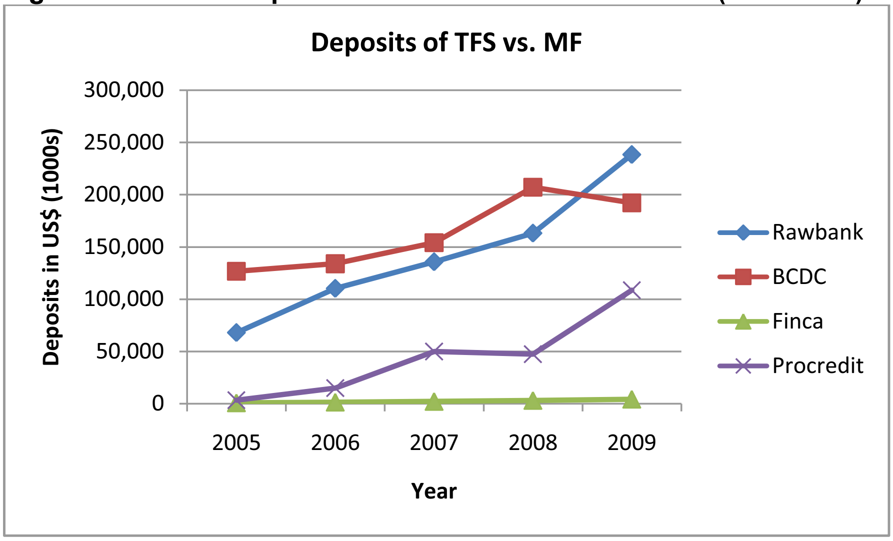
Table 5.13: Total Deposits of TFS vs. MF in thousands of US Dollars (2005-2009)

Institutions Name	2005	2006	% Chg 05-06	2007	% Chg 06-07	2008	% Chg 07-08	2009	% Chg 08-09
Rawbank	67,986	110,223	62%	135,665	23%	163,069	20%	238,232	46%
BCDC	126,600	133,800	6%	154,000	15%	207,000	34%	192,000	-7%
Total TFS	194,586	244,023	25%	289,665	19%	370,069	28%	430,232	16%
Finca	670	1,340	100%	2,059	54%	3,018	47%	4,197	39%
Procredit	3,306	14,841	349%	49,800	236%	47,394	-5%	108,529	129%
Total MF	3,976	16,181	307%	51,859	220%	50,413	-3%	112,726	124%

Source: BCDC Annual Reports 2005, 2006, 2008 & 2009; Mixmarkets, 2010; Procredit Annual Reports 2008 & 2009; Rawbank Annual Reports 2005, 2006, 2007, 2008 & 2009.

Rawbank and Finca had consecutive positive increase rates from 2005 to 2009, while Procredit experienced a negative increase rate (-3%) in 2008 and BCDC experienced it in 2009 (-7%). As of 2009, Rawbank had the largest deposits (US$ 238 million), followed by BCDC (US$ 192 million), Procredit (US$ 108 million), and Finca (US$ 4 million). Figure 5.27 captures the time series of each institution's trend in term of deposits from 2005 to 2009. As with the loans BCDC deposits come largely from state and big private companies; Rawbank had the same sources of deposits in its beginning but has shift recently to individuals, and to small and medium enterprises. As for loans, Procredit and Finca's deposits originate mostly from individual clients many of whom are poor or vulnerable.

Figure 5.27: Total Deposits of TFS vs. MF in US Dollars (2005-2009)



This study’s hypothesis was that outreach of financial services institutions applying a microfinance approach (MF), as measured by the volume of deposits of their clients, will display faster growth rates between 2005 and 2009 when compared to the outreach of TFS (O_{TFS}). This hypothesis should therefore display the following pattern:

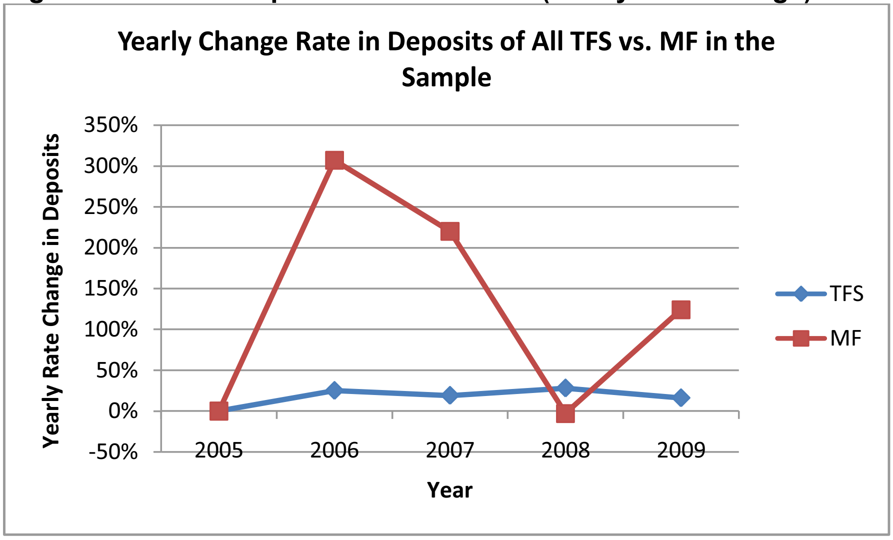
$O_{MF2005} > O_{TFS2005}$; $O_{MF2006} > O_{TFS2006}$; $O_{MF2007} > O_{TFS2007}$; $O_{MF2008} > O_{TFS2008}$; $O_{MF2009} > O_{TFS2009}$.

This study displayed the following outcome:

$O_{MF2005} > O_{TFS2005}$; $O_{MF2006} > O_{TFS2006}$; $O_{MF2007} > O_{TFS2007}$; $O_{MF2008} < O_{TFS2008}$; $O_{MF2009} > O_{TFS2009}$.

Although the pattern shows a slight deviation in 2008, as depicted in figure 5.28 below, when smoothing the trend line, the hypothesized pattern clearly occurred.

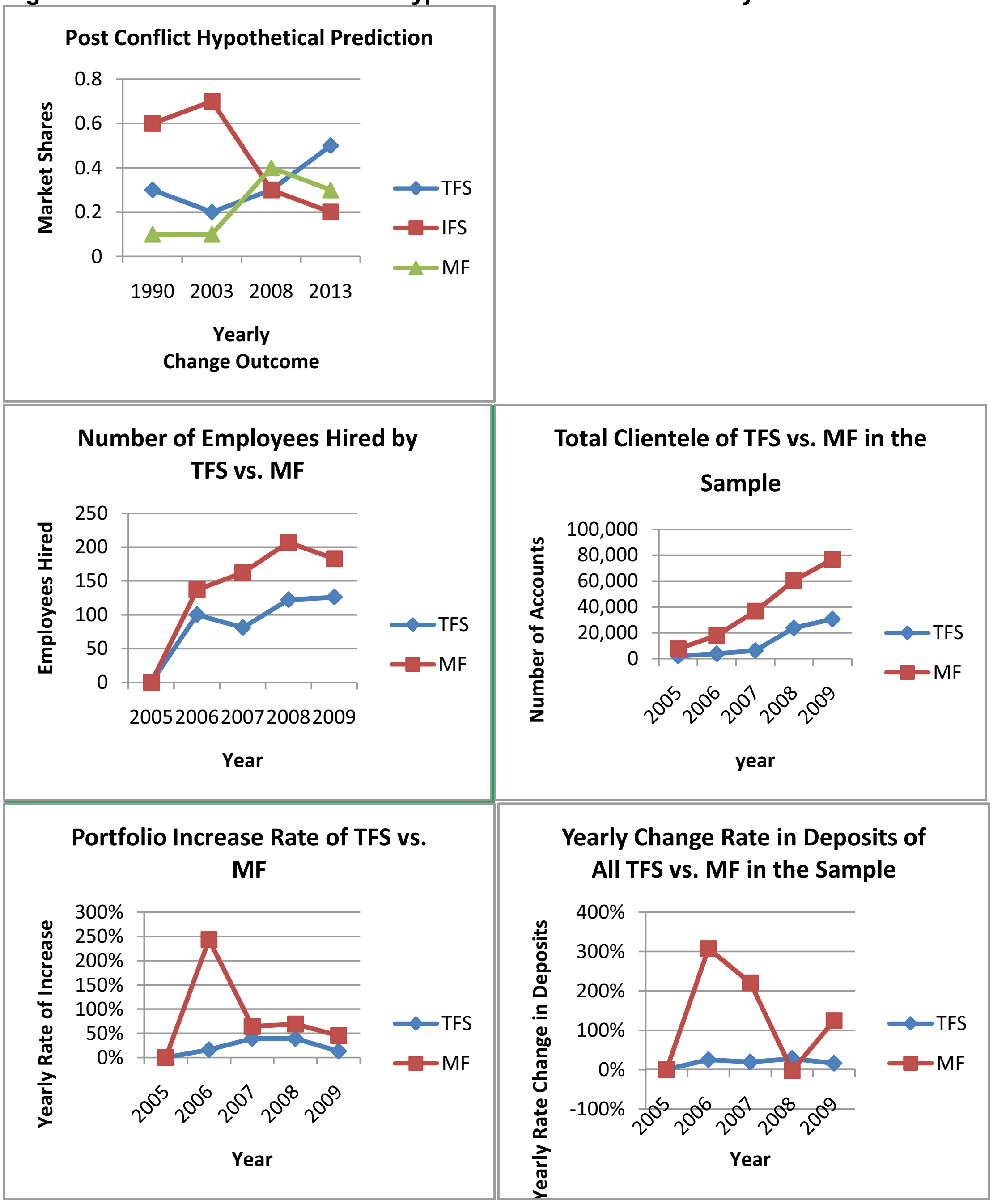
Figure 5.28: Total Deposits of TFS vs. MF (Yearly Rate Change)



5.4.5. Outreach Hypothesized vs. Study's Outcome

This study postulated that MF is a valuable financial service reconstruction tool in post-conflict communities because it displays more rapid and profound increases in outreach and financial performance during consecutive years in post-conflict situation, and its services translate into reconstruction. It also hypothesized MF is a better tool than TFS particularly at the earlier stages of post-conflict reconstruction because MF displays more rapid increases in outreach. Four variables were proposed for that purpose: employment, clientele, lending, and deposits/Savings. Time series analysis was proposed to look at the trend displayed by the four variables by plotting raw numbers and/or percentage change from each year to illustrate the trends. Figure 5.29 below summarizes the findings related to the comparison of outreach of TFS and MF. This study has found that, when comparing outreach of financial services institutions applying a microfinance approach (MF) to those applying a traditional financial approach (TFS), using employment, clientele, loan portfolio, and deposits as measurements, this study displayed the hypothesized pattern of $\mathbf{O_{MF2005}<O_{TFS2005}}$; $\mathbf{O_{MF2006}>O_{TFS2006}}$; $\mathbf{O_{MF2007}>O_{TFS2007}}$; $\mathbf{O_{MF2008}>O_{TFS2008}}$; $\mathbf{O_{MF2009}>O_{TFS2009}}$. MF hired more employees than TFS; MF attracted more clients (as expressed by the number of accounts) than TFS; MF loan portfolios experienced higher rates of increase than TFS; and overall, MF displayed faster consecutive yearly increase rates than TFS. The hypothesized pattern occurred at the institutional level as well as at the industry level. Figure 5.29 depicts the time series trends summary of the above findings.

Figure 5.29: TFS vs. MF Outreach Hypothesized Pattern vs. Study's Outcome



5.5. Comparing Financial Performance of Traditional Financial Services (TFS) to Financial Performance of Microfinance Institutions (MF)

5.5.1. Assets

Rawbank, BCDC, Finca, and Procredit total assets were analyzed at the individual financial institution level as well at their category level to depict the trend from 2005 to 2009. The study looks at both the total assets of each financial institution during the five-year period but also the increase rates of their total assets throughout the five-year period (2005-2009). Table 5.14 summarizes the data.

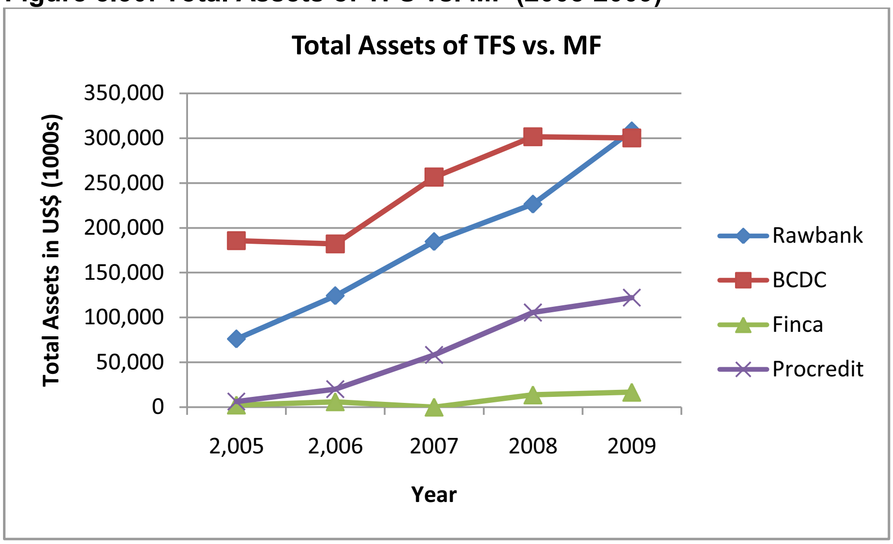
Table 5.14: Total Assets in Thousands US Dollars of TFS vs. MF (2005-2009)

Institutions Name	2005	2006	% Chg 05-06	2007	% Chg 06-07	2008	% Chg 07-08	2009	% Chg 08-09
Rawbank	75,851	124,084	64%	184,530	49%	226,317	23%	308,135	36%
BCDC	185,400	181,900	-2%	256,500	41%	301,500	18%	300,300	-0.4%
Total TFS	261,251	305,984	17%	441,030	44%	527,817	20%	608,435	15%
Finca	2,336	5,987	156%	103,83	73%	13,556	31%	16,542	22%
Procredit	6,077	19,980	229%	58,149	191%	105,382	81%	122,012	16%
Total MF	8,414	25,967	209%	68,532	164%	118,939	74%	138,555	16%

Source: BCDC Annual Reports 2005, 2006, 2008 & 2009; Mixmarkets, 2010; Procredit Annual Reports 2008 & 2009;Rawbank Annual Reports 2005, 2006, 2007, 2008 & 2009.

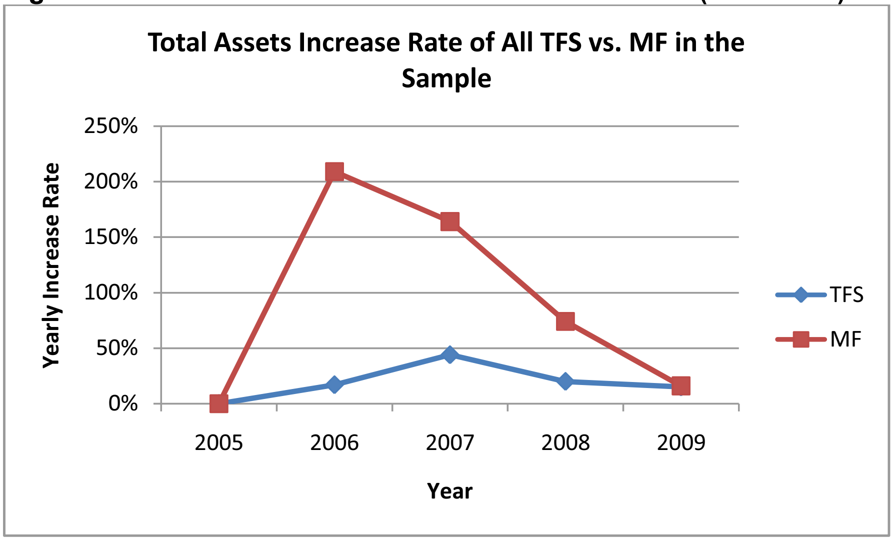
BCDC has been the financial institution with the highest total assets from 2005 to 2008, but was surpassed by Rawbank in 2009. As of December 2009, Rawbank has also posted the highest increase rate of its assets (36%) among the four financial institutions. In contrast, BCDC, the financial institution with the slowest growth of its assets, posted negative rates (-2%) in 2006 and in 2009 (-0.4%). Procredit has dominated all its peers from 2005 to 2008, posting the highest increase rates of its total assets among all, before decreasing to a 16% increase rate in 2009. Finca has been positive all the way from 2005 to 2009 but has shown a decreasing pattern with lower and lower increase rates through the five years (2005-2009). When looking at the two categories (TFS vs. MF), the latter has experienced faster increase rates during the entire period (2005-2009). Figure 5.30 depicts the time series trends of each financial institution involved in this study.

Figure 5.30: Total Assets of TFS vs. MF (2005-2009)



The dollar value of total assets yields valuable information on the volume of assets financial institutions have to provide financial services. Clearly, the higher the dollar amount a financial institution has at its disposal the better. However, as an indicator of financial performance, the dollar amount does not tell the whole story. It is instead the increase rate through the years that captures the effect of reconstruction of financial services, which is central to this study. The rate of increases of each institution and each category (TFS vs. MF) should determine the effectiveness of each institution and each category to reconstruct financial services in a post-conflict context. This effect is depicted in Figure 5.31 below.

Figure 5.31: Total Assets Increase Rate of TFS vs. MF (2005-2009)



This study's hypothesis was that financial performance of financial services institutions applying a microfinance approach (MF), as measured by their total assets, will display faster growth rates between 2005 and 2009 when compared to the financial performance of TFS. The findings in this study have displayed the pattern $\mathbf{FP_{MF2005} > FP_{TFS2005}}$; $\mathbf{FP_{MF2006} > FP_{TFS2006}}$; $\mathbf{FP_{MF2007} > FP_{TFS2007}}$; $\mathbf{FP_{MF2008} > FP_{TFS2008}}$; $\mathbf{FP_{MF2009} > FP_{TFS2009}}$, which is indeed identical with the hypothesized pattern, as it has been depicted in Figure 5.31 above.

5.5.2. Profitability

As mentioned above, Return on Equity (ROE) and Return on Assets (ROA) are two measures that indicate profitability of a portfolio or a business - ROA measures returns generated from total assets while ROE measures returns generated from total equity. When looking at the data collected, ROE and ROA presented the same trend and it was decided that only one will be subject to analysis, and in this case it is the return on total assets (ROA). Exhibit 51below presents the ROA rates of each financial institution included in this analysis.

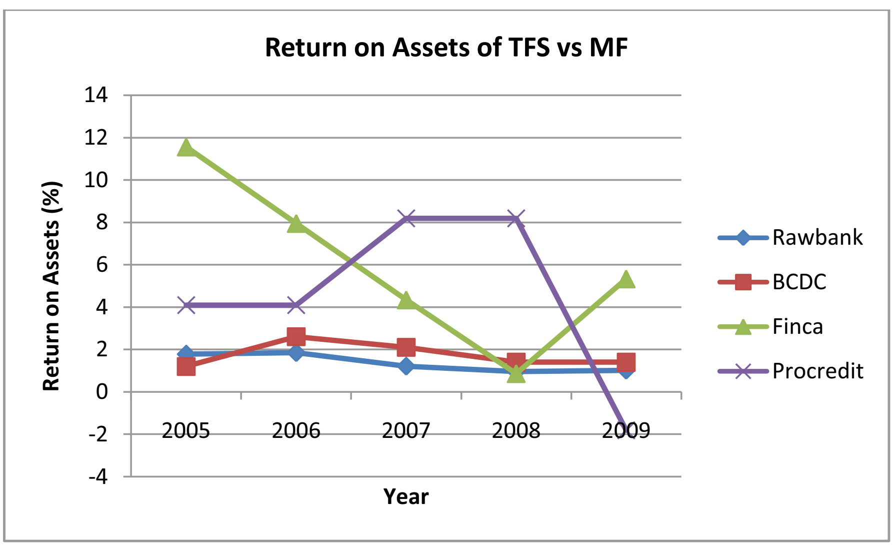
Table 5.15: Return On Assets (ROA) of TFS vs. MF (2005-2009)

Institutions Name	2005	2006	2007	2008	2009
Rawbank	1.78	1.85	1.21	0.96	1.02
BCDC	1.2	2.6	2.1	1.4	1.4
TFS Average	1.49	2.23	1.66	1.18	1.21
Finca	11.56	7.95	4.34	0.86	5.33
Procredit	4.09	4.09	8.18	8.18	-1.82
MF Average	7.83	6.02	6.26	4.52	1.76

Source: BCDC Annual Reports 2005, 2006, 2008 & 2009; Mixmarkets, 2010; Procredit Annual Reports 2008 & 2009;Rawbank Annual Reports 2005, 2006, 2007, 2008 & 2009.

When looking at exhibit 51, all four financial institutions posted positive ROA during the five consecutive years (2005-2009), except for Procredit which posted a negative ROA (-1.82) in 2009. Finca has emerged as the financial institution with the highest ROA (6% average) ahead of Procredit (4.5% average), BCDC (1.74% average), and Rawbank (1.36% average). Exhibit 52 depicts the time series trends of all four financial institutions from 2005 to 2009.

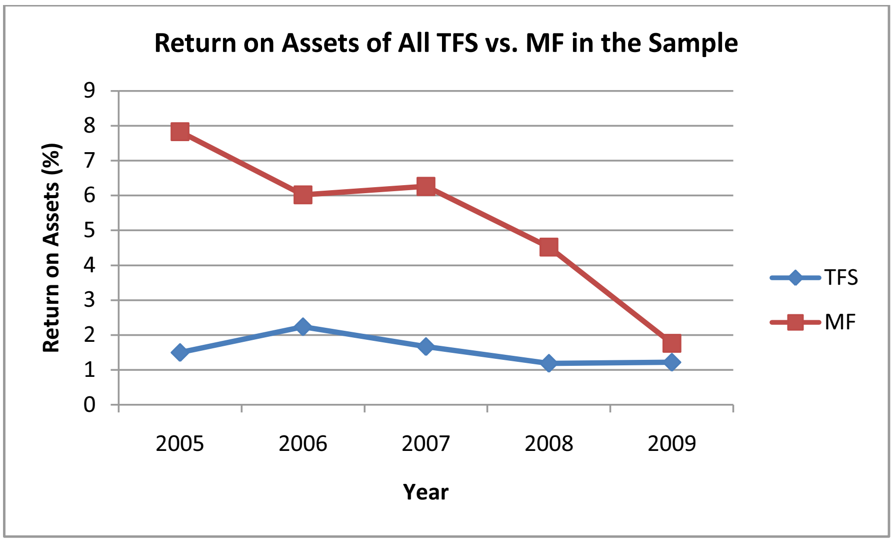
Figure 5.32: Return on Assets (ROA) of Financial Institutions (2005-2009)



When looking at the two categories (TFS vs. MF), microfinance institutions have averaged better ROAs for the entire period (2005-2009), as depicted on Figure 5.33

below. This study's hypothesis was that financial performance of financial services institutions applying a microfinance approach (MF), as measured by their return on total assets (ROA), will display higher ROAs between 2005 and 2009 when compared to the financial performance of TFS. The findings in this study have displayed the pattern $\mathbf{FP_{MF2005} > FP_{TFS2005}}$; $\mathbf{FP_{MF2006} > FP_{TFS2006}}$; $\mathbf{FP_{MF2007} > FP_{TFS2007}}$; $\mathbf{FP_{MF2008} > FP_{TFS2008}}$; $\mathbf{FP_{MF2009} > FP_{TFS2009}}$, which is indeed identical with the hypothesized pattern.

Figure 5.33: Return on Assets (ROA) of TFS vs. MF (2005-2009)



5.5.3. <u>Efficiency</u>

When analyzing microfinance institutions' efficiency, the self-sufficiency rate of microfinance emerged as the right measure compared to others such as nominal or real yield on portfolio. It was argued indeed that microfinance institutions are often criticized for dependence on grants and donations and that self-sufficiency (use of proper funds to operate) should provide this study with a better measure of microfinance as a tool for financial services reconstruction. In this section where a comparison is conducted between financial institutions applying a microfinance approach and those using traditional approach, a different variable is used: the network expansion pace of each category. While not being a proper measure of financial performance, it is a good indicator of efficiency. Table 5.16 presents data related to the network expansion of each institution and each category.

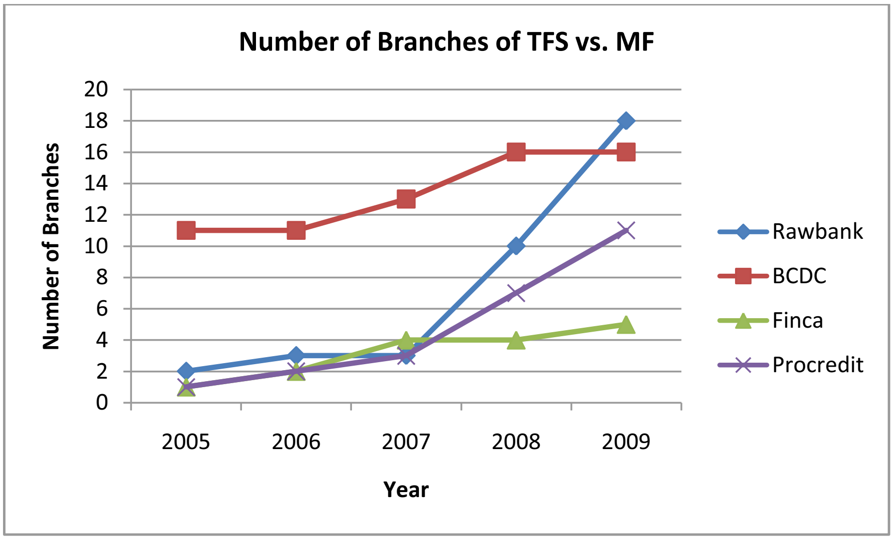
Table 5.16: Network Expansion of TFS vs. MF (2005-2009)

Institutions name	2005	2006	Chg 05-06	2007	Chg 06-07	2008	Chg 07-08	2009	Chg 08-09
Rawbank	2	3	1	3	0	10	7	18	8
BCDC	11	11	0	13	2	16	3	16	0
Total TFS	13	14	1	16	2	26	10	34	8
Finca	1	2	1	4	2	4	0	5	1
Procredit	1	2	1	3	1	7	4	11	4
Total MF	2	4	2	7	3	11	4	16	5

Source: BCDC Annual Reports 2005, 2006, 2008 & 2009; Mixmarkets, 2010; Procredit Annual Reports 2008 & 2009;Rawbank Annual Reports 2005, 2006, 2007, 2008 & 2009.

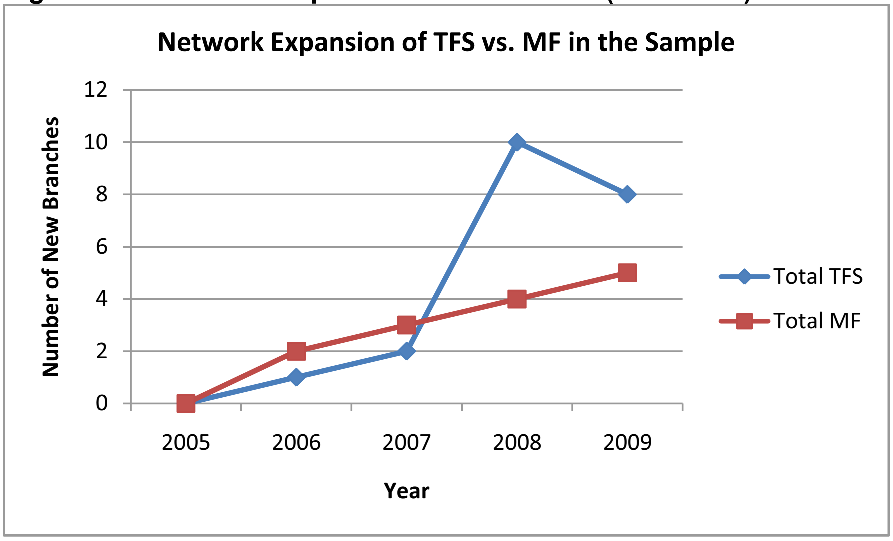
Exhibit Table 54 indicates that, as of December 2009, Rawbank operated the largest number of branches (18), ahead of BCDC (16), Procredit (11), and Finca (5). Procredit has emerged as the fastest financial institution in expanding its network of branches, going from one branch in 2005 to eleven branches in 2009. Rawbank has shown almost the same pattern, growing from only two branches in 2005 to 18 branches, a nine times increase in five years. Finca is grown five times in five years, while BCDC has been the slowest, adding only five branches in five years. When looking at the average of each category, microfinance institutions have grown faster from 2005 to 2007 but the commercial banks have reversed the trend to become faster than microfinance institutions during the last two years (2008 and 2009). Exhibit 55 below depicts the time series trend of the financial institutions' network expansion from 2005 to 2009.

Figure 5.34: Network Expansion of TFS vs. MF (2005-2009)



This study's hypothesis was that financial performance of financial services institutions applying a microfinance approach (MF), as measured by their network expansion, will display faster growth between 2005 and 2009 when compared to the financial performance of TFS. The hypothesis was formulated as $\mathbf{FP_{MF2005} > FP_{TFS2005}}$; $\mathbf{FP_{MF2006} > FP_{TFS2006}}$; $\mathbf{FP_{MF2007} > FP_{TFS2007}}$; $\mathbf{FP_{MF2008} > FP_{TFS2008}}$; $\mathbf{FP_{MF2009} > FP_{TFS2009}}$. When looking at figure 5.35, the outcome in this study deviates from the hypothesis in 2008 and 2009. The outcome is indeed $\mathbf{FP_{MF2005} > FP_{TFS2005}}$; $\mathbf{FP_{MF2006} > FP_{TFS2006}}$; $\mathbf{FP_{MF2007} > FP_{TFS2007}}$; $\mathbf{FP_{MF2008} < FP_{TFS2008}}$; $\mathbf{FP_{MF2009} < FP_{TFS2009}}$. The overall trend has not matched the hypothesis pattern, as it can be seen in figure 5.35 providing the time series trends of TFS and MF.

Figure 5.35: Network Expansion of TFS vs. MF (2005-2009)



5.5.4. Risk

It was said earlier in this chapter that post-conflict microfinance institutions operate in a risky environment due to the flexibility of its methodology (non-rigorous lending conditions) compounded by the legacy of conflict. This is true with any type of financial institutions, including commercial banks resuming their activities (like BCDC in Congo) or new post-conflict commercial banks (like Rawbank). Credit risk, market risk, liquidity risk, and operational risk are compounded by the turmoil of post-conflict reconstruction, mostly an unstable macroeconomic environment. As with the previous analysis, portfolio at Risk (PAR) is used here because it is generally considered as a good indicator of the level of a financial institution's portfolio risk. This study was unable to get BCDC data related to its PAR. Only three financial institutions are included in the analysis. Exhibit 57 presents PAR of financial institutions studied.

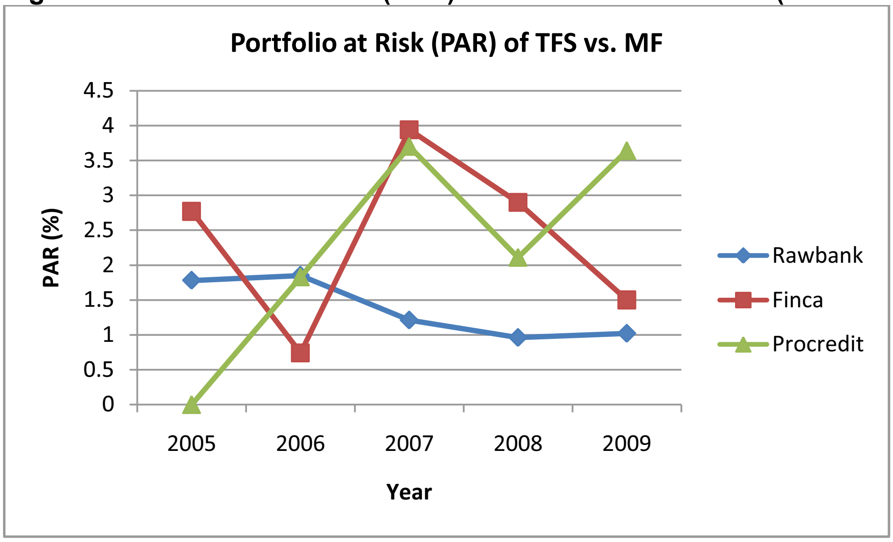
Table 5.17: Portfolio at Risk (PAR) of TFS vs. MF (2005-2009)

Institutions Name	2005	2006	2007	2008	2009
Rawbank	1.78	1.85	1.21	0.96	1.02
Total TFS/Average	1.78	1.85	1.21	0.96	1.02
Finca	2.77	0.74	3.94	2.9	1.5
Procredit	0	1.83	3.7	2.11	3.64
Total MF	2.77	2.57	7.64	5.01	5.14
MF Average	1.39	1.29	3.82	2.51	2.57

Source: BCDC Annual Reports 2005, 2006, 2008 & 2009; Mixmarkets, 2010; Procredit Annual Reports 2008 & 2009; Rawbank Annual Reports 2005, 2006, 2007, 2008 & 2009.

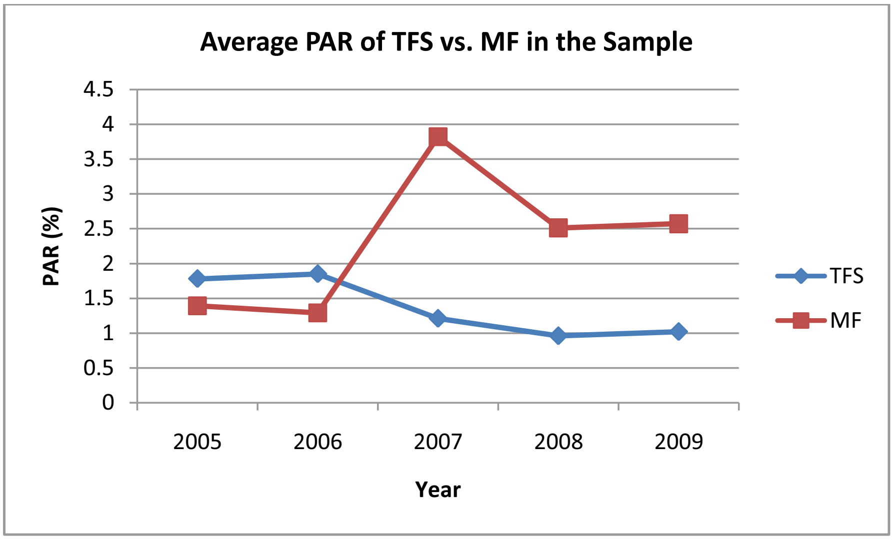
Rawbank has maintained the most efficient risk management of its portfolio during the five consecutive years (2005-2009), remaining under 2% PAR for entire period, while Finca and Procredit have exceeded 3.5% in some years. This outcome is not unexpected considering the specific approaches used in lending by financial institutions applying a microfinance methodology and those applying a pure commercial approach to lending. Nevertheless, Finca and Procredit have also demonstrated good risk management of their portfolio. Finca's highest PAR occurred in 2007 (3.94%) but the trend has been a descending pattern during the last two years. Procredit has experienced ups and downs but has also maintained a strong portfolio with a maximum PAR of 3.64% in 2009. Exhibit 58 depicts the time series trends of financial institutions included in the analysis.

Figure 5.36: Portfolio at Rear (PAR) of Financial Institutions (2005-2009)



This study's hypothesis was that financial performance of financial services institutions applying a microfinance approach (MF), as measured by their portfolio at risk (PAR) rate, will display better rate (lower) between 2005 and 2009 when compared to the financial performance of TFS. The hypothesis was formulated as $\mathbf{FP_{MF2005} > FP_{TFS2005}}$; $\mathbf{FP_{MF2006} > FP_{TFS2006}}$; $\mathbf{FP_{MF2007} > FP_{TFS2007}}$; $\mathbf{FP_{MF2008} > FP_{TFS2008}}$; $\mathbf{FP_{MF2009} > FP_{TFS2009}}$. When looking at exhibit 59 below, the outcome in this study deviates from the hypothesis from 2006 to 2009 and fits the hypothesized pattern only in 2005. The outcome is indeed $\mathbf{FP_{MF2005} > FP_{TFS2005}}$; $\mathbf{FP_{MF2006} < FP_{TFS2006}}$; $\mathbf{FP_{MF2007} < FP_{TFS2007}}$; $\mathbf{FP_{MF2008} < FP_{TFS2008}}$; $\mathbf{FP_{MF2009} < FP_{TFS2009}}$. The overall trend has not matched the hypothesis pattern, as can be seen in Figure 5.37.

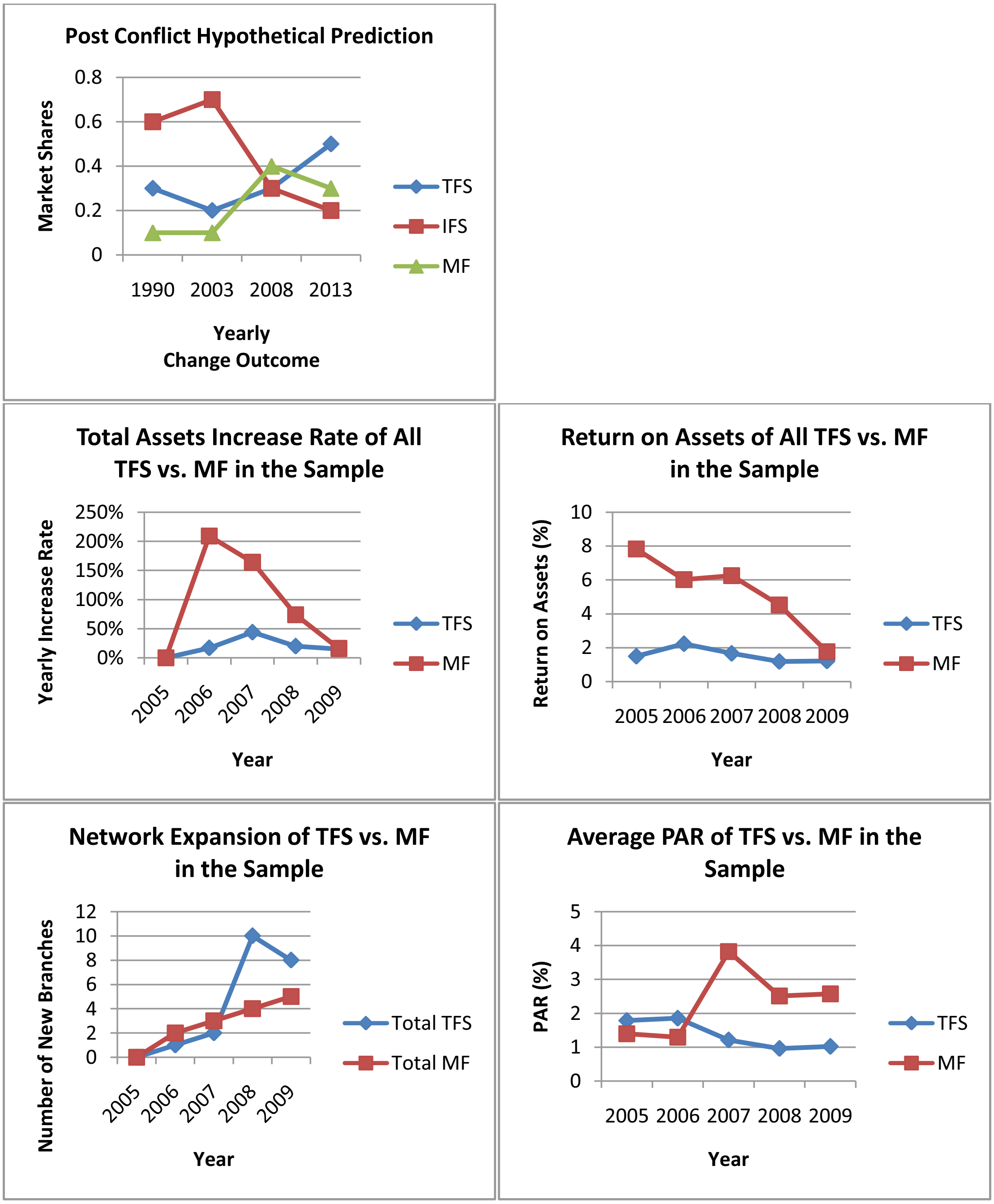
Figure 5.37: Portfolio at Risk (PAR) of TFS vs. MF (2005-2009)



5.5.5. <u>Comparing Financial Performance Hypothesized vs. Study's Outcome</u>

This study postulated that MF is a valuable financial service reconstruction tool in post-conflict communities because it displays more rapid and profound increases in outreach and financial performance during consecutive years in post-conflict situations, and its services translate into reconstruction. It also hypothesized that MF is a better tool than TFS particularly at the earlier stages of post-conflict reconstruction because MF displays more rapid increases in outreach and financial performance. Four variables were proposed for that purpose: assets, efficiency, profitability, and risk. Time series analysis was suggested to look at the trend displayed by the four variables by plotting raw numbers and/or percentage change from each year to illustrate the trends. Exhibit 60 below summarizes the findings related to the comparison of financial performance of TFS and MF. This study can conclude that: First, this study's hypothesis that financial performance of financial services institutions applying a microfinance approach (MF), as measured by their total assets, will display faster growth rates between 2005 and 2009 when compared to the financial performance of TFS, stood and this study's outcome displayed the hypothesized pattern and found indeed $FP_{MF2005} > FP_{TFS2005}$; $FP_{MF2006} > FP_{TFS2006}$; $FP_{MF2007} > FP_{TFS2007}$; $FP_{MF2008} > FP_{TFS2008}$; $FP_{MF2009} > FP_{TFS2009}$. Second, this study's hypothesis that financial performance of financial services institutions applying a microfinance approach (MF), as measured by their return on total assets (ROA), will display higher ROAs between 2005 and 2009 when compared to the financial performance of TFS, stood and this study's outcome displayed the hypothesized pattern and found indeed $FP_{MF2005} > FP_{TFS2005}$; $FP_{MF2006} > FP_{TFS2006}$; $FP_{MF2007} > FP_{TFS2007}$; $FP_{MF2008} > FP_{TFS2008}$; $FP_{MF2009} > FP_{TFS2009}$. Third, this study's hypothesis that financial performance of financial services institutions applying a microfinance approach (MF), as measured by their network expansion, will display faster growth between 2005 and 2009 when compared to the financial performance of TFS, partially stood and this study's outcome displayed the hypothesized pattern and found indeed $FP_{MF2005} > FP_{TFS2005}$; $FP_{MF2006} > FP_{TFS2006}$; $FP_{MF2007} > FP_{TFS2007}$; $FP_{MF2008} < FP_{TFS2008}$; $FP_{MF2009} < FP_{TFS2009}$. The overall trend has not matched the hypothesized pattern. Fourth, this study's hypothesis that financial performance of financial services institutions applying a microfinance approach (MF), as measured by their portfolio at rear (PAR) rate, will display better rate (lower) between 2005 and 2009 when compared to the financial performance of TFS, did not stand and this study's outcome displayed the hypothesized pattern and instead found $FP_{MF2005} > FP_{TFS2005}$; $FP_{MF2006} < FP_{TFS2006}$; $FP_{MF2007} < FP_{TFS2007}$; $FP_{MF2008} < FP_{TFS2008}$; $FP_{MF2009} < FP_{TFS2009}$. The overall trend has not matched the hypothesized pattern.

Figure 5.38: Financial Performance Hypothesized Pattern vs. Study's Outcome



5.6. Reconstruction by Microfinance

While outreach and financial performance are measured at the institutional level, the reconstruction variable is measured at the client and the household levels. Reconstruction is measured by the level of clients' business development, and the access to education by family members of clients, the household's assets acquisition, and household's standard of living.

Data used in the following analysis originated from ninety-three structured interviews conducted between 6/2/2010 and 11/11/2010 in the DRC, using the "MFI Clients Post-Conflict Reconstruction Survey" attached in Appendix 2. Forty-six interviews were conducted among clients of microfinance institutions (MF) and forty-seven interviews were conducted among non- clients of either microfinance institutions or commercial banks (Non Client). These ninety-three interviews provided a set of primary quantitative data summarized in the following sections.

To test the business development hypothesis, three variables were tested statistically: number of businesses, profit, and number of employees. To test the education hypothesis, two variables were submitted to inferential analysis: number of children currently sent to school and number of children sent to school before microfinance. To test the asset acquisition hypothesis, one score summarizing assets acquisition was submitted to statistical analysis. That variable was the Total value of all of goods acquired. To test the standard of living hypothesis, two variables were submitted to statistical analysis: individual income of interviewees and their households' expense. Savings emerged as another key measure of reconstruction during data collection. To test the savings hypothesis, one variable was submitted to statistical analysis: amount saved. This study also computed the DPCE (Daily Per Capita Expenditure) Score. The DPCE is a score used by FINCA Client Assessment Tool (FCAT) to determine the poverty level of an MFI client (FINCA, 2007). The methodology is based on indicators of poverty scaled (World Bank, 2009) as following: (a) Less than $1/day of total household consumption indicates "Severe Poverty"; (b) $1-$2/day of total household consumption indicates "Moderate Poverty"; and above $2/day of total household consumption indicates "Vulnerable or Non-Poor". Using collected data from the variable "Expenditures" of the survey resulted in computing a DPCE for each category of clients. Using the DPCE score to determine their consumption level should provide a good indication of the reconstruction effect on clients.

Prior to executing statistical tests, some descriptive information was provided for each of these variables. Selected SPSS output (Tables and Figures) are displayed in Appendix 3. In the narrative, tables and figures in Appendix 3 will be numbered as A3 plus the number.

5.6.1. Surveyed Participants

5.6.1.1. Gender

Women represented 76% of the sample while men represented 24% (Table A3.1). The sample reflects the composition of clients operating in the DRC's microfinance and the informal sectors. Indeed, when looking at FINCA DRC, the larger provider of outstanding loans in DRC, 76% of its clients as of December 2009 were women (MixMarket, 2010). Also, Todaro & Smith (2006) argues that “women often represent the bulk of the informal sector labor supply, working for low wages at unstable jobs with no employee or benefits” (p. 333). This gender distribution characteristic was almost equally represented in the two comparison groups, as depicted on table 10 below: 20% among clients of microfinance institutions were male and 80% were female; 28% among non-clients of microfinance institutions were male and 72% were female.

When looking at the distribution among the types of microfinance clients (village banking, solidarity group, and individual client), it appears that women are concentrated in the village banking type (which provides lower amount of loans: average of $US 446 monthly found in this study) while men are concentrated in the individual client type (which provides higher amount of loans: average of US$ 1,475 monthly found in this study). Nine-two percent of village banking clients were female and only 8% (Table A3.2) were male. On the other, one-third (around 32%) of men were individual clients or members of a solidarity group.

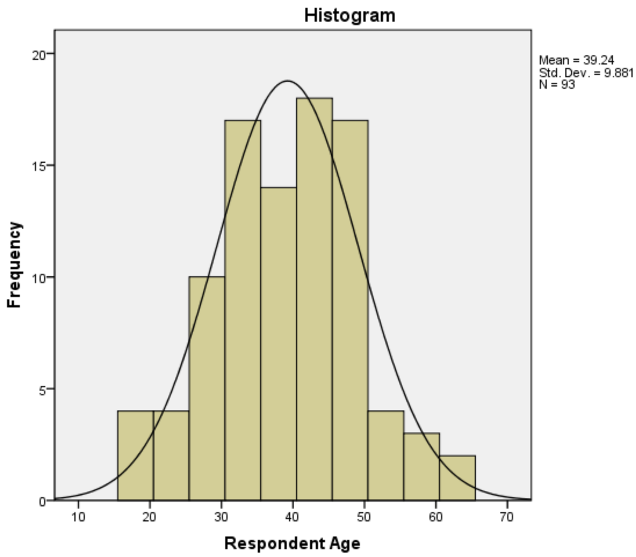
5.6.1.2. Marital Status

Fifty-nine percent in of respondents were married; 25% singles; 10% widows; and 6% were separated or divorced (Table A3.3). Singles and widows represented together one third of the sample (35%) which means that most of these households depend on only one source of income, the one earned by the single or the widow. This distribution corroborates Todaro & Smith’s (2006) argument that “the increase in the number of single female migrants has also contributed to the rising proportion of urban households headed by women, which tend to be poorer, experience tighter resource constraints, and retain relatively high fertility rates" (p. 333).

5.6.1.3. Age

The mean age of respondents was 39.24 and their median was 40 (Table A3.4). The sample has multiple modes with the smallest being 35 years old. The sample had a standard deviation of 10 years (9.881) and a range of 46 years with the oldest interviewee being 64 years old and the youngest 18 years old. In Figure 5.39, the sample age's distribution appears closely normal (Field, 2005). The histogram reveals also that the majority of clients fall between the ages of 25 and 50 years old, which represent the active population of DRC who are the main source of income for their households. This section of the population is the target of microfinance institutions applying a poverty alleviation approach, claiming that the overall goals of microfinance should be poverty reduction and empowerment (Hishigsuren, 2004). Whether these households fall into the severe poverty rank ($1 or less per day), the moderate poverty rank ($1.01-$2 per day), or the vulnerable category (2.01-$3 per day), they are generally low-income households deprived access to mainstream financial institutions services (Daley-Harris & Awimbo, 2006). As noticed by Todaro & Smith (2006) "the lack of capital is a major constraint on activities of the informal sectors and the provision of credit would therefore permits these enterprises to expand, produce more profit, and hence generate more income and employment" (p.333).

Figure 5.39: Respondents Age Distribution



5.6.1.4. Experience with Financial Institutions

Out of the 93 interviews, forty-six interviews were conducted among clients of microfinance institutions (MF); and forty-seven interviews were conducted among non-clients of either microfinance institutions or commercial banks (Non Client). The two groups are the comparison groups used for various analyses related to the reconstruction hypothesis. Table 5.18 presents the distribution of the sample in terms of their experience with formal financial services providers.

Table 5.18: Experience with Financial institutions

Experience with Financial Institutions	Number of Interviewees	Percentage
Client of Microfinance Institution	46	49.5%
Not a Client of either Type of Financial Institution	47	50.5%
Total	93	100.0%

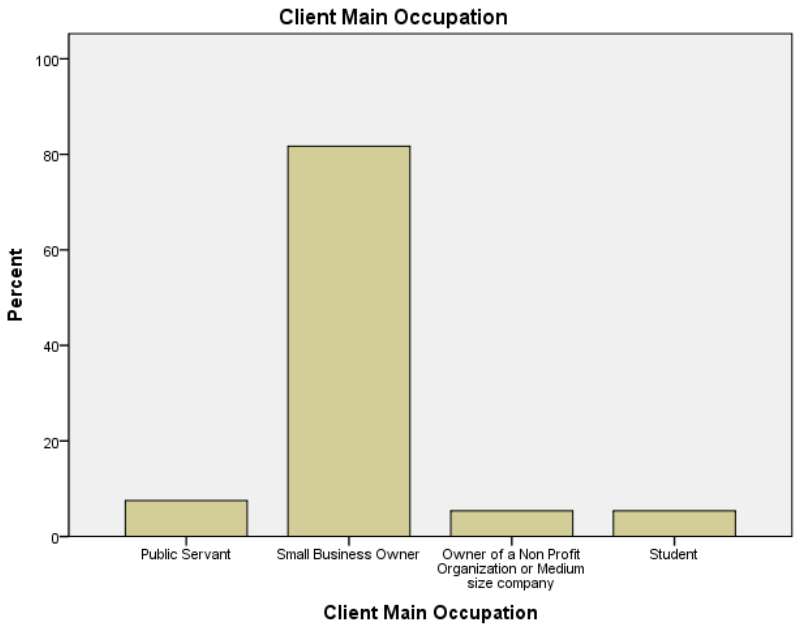
5.6.1.5. Types of Clients of Microfinance Institutions

The microfinance industry usually categorizes clients into group lending (solidarity group loans, expanded solidarity group loans, village banking) and individual lending (working capital loans, fixed asset loans, small business loans, agricultural loans, home improvement loans, lines of credit, consumer loans, emergency loans, pawn loans, parallel loans). The two approaches have resulted in three main types of clients: village banking, solidarity group, and individual client. The 'group methodology' has been the cornerstone of microfinance since its inception; however, John Hatch is generally recognized as the founder of the village banking model that brings together 25 to 40 people to form a group called a 'village bank'. The microfinance institution provides financial services to the group as a unit, mostly in the areas of loans and financial education. In a village bank, the group constitutes their collateral and is therefore collectively responsible for the full amount borrowed; if one member defaults, the entire group bears the responsibility to pay back the loan defaulted and in some cases get their credit score affected. The solidarity group is smaller in size (up to 10 members but generally around 5) but operates exactly as does the village bank in terms of lending policy and financial education. The individual client deals with the microfinance institution alone. This typology of clients has been largely influenced by the microfinance credit methodology which lies at the heart of microfinance and its quality. It is believed to be one of the most determinant factors for the efficiency, impact and profitability of a microfinance institution. Among microfinance clients, the sample had the following composition: 52.2% were village banking clients, 21.7% were members of solidarity groups, and 26.1% were individual clients (Table A3.5).

5.6.1.6. Clients Main Occupations

Except for one case, all interviewees own some type of business. Small business ownership reveals therefore to be the main occupation of clients of financial institutions and non-clients. Overall, 82% of the sample considered themselves primarily micro and small business owners; 8% considered themselves primarily public servants conducting small business in addition to their main job as public servant; 5% were primarily owners of not for profit organizations or of a medium size business; and 5% were students conducting small businesses while studying at local universities (Table A3.6). Figure 5.40 below displays the dominance of small business ownership as the main occupation of interviewees from both comparison groups: microfinance institutions' clients and non-clients of either type of financial services providers. It was important that this study's sample reflects this distribution because, as said above, post-conflict microfinance can help reconstruct small enterprises destroyed by armed conflict by providing the necessary capital to consolidate existing business or create new business. Indeed, Santos (2003) suggested that in the post-conflict DRC, microfinance should seize the opportunity to finance small, medium and micro enterprises. This section of this study, comparing microfinance institutions clients and non-clients, can be considered an impact evaluation of the role of major microfinance institutions (Procredit, Finca, Hope, Paidek, Hekima, and Mecreco, to name just a few) since they started disbursing loans to micro and small entrepreneurs in the city of Kinshasa.

Figure 5.40: Respondents Main Occupation



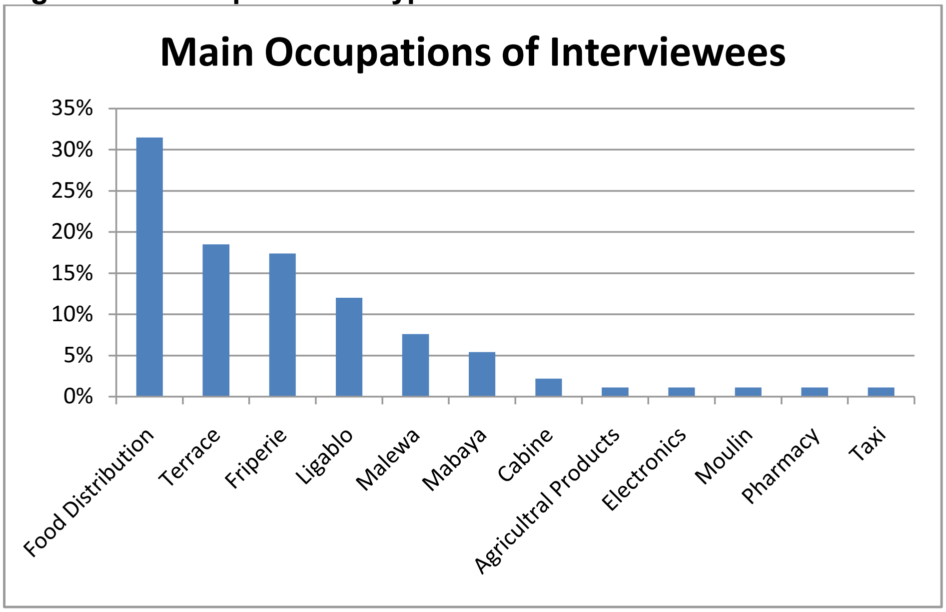
5.6.1.7. Clients Categories of Businesses

Small businesses conducted by interviewees were categorized into three sectors: commerce or trade (including retail), manufacturing, and service. As depicted in Figure 5.40, the bulk of interviewees split into the commerce/ trade/ retail and service sectors and represented together 97% of activities. Less than 3% were operating in the manufacturing sector. As mentioned above, one interviewee had no operating business at the time of interview. This distribution corroborates previous research in Kinshasa (DRC) which found that the majority of household businesses fall under "Commerce" and "Services" with 58.2 % and 29.5% respectively (Matabisi, Beyene, and Kiremidjan, 2007). However, though the 3% appear insignificant in term of percentage, it is important that the manufacturing domain be part of the poor's portfolio in term of business and receives funding from financial institutions because manufacturing has the highest potential to create jobs and wealth. The current trend in the microfinance industry is to finance trade and retail activities and less of manufacturing and agricultural activities because they usually don't fit the repayment schedule (bi-weekly and monthly). As a matter of risk mitigation, most financial institutions providing loans require a maximum of a monthly timeframe to repay loans, which doesn't fit manufacture and agricultural activities.

Twelve types of businesses were recoded among clients and non-clients of financial institutions: food distribution, mini-convenient store or "ligablo" in Lingala, beverage kiosk or "Terrace" in Congolese French, pharmacy, used clothes sale or "fripperie" in Congolese French, agricultural products, local restaurant or "Malewa" in Lingala, taxi, phone kiosk or "Cabine" in Congolese French, grain mill or "Moulin" in French, wood products sale or "Mabaya" in Lingala, and electronics. Table A3.8 presents detailed data for each type of business.

As illustrated by Figure 5.41, food distribution scored highest with 31% of interviewees involved in this type of business. Food distribution included all type of food sold at the market (grains, vegetables, beans, rice, meet, fish, and so on). Ligablo or mini-convenient stores represented around 12% of main businesses; Terraces and Fripperies were respectively at 18% and 17% among clients. Malewa represented around 7% of business of interviewees, while Mabaya sellers represented around 5%. All the other types scored 2% or less.

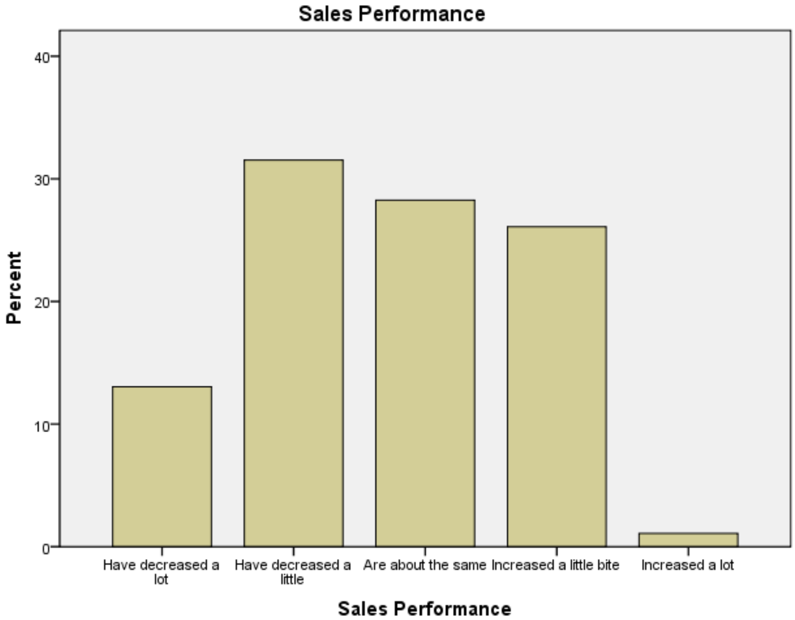
Figure 5.41: Respondents Type of Main Business



5.6.1.8. Clients Sales Performance

As shown on Table A3.9 and figure 5.42, only 27% of respondents reported that sales had increased since one year earlier. Approximately the same percentage said that sales were stable. The rest reported decreasing sales. This finding revealed that the post-conflict macroeconomic environment in the DRC is still unstable. While this underperformance of the Congolese economy has an impact on client's sales and profit, it should not affect the results of this study because it is assumed that both comparison groups are affected the same way. Figure 5.42 below displays the distribution of clients in term of their sales performance.

Figure 5.42: Respondents Sales Performance



5.6.1.9. Loan Recipients

In the sample of clients of financial services institutions, eighty percent received a loan to boost their activities (Table A3.10). Financial services referred generally to the range of activities of the finance industry, which include lending, savings, insurance, investments, pension/retirement, payment services, mortgage, and money transfer. In the DRC, "the banking sector remains underdeveloped, and the level of financial intermediation is extremely low. In 2008, the level of aggregate credit to economy to GDP was only 6.4%, and the level of customer deposits to GDP was 9.5%" (IMF World Economic Outlook Database, cited by Procredit 2010). Deposits, loans, and money transfer through Western Union and MoneyGram are the main financial products most financial institutions offer. Recently, debit cards have been introduced and an emphasis is more and more put on savings accounts. In the DRC microfinance industry, loans remain the main financial product offered to which are attached compulsory deposits or savings. For those clients with loans, three timeframes of repayment had been identified within the sample: weekly, bi-weekly, and monthly. Clients of village banking and solidarity groups are usually required to start repaying their loans a week but generally two weeks after loan disbursement. Individual clients are usually scheduled for a monthly repayment schedule. The bi-weekly repayment schedule seems to be the mode and scores 58% of clients with loans, followed by the monthly repayment schedule (33%) (Table A3.11). The loan repayment cycle currently practiced by microfinance institutions has been subject to a lot of comments by clients and non-clients interviewed. Summaries of these qualitative findings are presented in a subsequent section of this chapter; however, clients generally complained about this repayment cycle and argued that it profits the financial institution but disadvantages loan recipients.

5.6.1.10. Use of Loans

The logic behind small loans provided to micro and small entrepreneurs is that the full loan amount is invested in the current business in order to bust the business in term of volume of inventory and sales. The result would be higher profit generated, enabling the loan recipient to pay back its loan on schedule while having enough money to provide for the household well-being. However, the sample revealed that not all loans recipients invest all loan amounts into their business; a cumulative 28% invested less than all of loan received (Table A3.12). This finding is plausible in an economy where business and household expenses are mingled. This behavior appears to be a risk mitigation strategy by some recipients who prefer to keep some portion of their loan to cope with social shocks (sickness, death, social emergency, bankruptcy, and so on…).

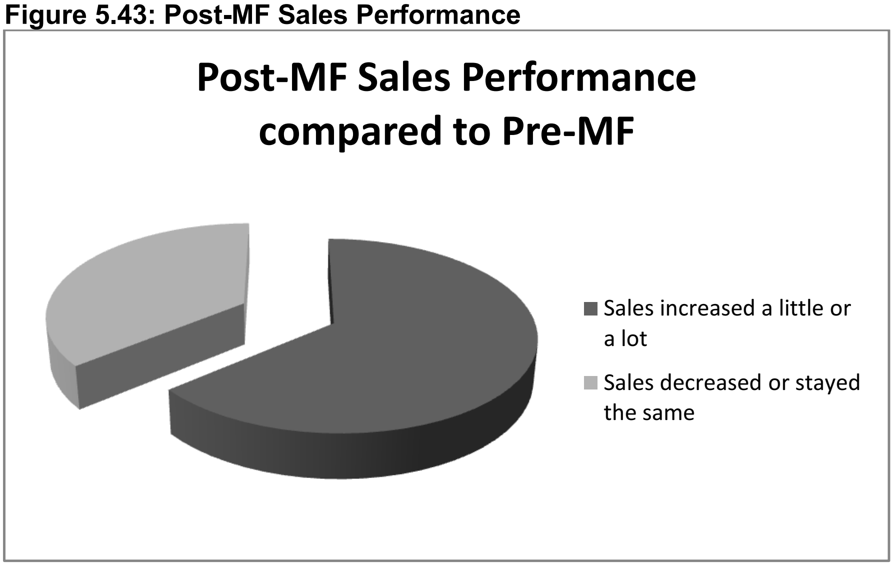
5.6.1.11. Clients Affiliations

Microfinance institutions expect their clients to belong to only one institution. This is not actually an expectation but more a requirement. The logic is simple: loans from more than one institution will overburden the loan recipient who will be unable to pay back the money borrowed on time. In a country like the DRC where there is no credit bureau and where financial providers are more than just competitors and do not share information, the chance for a client to get loans from more than one financial institution is high. However, microfinance institutions usually succeed in educating and using social pressure to convince their clients to avoid cross-loans. Nevertheless, this study's sample revealed that around 15% of clients do belong to another financial institution and take loans from that financial institution (Table A3.13).

5.6.1.12. Sales Performance of MF Clients

Microfinance as an intervention to either access to financial services or to poverty alleviation rests on business development of the microfinance client. So far, emphasis has been on micro-credits but more and more saving-led microfinance is growing and considered an equal or even better tool as intervention (Ashe, 2009). Earlier, we found that 82% of all interviewees considered small business ownership their main occupation. All clients interviewed, but one, had a running business. As said above, the logic behind small loans provided to micro and small entrepreneurs is that this loan is invested in the current business in order to boost business in terms of volume of inventory and sales. The result is higher profit generated from the business. To test this assumption, this study inquired about the level of sales performance pre and post microfinance. Only 38% of microfinance clients experienced the same or lower performance but the majority (62%) experienced some sort of increase in their sales performance (Table A3.16). This is an indication that microfinance as an intervention helps clients to boost their business. Figure 5.43 illustrates the sales performance of microfinance clients.

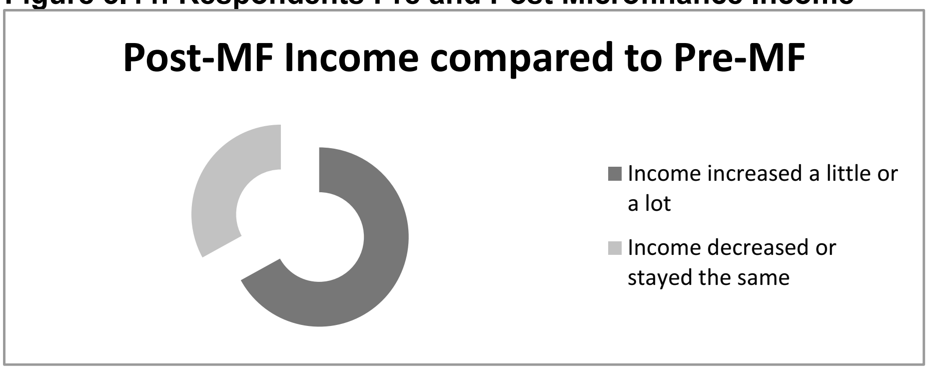
Figure 5.43: Post-MF Sales Performance



5.6.1.13. Income

With 82% of the sample depending only on their business profit as income, one of the key areas of comparison between the two comparison groups (MF vs. Non Client) is obviously the difference in their individual income level. While the independent t-test or its nonparametric equivalent will determine if there is a significant difference between MF and Non Clients, an indication comes from the pre and post level of income of microfinance clients. Table A3.16 presents the answers of forty-six interviewees exposed to microfinance intervention to know whether their current income experiences any change compared to their pre-microfinance level. The question was measured at the ordinal level and it revealed that only a cumulative percentage of 33% of interviewees said that their income level stayed the same or were lower than their pre-microfinance level. The majority of respondents (67%) said that their incomes were little higher or a lot higher. Figure 5.44 displays the outcome.

Figure 5.44: Respondents Pre and Post Microfinance Income



5.6.1.14. Savings

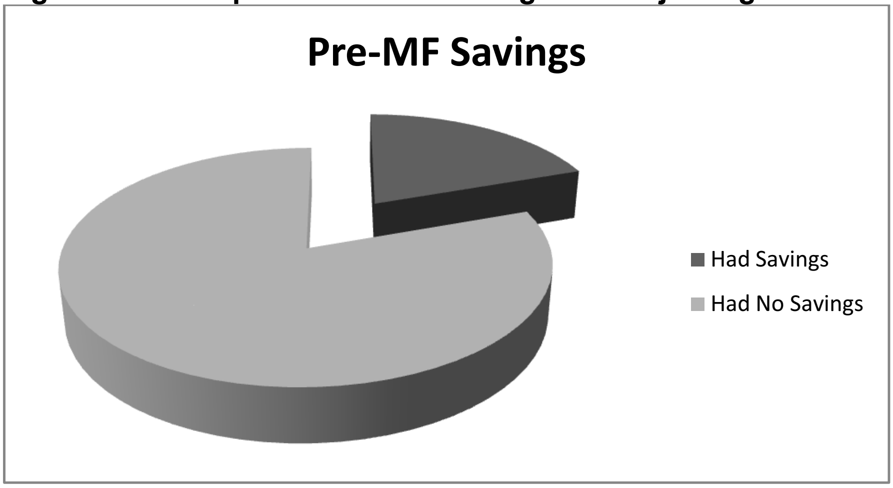
Saving is a major component of the microfinance equation. It takes many forms, depending on the approach and the methodology applied by the microfinance institution. In most cases, microfinance institutions require a deposit (up to 20% of requested loan) before loan consideration and disbursement.

Major microfinance institutions, like FINCA DRC, require compulsory saving by the client at the time of loan reimbursement. For instance, interviewee No. 87, a client of FINCA DRC, belonging to the village bank called “Ndanu” in Limete, presented us her loan's register or card detailing her cycle number, loan amount (principal), the interest, and the total amount (principal + interest). Another row detailed the payment amount, the savings, and the amount actually paid. The full name of the member was mentioned, the name of her village bank, and her membership number. This is an illustration of how important saving/deposit is for the microfinance industry. As of December 2009, the total amount saved by FINCA DRC clients was US$ 4.2 million.

Although it was not emphasized in the proposal, saving has emerged as a key variable in measuring the impact of microfinance as an intervention. Using a "yes-no" format, the sample revealed that around 56% of the entire sample had savings of some sort, as depicted on Table A3.17.

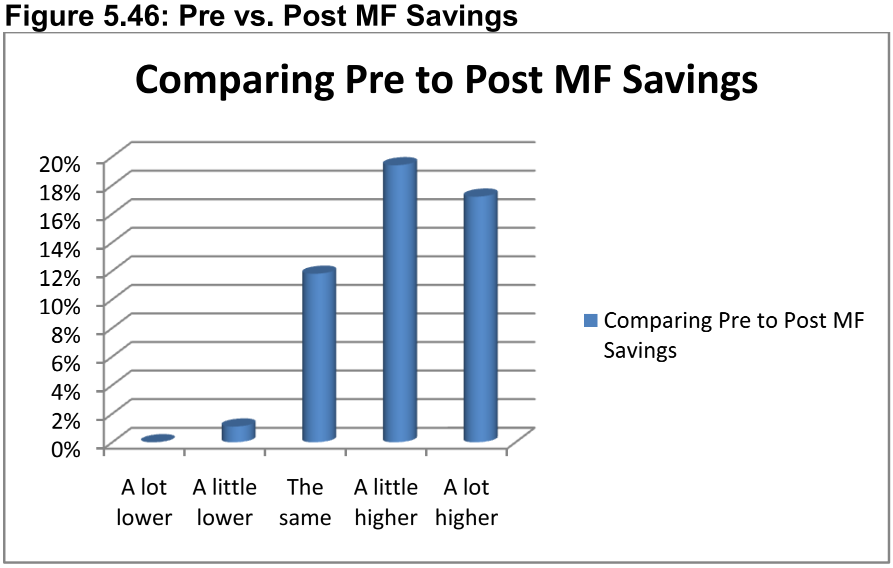
Obviously, some non-clients had savings. Seventy-seven percent among clients of financial institutions currently with savings had no savings before joining their current financial institution; only around twenty-three percent had savings before joining their current financial institution. This is an indication of a potential impact of the intervention by financial services providers, acting as a trigger to save. Table A3.18 presents the data. Figure 5.45 below provides a visual illustration that shows the impact of microfinance, as an intervention, in promoting savings among its clients.

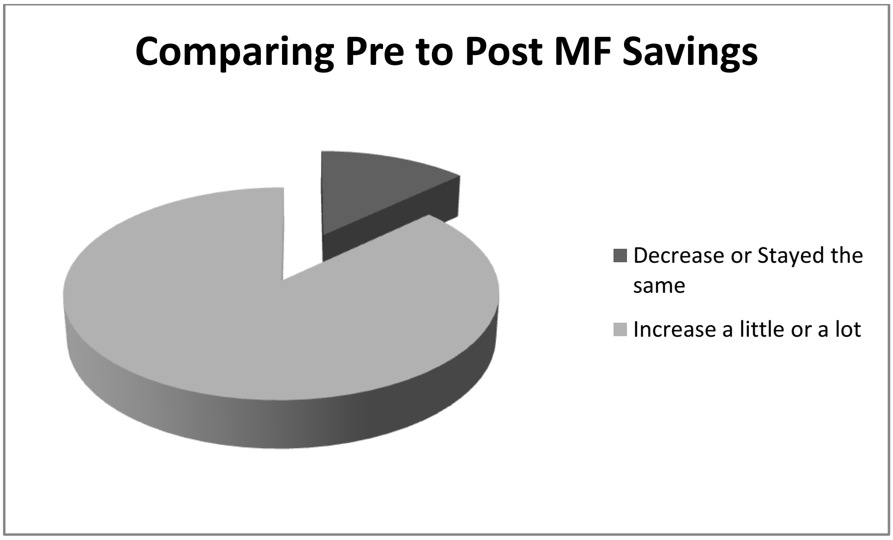
Figure 5.45: Respondents with Savings before joining MF



Finally, when comparing the amount or level of savings pre and post microfinance institution, only 14% said that their savings were the same or less than their pre-microfinance membership; the vast majority (86%) said that their savings were a little or a lot higher during their post-microfinance membership when compared to their pre-microfinance membership. Table A3.19 presents the data and Figure 5.46 below displays the impact of microfinance, as an intervention, in promoting savings.

Figure 5.46: Pre vs. Post MF Savings





Testing Reconstruction Hypotheses

When planning this study, it was said that checking for differences between the two groups (MFI clients and Non clients) will improve our understanding of how they are different. The section above (population's sample characteristics) has provided this study with some indications of differences between the two comparison groups. For instance, only 38% of microfinance clients experienced the same or lower sales performance. The majority (62%) experienced some sort of increase in their sales performance since they joined the current microfinance institution. In addition, using a "yes-no" format, the sample revealed that around 56% of the entire sample had savings of some sort; and seventy-seven percent among clients of financial institutions currently with savings had no savings before joining their current financial institution. This might be an indication of a potential impact of the intervention by financial services providers, acting as a trigger to save. When comparing the amount or level of savings pre and post microfinance institution, only 14% said that their savings were the same or less than their pre-microfinance membership; however, the majority (86%) said that their savings were a little or a lot higher during their post-microfinance membership when compared to their pre-microfinance membership. Finally, only 33% of interviewees said that their income level stayed the same or was lower than their pre-microfinance level; the majority of respondents (67%) said that their incomes were a little higher or a lot higher. These indications of differences between the MF and Non Clients groups needed to be tested to see whether they are statistically significant.

T-tests of differences between means are appropriate tests for determining such differences. It was anticipated during the planning stage that some data would be parametric while others will be nonparametric data to make sure that the study uses the right statistic for the data collected. It was said that Pearson's correlation coefficient would be used to measure the strength of the relationships between variables when data are parametric, while nonparametric data would be submitted to Spearman's and Kendall's correlation coefficients. The study's planning also anticipated that partial correlations might be used to control for other variables. Significance was set at the generally accepted social science standard of 95% confidence level ($p<.05$). To test the business development hypothesis, three variables were tested statistically: number of businesses, profit, and number of employees. To test the education hypothesis, two variables were submitted to inferential analysis: number of children currently sent to school and number of children sent to school before microfinance. To test the asset acquisition hypothesis, one score summarizing assets acquisition was submitted to statistical analysis. That variable was the total value of all of goods acquired. To test the standard of living hypothesis, two variables were submitted to statistical analysis:

individual income of interviewees and their households' expense. To test the saving hypothesis, one variable was submitted to statistical analysis: amount saved. Prior to executing statistical tests, some descriptive information is provided for each of these variables.

To begin, each variable was tested for normality (Kolgomorov-Smirnov "K-S" and Shapiro-Wilk "S-W" tests) and homogeneity of variance (Levene statistic) to guide the decision on whether to use parametric or nonparametric tests. The second step applied the correct (parametric or nonparametric) test to check significant correlation between the independent and the dependent variables (Pearson, Spearman and Kendall tau, Biserial, or Point-Biserial). When correlation was found, then the independent t-test (parametric) and the Mann-Whitney U Test (nonparametric) were applied to the data. Following Field (2005), a decision was made to apply both parametric and nonparametric tests to the data to make sure that all tests resulted to the same outcome (correlation and significance). The rationale for this double-testing can be justified by Field's argument that "tests of normality (Kolmogorov-Smirnov and Shapiro-Wilk) have their own limitations because with large sample sizes, it is very easy to get significant results from small deviations from normality, and so a significant test doesn't necessarily tell us whether the deviations from normality is enough to bias any statistical procedures that we apply to the data. I guess the take-home message is: by all means use these tests, but plot your data as well as try to make an informed decision about the extent of non-normality" (Field, 2005, 93).

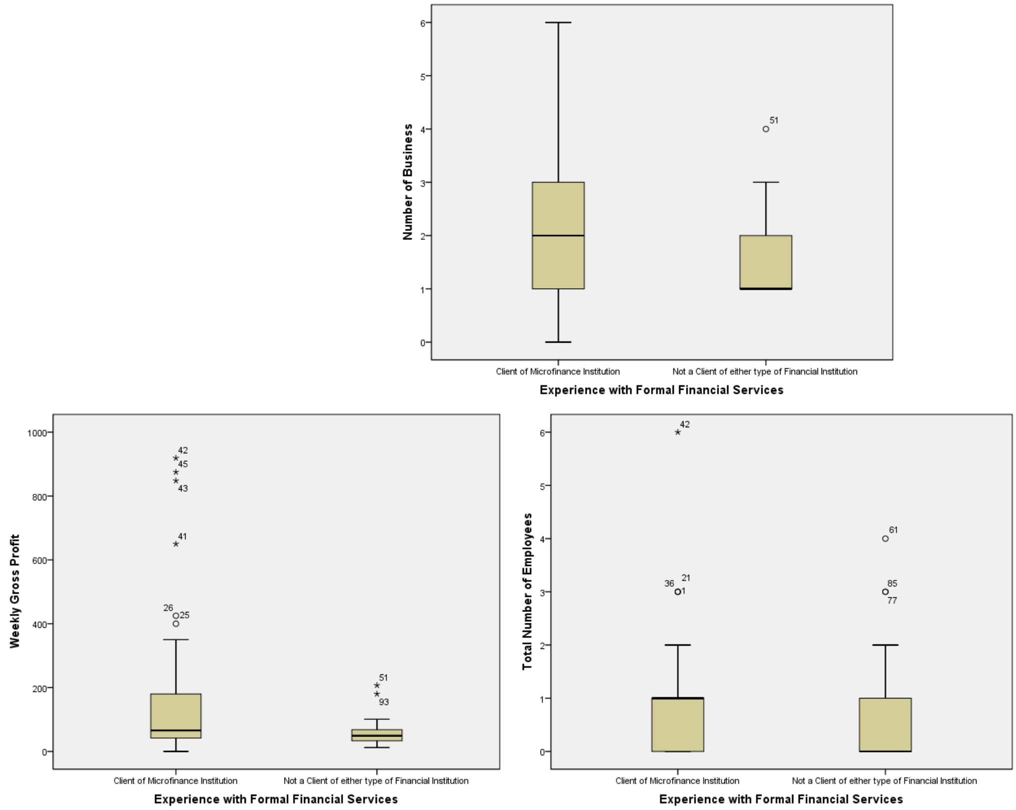
5.6.2. Business Development Hypothesis

As said above, three variables are used to test business development hypothesis: number of businesses, profit, and number of employees. Table 5.19 provides key descriptive statistics of the three variables. Ninety-three cases are examined for each of the three variables. Respondents had up to six businesses with an average of 1.82 businesses for the entire sample and a standard deviation of .999; they earned an average of US$113.80 profit weekly with a wide standard deviation of US$171 and a maximum of US$919; and respondents employed an average of 0.75 workers with a standard deviation of 1.07 and a maximum of 6 workers. It should be noticed that one respondent had no business when this survey was conducted, resulting to a minimum value of zero for the three variables. When looking at the two comparison groups (microfinance clients vs. non-clients of any financial institution), boxplots provide indications of the distribution of respondents for each variable. Figure 5.47 presents the boxplots of the distribution for the number of businesses respondents from different groups have, their weekly income, and the number of workers they employ.

Table 5.19: Business Development Key Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Number of Business	93	6	0	6	1.82	.100	.966
Weekly Gross Profit	93	919	0	919	113.80	17.737	171.046
Total Number of Employees	93	6	0	6	.75	.111	1.070
Valid N (listwise)	93						

Figure 5.47: Boxplots for Business Development



The boxplots provide a first flavor of the data distribution among respondents for the three variables. The three whisker diagrams show the lowest score and the highest scores. As explained by Field (2005), “the distance between the lowest horizontal line and the lowest edge of the tinted box is the range between which the lowest 25% of scores fall (call the bottom quartile)” (p. 75).

When looking at the boxes, the median numbers of businesses and employees are higher for MF clients vs. non-MF clients. There is very little difference in median weekly gross profits.

For all three variables, however, means are higher for the MF clients. These results suggest a difference between the two groups. Table 5.20 presents the results of the Kolmogorov-Smirnov and Shapiro-Wilk outcomes for business development.

When looking at Table 5.20 below, the Kolmogorov-Smirnov and the Shapiro-Wilk output significant results (p>.05) for the three variables (number of business, weekly gross profit, and total employees), which indicate deviations from normality. The distributions are therefore not normal. (See Figure A2.3 for corroborating Normal Q-Q and Detrended Normal Q-Q Plots).

Table 5.21 below displays the results of the Test of Homogeneity of Variance (Levene Statistic) for variables number of business, profit, and number of employees. Test results support the assumption of homogeneity of variance for the numbers of businesses (p=.302) and employees (p=.259), but not for profit (p=.000). This reflects the much greater variation in profit for MF clients versus non-MF clients.

Table 20: Kolmogorov-Smirnov (K-S) and Shapiro-Wilk (S-W) Outcomes for Business Development.

	Experience with Formal Financial Services	Kolmogorov-Smirnov Significance	Shapiro-Wilk Significance
Number of Businesss	Client of MF Not a Client of MF	.000 .000	.000 .000
Weekly Gross Profit	Client of MF Not a Client of MF	.000 .004	.000 .000
Total Number of Employees	Client of MF Not a Client of MF	.000 .000	.000 .000

Field (2005) suggests the use of Point-Biserial correlation coefficient (**r_{pb}**) test when one of the two variables is dichotomous and discrete. This is the case here: the independent variable "Experience with formal financial services" is a categorical variable (Client of MF or Non Client of MF). A Point-Biserial correlation "is simply a Pearson correlation when the dichotomous variable is coded with 0 for one category and 1 for the other (actually you can use any values and SPSS will change the lower one to 0 and the higher one to 1 when it does the calculations)" (Field, 2005, 132). Table 5.22 presents the Point-Biserial correlations for number of businesses, profit, and the number of employees.

Table 5.21: Test of Homogeneity of Variance for Number of Business, Profit, and Number of Employees

		Levene Statistic	df1	df2	Sig.
Number of Business	Based on Mean	1.077	1	91	.302
	Based on Median	1.365	1	91	.246
	Based on Median and with adjusted df	1.365	1	90.991	.246
	Based on trimmed mean	.804	1	91	.372
Weekly Gross Profit	Based on Mean	26.561	1	91	.000
	Based on Median	11.481	1	91	.001
	Based on Median and with adjusted df	11.481	1	46.688	.001
	Based on trimmed mean	19.133	1	91	.000
Total Number of Employees	Based on Mean	1.292	1	91	.259
	Based on Median	2.277	1	91	.135
	Based on Median and with adjusted df	2.277	1	90.568	.135
	Based on trimmed mean	1.816	1	91	.181

Table 5.22: Point-Biserial Correlations for Number of Businesses, Profit, and Number of Employees

		Experience with Formal Financial Services (a)	Number of Business	Weekly Gross Profit	Total Number of Employees
Experience with Formal Financial Services	Pearson Correlation	1	-.255**	-.337**	-.169
	Sig. (1-tailed)		.007	.000	.052
	N	93	93	93	93
Number of Business	Pearson Correlation	-.255**	1	.314**	.166
	Sig. (1-tailed)	.007		.001	.056
	N	93	93	93	93
Weekly Gross Profit	Pearson Correlation	-.337**	.314**	1	.494**
	Sig. (1-tailed)	.000	.001		.000
	N	93	93	93	93
Total Number of Employees	Pearson Correlation	-.169	.166	.494**	1
	Sig. (1-tailed)	.052	.056	.000	
	N	93	93	93	93

**. Correlation is significant at the 0.01 level (1-tailed).
(a): MF clients were coded 0 and Non-MF clients were coded 1.

From table 5.22 above, the Point-Biserial coefficient's output provides a matrix of the correlation coefficient for variables Number of Businesses (r_{bp}=.255), Weekly Gross Profit (r_{bp}= .337), and Total Number of Employees (r_{bp}= .169). Two variables are statistically significant at the 0.01 levels (Number of Business and Weekly Gross Profit). One variable was not statistically significant (Number of Employees).

As said above, a decision was made to apply both parametric and nonparametric tests. When looking at the output as summarized on table 5.23 below, the nonparametric tests

(Spearman's rho and Kendall tau) display statistical significant results for the three variables while the Point-Biserial test displays statistically significance for only two variables (Number of business and profit) while one is not significant (Number of employees). When looking at table 5.23, clearly the scores are closely similar. Therefore, a decision was made to proceed with the independent tests (T-test and Mann Whitney U tests) for the three variables.

Table 5.23: Comparing Parametric to Non Parametric Tests for Number of Businesses, Profit and Number of Employees

Variables	Pt-Biserial		Spearman rho		Kendall tau	
	Score	Sig.	Score	Sig.	Score	Sig.
Experience and # of Businesses	.255	.007	.261	.006	.244	.006
Experience and Profit	.337	.000	.315	.001	.260	.001
Experience and # of Employees	.169	.052	.174	.048	.164	.048

"Correlation coefficients say nothing about which variable causes the other to change" (Field, 2005, 128). However, when squared, the correlation coefficient called the coefficient of determination can indicate the amount of variability in one variable explained by the other variable. Using the Point-Biserial scores of the three variables to compute R Squared, number of businesses scored 6.5%; profit scored 11.3%; and employees scored 2.86%. After establishing correlations, significance was tested. Table 5.24 below summarizes the nonparametric hypothesis test between the independent variable (experience with formal financial services) and the three dependent variables that measure business development: number of businesses, profit, and number of employees. The tests confirm that differences in the number of businesses and amount of profit are statistically significant; the difference in the number of employees is not.

Table 5.24: Non Parametric Hypothesis Test Summary for Number of Business, Profit, and Number of Employees

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Number of Business is the same across categories of Experience with Formal Financial Services.	Independent-Samples Mann-Whitney U Test	.012	Reject the null hypothesis.
2	The distribution of Weekly Gross Profit is the same across categories of Experience with Formal Financial Services.	Independent-Samples Mann-Whitney U Test	.003	Reject the null hypothesis.
3	The distribution of Total Number of Employees is the same across categories of Experience with Formal Financial Services.	Independent-Samples Mann-Whitney U Test	.096	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

The output of the parametric test (T-Test) reveals the same trend of results. The tests confirm that differences in the number of businesses (p=.007) and amount of profit (p=.000) are statistically significant; the difference in the number of employees is not (p=.053).

From the above analysis, this study can conclude that there is indeed a correlation between the experience with formal financial institution of a micro or small business entrepreneur, operating in Kinshasa, the capital city of the DRC and the number of her or his business lines, the weekly profit she or he makes, and to some extent the number of people she or he employs. Moreover, this study established that two variables (number of business and profit) out of the three correlations are statistically significantly while the third one barely missed the significance level (p=.053). This study's experimental hypothesis, stating that micro and small entrepreneurs who are clients of microfinance experience more effective and efficient business development than micro and small entrepreneurs who are not clients of microfinance, has been confirmed. This study has therefore established that microfinance, as an intervention, improves business development in terms of the number of businesses, profit, and to some extent, in terms of the number of people they employed while exercising their micro and/or small enterprise activities.

5.6.3. Education Hypothesis

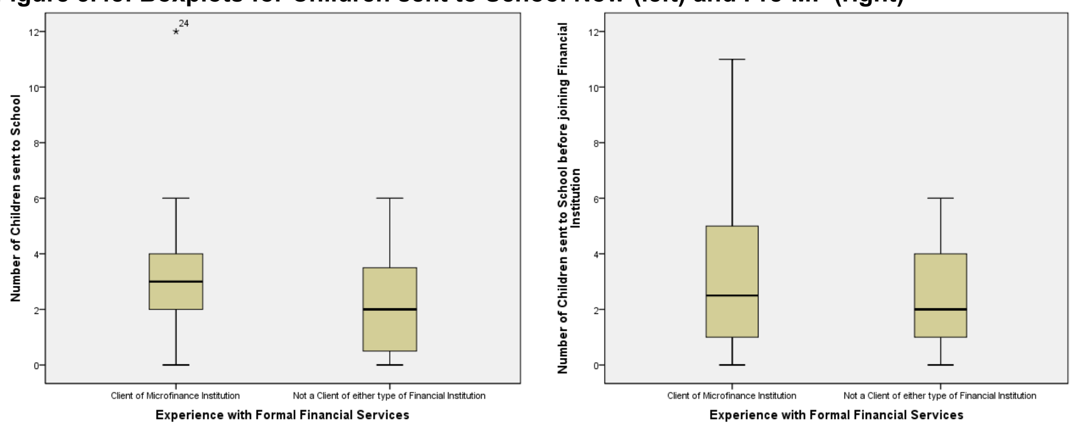
To test education hypothesis, two variables have been used: "number of children sent to school" and "number of children sent to school before joining current financial institution". Table 5.25 provides key statistics of the three variables.

Table 5.25: Education Key Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Number of Children sent to School	93	12	0	12	2.66	.212	2.046
Number of Children sent to School before joining Financial Institution	93	11	0	11	2.65	.208	2.004
Valid N (listwise)	93						

Ninety-three cases are examined for each of the two variables. Respondents sent up to 12 children to school when this survey was conducted; and up to eleven children were sent to school among current clients of microfinance institutions before becoming actual members. On average, 2.66 kids were currently sent to school and 2.65 were sent to school Pre-MF. The entire sample had a standard deviation of 2.046 while Pre-MF had a standard deviation of 2.004. A few respondents had no children sent to school now or Pre-MF, therefore both variables had a minimum value of zero. When looking at the two comparison groups (microfinance clients vs. non-clients of any financial institution), the boxplots below display the distribution of respondents for each variable. Figure 5.48 presents the boxplots of the distribution for the two education's variables.

Figure 5.48: Boxplots for Children sent to School Now (left) and Pre-MF (right)



The whisker diagrams show the lowest scores, the highest scores, and the range between which the lowest 25% of scores fall. The two whisker boxplots look the same for children sent to school currently and those sent to school Pre-MF. The similarities between the two boxes for each variable suggest non-significance between the two comparison groups in terms of education as defined in this study. Table 5.26 below presents the results of the test of normality for two variables used to test the education hypothesis.

Table 26: Kolmogorov-Smirnov (K-S) and Shapiro-Wilk (S-W) Outcomes for Education

	Experience with Formal Financial Services	Kolmogorov-Smirnov Significance	Shapiro-Wilk Significance
Number of Children sent to School	Client of MF Not a Client of MF	.004 .012	.000 .001
Number of Children sent to School before joining Financial Institution	Client of MF Not a Client of MF	.002 .028	.000 .002

Results from both the Kolmogorov-Smirnov (K-S) and the Shapiro-Wilk indicate deviations from normality. Table 5.27 below presents the results of the test of homogeneity of variance for education.

Table 5.27: Test of Homogeneity of Variance for Number of Children sent to School

		Levene Statistic	df1	df2	Sig.
Number of Children sent to School	Based on Mean	.271	1	91	.604
	Based on Median	.298	1	91	.586
	Based on Median and with adjusted df	.298	1	84.247	.587
	Based on trimmed mean	.273	1	91	.602
Number of Children sent to School before joining Financial Institution	Based on Mean	.465	1	91	.497
	Based on Median	.448	1	91	.505
	Based on Median and with adjusted df	.448	1	83.709	.505
	Based on trimmed mean	.466	1	91	.496

Test results support the assumption of homogeneity of variance for both the number of children sent to school and the number of children sent to school before joining financial institution (p=.497). As depicted on Table 5.28, the Point-Biserial correlation coefficient

(r_{pb}) tests show significance for number of children sent to school but non-significance for number of children sent to school before joining current financial institution.

Table 5.28: Point-Biserial Correlations for Experience with Financial Institution and Education

		Experience with Formal Financial Services	Number of Children sent to School	Number of Children sent to School before joining Financial Institution
Experience with Formal Financial Services	Pearson Correlation	1	-.188*	-.144
	Sig. (1-tailed)		.035	.085
	N	93	93	93
Number of Children sent to School	Pearson Correlation	-.188*	1	.937**
	Sig. (1-tailed)	.035		.000
	N	93	93	93
Number of Children sent to School before joining Financial Institution	Pearson Correlation	-.144	.937**	1
	Sig. (1-tailed)	.085	.000	
	N	93	93	93

*. Correlation is significant at the 0.05 level (1-tailed). **. Correlation is significant at the 0.01 level (1-tailed).

The output of nonparametric tests (Spearman's rho and Kendall tau) summarized in Table 5.29 below displays the same trend in terms of scores and significance.

Table 5.29: Comparing Parametric to Non Parametric Tests for Children sent to School

Variables	Pt-Biserial		Spearman rho		Kendall tau	
	Score	Sig.	Score	Sig.	Score	Sig.
Experience and # of Children sent to School	.188	.035	.176	.046	.154	.046
Experience and of Children sent to School Pre MF	.144	.085	.123	.120	.108	.119

Using the Point-Biserial scores of the two variables to compute R Squared, both variables scored less than 1%. Nonparametric hypothesis tests confirm that differences in both variables were not significant. Table 5.30 below displays the results. The output of parametric tests (T-Test) reveals the same trend of results. The tests confirm that there were no significant differences in the two variables.

Table 5.30: Non Parametric Hypothesis Test Summary for Number of Children sent to School Now and Pre-MF.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Number of Children sent to School is the same across categories of Experience with Formal Financial Services.	Independent-Samples Mann-Whitney U Test	.092	Retain the null hypothesis.
2	The distribution of Number of Children sent to School before joining Financial Institution is the same across categories of Experience with Formal Financial Services.	Independent-Samples Mann-Whitney U Test	.238	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

From the above analysis, this study has concluded that there is not a strong correlation or, most importantly, a significant difference in the number of children sent to school by micro and small entrepreneurs who are clients of microfinance institutions compared to those who are not client of any formal financial services institution, operating in Kinshasa, the capital city of the DRC. This study has not found that microfinance, as an intervention, makes a difference in children's education.

5.6.4. <u>Assets Acquisition Hypothesis</u>

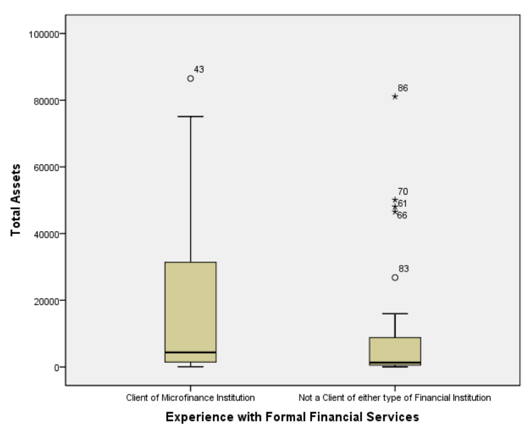
To test the Assets Hypothesis, variable "Total Assets Acquisition" is tested. Prior to statistical tests, Table 5.31 provides key statistics of total assets variable.

Table 5.31: Assets Acquisition Key Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Total Assets	93	86465	30	86495	13184.52	2135.046	20589.633
Valid N (listwise)	93						

Ninety-three cases are examined for variable total assets. Respondents' total assets' value ranges from US$ 30 to US$ 86,495 with an average of US$ 13,184 and a standard error of US$ 235.046. The standard deviation is US$ 20,589.633. Figure 5.49 displays the Boxplot for Assets.

Figure 5.49: Boxplot for Total Assets Acquisition of Respondents.



When looking at the boxplots, the median number is slightly higher for MF clients vs. non-MF clients; however, the mean is higher for MF clients. These results suggest that there seems to be a difference between the two groups.

Table 5.32 presents the results of the Kolmogorov-Smirnov and Shapiro-Wilk outcomes for assets acquisition.

Table 5.32: Tests of Normality for Total Assets

	Experience with Formal Financial Services	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Total Assets	Client of Microfinance Institution	.280	46	.000	.772	46	.000
	Not a Client of either type of Financial Institution	.305	47	.000	.552	47	.000

a. Lilliefors Significance Correction

When looking at Table 5.32, the results indicate deviations from normality. Normal Q-Q and Detrended Normal Q-Q Plots of variable total assets (see Figure A3.5) corroborate the Kolmogorov-Smirnov and the Shapiro-Wilk outcomes. From Table 5.33 below, the results of the test of homogeneity of variance for total assets acquisition indicate that the assumption of homogeneity was violated.

Table 5.33: Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Total Assets	Based on Mean	10.255	1	91	.002
	Based on Median	4.934	1	91	.029
	Based on Median and with adjusted df	4.934	1	84.227	.029
	Based on trimmed mean	10.103	1	91	.002

The Point-Biserial correlation coefficient (r_{pb}) test is used to check correlations. Table 5.34 displays the results.

Table 5.34: Point-Biserial Correlations for Experience with Microfinance and Total Assets

		Experience with Formal Financial Services	Total Assets
Experience with Formal Financial Services	Pearson Correlation	1	-.237*
	Sig. (1-tailed)		.011
	N	93	93
Total Assets	Pearson Correlation	-.237*	1
	Sig. (1-tailed)	.011	
	N	93	93

*. Correlation is significant at the 0.05 level (1-tailed).

According to table 5.34, the Point-Biserial for variable total assets is statistically significant. The nonparametric tests (Spearman's rho and Kendall tau), summarized in Table 5.35 below, display the same trends in terms of scores and significance. Total assets' R squared is 6%.

Table 5.35: Comparing Parametric to Non Parametric Tests for Total Assets

Variables	Pt-Biserial		Spearman rho		Kendall tau	
	Score	Sig.	Score	Sig.	Score	Sig.
Experience and Total Assets	.237	.011	.267	.005	.219	.005

The Independent-Samples Mann-Whitney U test reveals a significance level of .010. Results are displayed on Table 5.36. The parametric test (T-Test) reveals the same trend of results with p=.023 (two-tailed). One-tailed significance is .011.

Table 5.36: Non Parametric Hypothesis Testing

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Total Assets is the same across categories of Experience with Formal Financial Services.	Independent-Samples Mann-Whitney U Test	.010	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

From the above analysis, this study can conclude that there is indeed a correlation between experience with formal financial institution of a micro or small business entrepreneur, operating in Kinshasa, the capital city of the DRC, and the total value of their assets. Moreover, this study has found that the difference in the value of total assets between the two groups (MF vs. Non Clients) is statistically significant and displays a medium effect. Therefore, this study's experimental hypothesis has been confirmed.

5.6.5. Standard of Living Hypothesis

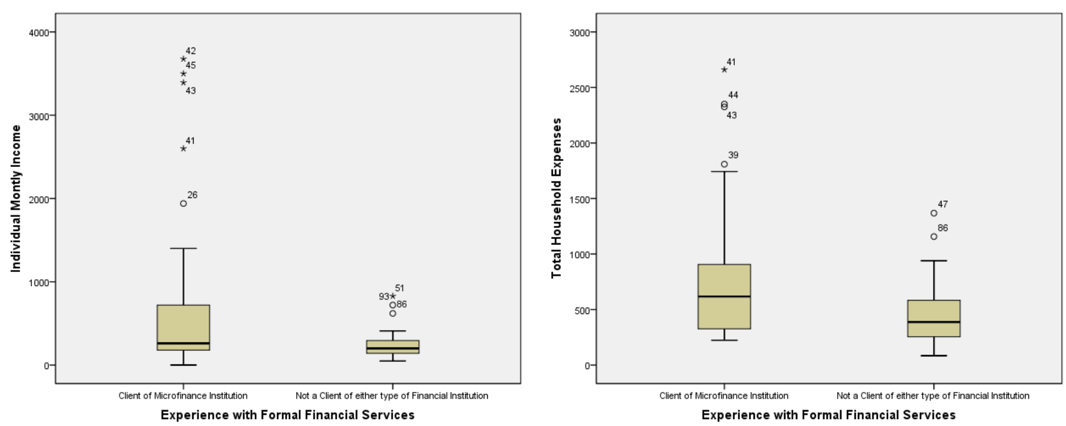
To test the standard of living hypothesis, two variables have been used: "individual monthly income" and "total household expenditures". Table 5.37 provides key statistics for the two variables.

Table 5.37: Standard of Living Key Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Individual Monthly Income	93	3676	0	3676	453.48	70.274	677.699
Total Household Expenses	93	2576	84	2660	623.24	51.869	500.208
Valid N (listwise)	93						

Ninety-three cases are examined for each of the two variables. Respondents earned an average of US$ 453 as individual monthly income while the household's expenditures average US$ 623. One respondent had no income and therefore the minimum is zero for monthly income while it is US$ 84 for household's monthly expenditure; their maxima are respectively US$ 3,676 and US$ 2,660; their standard deviations are respectively US$ 677.699 and US$ 500.208. Figure 5.50 displays the boxplots for individual income and total household expenditures.

Figure 5.50: Boxplots for Standard of Living



When looking at the boxes, the median numbers of total household expenditures is higher for MF clients vs. non-MF clients. There's however very little difference in median monthly income. For both variables, however, means are higher for the MF clients. These results suggest that there seems to be a difference between the two groups. Table 5.40 presents the results of the Kolmogorov-Smirnov and Shapiro-Wilk outcomes standard of living.

When looking at Table 5.38, the results of both variables indicate deviations from normality. Normal Q-Q and Detrended Normal Q-Q Plots of Standard of living (see Figure A3.7) corroborate the Kolmogorov-Smirnov and the Shapiro-Wilk outcomes.

Table 5.38: Kolmogorov-Smirnov (K-S) and Shapiro-Wilk (S-W) Outcomes for Business Development.

	Experience with Formal Financial Services	Kolmogorov-Smirnov Significance	Shapiro-Wilk Significance
Individual Monthly Income	Client of MF Not a Client of MF	.000 .004	.000 .000
Total Household Income	Client of MF Not a Client of MF	.000 .000	.000 .000

Table 5.39 below displays the results for the Test of Homogeneity of Variance for both variables and here too the results (Levene’s statistics) are both significant indicating violations of the assumption of homogeneity for both variables.

Table 5.39: Tests of Homogeneity for Individual Income and Household Total Expenditures

		Levene Statistic	df1	df2	Sig.
Individual Montly Income	Based on Mean	22.607	1	91	.000
	Based on Median	9.818	1	91	.002
	Based on Median and with adjusted df	9.818	1	46.950	.003
	Based on trimmed mean	15.980	1	91	.000
Total Household Income	Based on Mean	23.655	1	91	.000
	Based on Median	11.046	1	91	.001
	Based on Median and with adjusted df	11.046	1	46.769	.002
	Based on trimmed mean	16.888	1	91	.000

Results of the Point-Biserial correlation coefficient test are displayed on Table 5.40. The outcomes show high correlations for total household expenditures and monthly income.

Table 5.40: Point-Biserial Correlations for Individual Income and Household Total Expenditures

		Experience with Formal Financial Services	Individual Montly Income	Total Household Income
Experience with Formal Financial Services	Pearson Correlation	1	-.316**	-.364**
	Sig. (1-tailed)		.001	.000
	N	93	93	93
Individual Montly Income	Pearson Correlation	-.316**	1	.847**
	Sig. (1-tailed)	.001		.000
	N	93	93	93
Total Household Income	Pearson Correlation	-.364**	.847**	1
	Sig. (1-tailed)	.000	.000	
	N	93	93	93

**. Correlation is significant at the 0.01 level (1-tailed).

The same trend found with the Point-Biserial is also displayed when using nonparametric tests (Spearman's rho and Kendall tau). Results are summarized on Table 5.41. R squared is 10% for monthly income; it is 13% for total household expenses. Individual monthly income displayed a medium effect but close to a large size effect (r=.4.1). Total household expenditures displayed a large effect.

Table 5.41: Comparing Parametric to Non Parametric Tests for Income and Household Expenditures

Variables	Pt-Biserial		Spearman rho		Kendall tau	
	Score	Sig.	Score	Sig.	Score	Sig.
Experience and # Individual Monthly Income	.316	.001	.283	.003	.233	.003
Experience and Total Household Expenditures	.364	.000	.458	.000	.377	.000

Table 5.42 below summarizes the nonparametric hypothesis tests. The Independent-Samples Mann-Whitney U tests reveal significance for both variables. The parametric tests (T-Test) also reveal the same trend of results with p=.000 for both variables.

Table 5.42: Non Parametric Hypothesis Test Summary for Standard of Living

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Total Household Expenses is the same across categories of Experience with Formal Financial Services.	Independent-Samples Mann-Whitney U Test	.001	Reject the null hypothesis.
2	The distribution of Individual Montly Income is the same across categories of Experience with Formal Financial Services.	Independent-Samples Mann-Whitney U Test	.007	Reject the null hypothesis.

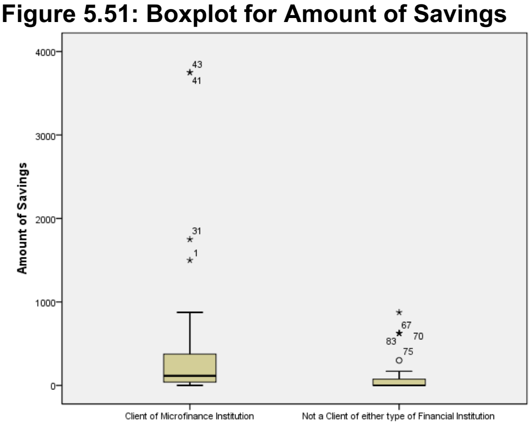
Asymptotic significances are displayed. The significance level is .05.

Based on the above analysis, there is indeed a correlation between the experience with formal financial institution of a micro or small business entrepreneur, operating in Kinshasa, the capital city of the DRC, and their standard of living, as measured by the individual monthly income and the total household expenditures. Moreover, this study established that the two variables are statistically significant and display large effects. This study's experimental hypothesis was retained. This study concluded that microfinance, as an intervention, improves the standard of living of their clients in comparison to non-clients of financial institutions.

5.6.6. Savings Hypothesis

To test the Savings hypothesis, the variable "Amount of Savings" is tested. The amount of savings of respondents ranges from US$ 0 to US$ 3,750 with an average of US$ 245.90 and a standard error of US$ 62.589 (Table A3.20). The standard deviation is US$ 603.590. Figure 5.51 displays the boxplot for amount of savings.

Figure 5.51: Boxplot for Amount of Savings



When looking at the boxes, the median savings displays little difference between MF clients and non-clients. The means however appear to be higher for MF clients. These results suggest that there might be a difference between the two groups. Table 5.43 presents the results of the Kolmogorov-Smirnov and Shapiro-Wilk outcome for savings.

Table 5.43: Tests of Normality for Savings

	Experience with Formal Financial Services	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Amount of Savings	Client of Microfinance Institution	.315	46	.000	.499	46	.000
	Not a Client of either type of Financial Institution	.358	47	.000	.524	47	.000

a. Lilliefors Significance Correction

Results of the test of normality for savings show that the assumption of normality has been violated. Table 5.44 below presents the results of the test of homogeneity of variance for savings. Results of the test of homogeneity also show that the assumption of homogeneity of variance is violated because the Levene's score (9.858) is significant (p=.002).

Table 5.44: Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Amount of Savings	Based on Mean	9.858	1	91	.002
	Based on Median	4.826	1	91	.031
	Based on Median and with adjusted df	4.826	1	51.873	.033
	Based on trimmed mean	5.749	1	91	.019

The Point-Biserial correlation coefficient ($\mathbf{r_{pb}}$) test is used for correlation. Table 5.45 displays the results of the correlations.

Table 5.45: Point Biserial Correlation for Savings

		Experience with Formal Financial Services	Amount of Savings
Experience with Formal Financial Services	Pearson Correlation	1	-.249**
	Sig. (1-tailed)		.008
	N	93	93
Amount of Savings	Pearson Correlation	-.249**	1
	Sig. (1-tailed)	.008	
	N	93	93

**. Correlation is significant at the 0.01 level (1-tailed).

When looking at Table 5.45, the Point-Biserial coefficient outcome significant result. The same trend is displayed when using nonparametric tests (Spearman's rho and Kendall tau). The results are summarized on table 5.46. Saving's R Squared scored .06, meaning that savings accounts for 6% of the variability.

Table 5.46: Comparing Parametric to Non Parametric Tests for Savings

Variables	Pt-Biserial		Spearman rho		Kendall tau	
	Score	Sig.	Score	Sig.	Score	Sig.
Experience and Amount of Savings	.249	.008	.450	.000	.395	.000

The Independent-Samples Mann-Whitney U test reveals a high significance level (.000). Table 5.47 below presents the output of the non-parametric test. The output of the parametric test (T-Test) also reveals the same trend of results with p=.010.

Table 5.47: Non Parametric Hypothesis Test for saving

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Amount of Savings is the same across categories of Experience with Formal Financial Services.	Independent-Samples Mann-Whitney U Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Based on the above analysis, there is indeed a correlation between the experience with formal financial institution of a micro or small business entrepreneur, operating in Kinshasa, the capital city of the DRC, and the amount they save. Moreover, this study has found that the difference in the amount of savings between the two groups (MF vs. Non Clients) is statistically significant and displays a medium effect. Therefore, this study's experimental hypothesis is retained. This study has therefore found that microfinance, as an intervention, allows its clients to save higher amount of money than those not working with any financial services institution.

5.6.7. Daily Per-Capita Expenditure (DPCE)

Data collected enabled this study to compute the DPCE (Daily Per Capita Expenditure) Index. The DPCE is a score used by FINCA Client Assessment Tool (FCAT) to determine the poverty level of an MFI client (FINCA, 2007). The methodology is based on indicators of poverty, scaled as following: less than $1/day of total household consumption indicates "Severe Poverty"; $1-$2/day of total household consumption indicates "Moderate Poverty"; and $2-$3/day of total household consumption indicates

“Vulnerable Non-Poor” (FINCA, 2007). Using data collected for variable “Expenditures” of the survey resulted in computing a DPCE for both MF clients and Non Clients. As does FINCA, this study uses the DPCE index to determine the consumption level of households involved in this study. This index has been adapted to provide the study with an indication of the reconstruction effect when it comes to standard of living. It should be noticed however that, while FINCA utilizes comprehensive annual household expenditure data to compute the total household expenditures which is then divided by the total number of household members, this study uses instead a comprehensive monthly household expenditure data to process the DPCE Index.

Indeed, when using the FCAT in 2007, the researcher found it very challenging to clients to remember their expenses on an annual basis. A monthly approach appears to be a more practical one and has been used here. In addition, this study has come up with an additional type of DPCE index, called the “Microfinance DPCE Index’ (MDPCEI). Indeed, the FINCA DPCE is based on household expenditures which comprises in general more than one income (MF clients + other income earners of the household). This study agrees that the classical DPCE, using the household expenditures approach as applied by the UN and its UNDP program, provides a real figure of the status of the household in term of $ amount used per day/household. However, this study is suggesting the MDPCEI as a clean and more realistic measure of the contribution of microfinance in the DPCE. As stated above, two paradigms champion the microfinance industry: financial self-sustainability and poverty alleviation. This study’s understanding is that each among these two approaches will be interested in determining the share of microfinance outcome in the stability of a household for a self-sustainability goal of a household or its poverty alleviation's goal. It is the hope of this study that the MDPCEI will prove useful to the microfinance community.

Pooling all respondents, 7.5% of households in the sample live in severe poverty (less than US$ 1per day); 28% live in moderate poverty (between US$ 2 and US$1 per day); 21.5% can be considered as vulnerable (spend between US$ 3 and US$2 per day); and 43% can be considered non poor because they live with US$3 or higher amount per day (A3.21). When breaking the results between the two comparison groups (MF vs. Non Clients), Table 5.48 reveals that only 2.25% of MF clients in the sample live in severe poverty vs. 12.8% among Non-Clients; 26.1% live in moderate poverty vs. 29.8% Non-Clients; 23.9% MF clients are vulnerable vs. 19.1% Non-Clients; and 47.8% MF clients are non-poor vs. 38.3% Non-Clients.

Table 5.48: Household Poverty Level of MF Clients vs. Non Clients

Poverty Level	**MF Clients**			**Non Clients**		
	Frequency	%	Cumulative %	Frequency	%	Cumulative %
Severe	1	2.2	2.2	6	12.8	12.8
Moderate	12	26.1	28.3	14	29.8	42.6
Vulnerable	11	23.9	52.2	9	19.1	61.7
Non poor	22	47.8	100.0	18	38.3	100.0
Total	46	100	100.0	47	100	100.0

Source: Primary data from Survey conducted in Congo in 2010.

When grouping the four categories into two main categories (Severe/moderate poverty and vulnerable/non poor), the difference between the two comparison groups become obvious as it can be seen from the cumulative column on the above Table 5.48: Only 28% among MF Clients live in either severe or moderate poverty vs. 43% among Non-Clients; inversely, 72% among MF Clients are vulnerable or Non Poor vs. 57% among

Non-Clients. In terms of poverty level, clients of microfinance institutions appear to be better off than non-clients.

5.6.8. Microfinance Daily Per-Capita Expenditure (MDPCE)

Table A3.22 summarizes the MDPCE (Microfinance Daily Per Capita Expenditures Index) outcome of MF clients and Non Clients. As a quick reminder, the DPCE uses the total household expenditures, which generally comprises more than one income; while the MDPCE is calculated based on the clients monthly income only, which permits to determine the net contribution of the client to the household economy. Said differently, MDPCEI determines what would be the household's DPCE if living on only the income from the client's microfinance activities. It can be depicted from the table that 34.4% of the sample's households would live in severe poverty (US$ 1or less per day); 33.3% in moderate poverty (between US$ 2 and US$1 per day); 11.6% would be considered as vulnerable (spend between US$ 3 and US$2 per day); and 20.4% could be considered non poor because they would live with US$3 or higher amount per day.

When looking at the results of microfinance households when other incomes are not considered, Table 5.49 reveals 32.6% of MF households would live in severe poverty if microfinance income was the only household income vs. 2.25% when the total household income is considered; 23.9% of MF households in moderate poverty vs. 26.1%; 15.2% of MF households would be considered vulnerable vs. 23.9%; and finally, only 28.3 % of MF households (28.3%) would be non-poor vs. 47.8%.

Table 5.49: Household Poverty Level of MF Households (MF income vs. Household income)

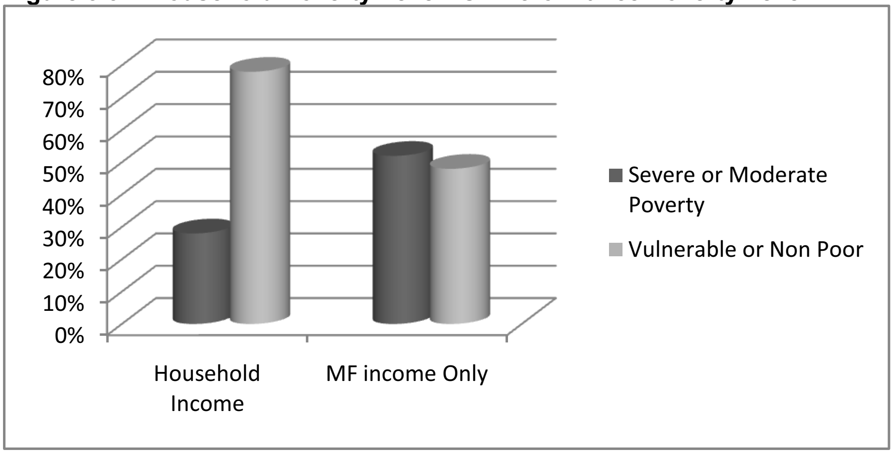
Poverty	**Household Income**	**MF Income Only**

Level	Frequency	%	Cumulative %	Frequency	%	Cumulative %
Severe	1	2.2	2.2	15	32.6	32.6
Moderate	12	26.1	28.3	11	23.9	52.5
Vulnerable	11	23.9	52.2	7	15.2	71.7
Non poor	22	47.8	100.0	13	28.3	100.0
Total	46	100	100.0	47	100	100.0

Source: Primary data from Survey conducted in Congo in 2010.

When grouping the four categories into two main categories (Severe/moderate poverty and vulnerable/non poor), Figure 5.52 represents the difference between the poverty level of households of microfinance clients when the household income is considered vs. when only income from microfinance activities is considered: 28% among MF Clients would live in either severe or moderate poverty when household income is considered vs. 52% when only MF income is considered; inversely, 72% among MF Clients would be vulnerable or Non Poor when household income is considered vs. 48% when only MF income is considered. This comparison illustrates the net contribution of MF income and indicates that while microfinance is a tool for post-conflict reconstruction because it improves its clients' household standard-of-living, other members of the household should also bring their contribution for a higher standard of living of microfinance clients. Figure 5.52 displays the contrast between the DPCE and the MDPCE.

Figure 5.52: Household Poverty Level vs. Microfinance Poverty Level



6. Discussion

6.1. Post-Conflict Outreach and financial Performance by Microfinance

One limitation identified when planning this study was the reliability of data from DRC, a country that just emerging from a long period of political and armed conflicts. Surprisingly, reliability was not an issue; it is the availability of data that emerged as a critical issue. Indeed, data used in this study came from reliable sources: published annual reports of financial institutions, published flyers, Central Bank of Congo's published reports and documents, current information on diverse web sites, CGAP (Consultative Group to Assist the Poor), the World Bank, and the MIXMarkets database. These raw data were verified and cross-checked through various means: authentication of data, two trips to Congo, five visits to the Central Bank of Congo, visits at headquarters and branches of financial institutions operating in Kinshasa, and fifteen unstructured interviews with key players of the financial services industry (regulators, CEOs, branch managers, loan officers, tellers, and clients).

It is however the availability of data that was an issue. Only two financial institutions applying the traditional approach and four financial institutions applying a microfinance approach had available and complete data sets that fit this study. Data from other financial institutions of both types were collected but could not be included in the analysis, because they were either incomplete or did not fit the study's time frame.

The reliability of data being assured, this study has worked through available data and came up with valuable results presented in the previous chapter.

This study proposed that microfinance serves as a tool for rebuilding financial services in post-conflict communities, and one way of determining whether or not the phenomenon occurred in the DRC was to determine that microfinance institutions show increases in outreach during consecutive years in a post-conflict situation. Four variables were proposed for that purpose: employment, clientele, lending, and savings/deposits by providers of financial services during the post-conflict period. This study found that outreach, measured by the level of employment by microfinance institutions, the number of clients joining microfinance institutions, and the volume (dollar amount) of loans disbursed by microfinance institutions, displayed consecutive yearly increases from 2005 through year 2009. Outreach, measured by the dollar amount of deposits of clients, displayed consecutive yearly increases from 2005 to 2007, a slight decrease between 2007 and 2008, and again a sharp increase through year 2009. The increases happened at the institutional level and at the industry level. This study found that the overall trend fit the hypothesized pattern.

Another indicator that can determine whether microfinance serves as a tool for rebuilding the financial services sector in post-conflict communities is whether microfinance institutions show improvements in their financial performance during consecutive years in a post-conflict situation. Four variables were examined in this study: assets, efficiency, profitability, and risk.

This study found that financial performance, measured by total assets of microfinance institutions, displays consecutive yearly increases from 2005 through year 2009. The study also found that financial performance, measured by efficiency (self-sufficiency) of microfinance institutions, displays consecutive yearly increases from 2005 through year 2008 but deviated from the hypothesis in 2009; overall, however, the trend has matched the hypothesized pattern. Financial performance, measured by profitability of microfinance institutions and yields on portfolio, did not occur as hypothesized. Nevertheless, it is important to mention that all microfinance institutions in the sample displayed positive yields on their gross portfolio during the five-year period, ranging from a lowest of 25% to a high of 85% but their time series outcome shows a decreasing trend which deviated from the hypothesized pattern. Finally, financial performance, measured by risk (Portfolio at Risk) of microfinance institutions, displays consecutive yearly improvement from 2006 through year 2009 but deviated from the hypothesis in 2005. This study has concluded that the overall financial performance trend matched the hypothesized pattern.

Data collected from other microfinance institutions but not included in the analysis corroborate this study's finding that, outreach, measured by the level of employment by microfinance institutions, the number of clients joining microfinance institutions, the volume (dollar amount) of loans disbursed by microfinance institutions, and deposits by clients, displays consecutive yearly increases. For instance, MECRECO, a network of credit and saving cooperatives, displays the pattern found in this study, as demonstrated in Table 6.1.

Table 6.1: MECRECO Key Data

Key Variables	2006	2007	% Chg 06-07	2008	% Chg 07-08	2009	% Chg 08-09	% Chg 06-09
Clients	11,009	22,060	100%	36,747	67%	49,675	35%	351%
Borrowers	3,824	9,467	148%	13,797	46%	13,577	-2%	255%
Loan Portfolio (US$)	2,661,886	5,722,874	115%	10,760,711	88%	14,051,641	31%	428%
Savings (US$)	4,853,065	11,355,494	134%	13,565,578	19%	19,277,217	42%	297%
Total Assets (US$)	**5,639,219**	**12,978,864**	130%	**16,834,691**	30%	**22,552,779**	34%	300%

Source: MECRECO 2010 Prospectus.

Another example is HOPE DRC, a national microfinance program belonging to the HOPE International microfinance network with fourteen programs around the world that has also displayed an outreach performance that corroborates the findings of this study. Table 6.2 presents Hope-DRC's key data.

Table 6.2: HOPE-DRC Key Data

Key Variables	2004	2005	% Chg 04-05	2006	% Chg 05-06	2007	% Chg 06-07	% Chg 04-07
Clients/Borrowers	936	3,735	299%	4,936	32%	11,160	126%	1092%
Employees	11	38	245%	36	-5%	100	%	809%
Loan Portfolio (US$)	48,144	196,968	309%	492,367	150%	868,225	76%	1703%
Offices	1	3	200%	3	0%	4	33%	300%
Total Assets (US$)	**73,264**	**446,153**	509%	**827,959**	86%	**1,506,001**	82%	1956%

Source: MixMarkets, 2009.

Finally, the findings of outreach and financial performance by post-conflict microfinance corroborate data published by the Microfinance Unit of the Central Bank of Congo (Annual Report 2009, p.205; Internal Draft from the Microfinance Unit, Department of financial providers' supervision, Central Bank of Congo, 2010) related to the microfinance industry in Congo. Accordingly, as of December 2009:

(a) Total deposits amounted to USD 58.7 million against USD 47.5 million as of December 2008, an increase of 24%. The provinces of Nord-Kivu and Sud-Kivu have distinguished themselves in this area with 37% of total deposits for the former and 35% for the later.

(b) Loans disbursed totaled USD 45.5 million against USD 41.2 million as of December 2008, a 10% increase. The provinces of Nord-Kivu and Sud-Kivu alone disbursed 64% of all loans while the Capital city of Kinshasa accounted for 30% of all loans. Three institutions provided more than half of total loans: Coopec Nyamweri (USD 7.9 million), FINCA DRC (USD 7.9 million), and MECRECO (USD 10.3 million).

(c) Depositors increased to 344,207 as of September 2009 from 293,682 as of December 2008, an increase of 17%. MECRECO's depositors represented 15% of all depositors while FINCA DRC counted 11% of all depositors.

(d) The national average deposit or saving per client was USD 117; the highest average was found in the province of Sud-kivu (USD 408) and the lowest in the province of Kasai-Occidental (USD 39) and the province of Bandundu (USD 8).

Clearly, this study's findings and additional evidence support the thesis that microfinance serves as a tool for rebuilding the financial services sector in post-conflict communities. The findings in this study bring additional evidence to the field of Post-Conflict Microfinance (PCM) and corroborate Barr's (2005) suggestion to approach microfinance as a form of financial development and understand how it can contribute to financial sector development. Barr extended the original understanding of microfinance as a poverty alleviation tool into a broader role as a specific financial development tool that has to be understood in the larger context of a country's entire financial sector.

This study's findings also provide evidence to support Kuehnast (2001); Frasier & Saad (2003); and Barr (2005) who argued that microfinance can play the role of financial services reconstruction in a post-conflict context.

Two institutions, Procredit and Finca, have greatly impacted the time series trend lines of the outreach variables (employment, clientele, loans, savings /deposits) and financial performance variables (assets, efficiency, profitability, and risk). Nevertheless, Hekima and Paidek have also shown the same trends but usually with lower numbers or rates than Procredit and Finca. The findings within the sample of microfinance institutions have shown two behaviors or some type of divide between more aggressive and high performing institutions (Procredit and Finca) on one side and, on the other side, less aggressive and performing microfinance institutions (Hekima and Paidek). These two behaviors seem to corroborate what Hishigsuren (2004) cited as two competing paradigms guiding microfinance practice, the financial self-sustainability approach (also referred as profit, institutionalist or financial systems approach) and the poverty alleviation approach (also referred as welfarist approach). Procredit and Finca seem to match the former (financial self-sustainability) while Hekima and Paidek appear to match the latter (poverty alleviation approach).

While these practices can indeed reflect the two competing paradigms mentioned by Hishigsuren (2004), this study would instead suggest that, in a post-conflict setting of developing countries such as the DRC, these two behaviors shall be understood theoretically as two sides of the same coin, instead of two competing approaches. Indeed, Stiefel (1999) reminds us that the challenge of post-conflict reconstruction is similar to development challenges because they are related to growth, inclusiveness, stability, and sustainability which become more severe due to the legacy of conflict. In such post-conflict settings, a microfinance approach to financial services reconstruction needs to operate at two levels: the micro-level and the meso-level. At the micro-level, as do Paidek, Hekima, and Hope DRC to name just a few, microfinance reaches the urban and rural poorest and constitutes the entry level to the financial services industry. At the miso-level, as do Procredit, Finca, Advans Congo, and Mecreco to name just a few, microfinance addresses immediately the needs of micro and small entrepreneurs who are low-income but not necessary poor to access capital, deposits and savings capability in a post-conflict financial services environment characterized by a destruction of financial infrastructures. The meso-level also plays a role of “re-entry” to the financial services industry for many former clients of pre-conflict financial institutions who have lost their money but mostly their trust to the financial services industry. This “re-entry” move was expressed by interviewee No. 85 (see appendix 4 for full comment) who said “Procredit is the financial institution that has brought people back to the financial services industry. Procredit has projected trust and confidence by providing loans, securing deposit, introducing debit cards and ATM in Kinshasa”. (Interview conducted in Kinshasa, DRC, in October 2010).

The entry and re-entry role played by microfinance institutions in post-conflict DRC is an important finding because it confirms this study's postulate that microfinance is more agile and positions itself as a bridge between the informal financial sector and the formal financial sector. Indeed, microfinance institutions provide a potential solution to the traditional exclusion of some segments of the population to access mainstream financial services encountered in many developing countries. Post-Conflict Microfinance in DRC provides therefore a way to address the divide between the poor majority and the rich minority to access financial services. As said earlier, while inequality in accessing financial services may always exist, it can be reduced by using a microfinance approach to financial services provision following a conflict.

The outreach and financial performance by microfinance institutions' findings and supporting evidence are encouraging signals in the post-conflict reconstruction of financial services in post-conflict DRC. However, the head of the Microfinance Unit at the Central Bank of Congo warns that while these results are great, "the microfinance sector in DRC is still weak and characterized by a lack of professionalism within the sector: many among them have no clear vision, do not use acceptable account systems, and do not have effective management systems. As a result, many microfinance institutions are bankrupted and have to close doors soon after they start operating" (Interview conducted in Kinshasa, DRC, in August 2010).

DRC post-conflict microfinance institutions are a valuable tool in reaching out to many Congolese to use financial services for their first time, bringing back to the financial services sector former clients of bankrupt cooperatives, or even serving former clients of commercial banks. However, those institutions are being criticized for a myriad of reasons. The principal ones are: (1) High interest rates; (2) Harsh methods of loan recovery; (3) Social and cultural insensitivity in recovering troubled loans; (4) Unprofessional behavior when dealing with clients; (5) Short time between loan disbursement and loan repayment; (6) Caring only about loans and less about clients' business development.

Those criticisms are echoed by microfinance institutions' clients. Indeed, while collecting quantitative data over a five-month period in Kinshasa, this study collected also some qualitative data by probing and asking unstructured questions, using the "MFI Clients Post-Conflict Reconstruction Survey" (see appendix 1). In relation to high interest charged by microfinance institutions, interviewee No. 90 said the following:

> If it's true that MFI rates are lower when compared to street lenders, it's however more and more obvious that MFI exploit us. They lend us money using monthly interest rate (5% more or less) but when you translate it into yearly rate, you find out that we pay 30%, 40% and sometimes 60%. This is a shame because none pays such a rate in Europe and in America. (Interview conducted in Kinshasa, DRC, on November 8, 2010).

When it comes to harsh methods of loan recovery, interviewee No. 67, a pastor from a local church said:

> I am not a client of a microfinance or bank but many of my followers in the church are clients of MF institutions. I understand that they borrow money as a group and when one person defaults the others pay. This is not fair

> and I guess this is why more and more people are skeptical with MF institutions. Group punishment is not a fair practice. I heard a lot of bad stories about MF: people's belongings are taken if they are late or do not pay back loans; some are hiding or moving to other neighborhoods; savings are retained and not given easily. (Interview conducted in Kinshasa, DRC, on October 21, 2010).

Many clients have complained that microfinance institutions are not sensitive to social and cultural aspects of the environment where they operate. Interviewee No. 90 adds the following:

> In this country, social life is mingled with business. It happens often that on the day of repayment, a client has a funeral, a sickness or other social emergency. Here, MFI are not flexible at all and loan officers behave unprofessionally, sometimes threatening people. As I told you before, word-of-mouth is an effective communication tool. People talk and know about what others are going through and as a result people are becoming reluctant vis-à-vis the financial institutions. (Interview conducted in Kinshasa, DRC, on November 8, 2010).

Clients have also complained about unprofessional behavior by microfinance institutions when dealing with clients. Interviewee No. 30 said the following:

> In general, things are well organized with FINCA. I just was not lucky and became ill; my sales decreased and I could not pay back my loan regularly. However, FINCA's approach is good and helpful. The one think I do not like with FINCA is that they do not care about people's health. Even if you are seriously ill you have to pay back your loan on time. I owed FINCA US$ 20 and received threats from loan officers. According to them even a dead body must pay back their loan. (Interview conducted in Kinshasa, DRC, on October, 9, 2010).

Concerning complaints about the short time between loan disbursement and loan repayment, interviewee No. 35 said the following:

> Loans help a lot. Prior to FINCA and other MF institutions, people lent money asking 50% interest monthly. Finca's rate is 4 or 5% monthly. This is good. The fact is that it's tough to find someone lending you money in this city. However, I will take a break and won't take a new loan. If you want to know why, loan repayment is stressful. I need a break. Paying back loans every two weeks is very challenging. I am more in favor of a monthly repayment cycle. I will be back with Finca if they adopt a monthly repayment policy for groups. MF institutions are growing but clients are suffering and not making good progress. Sales are usually a little higher when you just start your loan cycle. After few repayments, sales decrease drastically because most of the capital is going back to MF as part of loan reimbursement. (Interview conducted in Kinshasa, DRC, on October 11, 2010).

Finally, some clients to whom we talked complained about the fact that microfinance institutions care only about their loans and less about their clients' business development. Interviewee No. 81 said:

> Usually, you experience serious difficulties during the last month of the loan cycle: your inventory is gone, the principal is gone, your own capital is at its lowest, and sales are very low because you do not have enough and diversified inventory. Loans bring you a lot of stress. I am a Christian and I am supposed to be happy with the standard of living God allows me to have, but the day before paying back your loan you feel so low that even prayers do not help. I feel better now that I am out of that loans-business (Interview conducted in Kinshasa, DRC, on October 23, 2010).

In conclusion, this study has found that microfinance institutions are doing a tremendous work in terms of outreach and financial performance but it is important that they address clients' complaints through adequate policies and financial education to explain why they do what they do, if they think that it is the best policy or behavior for both the institution and the client. This study agrees with interviewee No. 90 that what motivated people to get involved with financial institutions in the post-conflict DRC is first the fact that microfinance institutions were proactive and offered loans to micro and small entrepreneurs in need of fresh capital in a destroyed post-conflict era. Microfinance institutions must recreate this business environment based on trust and mutual benefit. This need is echoed by interviewee No. 90:

> When MFI started their business in DRC, all was great and fine: they gave as much money as people wanted and the numbers were growing faster in terms of clients, loans, and deposits. Today, things have changed. MFI understood that they are so wanted by a population so motivated to trust again financial institutions that they have changed their behavior to start operating like commercial banks. Clients are getting frustrated with MFI. MFI must change their attitude. Overall, however, I do encourage what's happening in the financial services industry: MFI have created jobs by providing the necessary funding for small businesses to remain operative and also for new people to enter the market with new lines of businesses to be part of the DRC's business framework. We need more MFI to enter the country in order for competition to take place and improve the entire financial services provision environment.

Appendix 5 labeled "Voices of MFI Clients" displays primary data collected by this study over a five-month period in Kinshasa, by probing and asking unstructured questions when collecting quantitative data using the “MFI Clients Post-Conflict Reconstruction Survey”. The reader can get more insights related to clients’ concerns about microfinance activities by reading summaries of interviews.

6.2. Post-Conflict Outreach and Financial Performance of Microfinance Institutions vs. Traditional Financial Services

This study has found that MF is a valuable financial service reconstruction tool in post-conflict communities because it displays rapid and profound increases in outreach and financial performance during consecutive years in post-conflict situation. However, this study postulated also that MF is a better tool than TFS particularly at the earlier stages of post-conflict reconstruction because MF displays more rapid increases in outreach and financial performance than TFS. Four variables related to outreach (employment, clientele, lending, and deposits/Savings) and four variables related to financial performance (assets, efficiency, profitability, and risk) were analyzed for each approach. Time series analysis was proposed to look at the trends displayed by the eight variables by plotting raw numbers and/or percentage change from each year.

Regarding outreach, this study found that financial services institutions applying a microfinance approach (MF), measured by the level of employment by microfinance institutions, the number of clients joining microfinance institutions, the volume (dollar amount) of loans disbursed by microfinance institutions, and the dollar amount of deposits of clients, displayed higher yearly increases between 2005 and 2009 when compared to the outreach of TFS. MF hired more workers than TFS; attracted more clients (as expressed by the number of accounts) than TFS; their loan portfolios experienced higher rates of increase than TFS; and MF displayed faster consecutive yearly increase rates in deposits from 2005 to 2009 (deposits of MF slightly decreased in 2008 but regained its faster path compared to TFS through year 2009). This study has concluded that the overall outreach trend has matched the hypothesized pattern.

Regarding financial performance, this study found that financial services institutions applying microfinance approach (MF), measured by their total assets displayed faster growth rates between 2005 and 2009 when compared to the financial performance of TFS. The study also found that financial performance of financial services institutions applying microfinance approach (MF), measured by their return on total assets (ROA), resulted in higher ROAs between 2005 and 2009 when compared to the financial performance of TFS. However, the study found that financial performance of financial services institutions applying microfinance approach (MF), measured by their network expansion, displayed faster growth between 2005 and 2007 but were surpassed by the financial performance of TFS in 2008 and 2009. Finally, the study found that financial performance of financial services institutions applying microfinance approach (MF), measured by their portfolio at risk (PAR) rate outcome better result than TFS only in 2005 but has displayed a lesser performance than TFS from 2006 throughout 2009. This study concluded that, overall, the financial performance trend has only partially the hypothesized pattern.

Microfinance institutions and commercial banks are often considered as two different animals with two distinct target markets and clientele. Microfinance was originally initiated to “bank to the poor” (Yunus & Jolis, 2003) and mainstream financial institutions are known to exclude the poor and low-income people. When adhering to this divide, a comparative study between them can a priori appear to compare apples and oranges. This study did not adhere to this divide and has postulated that in a post-conflict setting like DRC, financial institutions applying a microfinance approach (MF) and those applying a traditional approach (TFS) are comparable in terms of outreach and financial performance for the purpose of financial services reconstruction. This approach and the findings from this study corroborate Barr’s (2005) suggestion to approach microfinance as a form of financial development that can contribute to the development of the financial sector. The approach and the findings also corroborate Kuehnast (2001); Frasier & Saad (2003); and Barr’s (2005) arguments that microfinance can play the role of financial services reconstruction in a post-conflict context.

In 2007, The CGAP conducted a policy study on the DRC financial sector and concluded that the sector was still fragile, but had improved since major reforms suggested by the Bretton Woods institutions were implemented since 2001. According to the CGAP report:

> The government and the Central Bank of Congo (BCC) have made good progress in strengthening the legal framework for the financial system, improving monetary management, cleaning up the financial sector and restructuring the Central Bank. Most banks are focused on the relatively small government and corporate sector. In a population estimated at 62

> million people, the Association of Congolese Banks and the BCC estimate only 60,000 bank accounts - that is 0.01 percent of the population has a bank account. The authorities are consolidating the banking sector by closing insolvent state and commercial banks (CGAP, 2007, pages 1-2).

One illustration of the cleaning up of the financial sector has been the closure by the Central Bank of Congo of thirteen financial institutions. In its appraisal, the CGAP (2007) "12 banks still in operation after the ongoing restructuring of the banking sector focused primarily on the corporate and government sector, and retail banking remained largely underdeveloped" (p.4). As of February 2010, the Central Bank of Congo's website reported that there are currently 21 banks fully operating in DRC. However, during data collection in Kinshasa, it was mentioned that up to 3 more should start operating soon. **Appendix 4** presents the list of banks currently operational in DRC and the list of banks that were closed.

As with the microfinance sector, the banking sector is still fragile. The majority of banks (twelve out of twenty-one) operate only in the capital city of Kinshasa and do not have agencies outside Kinshasa. Even in Kinshasa, most are concentrated in Gombe (business center) and do not reach out to other neighborhoods. One supervisor of bank at the Central Bank of Congo recognized the fragility of the financial sector and said:

> An illustration will be a recent case of 'Banque Congolaise', which has just been put under the management of the Central Bank because it is almost bankrupted. The Central Bank feared a systemic effect without such drastic measures. So, as supervisors of banks, we are watching the banking booming with caution. We are happy to see that finally we are out of trouble when the entire country had only 5 to 6 credible banks. DRC is

> in need of more efficient and viable banks to cover the entire country. For a country of over 65 million people, so many people do not have access to financial services (Interview conducted in Kinshasa, DRC, on October 2010).

There is indeed a “booming” climate in the financial sector in the DRC, mostly in the Capital Kinshasa and in major towns such as Lubumbashi, Matadi, and Goma, to name a few. In fact, the majority of these banks (twelve out of twenty one) started their operations during the last five years, creating a booming environment in the banking sector. In the single year of 2005, four banks opened doors. Three more opened doors the following year in 2006. This boom has created excitement but also a lot of challenges for the regulatory body as well as for the providers. The decision of so many banks to establish in Congo is a sign of recovery of the financial sector after a long, miserable period that saw banks closing *en masse*. The remaining question is whether these new and old financial institutions are strong enough to be viable and sustainable.

The CGAP reported also that post-conflict DRC had a surprising number and range of structures claiming to provide microfinance services (CGAP, 2007). The overall picture depicted by the report can be summarized as following:

> Besides the commercial banks, only 38 COOPEC [Cooperatives d’Epargne et de Credit which means “Savings and Credit Cooperatives”] and nine MFIs are licensed as of March 2007. Companies providing transfers and financial messaging services are governed under separate laws. Most financial service providers are concentrated in Kinshasa and Kivu in the East, plus one bank in Lubumbashi. There are very few programs elsewhere in the country, and a particular dearth of services in

> rural areas where 65 percent of the population lives. The MFI survey currently being carried out through PASMIF will help identify more precisely the geographic coverage of services nationwide. Outside the reach of the law, some NGOs provide financial services, especially in regions far from Kinshasa. In addition, the BCC estimates there are as many as 500 Coopecs throughout the country, although many may no longer be active. Informal mechanisms, such as savings schemes called "daddy cards" and ROSCAs are common. Since 2003, international organizations have entered the financial services market in DRC, contributing greatly to the rapid growth of numbers of new bank accounts. (CGAP, 2007, p. 6).

The Central Bank of Congo's Annual Report 2009 mentioned that "as of December 2009, the Central Bank had authorized 96 savings and credit cooperatives, 17 microfinance institutions, and 2 cooperative networks" (p. 205). However, according to an internal document from the Microfinance Unit of the Central Bank of Congo, an update of these data reports that, as of March 2010, the Central Bank of Congo registered 112 Saving and Credit cooperatives (including two cooperative networks: COOCEC MECRECO and COOCEC NORD KIVU) and 15 Micro Finance Institutions, totaling 127 institutions. In addition, three commercial banks offer microfinance services: Procredit Bank, Trust Merchant Bank, and Advans Bank (Internal Draft from the Microfinance Unit, Department of financial providers' supervision, Central Bank of Congo, 2010). Overall, concluded the BCC Annual Report 2009, "the microfinance sector is expanding but its national penetration is very low at around 4% only. More than 250 structures operate some type of microfinance activities in addition to those operating in the informal sector, mainly the tontines (ROSCAS), mutual help groups, and informal lenders" (p. 206).

Appendix 1 provided an updated list of all formal financial institutions of all types operating in the DRC as of December 2009 (Central Bank of Congo, 2010).

According to the Deputy Director at the department of financial institutions' supervision at the Central Bank of Congo, Mr. Valentin Ramazani, when compared to the sector's situation during the conflict period, the financial sector is moving in the right direction. During an interview in June 2010, he said:

> It's true that microfinance institutions have played a critical role in restoring the confidence in the banking system, he said. However, RawBank and Trust Merchant Bank should also be considered as major players in reconstructing financial services in the post-conflict era, together with Procredit Bank and FINCA. In fact, many banks are now using the microfinance approach; and at the same time, microfinance institutions are adopting more rigorous conditions as do commercial banks. I think that there is complementarity between the commercial and the microfinance approaches (Interview conducted in Kinshasa, DRC, in June 2010).

A manager of the credit department at Trust Merchant Bank (TMB) shared her thought about this complementarity and said:

> Procredit Bank has been the trigger in changing the game in providing financial services in Kinshasa and in some extent in the DRC. TMB can however claim to be the first Congolese bank embracing the microfinance methodology. Until 2009, TMB had two credit departments, one dealt with MF clients and another operated with classical commercial banking clients. Since 2009, we have merged both departments into one that uses a commercial approach to credit (Interview conducted in Kinshasa, DRC, in September 2010).

One of TMB's flyers says: "TMB is proud of being the first DRC bank to launch, at its creation, a microfinance initiative in order to help a portion of the Congolese population neglected by formal financial institutions. It is our expectation that this initiate will enable all strata of the Congolese people, including women, to access financial services, come back to the formal financial sector, and reconstruct the country". (Trust Merchant Bank, DRC, 2010, p.5).

Trust Merchant Bank's case seems to be an interesting one when it comes to complementarity between MF and TFS in reconstructing post-conflict financial services provision. TMB is a Congolese bank established in 2003 but opened doors in August 2004 (TMB Annual report 2006, p.6), at almost the same time when Procredit Bank and Finca DRC, two international microfinance institutions, entered the DRC market. TMB defines itself as a community financial institution with the goal of bringing to the formal financial services sector those who have been denied or excluded from the sector and operated in the informal financial services sector. At the same time, TMB aspired to be a major financial partner to the state and Congolese enterprises of all size in order to support and promote the reconstruction of the post-conflict DRC. For that reason, TMB had adopted a multi-service strategy by providing retail banking, corporate banking, and microfinance. According to Mr. Robert Levi, President and CEO of the bank:

> TMB is the sole bank that, when established in 2003, took into account individuals, all individuals, poor or rich as key ingredients of its development strategy. As a result, TMB created a department of microfinance as soon as it started operating in Congo. Indeed, TMB found it abnormal that the entire DRC with a population of 60 million people had

> just around 100,000 bank accounts in 2003 when it launches its operations. That is why this annual report presents a special tribute to these individuals, women and men, who fight daily to put food on their table, send their children to school, deal with medical bills by using the formal financial services with dignity and courage. (TMB Annual Report 2007, p. 5).

TMD's mixed approach has resulted in a fast increase similar to the one experienced by Procredit and Finca. As of December 2007, the corporate banking and retail banking had a total of 25,119 clients (23,144 individuals, 334 small and medium businesses, and 1641 companies). The 2006 annual report mentions that TMB employed 230 people at that time while the 2007 annual report mentions a total of 366 (around 60% increase in hiring) employees scattered within a dozen branches located mainly in the Katanga Province and the capital city of Kinshasa. Key variables (assets, deposits, capital, profit, and loans) all experienced high increases as depicted on Table 6.3 below.

Table 6.3: TMB Key Data

Key Variables	2005	2006	% Chg 05-06	2007	% Chg 06-07
Total Assets	17,573,233	57,348,112	226%	128,609,171	124%
Deposits	13,170,667	44,751,955	240%	99,331,659	122%
Capital	3,707,112	10,613,914	186%	24,454,304	130%
Profit	58,305	98,522	69%	149,088	51%
Loans	5,907,961	24,684,686	318%	43,311,112	75%

Source: Trust Merchant Bank Annual Reports 2006 & 2007.

The results of TMB, a newcomer mixing the commercial approach and the microfinance approach can be contrasted with those of BIAC (Banque Internationale pour l'Afrique au Congo). It is one of the oldest financial institutions of the DRC, established 40 years ago and applying a traditional approach to financial services delivery. BIAC is indeed one of the few survivors of the DRC economic and financial debacles. Trouble started at the end of the 1980s as result of the global financial crisis and became profound when political crises shuffled the DRC in 1991 and 1993 and saw banks' infrastructures looted and destroyed. The economic crisis that followed plunged the BIAC into a survival mode that saw an erosion of its assets, the closure of branches, a decrease in personnel and financial services limited to money transfer and few big clients. Since 2003, the post-conflict era, the Board of Directors of BIAC came up with a new business plan that suggested a redeployment of branches that were not operational, expansion to cover provinces where the bank was not present, a solid partnership abroad, and a diversification of its products and services.

Unfortunately, BIAC financial data following the first years of the post-conflict period were not available and the 2008 annual reports did not provide a retrospective of key data. When looking at 2007 and 2008 data, BIAC has made progress but its increase rates appear to be far less than the results posted by TMB, a competitor that mixes TFS and MF approaches. Table 6.4 presents key data posted by BIAC for 2007 and 2008.

Table 6.4: TMB Key Data

Key Variables	2007	2008	% Chg 07-08
Total Assets	112,787,590	152,302,817	35%
Deposits	88,490,954	118,449,058	34%
Capital	8,205,601	11,836,714	44%
Profit	944,664	987,096	4%
Loans	48,336,810	94,345,629	95%

Source: BIAC Annual Report 2008.

When interviewing Mrs. Lebugue, former Head of the Microfinance Unit and currenly Director for changes at Central Bank of Congo, she said:

> I do believe that microfinance institutions, mainly Procredit and FINCA have been determinant factors in restoring the confidence of the Congolese people to the entire financial system, particularly in Kinshasa. Very few people trusted DRC commercial banks prior to the arrival of these two institutions. Even today many people are still reluctant with commercial banks and prefer using the services of Procredit, a microfinance institution with the status of a fully operated bank. (Interview conducted in Kinshasa, DRC, in September 2010).

The findings from this study seem to corroborate her claim in terms of outreach because all four outreach variables (employment, clientele, lending, and deposits/savings) achieve better results for MF versus TFS. When adding up two other measures of financial performance (assets and profitability) where MF showed better results than TFS, one way to conclude indeed is that overall MF might be a better tool than TFS at the earlier stage of financial services reconstruction following political and armed conflicts such as the one that occurred in the Democratic Republic of Congo.

It is appropriate to conclude this section with a thought from a client of Advans-Congo, a newly established bank using a microfinance approach to financial services delivery:

> Ordinary people do not go to BCDC (Banque Commerciale du Congo). Only companies and government officials work with them. In fact, these commercial banks are not interested to work with small businesses like us. I am Advans' first client and I feel privileged doing business with them. I am in my third loan and overall I have borrowed around US$ 40,000 with

> them. Their loans have helped boosting my business and I have not experienced problems paying them back. When Advans Director asks why in a city of almost 10 million people, his bank has only a thousand clients after a year of operations; what I can say is that their loan's requirements are not easy to fulfill. I remember that the first time when I requested to borrow US$ 7,600, I had to surrender my house's ownership because Advans requests collateral for higher amount. In addition, Advans never gives you the requested amount. The first time I requested US$ 15,000 but got half; the second time I requested US$ 25,000 and got also half. This third time I wanted US$ 35,000 but got just US$ 25,000. I can understand why Advans is careful with loans because there are really issues with people in this city. There are some people who just take money without planning how to pay it back. At the same time, there are good people and hard workers who cannot access loans because of collateral. I agree with the bank that we need to maintain the system and therefore banks shall make sure that they can get their money back to continue operating in the country. (Interview conducted in Kinshasa, DRC, in November 2010).

Recently, BCDC, BIAC, RAWBANK (all TFS) and many financial institutions that have traditionally overpassed low-income, poor, micro and small businesses have changed their strategy and are reaching out to the category of client who either "entered" or "re-entered" the formal financial services through microfinance institutions. The result has been rapid growth in the number of their accounts as illustrated by Rawbank which went from 3,726 accounts in 2006 to 30,570 in 2008, a ten-time increase in four years. Year 2007 was the one that saw Rawbank's paradigm change to embrace clients formerly attracted by microfinance. Rawbank went from 6,212 accounts to 23,793 accounts in one year, an increase rate nearly 400%. BCDC has also done the same move by titling its 2009 Annual Report as “Loans for a new century” (BCDC, 2010), a signal to reach out to those who entered or re-entered the formal financial sector or are ready to do so. FINCA DRC has also moved aggressively towards individuals and big loans to be competitive with those banks embracing its target market. Procredit, the champion of all of them understood it from the start and has emerged as the big winner of DRC post-conflict reconstruction of financial services.

6.3. Post-Conflict Microfinance and Business Development

This study has found that microfinance, as an intervention, improves business development of its clients in terms of the number of businesses, profit, and to some extent, in terms of the number of people they employed while exercising their micro and/or small enterprise activities. Indeed, drawing from the analysis of business development in the previous chapter, this study found a correlation between the experience with formal financial institution of a micro or small business entrepreneur; and both the Mann-Whitney U-Test and the Independent-Samples T-Test reveal a significance level of $p < .05$ for number of businesses and profit; the variable “number of employees” barely missed the significance level for the Independent-Samples T-Test ($p=.052>.05$). Overall, this study’s hypothesis, stating that micro and small entrepreneurs who are clients of microfinance experience better business development than micro and small entrepreneurs who are not clients of microfinance, has been confirmed.

Santos (2003) suggested that in the post-conflict DRC, microfinance should seize the opportunity to finance small, medium and micro enterprises. Matabisi, Beyene, and

Kiremidjan (2007) found that almost all FINCA-DRC clients were owners of some kind of microenterprise; 3.6% of clients in the sample used their loan to start a new activity while 94.5% borrowed to continue their existing businesses. They also found that 37.1% of all businesses had at least one additional employee beside the business owner, an indication of job creation. This previous study was limited to descriptive analysis and did not determine the significance of the findings. This thesis fills that gap and brings evidence that MF clients experience better business development in terms of the number of businesses, profit, and to some extent in terms of employment. It is important to determine if microfinance results in a mutual benefit between the provider of services and their recipients. The previous chapter and the discussions in section one and two in this chapter have indeed demonstrated that microfinance institutions are doing good business in Congo. It is equally important to determine whether they are also better off.

This study's business development findings corroborate previous studies of Post-Conflict Microfinance which suggested that microfinance is a tool for microenterprise development because it helps reconstruct small enterprises destroyed by armed conflicts by providing the necessary capital to consolidate existing businesses or create new ones. Indeed, Frasier and Saad (2003) found that in the case of post-conflict Mozambique, microfinance enabled the self-employed to resume their economic activities. In addition, the findings in this study support Tucker, Nurse, Gailey, Park and Bauman (2004) who suggested that in post-conflict Liberia, microfinance emphasized building an entrepreneurial sector though structured grants and loans programs.

Statistics, however, do not tell the whole story. Indeed, data collection in DRC offered an opportunity to deeply understand the environment within which DRC's micro entrepreneurs operate, the structure of their small businesses, their challenges and their understanding of the all microcredit business. The study went beyond the structured survey to probe and listen to small vendors from both sides (MF clients and Non clients). Below are some of their voices. They articulate their views ranging from very satisfied to quite dissatisfied client who feel unempowered in the face of financial institutions.

Interviewee No. 87, a client of FINCA DRC, is the typical satisfied client whose experience with microcredit is positive and constructive. She said:

> I love FINCA and will go nowhere else. Access to more money as capital has been determinant to increase my sales volume since I joined FINCA. The real impact of the lending practice by FINCA has been on improving our standard of living, giving us access to more capital that allows us to diversify our merchandises and therefore provide us with more income and profit, and of course savings. (Interview conducted in Kinshasa, DRC, on November 3, 2010).

Interviewee No. 17, a client of (MF-Mufesakin), is another example of satisfied client. He said:

> My experience with MF is positive. I think that it's a good thing. Before getting MF money (loan) my business was down. I lost inventory and sales were low and I could not make profit. Ever since I got Mufesakin's loan, my business is again prosperous and I am doing pretty well. A friend of mine is a FINCA client and he asked me if I could be his witness or

> guarantor to get a loan. I agreed and after FINCA's loan officers visited my shop, they gave him the loan. He requested US$ 3,000 but got US$ 2,000. He bought a car and does taxi with this car. He got the loan in February and he's on track with repayments and will be done with the full loan soon. We know the secret and it helps when you mean business. The key is to invest the full loan into your business. We are aware that today things are good with microfinance institutions but one day they might change. We have seen the government closing banks and MF institutions here, so we are not naïve but have no choice than working with institutions that project confidence. FINCA and MUFESAKIN are among these institutions. (Interview conducted in Kinshasa, DRC, on September 1, 2010).

In contrast, Interviewee No. 14, a client with Procredit and Finca said:

> I started with Procredit but now I am also a client with FINCA. I got US$ 3,000 loan from Procredit and US$ 500 from FINCA. Of course I did not report to FINCA that I am a current Procredit Client. The truth is that using loans is a tough business. Sales are not as good as they used to be. Profit is thin and on top of that loan repayment makes it even tougher. In my case, I had to sell household appliances to pay back the loan. I also noticed that loan officers have no courtesy when recovering loan in arrears. Procredit has decided to stop lending me money due to late payments. I do not think that people should be punished because of late payment. Loans are good in nature but the conditions under which MFI are providing loans in Congo are just untenable. As clients, we feel used and weak. We can't win against them. I do recognize that there are people misusing loans by buying cars, home and other assets with MF money. But these cases are isolated. In most cases, clients face real difficulties as I did and couldn't keep track with loans repayment (Interview conducted in Kinshasa, DRC, on September 1, 2010).

Interviewee No. 50 is more neutral in her position and says:

> Usually, you invest all in your business and then you can use profit for household expenses. Usually, at the beginning of the loan cycle you will have a lot of inventory and experience high sales. But, when repayment starts, your sales decrease because you do not have any more a diversified stall with many products. You do concentrate only on a few products which are highly profitable. At the end of the cycle, sales are generally much lower. Sometimes you have to take from your own money to pay back the last portions of the MF loan. (Interview conducted in Kinshasa, DRC, on October 14, 2010).

As discussed in section 1 of this chapter, DRC post-conflict microfinance institutions are being criticized for a many reasons, including high interest rates; harsh methods of loan recovery; and short time between loan disbursement and loan repayment. These factors affect directly clients' business development. There are indeed a lot of stories at the market places and neighborhoods of Kinshasa about microfinance making huge profits while clients are being exploited. The voices of clients in the previous sections provide a flavor of this issue. During each of the ninety-five interviews conducted in DRC to collect these data, when sitting with clients at their stalls for an average of one hour, it became obvious that clients of MF are struggling to maintain their status of "good clients" who are on-time with loan repayment. Successful clients seem to be those who diversify largely their business and engage in lucrative lines such as large distribution (water, soda, beer) or buy large stock of clothes and electronics abroad (West Africa, Dubai, China). The bulk of small local vendors still struggle to make their payment and in many cases do not invest all their loan into their business either because they can't distribute large quantity or because they need a portion of the loan to provide their household with food, medicines, or cope with social events. At face value, although they are in general better-off than their peers who are not eligible for – or do not want - micro-credit, business development is far from showing real progress for the owners or the community. There should be better policies by microfinance institutions and the political authority to enable micro-entrepreneurs to live better, sell more products, maintain clean and decent environment around their stalls, and dream to become real entrepreneurs with adequate capital and perspectives of real business development instead of operating in the current survival mode.

6.4. Post-Conflict Microfinance and Education

This study has found low correlations between the experience with formal financial institution of a micro or small business entrepreneur and the number of children they currently send to school or the number of children clients of microfinance sent to school before joining their actual microfinance institution. This study found that these correlations were not statistically significant. Both the Mann-Whitney U-Test and the Independent-Samples T-Test reveal non-significance levels with $p > .05$ for both variables. The findings did not support this study's experimental hypothesis, stating that micro and small entrepreneurs who are clients of microfinance will send more children to school than micro and small entrepreneurs who are not clients of microfinance.

The logic behind this hypothesis was that armed conflict like the one that occurred in DRC has negative effects on a country's education system: physical infrastructures are usually occupied by military factions and are generally destroyed because they become targets by the opposite factions; teachers and students are displaced; and educational materials such as books, curricula, and didactical tools are destroyed. When conflict ends and education is reorganized in the post-conflict era, there are many reasons for it to be costly and not affordable for people who have lost their business or their jobs. This is besides all of the security issues that sometimes prevent parents to send their children to school. In this context, Post-Conflict Microfinance can at least resolve the affordability issue so that more parents are capable of sending their children to school.

In Kinshasa, the capital city of DRC, this hypothesis was not proved by this study. One reason might be that Kinshasa did not experience a lot of physical destruction of educational infrastructure because major combat was avoided. Another reason might be the colonial legacy in this country where education was made compulsory and free of charge in many cases and those parents who have been educated cannot imagine their children not going to school. As one of the interviewees said, with or without money children must go to school. It’s a “no brainer”, he said. Finally, the “urban” factor can be another explanation. In urban areas, there are little reasons not to send children to school and there is some kind of social pressure on families when they keep their children home. Discussions with MF clients and non-clients about this aspect revealed that microfinance makes a difference when it comes to the conditions under which children study. Interviewee No.1 said:

> Before becoming a microfinance (MF) client, we were paying for kids’ education almost the same amount we pay now; but it was very difficult to afford tuition and school materials. Children used to go to school hungry and without money for their lunch. The situation has changed since we became MF clients and we can afford children’s education costs easier than before. (Interview conducted in Kinshasa, DRC, on June 2, 2010).

Interviewee No. 2 also said that: "Tuitions are less now because one child is out of school. But other school related expenses are still high. We can afford it now with our small business' activities with Mecrekin". (Interview conducted in Kinshasa, DRC, on October 14, 2010).

6.5. Post-Conflict Microfinance and Assets Acquisition

This study concludes that microfinance, as an intervention, has an impact on the value of total assets owned by its clients. In fact, this study's experimental hypothesis, stating that micro and small entrepreneurs who are clients of microfinance acquired more assets than micro and small entrepreneurs who are not clients of microfinance, has been confirmed. Indeed, this study has found a correlation between the experience with formal financial institution of a micro or small business entrepreneur and the total value of their total assets and both the Mann-Whitney U-Test and the Independent-Samples T-Test reveals a significance level of $p < .05$ for total assets. Total assets were revealed to have medium size effect.

In a study conducted among clients of FINCA DRC in 2007, Matabisi, Beyene, and Kiremijan (2007) suggested that "asset ownership has been long recognized as an important measurement tool for determining poverty levels as it provides information about an individual's ability to smooth consumption over time as well as future economic burdens" (page 17). Their study found that:

> Of the sixty nine individual loan clients interviewed, where the average loan size was USD 2,349 the likelihood of owning luxury assets such as cars, cameras, stereo, colour TVs, DVD players, and

> refrigerators/freezers, outweighed Village Banking clients by 44%, 22%, 31%, 15%, 34%, and 35%, respectively. Moreover, Village Banking clients surpass individual loan clients only in the possession of livestock such as chickens and ducks by a margin of 10% and 4% (Matabisi & al., 2007, p. 18).

Although the study did not proceed to inferential analysis to determine significance, this study provided an indication of a correlation between the volume of a loan a client receives and the level of her or his asset. They concluded that:

> As such, the takeaways that can be inferred from this information are that Individual Loan clients generally lead more luxurious lives and can afford more luxurious assets. As a result, they are more readily adapted to continue their state of well-being in the face of downturns in business or economic prosperity (Matabisi & al., 2007, p. 18).

The preliminary findings by Matabisi & al. (2007) corroborate the findings in this study which provide additional evidence to suggest that clients who have access to financial services, most of all loans, end up with more assets than those who are not recipients of external money in the form of loans and other financial services. Interviewee No. 71, belonging to Procredit and Finca said: “what I have acquired as assets from FINCA are: flooring my house, a freezer, and my savings with two microfinance institutions” (Interview conducted in Kinshasa, DRC, on October 21, 2010).

Many clients interviewed had mentioned that it's hard to acquire assets while maintaining a sound business, paying back loans on time, and providing for the household. Interviewee 72, a Finca client said: "It's hard to acquire assets with FINCA's money. So far, I have got just a freezer. The remaining has gone into food and schooling". Of course, a freezer makes a big difference in term of its monetary value and therefore, even though clients feel like it is difficult to acquire assets, they do and this makes a difference in their number compared to their peers who are non-clients.

What was learned during the interviews was that the burden of loan repayment leaves clients little margin to regularly acquire luxury assets. During a loan cycle, essential items such as food and schooling are prioritized while the compulsory savings allow the client to have money aside. At the end of the cycle, usually clients take some portion of their savings and buy luxury or business related assets, such as a freezer, TV, Radio, DVD, mattress, new cellphone, and so on. This is an opportunity that non clients generally do not have. Another explanation might be that microfinance revenues help to stabilize the basic needs of the household such as food, clothes, medicines, and education. In a household with more than one income, the extra income that served to cover these basic needs can serve to acquire assets and thus make a significant difference between a household involved in microfinance and another one depending only on traditional sources of income.

One last explanation might be that some clients acquire assets at first with a portion of their loan but do not report it because microfinance institutions forbid such behavior. If so, the assets acquired should also make a difference between clients and non-clients because the latter do not have such an opportunity. Interviewee No. 14 said the following:

> People will tell you that they invest all their loans into their business, but the truth is that almost everyone put some portion of their loan into household expenses, mostly food and in some case house appliances. We can't report that to MF institutions because we know that they ask us not to do so (Interview conducted in Kinshasa, DRC, on September 1, 2010).

6.6. Post-Conflict Microfinance and Standard of Living

This study has found that microfinance, as an intervention, improves the standard of living of their clients in comparison to non-clients. This study's experimental hypothesis, stating that micro and small entrepreneurs who are clients of microfinance have a higher standard of living in term of their individual monthly income and their household total expenditures was retained. In fact, this study has found a correlation between the experience with formal financial institution of a micro or small business entrepreneur and their standard of living, in terms of household expenditures and individual monthly income. Moreover, this study found that the differences between MF Clients and Non Clients were statistically significant and both the Mann-Whitney U-Test and the Independent-Samples T-Test reveals a significance level of $p < .05$ for both variables.

Individual monthly income has a medium effect, but household expenditures have a large effect.

This study's findings corroborate Matul & Tsilikounas' (2004) claim that post-conflict microfinance is a household reconstruction tool. Indeed, they found that "micro-enterprise credit in Bosnia-Herzegovina stimulated household reconstruction as it provided an efficient and long lasting coping mechanism for household after war" (Matul & Tsilikounas, 2004, p. 1). As in the case of Bosnia-Herzegovina, Post-Conflict Microfinance DRC has provided individual clients and their families with the resources needed to jumpstart household economies destroyed by years of armed conflicts. At the end of a conflict, households are in a situation of high vulnerability to risks and "income generated from micro-enterprises was perceived during the research as the most efficient coping mechanism among households affected by conflict so as to fill some of their most important needs over the reconstruction period" (Matul & Tsilikounas, 2004, p.1). As suggested earlier, reducing vulnerability of risks experienced by the poor and the poorest is one of the fundamentals of microfinance. This study's findings provide evidence that this fundamental stands especially in post-conflict setting.

Throughout data collection, over ninety percent microfinance clients agreed that microfinance's first and concrete outcome is some improvement in the household's standard of living. Interviewee No.10 expressed it as following: "our solidarity group is new and we hope to bridge the gap between our poor salary and high living expenses". (Interview conducted in Kinshasa, DRC, on September 9, 2010).

6.7. Post-Conflict Microfinance and Savings

This study has concluded that microfinance, as an intervention, acts as a trigger for savings. Indeed, a correlation has been found between the experience with formal financial institution of a micro or small business entrepreneur and the total amount she or he saves. It has also been found that the amount of savings of clients of MF institutions was higher and statistically significant compared to savings of non-clients. Both the Mann-Whitney U-Test and the Independent-Samples T-Test reveals a significance level of $p < .05$ for savings. This study's hypothesis, stating that micro and small entrepreneurs who are clients of microfinance will save more than micro and small entrepreneurs who are not clients of microfinance, has been retained. Savings were revealed to have a medium effect and accounted for 6% of variability between MF clients and Non Clients.

Savings are usually considered as an asset like home, appliances, land, and automobile; it could indeed be included in the Asset Acquisition section of this study. Savings are however a key component of microfinance. Together with loans or microcredits, they are in fact the two "entry" products offered by microfinance institutions when they start their operations. Moreover, saving has become a specific approach to microfinance and has resulted in a specific branch of the microfinance industry called saving-led microfinance institutions (Ashe, 2007). Oxfam America, CARE, and Catholic Relief Services (CRS) are among the organizations that have embraced this methodology and have made it a cornerstone of their microfinance operations. In the field of microfinance, saving seems not to be another asset but the real asset, the starting point and the ending point for clients. This is why the survey submitted to respondents of this study had a special section related to savings.

Major DRC Post-Conflict Microfinance institutions could be defined as lending-led microfinance institutions when they started their operations in post-conflict DRC because their key product had been loans to micro and small entrepreneurs. Until recently, many MFI were not allow to collect savings or deposits from their client due to their Not for Profit status. Finca has been collecting compulsory savings since its beginning. The savings were not legally considered as savings but as some type of collateral and did not bear interests. Recently, Finca has been authorized by the Central Bank of Congo to collect savings and deposits. So far or at least until recently, Hope International and Paidek were also not allowed to collect savings but just provide loans and eventually a certain percentage of the loan disbursed was often required. Procredit bank and Advans bank have both been collecting savings since inception thanks to their status of banks which allow them to do so. Procredit has grown faster than all the other microfinance institutions during its five years of existence due partially to its strategy emphasizing provision of a complete menu of financial services to its clients that includes the collection of savings and deposits while also disbursing larger amount of loans to individuals, small and medium enterprises.

Savings is in itself a critical element of post-conflict reconstruction and it is an important finding of this study. In the framework of Post-Conflict Microfinance, savings help the financial institutions to grow quickly (as seen with Procredit) because it has a multiplier effect: proper funds for lending to clients, less dependence on foreign capital and therefore a low cost of capital, help introducing other financial products such as debit and credit cards, lines of credit, and guarantee or collateral to mortgage or letter of credit. At the same time, microfinance clients must save and be motivated to save because it also has a multiplier effect on the side of MF clients: less dependence on MFI loans with high interest rate (up to 60% annually) in the long term because proper fund can be used to conduct business, promote business development, allow assets acquisition, and provide household with reserve to cope with risks and shocks.

Clients and Non Clients expressed commitment to savings as revealed in their comments when probing during data collection. Interviewee No. 32, a non-client said:

> I am afraid of debt. I do not like owing someone. I heard about Procredit Bank but I am still not sure if I have to take their money. We use “Carte” or “Likelemba” to save some portion of our daily profit in order to have a margin at the end of the month. Household and business expenses are mingled and without this strategy, one will definitely put all the profit into household expenses (Interview conducted in Kinshasa, DRC, on October 11, 2010).

Interviewees No. 49 and 87 who are clients with Finca said that they continue to practice “Likelemba” and “Carte” (traditional saving and deposit practices closed to ROSCAS) while also saving with Finca. When asked why, Interviewee No. 87 said that it’s a response to Finca policy that a saving account cannot be accessed until a loan cycle ended. Obviously, with the new Savings Program introduced by Finca, clients will be having proper savings accounts in addition to the “savings-collateral” that have existed so far. Again, interviewee No. 87 said what many MF clients repeated during the interviews:

> The real impact of the lending practice of FINCA has been on improving standard of living, access to more capital that allows diversification and therefore more income and profit, and of course savings. (Interview conducted in Kinshasa, DRC, on November 3, 2010).

6.10. Post-Conflict Microfinance and Poverty Level

This study concluded that, in terms of poverty level, households of clients of microfinance institutions are less poor and financially better off compared to households of non-clients. Indeed, it was found that only 28% households of MF Clients lived in either severe or moderate poverty vs. 43% households of Non-Clients; inversely, 72% households of MF Clients are vulnerable or Non Poor vs. 57% households of Non-Clients.

The findings of this study corroborate the fundamentals of microfinance that emerged as a tool for poverty alleviation through the provision of financial services to the poor bypassing formal financial services. One of the major development goals found in the Grameen’s sixteen decisions was to bring prosperity to families (Yunus & Jolis, 2003). Hulme & Moore (2006) observes indeed that microfinance programs and institutions have become an increasingly important component of strategies to reduce poverty or promote micro and small enterprise development. As said earlier, from the Grameen, Aka Khan, ACCION, FINCA’s lending approach through recent innovation of OXFAM, CARE and many other programs using a savings-led approach, microfinance's major and ultimate goal has been the reduction of vulnerability of risks experienced by the poor and the poorest. This postulate makes sense in peaceful areas of intervention and this study thought that it should also be valid in conflict and post-conflict zones of intervention, using microfinance as a tool. The findings in this study have indeed supported this postulate.

In a previous study conducted by Matabisi, Beyene, and Kiremijan (2007) among clients of Finca DRC only, it was found that 13% lived in severe poverty, 43% in moderate poverty, 21% were vulnerable, and 23% non-poor. This study, conducting three years later came up with sample of MF clients, only half of whom belonged to Finca. The other half was a mixture of clients of other microfinance institutions such as Mecreco, Mufesakin, Procredit, Advans, and Charite. Using the same DPCE measure used in the 2007 study, this study found 2.2% of the total microfinance clients in the sample live in severe poverty, 26.1% live in moderate poverty, 23.9% are vulnerable, and 47.8% are non-poor. Table 6.5 summarizes the key findings of the 2007 vs. the 2010 studies.

Table 6.5: Household Poverty Level of MF Clients (2007 vs. 2010)

Poverty Level	**2007 Study**		**2010 Study**	
	%	Cumulative %	%	Cumulative %
Severe	13	13	2	2
Moderate	43	56	26	28
Vulnerable	21	77	24	52
Non poor	23	100	48	100
Total	100	100	100	100

Source: Matabisi & al. (2007); and Primary data from Survey conducted in Congo in 2010.

The 2007 study found a large number of severe and moderate poor (56%) among MF clients compared to the 2010 study that has found only half of the 2007 level (28%). Inversely, the 2007 study found 46% of vulnerable or non-poor while the 2010 study counted around 72% of combined vulnerable and non-poor. Obviously, this study cannot conclude that the difference reflects the improvement of poverty level as a result of microfinance because the two studies were conducted using different sample frame and the 2007 study was indeed a single case study of only Finca clients. Nevertheless, this might be an indication of the effect of microfinance. Further research should be conducted to monitor the poverty level of microfinance clients in order to determine whether or not poverty is alleviated as a result of microfinance as a mode of intervention. This dissertation went beyond the classical DPCE (poverty level based on household expenditures) to introduce a measure of the level of poverty based on MF income only, called MDPCE (Microfinance Daily per Capita Expenditures), which reveals the net contribution of microfinance client's share in the household total income. This study found that 34.4% of the sample's households would live in severe poverty (less than US$ 1) if the household came to depend on only the MF client's income; 33.3% in moderate poverty (between US$1 and less than US$ 2); 11.6% would be considered as vulnerable (spend between US$ 2 and less than US$3 per day); and 20.4% could be considered non poor because they would live with US$3 or higher amount per day. Calculation of MDPCE reveals that when other incomes are not considered, MF households are poorer and indeed microfinance by its own still has a way to go to eliminate poverty, which is one among its many goals.

6.11. Post-Conflict Microfinance versus Non-Conflict Microfinance

Stiefel (1999) has argued that problems faced by different societies emerging from war are similar to development issues such as access, growth, proper management, inclusiveness, stability, sustainability, poverty, and many others. Conflict is however a key variable when it comes to compare a non-conflict to a conflict situation. Indeed, in post-conflict communities, existing development issues are amplified and compounded by the impacts and legacies of the conflict. When addressing post-conflict issues, which on face value might appear to be similar to development issues, appropriate policies and studies must take into account the impacts and legacies of conflict. This argument should also apply to microfinance when operating or studied in a conflict or post-conflict situations versus a non-conflict situation. According to Santos (2003):

> Despite the promise of microfinance in terms of poverty alleviation and small business development and some of the good results obtained in developing countries, particular attention has to be given to the specificities of post-conflict situations (PCS). In fact, PCS impose new challenges to microfinance operations and, more generally to the development of financial institutions. The post-conflict transition encompasses several stages from emergency to development with different degrees of overlap according to each particular situation, as well as speed of transition, which need to be accounted for. Examples of specific problems to post-conflict situations are political uncertainty, macro-economic instability and economic policy distortions, disrespect for the rule of law, rapid growth of the informal sector, depleted physical infrastructure and human capital, damaged financial system, population movements, disruption of social capital, and lack of collateral (pp. 24-28).

One illustration can be provided in the area of political uncertainty. Santos suggested that "in many PCS, the initial stage of relief is accompanied by intense political struggle for power among the different factions" (Santos, 2003, p. 24). In fact, the post-conflict DRC experienced a lot of political struggle among different factions in conflict. Indeed, free and democratic election was planned and held in 2006 with the help of the UN Mission in Congo. Most factions in conflict have agreed that the outcome of this general election should be accepted by all and those elected should be considered as the legitimate authorities of the post-conflict DRC. Things did not happen exactly as planned. Indeed, in the middle of post-conflict period, at a time where all current major microfinance institutions were operating at full speed in Kinshasa, war broke in Kinshasa between the factions of the two main presidential candidates, Joseph Kabila and Jean-Pierre Bemba, creating a temporarily disruption of microfinance institutions' activities. Petrikova (2008) observed that "the field of post-crisis microfinance is still young but the existing literature has already defined the roles of microfinance in crises in an extensive and fairly congruent manner." Indeed, Petrikova (2008) characterized the literature on post-conflict microfinance (PCM) as showing an 'ideological unity' going from country case-studies in the 1990s to best-practices recommendations nowadays. Still, Petrikova (2008) suggests that: "Authors interested in contributing to the pool of post-crisis microfinance literature should strive to improve the best-practice set on one hand by carrying out case studies of countries that have been thus far ignored, and on the other hand by conducting comprehensive impact and financial evaluations of the case studies already published (Petrovika, 2008, p.7). This dissertation should be considered as an answer to Petrikova's call.

6.12. Post-Conflict Microfinance and the Cooperative Financial System

From the 1970s to the post-conflict period, financial cooperatives, most of them known as COOPEC (*Cooperatives d"Epargne et de Credit* or Savings and Credit Cooperative) have been associated with the field of microfinance. According to Santos (2003), "the main Congolese traditional type of financing institution reaching small and medium enterprises even in more remote areas is the COOPEC. The majority of COOPECs have started operations in the 1970s and in the 1980s expanded to low-accessibility areas where the banking system was not present, through leveraging the infrastructure of schools and religious centres" (p. 51).

Historically, financial cooperatives have played an important role in the provision of financial services in the DRC before being disrupted by the country's economic crisis and the political and armed conflicts that followed. According to Santos (2003):

> Most COOPECs were affiliated to a union, the UCCEC (central union of the credit and savings cooperatives). In 1987, these cooperatives accounted for 7% of the total savings of the country's banking sector and in 1989 the UCCEC included five regional networks totalling 145 cooperatives, more than 270,000 members and US$ 4.9 million in savings. In the early 1990s, the joint effect of plundering, hyper-inflation and political instability have caused severe damage to the COOPEC system, which lost around 80% of their clients and 66% of the funds placed with commercial banks between 1991 and 1993. In 1993, the monetary reform to implement the new currency, "new Zaire", also hurt the COOPECs, as most of its bank accounts were frozen and became inconvertible. At present, it is difficult to know how much of the COOPEC

> system is still on its feet, but it has become much smaller and faces severe problems, in particular, lack of trust from the population due to the dramatic episodes of the early 1990s (Santos, 2003, p. 51).

When major conflict ended in DRC in 2003, only a few COOPECs were functional. Those are the ones that survived the long conflict period and the economic turbulances of the 1990s. In the earlier post-conflict period, while current major microfinance institutions (Hope, Finca, Procredit, and others) were entering the DRC market, the overall cooperative system, and particularly financial cooperatives, started again to reorganize. Santos (2003) reported that the RIFIDEC (*Regroupement des Institutions de Financement Décentralisé* or Association of Decentralized Financial Institutions), created in 2000 with financing from the GTZ (German Cooperation for Development), registered at the beginning of 2003, 75 effective members (of which 15 COOPECs) and 126 non-effective members (of which 13 COOPECs). In 2007, the CGAP (2007) reported that "only 38 COOPECs were licensed as of March 2007, although the Central Bank of Congo estimated that there were around 500 cooperatives throughout the country, with many among them no longer being active" (p. 6). Finally, the Central Bank of Congo's Annual Report of 2009 mentioned that "as of December 2009, the Central Bank had authorized 96 savings and credit cooperatives" (p. 205); and an internal document from the Microfinance Unit of the Central Bank of Congo reported that as of March 2010, the Central Bank of Congo registered 112 Saving and Credit cooperatives (including two cooperative networks: COOCEC MECRECO and COOCEC NORD KIVU).

Clearly, in the DRC, some financial cooperatives are considered as part of the formal and legal microfincance industry while many others are considered as part of the informal financial sector because they are not registered by the Central Bank of Congo. In this dissertation, legal and recognized financial cooperatives were considered as part of the microfinance industry. Unfortunately, most of them did not have complete and reported financial data that could fit the analysis proposed in this dissertation. The one with data that fit part of this study's trend analysis was MECRECO (Mutual of Savings and Credit Institutions of Congo) and its data have been used in the discussion chapter. At this stage, this dissertation's findings and conclusions should also apply to financial cooperatives which are recognized as part of the DRC's microfinance industry. Nevertheless, further studies should be conducted within the financial cooperative industry to determine the size of the industry, the players and their competitiveness vis-à-vis classical microfinance institutions such as Finca, Procredit, Paidek, Hekima, Advans, or Hope. Moreover, in most cases, COOPECs are local financial institutions initiated and managed by Congolese while major classic microfinance institutions are foreign financial institutions, initiated by international institutions, and so far managed by foreigners. Financial cooperatives should therefore be encouraged, helped, promoted, and be competitive if the DRC shall count on a sustainable microfinance industry where decisions are local and are taken by local actors who will not close doors as soon as new conflicts arise. So far, this is not the case in the DRC, except for very rare cases such as MECRECO which appears to compete with Finca and performs better than Hope-DRC and other foreign microfinance institutions. The MECRECO model should be carefully studied and replicate for a sustainable microfinance industry in the DRC.

7. Conclusion

This study's main hypothesis was that microfinance (MF) plays an important role a financial service reconstruction tool in post-conflict communities. It displays more rapid and profound increases in outreach and financial performance during consecutive years in a post-conflict situation, and its services translated into reconstruction. In particular, MF is a particularly better tool than traditional Financial Services (TFS) at the earlier stages of post-conflict reconstruction because MF displays more rapid increases in outreach and financial performance and faster reconstruction during the immediate years post-conflict when compared to TFS.

The results, analyses, and discussions in previous chapters have brought evidence that microfinance - as a mode of financial services provision is active, agile, and is a better tool than traditional financial services in terms of outreach and some aspects of financial performance in a post-conflict reconstruction, at least in the early interim phases of reconstruction. The findings in this study demonstrate that MF takes less time to set up after conflict than TFS; it reaches more people faster through its proactive methodology, which induces MF to employ more people than do TFS. MF also reaches out to a portion of the population that has been excluded from TFS even in peace time. MF acts as an entry point to loans and savings for a portion of the low-income population and allows the general population to access financial services after a significant conflict. Moreover, MF acts also as a re-entry mechanism for former clients who left the financial service industry due to mistrust of traditional institutions and the loss of their financial assets. Above all, the findings show that MF acts as a bridge between the informal sector and the commercial banking sector while being a trigger for higher savings among its clients. MF seems to provide the financial services sector with a solution to the exclusion of some segments of the population in accessing mainstream financial services encountered in many developing countries such as the DRC. When compared to non-clients, this study found that clients of microfinance institutions experience greater business development, acquire more assets, save more, and enjoy a higher standard of living. This study did not find a difference in the area of education. Clearly, MF should be emphasized as an intervention in the early stages of reconstruction of financial services.

Traditional Financial Services (TFS) also have shown increases, altough at rates generally lower than microfinance institutions. While their rates are lower, they generally have higher volume and amount of currency and therefore are important to continue servicing the government and state enterprises in post-conflict. It is imperative however that after cleaning up their systems, structures, and after regaining stability following destruction by conflicts, they reach out to the bulk of the population that have been brought to the industry by microfinance institutions at the earlier stage of post-conflict period. In that way, while inequality in accessing financial services may still exist, it can be reduced by using a hybrid model of financial services provision following a conflict.

Towards a Hybrid Model of Financial Services Provision in Post-Conflict Situation:

When it comes to reconstructing financial services in poor post-conflict communities, a microfinance approach appears to be an effective tool at the beginning of the post-conflict period. Microfinance is agile, proactive and its shop is easy to set up, taking multiple-forms: Non Profit, Cooperative, or bank. These financial institutions known as Micro Finance Institutions (MFIs) start to rebuild confidence destroyed by years of conflict and disruption of the community life. Microfinance brings key ingredients needed to revitalize a destroyed financial system: trust, financial rigor, and financial education.

MFIs rebuild trust by using a proactive behavior in providing financial services. Indeed, MFIs reach out towards people and don't wait for people to come to the institution. Two activities are keys for that purpose: lending and deposit or saving. MFI generally provide loans to their clients without rigorous collateral and in many cases without any collateral. Instead of traditional collateral required by commercial banks, MFI build on mutual trust at two levels: MFI vis-à-vis the group or individuals, and group's member vis-à-vis each other.

Financial rigor is built through one of the three techniques of microfinance methodology: village banking, solidarity group, or individual client. In each case, MFI use an "intensive care" type of training and/or group creation. Members of village banking and solidarity groups are chosen among peers (professional, kinship, neighborhood, or sharing a market place). In most cases, members of a group guarantee the repayment of each and every one. When one defaults, the other members must pay. For individual clients, referrals are used as a social pressure mechanism or repayment guarantee. This rigor has proven to be effective as it can be observed through MFI's portfolio at risk (PAR).

Financial education is supposed to be an equal component of the microfinance methodology. In general, loan officers are keys in putting or help putting together groups, training them and making sure that the prerequisites are fulfilled before loans are disbursed. Every repayment session is an opportunity to financial education.

When well done, these ingredients create a “buzz” within post-conflict communities and word-of-mouth plays a crucial role in advertising the new opportunity for financial and business improvements. In many cases, membership grows fast and sometimes it reaches 100% increase rate per year. This buzz creates two effects: first, some commercial banks start adopting or adapting their approaches in providing financial services. They either create new products that attract the social strata targeted by MFI or sometimes introduce flexibility in their lending policies. On the other hand, strata of the population that never experienced financial services provision by commercial banks and felt excluded suddenly find themselves wanted by both MFI and commercial banks through the proactive work of bankers and loan officers. They are offered a chance to integrate into the financial services industry. For those clients already operating within the industry as MFI clients, they also suddenly discover that they can move into commercial banks, offering almost the same products as MFI but offering better rates of interest with bigger loans than MFI and also saving accounts that bear interests compared to some MFI which collect deposit or savings without paying interest.

While this process occurs, the post-conflict reconstruction process also brings new assets to the economy of the community, most of all an improved economic environment bringing more investors, private as well as public. Indeed, a post-conflict economy offers great opportunities for investors, considering that everything is to be rebuilt. New companies and entrepreneurs enter the new economy. Within the country, a few local entrepreneurs emerge and need commercial banks for their operations in a market hungry of all types of services and goods. At the same time, successful microfinance institutions also start becoming more aggressive in having more individual clients with higher loan amounts, relying less and less on groups whose members generally borrow lower amounts. Another trend is a geographical expansion when MFIs start covering territories outside their niche.

After more or less five years, commercial banks become competitive and start again to become the dominant feature of the post-conflict financial services provision, toppling the hegemony experienced by MFIs at the early years of the post-conflict period. It is commercial banks that put in place the right infrastructure, study carefully the financial market opportunities that quickly become the most beneficial of the booming financial services sector because they can operate at different levels of the market, servicing small, medium and large entrepreneurs as well as top-dollar individual clients who suddenly take advantage of both a better post-conflict macro-economy, opportunities offered by the post-conflict reconstruction period and, most importantly, the new and growing trust of the country’s population towards financial services institutions.

Policy Suggestions

a. Listern to the Voices of the Citizens

The provision of financial services is people's business, based on mutual trust between the provider and the recipient of the service. Bankers often forget this simple truth when they are behind their desks. People make the institution grow, succeed and mature. It is vital to listen to the people we serve. The DRC's post-conflict financial services reconstruction appears to be a success story. Still, there is a lot to be done by the providers to maintain its success. **Appendix 5** displays a summary of the comments, complains, and suggestions of the people who were interviewed between 6/2/2010 and 11/11/2010 in Kinshasa, the Democratic Republic of Congo, by probing and asking unstructured questions when collecting quantitative data using the "MFI Clients Post-Conflict Reconstruction Survey". Reading and learning from the voices of the clients appear to be the best policy suggestion this study can propose. Further analysis of these qualitative data is planned to systematically explore the themes and summarize the findings for publication.

b. Interest Rate

Interest rates charged by microfinance institutions when providing loans to their Congolese clients are more and more subject to controversy. The rates are considered to be too high by clients of microfinance institutions. Local press in the DRC as well as non-clients of microfinance institutions have echoed this criticism which is constatntly referred to when discussing DRC microfinance. It should be clear that lending-led microfinance institutions are the most vulnerable to this problem. Financial cooperatives and savings associations are theoretically not subject to this issue, considering that members own the funds and lend to themselves by determining the the interest rate they are willing to pay to themselves. Therefore, the emergence of well designed and managed financial cooperatives and savings associations should be encouraged because they can resolve the high interest rates' issue.

The rationale for higher interest rates charged by microfinance institutions is the higher cost of loan delivery induced by the proactive methodology to financial services delivery by lending-led microfinance institutions. Currently in the DRC, annual interest rates vary widely among institutions, ranging from 25% to 60% in most cases. Proposing a ceiling would not be a good policy and therefore, competitive interest rates as occurring now should be encouraged. It is however imperative that microfinance institutions start reducing the interest rates which appear to be excessive in most cases. Interst rates as applied nowdays suffocate clients and do not allow a faster business development of clients. This dissertation has shown that major lending-led microfinance such as Finca and Procredit make a lot of money both in terms of yield on their portfolios and in attracting grants from donors to help these institutions growing. It is therefore in their interest to have clients' business grow as fast as do the institutions. Higher interest rate as practiced today in DRC jeopardizes the long term sustainability of the microfinance industry.

There are many ways of reducing interest rates that can be suggested here. The first recommendation will be to suggest that all microfinance institutions commit to the reduction of interest rate and adopt it as a strategic goal. Second, clients with good record should see their rate descreasing because they represent lower risk for the loan portfolio, which is anoter rationale for higher interest rates. Third, clients with an excellent track record should be subject to a system of “interest only” during the cycle and pay back the principal at the end of the cycle. These are few suggestions that can help to resolve this issue.

c. Loan Cycle and Recovery

Loan cycles and recovery as practiced today in the DRC slow business development of clients and reduce their ability to make higher profits. Typically, a loan disbursed to a village banking or solidarity group client (group lending) has a life cycle of 20 weeks during which the full amount lend as principal should be pay back on top of 30 to 60% annual interest rate and in most cases a compulsory saving. The loan package (principal+interest+compulsory saving) is divided into ten equal payments to be paid every two weeks. Individual clients’ loan life cycle range from 3 to 12 months in most cases and payments are due monthly following the same model. Besides the interest rate issue discussed above, the critical constraint here is that after every payment, the client has less capital on hands and experience a decrease in its business lines as well as in the level of inventory. As a result, profit is squeezed and becomes almost inexistent at the end of the loan cycle. Here too, it is imperative that microfinance institutions adopt their client’s business development as a strategic goal to make sure that while loans are recovered and the institution's portfolio is growing, the client sees also its own portfolio and business growing. So far, there is no evidence for such a commitment (at least according to clients' perception) and loan recovery is perceived by the clients as the only goal pursuit by microfinance institutions.

d. Social and Cultural Context

"Microfinance has already deep roots built over a long period of time in the DR Congo. It has been one of the supporting mechanisms for the Congolese, especially in areas far from urban centres". (Santos, 2003, p.). There are indeed in DRC many types of 'traditional' microfinance practices and institutions which are generally considered as part of the informal financial sector. The key difference between the 'traditional' and the 'modern' microfinance rests on the introduction by modern microfinance of concepts such as interest rate, inflation, and risk. One would expect that in a society with deep roots of traditional microfinance, modern microfinance will be easily embraced and adopted. This assumption has proved to be inaccurate and can be partially explained by the introduction of interest rate, inflation, and risk.

Thus, people have been helping each other through traditional microfinance schemes such as *Likelemba* (an adapted type of rotating saving and credit association), *Moziki* (a type of likelemba where each member organize a party on the day he or she receives its share), *Cotisation* (mutual insurance used for sickness, death, and sometimes as start-up capital for business), or *Carte* (type of saving account on a daily basis maintained by a trusted member of the community). These practices have not considered interest rate and inflation; and risk has been mitigated through social pressure. Therefore, the modern microfinance, emphasizing on interest rate, inflation, and risk is encountering resistance and is subject to criticism because of these new ingredients not accounted for in the traditional microfinance practice. Here, financial education should be emphasized by microfinance instttutions. It is important that these concepts be clearly explained and be understood by borrowers.

e. Customer Care

Microfinance institutions are known to create and enhance friendly environment and attitude when dealing with their clients. The trend in Kinshasa is more and more of unfriend and hostile attitude when dealing with clients. Tellers and customer service agents of major microfinance institutions often use offensive language, have threatning attitude when recovering loans in rear and do not show respect to their clients. As said earlier, people make the institution grow, succeed and mature. Microfinance institutions should improve their training of loan officers, tellers, and customer service agents. The DRC microfinance industry must adopt a culture of "customar care" where clients feel appreciated and understood.

f. Data Reporting, Storage, and Analysis.

Finally, the financial services industry in the DRC must improve the collection, reporting, and analysis of data. It is unacceptable that data related to financial institutions are inaccessible and not available to analysts and researchers. An independent body should be instituted to systematically collect and store data from all financial institutions. This should be a basic requirement and a starting point if the industry has to improve its performance in the post-conflict era.

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APPENDIX 1: FINANCIAL INSTITUTIONS REGISTRED WITH THE CENTRAL BANK OF CONGO AS OF DECEMBER 2009

(Source: Central Bank of Congo, Annual Report, 2009, pp. 293-303)

I. BANKS

1. Banque Commerciale du Congo (B.C.D.C.)

    Headquarters: Kinshasa

2. Banque Congolaise (BC)

    Headquarters: Kinshasa

3. Afriland First Bank Congo (First Bank CD)

    Headquarters: Kinshasa

4. Banque Internationale pour l'Afrique au Congo (B.I.A.C.)

    Headquarters: Kinshasa

5. Citi Group (City Bank)

    Headquarters: Kinshasa

6. Stanbic Bank Congo (S.B.C.)

    Headquarters: Kinshasa

7. Access Bank (A.B.)

    Headquarters: Goma

8. Banque Internationale de Crédit (B.I.C.)

    Headquarters: Kinshasa

9. Procredit Bank Congo

    Headquartes: Kinshasa

10. Raw Bank

    Headquarters: Kinshasa

11. Trust Merchant Bank (T.M.B.)

    Headquarters: Lubumbashi

12. Solidaire Banque Internationale (SBI)

    Headquarters: Kinshasa

13. Ecobank (EC)

    Headquarters: Kinshasa

14. Mining Bank Congo (MBC)

    Headquarters: Kinshasa

15. First International Bank (FIBank)

    Headquarters: Kinshasa

16. Invest Bank Congo

    Headquarters: Kinshasa

17. Sofibanque

    Headquarters: Kinshasa

18. La Cruche Banque

    Headquarters: Goma

19. Advans Banque Congo

    Headquarters: Kinshasa

II. NON BANKING FINANCIAL INSTITUTIONS

1. Société Financière de Développement (SOFIDE)

    Headquarters: Kinshasa

2. Caisse Générale d'Epargne du Congo (CADECO)

    Headquarters: Kinshasa

3. Société Nationale d'Assurances (SONAS)

    Headquarters: Kinshasa

4. Fonds de Promotion de l'Industrie (F.P.I.)

    Headquarters: Kinshasa.

5. Office Congolais des Postes et Télécommunications (OCPT)

    Headquarters: Kinshasa.

6. Coopérative d'Epargne et de Crédit « Amitié Salutiste » (COOPECAS)

    Headquarters: Kinshasa.

7. Coopérative d'Epargne et de Crédit des Mamans Maraîchères de Kinshasa (COOPEC MAKIN)

    Headquarters: Kinshasa.

8. Mutuelle d'épargne et de Crédit Bomoko (COOPEC BOMOKO)

    Headquarters: Kinshasa.

9. Mutuelle des Femmes Sages de Kin (MUFESAKIN/COOPEC)

    Headquarters: Kinshasa.

10. Coopérative d'Epargne et de Crédit de l'Union pour le Développement Intégral de Pay – Kingandu «COOPEC UDIPAK »

    Headquarters: Bandundu.

11. Mutuelle de Crédit et d'Epargne des Femmes de Kikwit
«MUCREFEKI/COOPEC»

Headquarters: Kikwit.

12. Coopérative d'Epargne et de Crédit Saint François Xavier/Cathédrale

Headquarters: Kikwit.

13. Coopérative d'Epargne et de Crédit (COOPECCO KINSHASA)

Headquarters: Kinshasa.

14. Coopérative d'Epargne et de Crédit de Nyawera «COOPEC NYAWERA»

Headquarters: Bukavu.

15. Coopérative d'Epargne et de Crédit (CECI-PME)

Headquarters: Kinshasa

16. Coopérative Financière et de Développement Socio-Economique de Butembo
«COODEFI/COOPEC»

Headquarters: Butembo.

17. Coopérative d'Epargne et de Crédit Kimbanguiste «CECKI»

Headquarters: Kinshasa.

18. Coopérative d'Epargne et de Crédit pour le Développement du Kasaï
Occidental «COOPEC DEKOC»

Headquarters: Kasaï Occidental/Kananga.

19. Caisse d'Action Mutuelle d'Epargne et de Crédit de Mbanza-Ngungu
«CAMEC MBANZA NGUNGU/ COOPEC»

Headquarters: Mbanza-Ngungu.

20. Caisse d'Action Mutuelle d'Epargne et de Crédit de Inkisi «CAMEC INKISI/COOPEC»

    Headquarters: Inkisi.

21. Mutuelle d'Epargne et de Crédit de Kinshasa «MECREKIN/COOPEC»

    Headquarters: Kinshasa.

22. Mutuelle d'Epargne et de Crédit BOSANGANI «MEC BOSANGANI»

    Headquarters: Kinshasa.

23. Coopérative d'Epargne et de Crédit IMARA «COOPEC IMARA»

    Headquarters: Goma.

24. Coopérative d'Epargne et de Crédit PILOTE «COOPEC PILOTE»

    Headquarters: Bukavu.

25. Coopérative d'Epargne et de Crédit Scolaire «COOPEC'SCO»

    Headquarters: Kinshasa.

26. Coopérative d'Epargne et de Crédit BOLINGO « COOPEC BOLINGO»

    Headquarters: Kinshasa.

27. Coopérative d'Epargne et de Crédit Congolais pour la Reconstruction «COOPEC CR»

    Headquarters: Butembo.

28. Mutuelle d'Epargne et de Crédit de GOMA «MECREGO/COOPEC»

    Headquarters: Goma.

29. Mutuelle d'Epargne et de Crédit de KATINDO «MECRE-KATINDO COOPEC»

    Headquarters: Goma.

30. Mutuelle d'Epargne et de Crédit de VIRUNGA «MECRE- VIRUNGA/COOPEC»

Headquarters: Goma.

31. Coopérative d'Epargne et de Crédit Entraide pour le Développement Economique «COOPEC- EDE»

Headquarters: Goma.

32. Mutuelle d'Epargne et de Crédit de Bukavu « MECREBU/COOPEC »

Headquarters: Bukavu.

33. Coopérative d'Epargne et de Crédit pour le Développement « COOPEC EDE »

Headquarters: Bukavu.

34. Mutuelle d'Epargne et de Crédit de Beni « MECRE-BENI/COOPEC »

Headquarters: Goma.

35. Mutuelle d'Epargne et de Crédit de Mabanga « MECRE-MABANGA/COOPEC »

Headquarters: Mabanga.

36. Coopérative d'Epargne et de Crédit de la Communauté Evangélique de l'Alliance au Congo « COOPEC CEAC-MATETE »

Headquarters: Kinshasa.

37. Coopérative d'Epargne et de Crédit pour le Développement au Congo de Goma « COOPECCO-GOMA »

Headquarters: Goma.

38. Coopérative d'Epargne et de Crédit de la KAWA « COOPEC KAWA »

Headquarters: Bukavu.

39. Coopérative d’Epargne et de Crédit pour le Développement au Congo de Vitshumbi « COOPECCO-VITSHUMBI »

Headquarters: Vitshumbi.

40. Coopérative d’Epargne et de Crédit pour le Développement au Congo de Buturande « COOPECCO/BUTURANDE »

Headquarters: Butarande.

41. Coopérative d’Epargne et de Crédit de Kanyabayonga « COOPEC KANYABAYONGA »

Headquarters: Kanyabayonga.

42. Coopérative d’Epargne et de Crédit Kiwanja « COOPEC KIWANJA »

Headquarters: Butarande.

43. Coopérative d’Epargne et de Crédit Tumaini « COOPEC TUMAINI »

Headquarters: Kavisimbi.

44. Coopérative d’Epargne et de Crédit Rutshuru « COOPEC RUTSHURU »

Headquarters: Rutshuru.

45. Mutuelle d’Epargne et de Crédit de l’action pour la Promotion Sociale et Culturelle des Artistes Chrétiens « MEC APROSCAC »

Headquarters: Kinshasa.

46. Coopérative d’Epargne et de Crédit Congolais d’entraide et d’appui au développement « COOPEC EAD »

Headquarters: Goma.

47. Coopérative d’Epargne et de Crédit BOBANDANA « COOPEC BOBANDANA »

Headquarters: Minova.

48. Coopérative d’Epargne et de Crédit CAHI « COOPEC CAHI »

Headquarters: Bukavu.

49. Coopérative d’Epargne et de Crédit du Mouvement Ouvrier Chrétien « COOPEC MOCC »

Headquarters: Bukavu.

50. Coopérative d’Epargne et de Crédit Umoja « COOPEC UMOJA »

Headquarters: Butembo.

51. Coopérative d’Epargne et de Crédit Kirumba « COOPEC KIRUMBA »

Headquarters: Lubero.

52. Coopérative d’Epargne et de Crédit Beni « COOPEC BENI »

Headquarters: Bungulu.

53. Mutuelle d’Epargne et de Crédit « MECRECO/COOCEC»

Headquarters: Kinshasa

54. Coopérative d’Epargne et de Crédit de l’Eglise du Christ au Congo « COOPEC ECC/Kikwit » COOPEC ECC/Kikwit »

Headquarters: Kikwit.

55. Coopérative d’Epargne et de Crédit CEAC Kinzau Mvuete « COOPEC CEAC KINZAU MVUETE »

Headquarters: Kinza-Mvuete.

56. Mutuelle d’Epargne et de Crédit BIRERE « MECRE BIRERE/COOPEC ».

Headquarters: Goma.

57. Coopérative d’Epargne et de Crédit DIBAYA-LUBWE « COOPEC DILU »

Headquarters: Dibaya Lubwe.

58. Coopérative d'Epargne et de Crédit ECOLE « COOPEC ECOLE »

    Headquarters: Kikwit.

59. Coopérative d'Epargne et de Crédit LUKOLELA « COOPEC LUKOLELA »

    Headquarters: Kikwit.

60. Coopérative d'Epargne et de Crédit MOKALA « COOPEC MOKALA »

    Headquarters: Mokala.

61. Coopérative d'Epargne et de Crédit CEAC KINTAMBO

    Headquarters: Kinshasa.

62. Coopérative d'Epargne et de Crédit CEAC Boma/Ville « COOPEC CEAC BOMA/VILLE »

    Headquarters: Boma.

63. Mutuelle d'Epargne et de Crédit des Femmes Mennonites au Congo « MEC FMC/COOPEC »

    Headquarters: Kinshasa.

64. Coopérative d'Epargne et de Crédit « MUTECREDE/COOPEC»

    Headquarters: Kinshasa.

65. Coopérative d'Epargne et de Crédit Caisse pour la Promotion sociale « MEC-CAPROS/COOPEC »

    Headquarters: Kinshasa.

66. Coopérative d'Epargne et de Crédit de Masi Manimba « COOPEC MASI MANIMBA »

    Headquarters: Masi Manimba.

67. Coopérative d'Epargne et de Crédit de Kalundu « COOPEC KALUNDU »

    Headquarters: Uvira.

68. Coopérative d'Epargne et de Crédit de Gungu « COOPEC GUNGU »

    Headquarters: Gungu.

69. Coopérative d'Epargne et de Crédit Chrétiens Unis « COOPEC CU »

    Headquarters: Kinshasa.

70. Coopérative d'Epargne et de Crédit pour le Développement Communautaire au Congo « MEC DECO/COOPEC »

    Headquarters: Kinshasa.

71. Coopérative d'Epargne et de Crédit de Ngaliema – UPN « MECRE NGALIEMA UPN/COOPEC »

    Headquarters: Kinshasa.

72. Coopérative d'Epargne et de Crédit de la Gombe « MECRE GOMBE/COOPEC »

    Headquarters: Kinshasa.

73. Mutuelle d'Epargne et de Crédit de Kintambo Magasin « MECRE KINTAMBO MAGASIN »

    Headquarters: Kinshasa.

74. Mutuelle d'Epargne et de Crédit de Masina « MECRE MASINA/COOPEC »

    Headquarters: Kinshasa.

75. Coopérative d'Epargne et de Crédit Actions de Développement par l'Epargne et le Crédit « COOPEC/ADEC »

    Headquarters: Goma.

76. Coopérative d'Epargne et de Crédit de Bagira « COOPEC BAGIRA »

Headquarters: Bukavu.

77. Coopérative d'Epargne et de Crédit Nyalukemba « COOPEC NYALUKEMBA »

    Headquarters: Ibanda.

78. Coopérative d'Epargne et de Crédit Agro-Pastorale Le Grenier « COOPEC AGROPAS LE GRENIER/GOMA »

    Headquarters: Goma.

79. Coopérative d'Epargne et de Crédit TUJENGE PAMOJA « COOPEC TUJENGE PAMOJA »

    Headquarters: Goma.

80. Coopérative d'Epargne et de Crédit « COOPEC MOLENDE »

    Headquarters: Kinshasa.

81. Coopérative d'Epargne et de Crédit « COOPEC EDE/KINDU »

    Headquarters: Kindu.

82. Coopérative d'Epargne et de Crédit « COOPEC MSAADA WETU»

    Headquarters: Kindu.

83. Coopérative d'Epargne et de Crédit « COOPECCO OICHA»

    Headquarters: OICHA.

84. Coopérative d'Epargne et de Crédit «COOPEC BENI»

    Headquarters: Beni.

85. Coopérative d'Epargne et de Crédit «COOPEC LA SEMENCE»

    Headquarters: Butembo.

86. Coopérative d'Epargne et de Crédit «COOPEC KESHENI »

    Headquarters: Goma.

87. Coopérative d’Epargne et de Crédit «COOPEC UNITE»

Headquarters: Goma.

88. Coopérative d’Epargne et de Crédit « COOPECCO-KIRUMBA»

Headquarters: Kirumba.

89. Coopérative d’Epargne et de Crédit «COOPECCO-LUBERO»

Headquarters: Lubero.

90. Coopérative d’Epargne et de Crédit «MUTEC/COOPEC»

Headquarters: Bukavu.

91. Coopérative d’Epargne et de Crédit «COOPEC BURHIBA-KASHA»

Headquarters: Sud-Kivu.

92. Coopérative d’Epargne et de Crédit «COOPEC CIMPUNDA»

Headquarters: Sud-Kivu.

93. Coopérative d’Epargne et de Crédit «COOPEC FOMULAC KATANA»

Headquarters: Sud-Kivu.

94. Coopérative d’Epargne et de Crédit «COOPEC KAVIMVIRA»

Headquarters: Sud-Kivu.

95. Coopérative d’Epargne et de Crédit «COOPEC KAZIMIA»

Headquarters: Sud-Kivu.

96. Coopérative d’Epargne et de Crédit «COOPEC LUHWINDJA»

Headquarters: Sud-Kivu.

97. Coopérative d’Epargne et de Crédit «COOPEC UVIRA»

Headquarters: Sud-Kivu.

98. Coopérative d'Epargne et de Crédit «COOPEC/BARAKA»

Headquarters: Sud-Kivu.

99. Mutuelle d'Epargne et de Crédit « MECRE IBANDA/COOPEC»

Headquarters: Sud-Kivu.

100. Mutuelle d'Epargne et de Crédit « MECRE KADUTU/COOPEC»

Headquarters: Sud-Kivu.

101. Mutuelle d'Epargne et de Crédit « MECRE UVIRA/COOPEC»

Headquarters: Sud-Kivu.

III. <u>MICROFINANCE INSTITUTIONS</u>

1. IMF HOPE RDC

Headquarters: Kinshasa/Ngaliema

2. Société de Microfinances Maendeleo

Headquarters: Nord-Kivu/Goma

3. IMF LIFE-VEST

Headquarters: Kinshasa/Gombe

4. Société de Microfinances FINCA RDC

Headquarters: Kinshasa/Gombe

5. IMF ESPERENCE

Headquarters: Katanga/Likasi

6. Solidarité pour le Développement Communautaire (SODEC IMF)

Headquarters: Kinshasa/Ngiri-Ngiri

7. Association pour le Développement du Kasaï Oriental (ADEKOR/IMF

Headquarters: Kasaï Oriental/Mbuji-Mayi

8. Entreprise de Micro-Crédit de 1ère catégorie « IMF HEKIMA »

Headquarters: Goma

9. Entreprise de Micro Crédit de 2ème catégorie AFRICAN PEOPLE FINANCE (IMF A.P.F)

Headquarters: Kinshasa/Gombe

10. Entreprise de Micro Crédit de 2ème catégorie VIA NOVA sprl (IMF VIA NOVA sprl)

Siège: Kinshasa/Gombe

11. IMF APF

Headquarters: Kinshasa/Gombe

12. Société de Micro Finance « IMF BARAKA/PRESE »

Headquarters: Goma

13. Société de Micro Finance « GALA LETU IMF »

Headquarters: Goma

14. Société de Micro Finance « SOMIFI REJEDE »

Headquarters: BUTEMBO.

15. Société de Micro Finance «IMF BUSINA MICROCREDIT sprl»

Headquarters: BOMA.

16. Société de Micro Finance «IMF COMIF»

Headquarters: KINSHASA.

17. Société de Micro Finance «IMF RACREDIT SARL»

Headquarters: KINSHASA.

IV. <u>CHANGE AGENCIES</u>

1. Malu Change
2. Solidarite Change
3. Free Business Change
4. Soficom Change
5. Modestie Change
6. Mamie Laure
7. Monex
8. Christel Change
9. A.B.S. Change
10. La Reference Change
11. Kilefu SPRL
12. Ewedje Exchange RDC

V. <u>MONEY TRANSFERTS AGENCIES</u>

1. Money Trans RDC
2. Golden Money Trust
3. Kin Express Multiservices
4. Soficom Transfert
5. Kin Personnel Mail
6. Solidaire Transfert
7. Maison Lupi

8. Groupe Lambert de Paris SPRL
9. Societe de Transport Compagnies SPRL
10. Sikar Finances
11. Agence Aiglon Service
12. Berval Express
13. Colikin
14. Trans Cash
15. Amis Fideles
16. African Express SPRL
17. Express Union
18. Societe Jesus Seul
19. Agence Grace D. World Business SPRL
20. Transfert de Fonds Ewedje RDC
21. Winkele Business Agency
22. Axes Services
23. Datco
24. Justin et CIE SPRL
25. Apocalypse 22
26. Colombe Services SPRL
27. Zifa – FT
28. Malu Transfert
29. New Way FR Agency
30. Graines des Ass SPRL

Appendix 2: MFI Clients Post-Conflict Reconstruction Survey Interview Schedule.

Date of Interview : ____________________
Interview Number : ____________________
Interviewer Name : ____________________
Client Name or ID : ____________________
Financial Institution : ____________________
Locality Name : ____________________

INFORMED CONSENT
CLIENTS OF FINANCIAL SERVICES OPERATING IN CONGO (DRC)

Consent to Participate in Research

Study Title: MICROFINANCE AND POST-CONFLICT RECONSTRUCTION: IS MICROFINANCE A FINANCIAL SERVICES RECONSTRUCTION TOOL IN POST-CONFLICT COMMUNITIES?

Principal Investigator: Lukumu Nicodème Matabisi, PhD Candidate: (lukumu.matabisi@snhu.edu).

The Research Supervision and Dissertation Committee include:

- Catherine Rielly, PhD: c.rielly@snhu.edu)
- Jeffrey Ashe, Director at Oxfam America: (JAshe@oxfamamerica.org)
- Christina Clamp, PhD: C.Clamp@snhu.edu
- Charles Hotchkiss, PhD (c.hotchkiss@snhu.edu)

Sponsor: PhD Program, School of Community Economic Development, Southern New Hampshire University.

You are being asked to participate in a **research study**. Your participation is **voluntary**. Your decision to participate will have no effect on your ability to access services to which you are otherwise entitled. Please ask questions if there is anything you don't understand.

What is the purpose of this study?
The purpose of this study is to determine the role that various types of financial institutions play in the reconstruction process of financial services, following the end of a conflict. The results will be used to write a doctoral dissertation.

What does this study involve?
The study involves interviewing 150 people individually to talk about issues related to access or not to financial services such as loan, saving, or deposit; issues related to clients' business activities, if relevant, education, assets acquisition; and expenditures. You will be asked to respond to a series of multiple choices and open-ended questions related to these subjects.

Data Collection:
Interviews are designed to seek information about your experiences, knowledge, opinions, and attitudes about the following topics:

a) Loan, saving and deposit activities through a financial services provider.
b) Development of your small or medium enterprise, if you have one.
c) Education of your children in your household.
d) Types and number of assets belonging to your household.
e) Individual and family incomes.
f) Household Expenditure.

The interview will take approximately 30 to 45 minutes to complete.

Are there any benefits from participating in this study?
You may receive no benefit from participating in this study. However, input from the interview may be incorporated in future program and policy changes in an effort to improve the provision of financial services in the DRC.

How is this different from what will happen if you do not participate in this study?
Your decision not to participate in this study will have no effect on the services you are eligible to receive.

What are the risks involved with being enrolled in this study?
There are very minimal risks involved with your participation, due to the fact that this is a one-on-one conversation with me and that your responses and comments are confidential. Your name will not be used but instead you will be given an ID number to protect the confidentiality of your identity. However, *I cannot guarantee that your financial institution, if for some reason it knows about this interview, will not ask you to tell what this interview was about. However, there is almost no chance for this to happen. If it happens and you are questioned about this interview, tell whoever that I instructed you not to discuss the content of this interview and please refer them to me and tell them that I am the only one who can answer any question. Provide them with my phone number: 0814421124 (DRC) or +15084083847 (USA). Remember that you do not have to tell anyone about this interview.* However, before the interview starts, SNHU researchers ask participants in interviews to agree to a *Statement of Confidentiality*.
Other important things you should know

Withdrawal
You may choose to stop your participation in this study at any time without penalty or prejudice.

Confidentiality
I or any person I choose to handle this study's data or materials will be committed to confidentiality and will make every effort to protect the confidentiality of your involvement in the survey. Moreover, your name will not be used but instead you will be provided with an ID number to use instead of your name or other personally identifiable information. This makes it almost impossible for anyone else but me to identify you.

Data Storage:
I or any person I choose to handle this study's data or materials will maintain data collected in this study in the manner that follows, for the time required by the School of Community Economic Development at Southern New Hampshire University:

1.) Interview will be audio or video-recorded.

2.) Access to data will be limited to those I will appoint and to my Dissertation Committee after they have agreed and adhered to the terms of this study's confidentiality commitment and agreement.

3.) Data will be stored in a password protected computer.

4.) Your name will not appear in any publication that may result from this study. As said above, your name will not be used but instead you will be provided with an ID number to use instead of your name or other personally identifiable information.

Number of participants:
We expect approximately 150 people to participate in this study: 50 are clients of microfinance institutions, 50 are clients of traditional financial institutions, and 50 are non clients and belong to none of any type of financial services provider.

Who should you call with questions about this study?
Questions about this study should be directed to Dr. Charles Hotchkiss, Dean of the School and PhD program Director at 001-603-644-3181 (Phone)/ 001-603-644-3130 (Fax) or via email: c.hotchkiss@snhu.edu . You can also ask for Dr. Catherine Rielly, Chair of my Dissertation Committee at 001-603-644-3156 (Phone)/ 001-603-644-3130 (Fax) or via email: c.rielly@snhu.edu, both are at the School of Community Economic Development at Southern New Hampshire University in the United States of America. The Principal Investigator who oversees all aspects of this research is me (Lukumu Nicodème Matabisi) of the PhD Program at the School of Community Economic Development at Southern New Hampshire University. You can reach me anytime at 081 4421124 (DRC) or 001-508-408-3847 (USA) or lukumu.matabisi@snhu.edu.
If you have any questions about your rights as a research subject, you can contact the Chair of the university's Institutional Review Board, during office hours at 001-800-668-1249 to discuss them in confidence.

What about the costs of this study?
There are no costs to participating in this study besides your time.

SPONSOR POLICY:
This study is conducted with the goal of obtaining a PhD degree and its results will be used to write a doctoral dissertation. The School of Community Economic Development at Southern New Hampshire University has covered part of the research costs.

CONSENT

- I have read or listen the above information about the Interview
- I understand the possible benefits that may be accrued from this research and how it may affect me or others.
- I understand that I am being asked to offer my opinion about my access or not to financial services such as loan, saving, or deposit; business activities if relevant; education, assets acquisition; and expenditures.
- I understand the discussion during the interview will be recorded**.**
- I understand the discussion in the interview will be summarized or transcribed (typed word for word).
- I understand that my name will not be used but instead I will be given an ID number to protect the confidentiality of my identity. However, there is a possibility that other sources (non-study team members) may ask me about the interview's content. If it happens, I do not have to tell them and will refer them to you by providing them with your phone numbers, and tell them that you are the only one who can answer questions related to this interview.
- I understand that my consent to participate is entirely voluntary, and that my refusal to participate will involve no prejudice or loss of benefits to which I am entitled.
- I confirm that no coercion of any kind was used in seeking my participation.
- I understand that I will not be paid to participate in this study.
- I understand that information about this project will be provided to me by the Principal Investigator upon written request at the conclusion of the project**.**
- I certify that I have read or listen and fully understand the purpose of this research study and its risks and benefits for me as stated above.

PRINT NAME:
I (signature) ________________________________ Date:
CONSENT/AGREE to participate in this research project.

I (signature) ________________________________ Date:
REFUSE/DO NOT AGREE to participate in this research project.
Witness: (signature) _________________________ Date:

Client Profile

Q1. Indicate respondent's gender:
1= Male
2= Female

Q2. What is your current marital status? Would you say you currently are……………
(Read answers and enter just one).

1= Married 3= Widow
2= Separated/Divorced 4= Single/Never Married

Q3. How old are you?_________
Specify number of years 99= Do not know (DNK).

Q4. How many years of schooling have you completed?
Number of years: _______

Q5. What is your experience with formal financial services? Would you say you are:

1= client of a commercial bank (Go to question 7)
2= client of a microfinance institution (ask question 6)
3= not a client of either type of financial institution. (Go to question 8)

Q6. What type of client are you:

1= Village banking
2= Solidarity group
3= Individual client.

Q7. How long have you been a client with your current financial institution?
Number of months: ______ (If answer in years, calculate and enter in months).

Q8. What would you define as your main occupation?

Specify type of occupation : _____
Specify amount earned/month in $US : _____

Q9. How many persons in your household live together and share a meal with you? Of these, how many are:

Adults (16 years of age and older) : _____
Children (Less than 16 years of age) : _____

Q10. How many persons in your household are engaged in work that allows them to earn income? _______

Business Development

Q11. (If a client of a financial institution). Have you ever received a loan from your financial institution?
1=No (Go to question 14).
2=Yes (Ask questions 12-13).

Q12. What is the amount of the most recent loan you have received?
_____________________________ (Record amount in $US)

Q13. What is the loan amount you have received before this most recent loan?
Interviewer: Repeat this question until you get the maximum information the client can provide. Record them in the table below and compute later the total number of loans and the total amount of loans received.

Loan	**Amount**	**Loan Length** (in Weeks)	**Interest Rate** (Annual)	**Repayment Schedule** 1=Weekly 2=Bi-Weekly 3=Monthly
Loan 1				
Loan 2				
Loan 3				
Loan 4				
Total =				N/A

Q14. Are you involved in any kinds of businesses? (Explain that this is any activity where you earned money for yourself by selling something you made, or grew, or goods that you purchased and resold)
1=No (Go to question 20).
2=Yes

Q14a. What kinds of businesses are you involved in?

Category of Business	**Specific Type of business**	**Number of businesses of this type:**
1= Commerce/Trade/ Retail (includes petty trade)		
2= Manufacturing (includes food processing, textile		

production, crafts)		
3=Service (includes hairdressing, restaurants, food stalls, cleaning services)		
4=Agriculture/Livestock (includes food or other crop production, animal raising)		
5=Other (specify)_____________		

Q14b. Which among these businesses earned you the most money?________

Q14c. Is this business….? (Read answers and enter one).

1= Primarily your own
2= Primarily a household enterprise
3= Joint business with outside the family.

Q14d. Did you spend time working at this business over the past four weeks?

1 = No
2 = Yes
99=DNK

Q15. What investments have you made in your business over the last year?
(check all that apply)

AGRICULTURE AND ANIMAL RAISING		TRADE/SERVICE/MANUFACTURING	
15a. Purchased goats/pork		**16a.** Added new products	
15b. Purchased chickens/ducks		**16b.** Hired more workers	
15c. Grew more vegetables to sell		**16c.** Bought wholesale or in greater volume	
15d. Increased the types of vegetables/fruits you sell		**16d.** Added new line of products	
15e. Purchased small tools such as hoes, shovels		**16e.** Purchased small tools/equipment	
15f. Hired more workers		**16f.** Purchased major equipment	
15g. Purchased a bicycle/cart to transport my goods to market		**16g.** Invested in a structure for your kiosk or shop	
15h. Leased/purchased more land to farm		**16h.** Purchased a bicycle/cart for your business	
15i. Purchased fertilizer and pesticides		**16i.** Rented space for your business	
15j. Other _____________		**16j.** Other: ____________	

Q17. Compared to last year your sales (circle one):

1= have decreased a lot
2= have decreased a little
3= are about the same
4= increased a little bite
5= increased a lot

Q18. How much of your loan from your financial institution was invested into your business?

1= None
2=Less than Half
3=Half
4=More than Half
5=All

Q19. If not all, did you use any portion of your MFI loan to:

1. Buy food?
   1=No 2=Yes 99=DNK
2. Buy clothes or other household items?
   1=No 2=Yes 99=DNK
3. Give or loan the money to someone else?
   1=No 2=Yes 99=DNK
4. Keep money on hand in case of an emergency or to repay the loan?
   1=No 2=Yes 99=DNK
5. Spend money on medicines or healthy care for your family?
   1=No 2=Yes 99=DNK
6. Organize a party or social event?
   1=No 2=Yes 99=DNK
7. Any other activity? Specify ___________________
   1=No 2=Yes 99=DNK
8. Not Applicable.

Q20. Apart from being a client of your current financial institution, are you a client of another financial institution of any type (bank, MFI, NGO)?

1= No.
2= Yes (ask questions 21-24)

Q21. Did you borrow from them while being a member of your current financial institution?

1= No.
2= Yes (ask questions 22-24)

Q22. How much did you borrow?
Specify amount in $US: _______

Q23. How much of this other loan (not your financial institution) was invested into your business?

1= None
2=Less than Half
3=Half
4=More than Half
5=All

Q24. If not all, did you use any portion of your MFI last loan to:

1. Buy food?
   1=No 2=Yes 99=DNK
2. Buy clothes or other household items?
   1=No 2=Yes 99=DNK
3. Give or loan the money to someone else?
   1=No 2=Yes 99=DNK
4. Keep money on hand in case of an emergency or to repay the loan?
   1=No 2=Yes 99=DNK
5. Spend money on medicines or healthy care for your family?
   1=No 2=Yes 99=DNK
6. Organize a party or social event?
   1=No 2=Yes 99=DNK
7. Any other activity? Specify _______________
   1=No 2=Yes 99=DNK
8. Not Applicable.

Q25. Did you have a business before joining your current financial institution?

1= No
2= Yes

Q26. (If yes). Since you joined (Name of MFI) are your sales:

1= Much lower
2= A little lower
3= The same
4= A little higher
5= A lot higher

Q27. Do you record your expenses and your sales in a ledger book?

1= No.
2= Yes

Q28. Regarding your major businesses, please provide the following as accurate as possible. (Interviewer: Probe to obtain each value and record in the table bellow. Follow the legend when questioning and probing).

Categories	PP	PE	SP	SE	GP
Business 1					
Business Cycle Period					
Loan Cycle Period					
Loan Cycle Total					

Legend

- PP: Purchase Price of Merchandises (Ask: How much did you buy)
- PE: Expenses related to Purchase of Merchandises (Ask: What were your expenses while buying).
- SP: Sales of Merchandises (Ask: How much did you sell)
- SE: Expenses related to Sales of Merchandises (Ask: What were your expenses while selling)
- GP: Gross Profit (Interviewer: Subtract sales from expenses for Gross profit).
- GP= (SP-SE) – (PP+PE)
- Business Cycle Period (BCP) or sales cycle : daily, weekly, monthly or else to be computed on a weekly basis
- Loan Cycle Period (LCP) in weeks
- Loan Cycle Total = BCP * LCP

Q29. Beside yourself, do you employ another person part-time or full-time?
1=Yes 2=No (Go to question 31)

Q30. (If yes). Can you provide details (Interviewer: Fill Table bellow):

Total Number	How many work full time?	How many work part time?	How many are family members?	How many are non-family members?

Education

Q31. How many children does your household send to school?
_____________________________ (Record the number)

Q32. How many children were you sending to school before becoming client of your current financial institution?
_____________________________ (Record the number)

Q33. If the number has changed, why? (check all that apply)

1= Children became older

2= I got external help from family

3=I have more money now and can afford that

4= Other reason___________

Q34. Since you joined your current MFI, did the amount you spend for school:

1= Decreased a lot

2= Decreased

3= Stayed the same

4= Increase

5= Increased a lot

Assets

Q35. Now I have some questions about items that your household might own. I will read a list of items and I would like you to indicate if your household owns any of these items.

Asset Type	**Yes =1 No =0**	**Number owned now**	**Owned Before joining MFI: 1=Yes 0= No**	**Purchase value at current market price**
General Assets				
House or land to build				
Sofa set				
Table				
Chair				
Bed				
Mattress				
Gold Jewelry				
Clothes Closet				
Mobile Phone				
Appliances & Electronics				
Television				
Videocassette recorder				
DVD				
Refrigerator/Freezer				
Electric Cooker/Stove				
Washing machine				
Radio				
Watch				
Computer				
Transportation-related				
Car				
Motorcycle				
Bicycle				
Cart				
Agriculture-related				
Land				
Cattle/Goat/Pork				
Poultry				
Material and Fertilizer				
Other				

Standard of Living

Q36. Did any special event occur in the past two days (for example a family reunion, a family party)?
1=No (ask next question) 2=Yes (ask question 38)

Q37. If no, how many meals were served to the household members during the last two days? __________________ (Record Number).

Q38. Were there any special events in the last seven days?
1=No (ask next question) 2=Yes (ask the nearest week without event).

Q39. If no, how many meals were served to the household members during the last two days? __________________ (Record Number).

Q40. During the last seven days, for how many days were the following foods served in a main meal eaten by the household?

Luxury food		Number of days served
Luxury food 1	(Fish)	
Luxury food 2	(chicken)	
Luxury food 3	(Meat)	

Q41. During the last seven days, for how many days did a main meal consist of an inferior food only?

Inferior food		Number of days served
Inferior food 1	(vegetable only)	
Inferior food 2	(Rice only)	
Inferior food 3	(Bread + beverage)	

Q42. During the last 30 days, how many days did your household not have enough to eat everyday? __________________ (Record Number).

Q43. Now I have some questions about your household's last month expenses. I will read a list of items and I would like you to indicate how much you spend every month.

Interviewer: Please use the chart below and record expense for each specific item using the second column. Ask if this amount decreased, stayed the same, or increased from its Pre-MF level and fill in the third column.

Categories	Amounts (Current)	Compare this amount to Pre-MF situation: 1= decreased 2= stayed the same 3= Increased
Home (rent/mortgage)	43a.	44a.
Furniture/Appliances	43b.	44b.
Utilities	43c.	44c.
Cooking fuel cost	43d.	44d.
Food purchase expense	43e.	44e.
Household production of food	43f.	44f.
Personal products expense	43g.	44g.
Clothing and shoes	43h.	44h.
Total school/Education expense	43i.	44i.
Transport expense	43j.	44j.
Health care expense	43k.	44k.
Charitable giving expenditures	43l.	44l.
Money to family and friends	43m.	44m.
Taxes/bribes	43n.	44n.
Special events expenditures	43o.	44o.
Leisure expense	43p	44p.
Other expenses	43q.	44q.

Q45. How much is your (as an individual) monthly income. You can give me a figure ____________ or I can read a list of categories and you can tell me which category you fall into.

1	2	3	4	5	6	7	8	9	10
$0-30	$31-60	$61-90	$91-250	$251-500	$501-750	$751-1,000	$1,001-2,500	$2,501-5,000	$5,001-10,000

Q46. Thinking about how much income you have now compared to your expenses, would you say that you have…

1= Much less than enough
2= A little less than enough
3= Just enough
4= A little more than enough
5= Much more than enough

Q47. (If client of a financial institution). Thinking about how much income you have now compared to your income before joining your current financial institution, would you say you have…

1= Much lower than before
2= A little lower than before
3= The same than before
4= A little higher than before
5= A lot higher than before

Q48. Do you have any savings or money deposited somewhere?

1= No
2= Yes

Q49. If yes, how much approximately? You can give me a figure __________ or I can read a list of categories and you can tell me which category you fall into within $500.

1	2	3	4	5	6	7	8	9	10
$0-30	$31-60	$61-90	$91-250	$251-500	$501-750	$751-1,000	$1,001-2,500	$2,501-5,000	$5,001-10,000

Q50. (If client of a financial institution). Think about the time before you join your actual financial institution, did you have savings or deposits?

1= No
2= Yes

Q51. (If yes). Think about the time before you join your actual financial institution, would you say that your current savings or deposits are:

1= Much lower
2= A little lower
3= The same
4= A little higher
5= A lot higher

Q52. When putting together income of all the members of your household, how much is your household's monthly income? You can give me a figure ____________ or I can read a list of categories and you can tell me which category you fall into.

1	2	3	4	5	6	7	8	9	10
$0-30	$31-60	$61-90	$91-250	$251-500	$501-750	$751-1,000	$1,001-2,500	$2,501-5,000	$5,001-10,000

Thank you very much. This is the end of this interview. I do appreciate your help. Do you have any question?

If "yes", write down respondent's question (s) and answer the question as accurate as you can or let the interviewee understands that you do not know the answer.

If "no", thank the interviewee and end the interview.

APPENDIX 3: SELECTED SPSS OUTPUT (TABLES AND FIGURES) FROM THE SURVEY

Table A3.1: Respondent Gender per Experience with Formal Financial Services

			Experience with Formal Financial Services		
			Client of Microfinance Institution	Not a Client of either type of Financial Institution	Total
Respondent Gender	Male	Count	9	13	22
		% within Experience with Formal Financial Services	19.6%	27.7%	23.7%
	Female	Count	37	34	71
		% within Experience with Formal Financial Services	80.4%	72.3%	76.3%
Total		Count	46	47	93
		% within Experience with Formal Financial Services	100.0%	100.0%	100.0%

Table A3.2: Respondent Gender per Type of Client

			Type of Client			
			Village Banking	Solidarity Group	Individual Client	Total
Respondent Gender	Male	Count	2	3	4	9
		% within Type of Client	8.3%	30.0%	33.3%	19.6%
	Female	Count	22	7	8	37
		% within Type of Client	91.7%	70.0%	66.7%	80.4%
Total		Count	24	10	12	46
		% within Type of Client	100.0%	100.0%	100.0%	100.0%

Table A3.3: Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	55	59.1	59.1	59.1
	Separated	6	6.5	6.5	65.6
	Widow	9	9.7	9.7	75.3
	Single - Never Married	23	24.7	24.7	100.0
	Total	93	100.0	100.0	

Table A3.4: Respondents Age

N	Valid	93
	Missing	0
Mean		39.24
Median		40.00
Mode		35[a]
Std. Deviation		9.881
Variance		97.639
Range		46
Minimum		18
Maximum		64

Table A3.5: Type of Clients of Microfinance Institutions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Village Banking	24	52.2	52.2	52.2
	Solidarity Group	10	21.7	21.7	73.9
	Individual Client	12	26.1	26.1	100.0
	Total	46	100.0	100.0	

Table A3.6: Client Main Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public Servant	7	7.5	7.5	7.5
	Small Business Owner	76	81.7	81.7	89.2
	Owner of a Non-Profit Organization or Medium size company	5	5.4	5.4	94.6
	Student	5	5.4	5.4	100.0
	Total	93	100.0	100.0	

Table A3.7: Categories of Main Businesses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Commerce/Trade/Retail	43	46.2	46.7	46.7
	Manufacturing	3	3.2	3.3	50.0
	Service	46	49.5	50.0	100.0
	Total	92	98.9	100.0	
Missing	Not Applicable	1	1.1		
Total		93	100.0		

Table A3.8: Type of Main Business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Food Distribution	29	31.2	31.5	31.5
	Terrace or Beverage kiosk	11	11.8	12.0	43.5
	Friperie or Used Clothes Lines	17	18.3	18.5	62.0
	Ligablo or Mini-Convenient Store	1	1.1	1.1	63.0
	Malewa or Local restaurant	16	17.2	17.4	80.4
	Agricultural products	1	1.1	1.1	81.5
	Cabine or Phone Kiosk	7	7.5	7.6	89.1
	Agricultural Products	1	1.1	1.1	90.2
	Electronics	2	2.2	2.2	92.4
	Moulin or Grains Mill	1	1.1	1.1	93.5
	Local Pharmacy	5	5.4	5.4	98.9
	Taxi or Cab	1	1.1	1.1	100.0
	Total	92	98.9	100.0	
Missing	Not Applicable	1	1.1		
Total		93	100.0		

Table A3.9: Sales Performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Have decreased a lot	12	12.9	13.0	13.0
	Have decreased a little	29	31.2	31.5	44.6
	Are about the same	26	28.0	28.3	72.8
	Increased a little bite	24	25.8	26.1	98.9
	Increased a lot	1	1.1	1.1	100.0
	Total	92	98.9	100.0	
Missing	98	1	1.1		
Total		93	100.0		

Table A3.10: Ever Received Loan from Financial Institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	57	61.3	61.3	61.3
	Yes	36	38.7	38.7	100.0
	Total	93	100.0	100.0	

Table A3.11: Repayment Schedule

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Weekly	3	3.2	8.3	8.3
	Bi-Weekly	21	22.6	58.3	66.7
	Monthly	12	12.9	33.3	100.0
	Total	36	38.7	100.0	
Missing	Not Applicable	57	61.3		
Total		93	100.0		

Table A3.12: Portion of Loan Invested in Business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Half	2	2.2	5.6	5.6
	More than half	8	8.6	22.2	27.8
	All	26	28.0	72.2	100.0
	Total	36	38.7	100.0	
Missing	Not Applicable	57	61.3		
Total		93	100.0		

Table A3.13. Repayment Schedule

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Weekly	3	3.2	8.3	8.3
	Bi-Weekly	21	22.6	58.3	66.7
	Monthly	12	12.9	33.3	100.0
	Total	36	38.7	100.0	
Missing	Not Applicable	57	61.3		
Total		93	100.0		

Table A3.14: Belonging to More than one Institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	39	41.9	84.8	84.8
	Yes	7	7.5	15.2	100.0
	Total	46	49.5	100.0	
Missing	98	47	50.5		
Total		93	100.0		

Table A3.15: Sales Performance since Member of financial Institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Much lower	1	1.1	2.2	2.2
	A little lower	6	6.5	13.3	15.6
	The same	8	8.6	17.8	33.3
	A little higher	17	18.3	37.8	71.1
	A lot higher	13	14.0	28.9	100.0
	Total	45	48.4	100.0	
Missing	Not Applicable	48	51.6		
Total		93	100.0		

Table A3.16: Compare actual Income and Pre-Financial Institution Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A little lower than before	5	5.4	5.4	5.4
	The same as before	9	9.7	9.7	15.1
	A little more than before	23	24.7	24.7	39.8
	A lot of higher than before	9	9.7	9.7	49.5
	Not Applicable	47	50.5	50.5	100.0
	Total	93	100.0	100.0	

Table A3. 17: Have Savings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	42	45.2	45.2	45.2
	Yes	51	54.8	54.8	100.0
	Total	93	100.0	100.0	

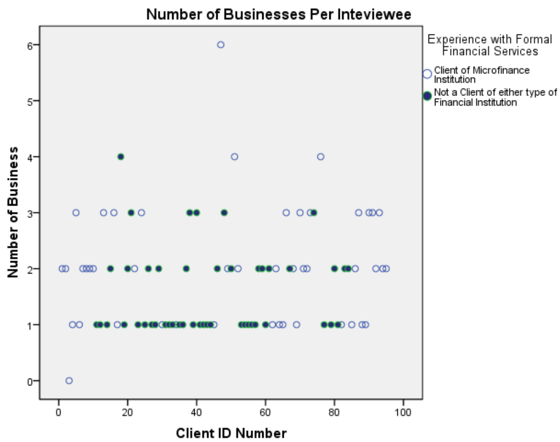
Table A3.18: Had Savings before Joining Financial Institution

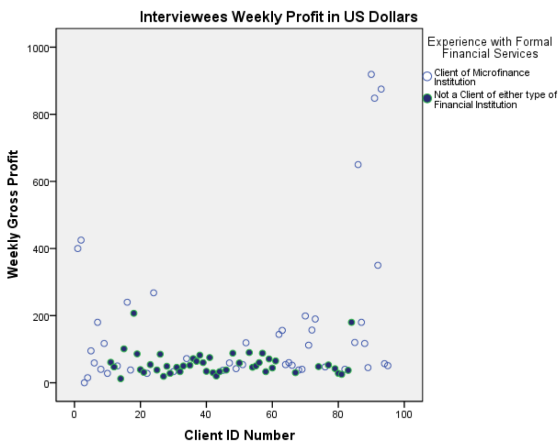
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	37	39.8	80.4	80.4
	Yes	9	9.7	19.6	100.0
	Total	46	49.5	100.0	
Not Applicable		47	50.5		
Total		93	100.0		

Table A3.19: Compare Actual Savings and Pre-Financial Institution Savings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A little lower	1	1.1	1.1	1.1
	The same	11	11.8	11.8	12.9
	A little higher	18	19.4	19.4	32.3
	A lot higher	16	17.2	17.2	49.5
	Not Applicable	47	50.5	50.5	100.0
	Total	93	100.0	100.0	

Figure A3.1: Business Development Scatterplots





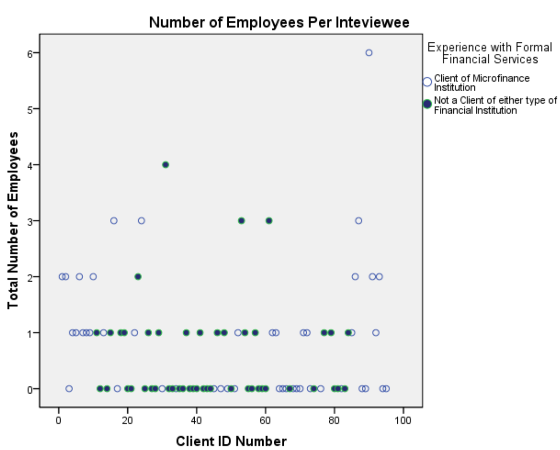


Figure A3.2: Normal Q-Q and Detrended Normal Q-Q Plots of Business Development.

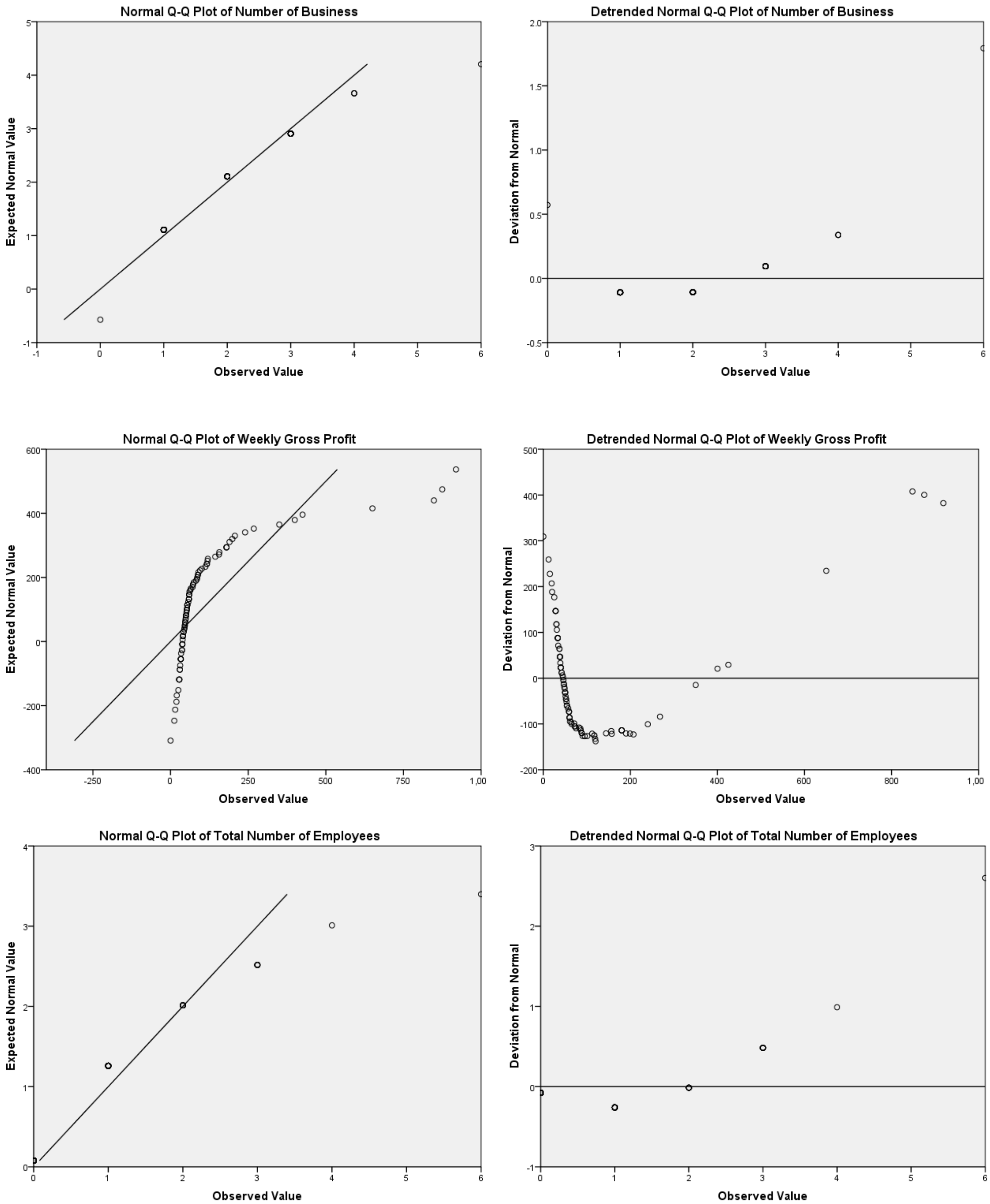
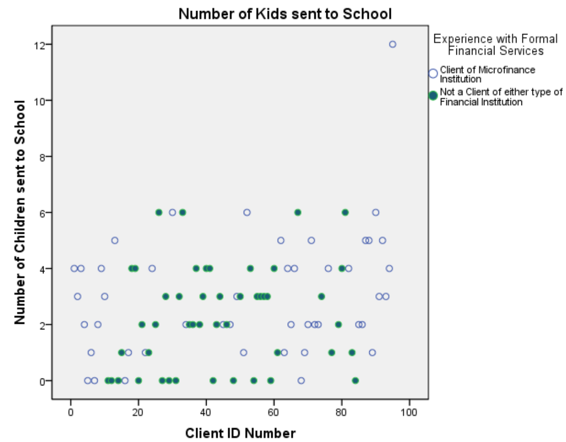


Figure A3.3: Scatterplots and Boxplots of Children sent to School



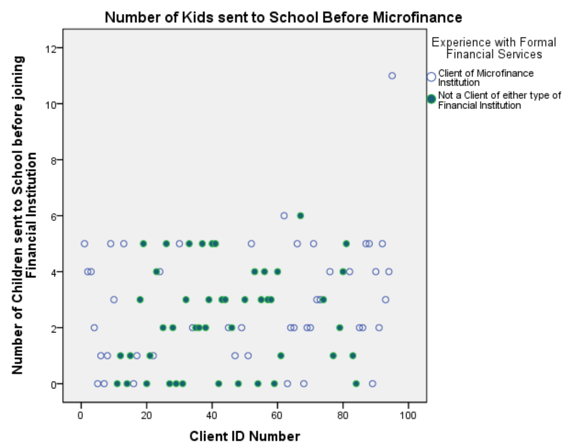


Figure A3.4: Scatterplot for Total Assets Acquisition of Respondents.

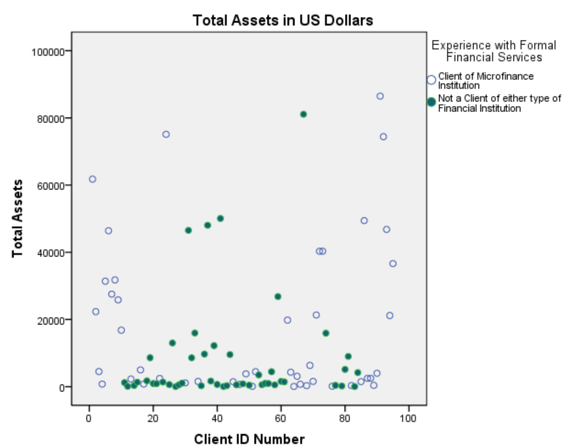


Figure A3.5: Normal Q-Q and Detrended Normal Q-Q for Total Assets

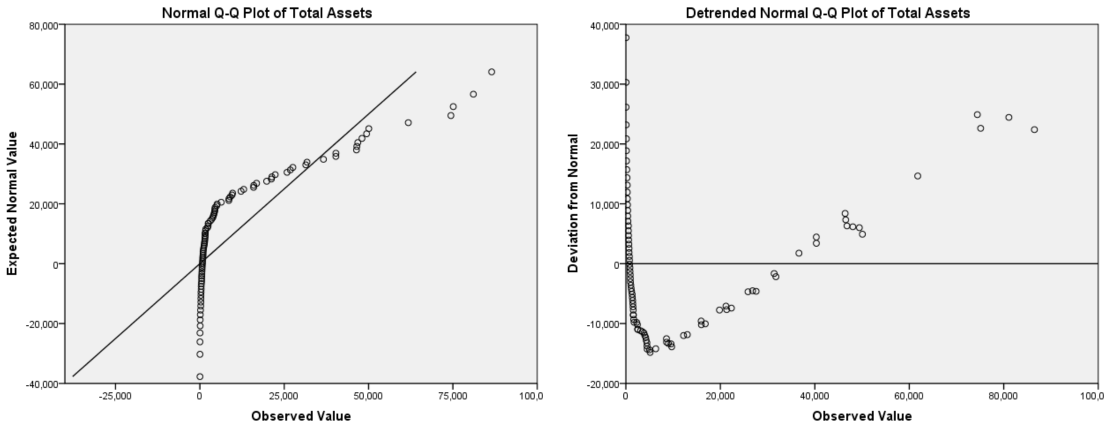


Figure A3.6: Scatterplots for Standard of Living

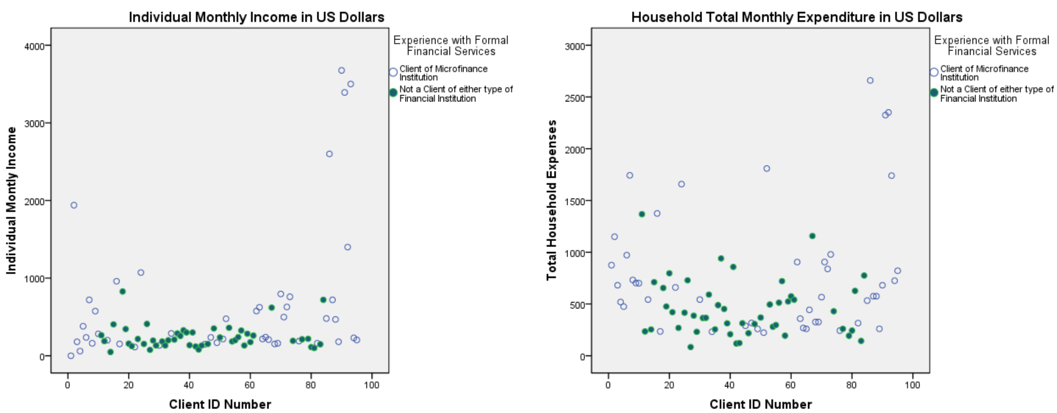


Figure A3.7: Normal Q-Q and Detrended Q-Q Plots for Individual Income and Total Household Expenditures.

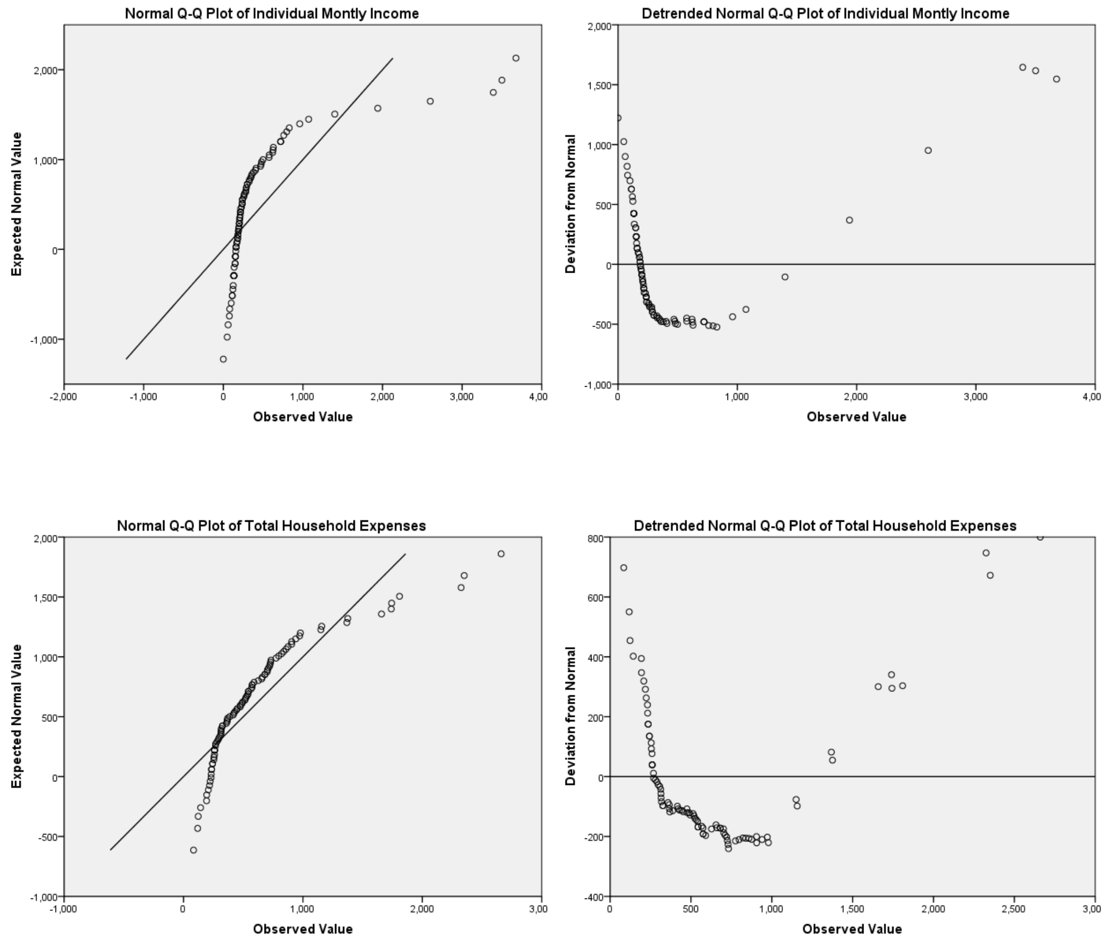


Table A3.20: Savings Key Statistics

	Experience with Formal Financial Services			Statistic
Amount of Savings	Client of Microfinance Institution	Mean		397.20
		95% Confidence Interval for Mean	Lower Bound	157.37
			Upper Bound	637.02
		5% Trimmed Mean		247.49
		Median		115.00
		Variance		652191.050
		Std. Deviation		807.583
		Minimum		0
		Maximum		3750
		Range		3750
		Interquartile Range		340
		Skewness		3.448
		Kurtosis		12.194
	Not a Client of either type of Financial Institution	Mean		97.83
		95% Confidence Interval for Mean	Lower Bound	35.31
			Upper Bound	160.35
		5% Trimmed Mean		68.07
		Median		.00
		Variance		45337.666
		Std. Deviation		212.926
		Minimum		0
		Maximum		875
		Range		875
		Interquartile Range		75
		Skewness		2.433
		Kurtosis		4.969

Figure A3.8: Scatterplot and Boxplot for Amount of Savings

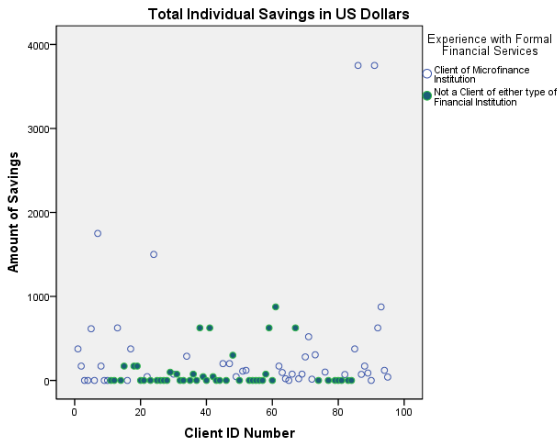
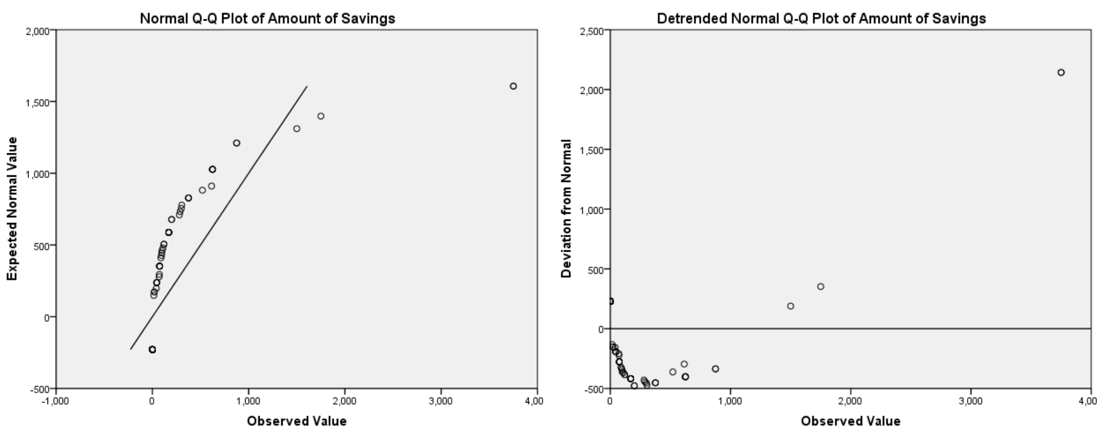


Figure A3.9: Normal Q-Q and Detrended Q-Q Plots for Savings



APPENDIX 4: BANKS CURRENTLY OPERATING AND BANKS CLOSED BY THE CENTRAL BANK OF CONGO AS OF DECEMBER 2009 (Source: www.bcc.cd, 2011)

I. BANKS CURRENTLY REGISTERED AND OPERATING

1. Banque Commerciale du Congo (B.C.D.C.)

    Headquarters: Kinshasa

2. Banque Congolaise (BC)

    Headquarters: Kinshasa

3. Afriland First Bank Congo (First Bank CD)

    Headquarters: Kinshasa

4. Banque Internationale pour l'Afrique au Congo (B.I.A.C.)

    Headquarters: Kinshasa

5. Citi Group (City Bank)

    Headquarters: Kinshasa

6. Stanbic Bank Congo (S.B.C.)

    Headquarters: Kinshasa

7. Access Bank (A.B.)

    Headquarters: Goma

8. Banque Internationale de Crédit (B.I.C.)

    Headquarters: Kinshasa

9. Procredit Bank Congo

    Headquartes: Kinshasa

10. Raw Bank

    Headquarters: Kinshasa

11. Trust Merchant Bank (T.M.B.)

    Headquarters: Lubumbashi

12. Solidaire Banque Internationale (SBI)

    Headquarters: Kinshasa

13. Ecobank (EC)

    Headquarters: Kinshasa

14. Mining Bank Congo (MBC)

    Headquarters: Kinshasa

15. First International Bank (FIBank)

    Headquarters: Kinshasa

16. Invest Bank Congo

    Headquarters: Kinshasa

17. Sofibanque

    Headquarters: Kinshasa

18. La Cruche Banque

    Headquarters: Goma

19. Advans Banque Congo

    Headquarters: Kinshasa

20. Bank of Africa

    Headquarters: Kinshasa

21. Crane Bank of Congo

    Headquarters: Kinshasa

II. BANKS CLOSED

1. African Trade Bank
2. Banque à la Confiance d'Or
3. Banque Congolaise de Commerce Extérieur
4. Banque Continentale du Congo
5. Banque de Commerce et de Développement
6. Banque de Crédit Agricole
7. Compagnie Bancaire de Commerce et de crédit (Ancienne SOZABANQUE)
8. First Bank Congo Corporation
9. Nouvelle Banque de Kinshasa
10. Ryad Banque
11. Union des Banques Congolaises
12. Banque Continentale au Zaïre
13. Banque de placement au Zaïre

APPENDIX 5: SUMMARIES OF UNSTRUCTURED INTERVIEWS WITH SELECTED CLIENTS

Source: Primary data collected by *Lukumu Nicodème Matabisi* between 6/2/2010 and 11/11/2010 in Kinshasa, the Democratic Republic of Congo, by probing and asking unstructured questions when collecting quantitative data using the "MFI Clients Post-Conflict Reconstruction Survey", designed by Matabisi, L.N (2010) as part of a Dissertation Proposal, submitted to and approved by Southern New Hampshire University.

1. Interviewee 1: (MF-Mecrekin)
   a. Q34: Before becoming microfinance (MF) client, we were paying for kids' education almost the same amount we pay now; but it was very difficult to afford tuition and school materials. Children used to go to school hungry and without money for their lunch. The situation has changed since we became MF clients and we can afford children's education costs easier than before.
   b. I suggest that Mecrekin increases the amount of credit. 10,000 US dollars will make more sense than what we get now (around 3,000 US dollars).

2. Interviewee 2: (MF-Mecrekin)
   a. Q34: Tuitions are less now because one child is out of school. But other school related expenses are still high. We can afford it now with our small business' activities with Mecrekin.
   b. I suggest that Mecrekin provides agricultural loans.

3. Interviewee 3: (MF-Mufesakin)
   a. Q5. So far I have been depending only on my salary but it's getting harder and harder. I have decided to try with loans from an MFI and in this case Mecrekin. I have followed a solidarity group created by few of my colleagues who get loans from Mecrekin and my conclusion has been that it helps. I have created my solidarity group with 4 other colleagues and we are waiting to get our first loan. My wife used to be FINCA client but she had a bad experience and lost around $200. Mecrekin seems to have a better approach and I have decided to try it.

4. Interviewee 9: (MF-Mecrekin)
   a. Q34: Being part of an MF helps a bit and I must be honest to recognize that it would be harder without extra income from loan's activities with Mecrekin.
   b. Q35: There is almost no asset acquisition from MF activities. It helps to feed the family, schooling and in some cases with medical bills. The burden of loans does not allow assets acquisition. Those who tried to acquire assets with loans money are in trouble and could not pay back their loans.
   c. Agricultural loans will be helpful to improve our lives in the long term.

5. Interviewee 10: (MF-Mufesakin)
   a. Our solidarity group is new and we decided to name it "Boyokani" which means "Mutual understanding" and we hope to bridge the gap between our poor salary and high living expenses. I have witnessed a lot of issues among

women involved in this microfinance business. MFI does not care about people. Even if your relative dies you have to pay back their loan on that day. This is not human. In addition, I heard that in the groups (village bank or solidarity group) if one member does not pay their loan, the entire group must pay it. I find it cruel. I prefer doing “Likelemba” (ROSCAS) because here women help themselves and not someone else to become rich on their backs.

6. Interviewee 12: (Non Member)
    a. I do not trust financial institutions because they exploit people. They make a lot of money on the back of poor people. It’s like you are just working for them.

7. Interviewee 13: (MF-Mufesakin)
    a. I am a client of an MF institution call “Mutuelle des Femmes Sages de Kinshasa” (Mutual of Wise Women of Kinshasa). So far, I just deposit and save; I haven’t yet experienced loan or credit. I still have enough capital. I prefer saving because it helps when business gets into trouble. A loan is a huge burden and I am not yet ready for that.
    b. Q17: Sales are low because money is not circulated. People have no money on their hands because the economy seems to slow down.
    c. The issues with current MFI loans are: (1) women are not well trained and informed about credit and loan. Many of these women have been selling their stuff with their own capital of less than 20 dollars. When suddenly they have

on hands twice or even 5 times this amount, well they should be troubled with such amount of money and might start spending it crazy! A second issue is that someone who has never been selling big quantity will experience difficulties in doing so. So, I am not surprised that many of them are in trouble and get their household's assets confiscated. Some have left their houses and hide somewhere in the city. This is not good. (2) MF institutions are behaving just like commercial banks. They only care about their money and not about the women. (3) Then the reimbursement cycle is even worse. How can you lend someone money to invest in business and start requesting repayment a week after? This is insane. (4) Profit is not very significant for all of us selling due to macroeconomic difficulties. When in addition, you must pay back loans, it is hard. One should also notice that in Congo, business and household's life are mixed; they are handled from the same income source which takes care of loan reimbursement, household expense and business capital. This is a huge challenge. I feel sorry for these women. (5) Having a loan is very stressful. Women are very tense when the reimbursement day is approaching. Many of them are not healthy and are developing high potency (high blood pressure) because of loan reimbursement. (6) There is also a moral issue here because parents who cannot afford to pay back loans ask their children to lie to loan officers when their parents are hiding. (7) Of course there are also women who are dishonest because they take money while they know that they will not or cannot pay back. They think that it's free money.

d. If you ask my suggestions, I think that (1) MF institutions must be very professional and identify women who are capable of paying them back their loans. (2) MF must give enough time to women to work with the money borrowed before starting repayment of loans. (3) I have heard that their interest rate is high compared to banks. If they really want to help people, they should not ask for so much interest. (4) There is more and more competition among microfinance institutions and they are just taking whoever as clients and therefore they can't get their money back on time. Loans should be given to women with experience in sales and money management.

e. You ask me my preference between Likelemba (traditional ROSCAS) and MF loans through groups (Village Bank or Solidarity Group). Well, both are based on trust, but you do not take whoever and let them become Likelemba member. We know each other and usually we know who is honest, reliable, and capable of making profit from doing business. What I see with MF groups is fierce competition among institutions and therefore they have groups which are not homogenous.

8. Interviewee 16: (MF-Procredit)

   a. Q18: people will tell you that they invest all their loans into their business, but the truth is that almost everyone spends some portion into household expenses, mostly food and in some case house appliances. We can't report that to MF institutions because we know that they ask not to do so.

b. I started with Procredit but now I am also a client with FINCA. I got US$ 3000 loan from Procredit and US$ 500 from FINCA. Of course I did not report to FINCA that I am a current Procredit Client.

c. The truth is that using loans is a tough business. Sales are not as good as they used to be. Profit is thin and on top of that loan repayment makes it even tougher. In my case, I had to sell household appliances to pay back the loan. I also noticed that loan officers have no courtesy when recovering loan in rear. Procredit has decided to stop lending me money due to late payments. I do not think that people should be punished because of late payment.

d. Loans are good in nature but the conditions under which MFI are providing loans in Congo are just untenable. As clients, we feel used and weak. We can't win against them.

e. I do recognize that there are people misusing loans by buying cars, home and other assets with MF money. But these cases are isolated. In most cases, clients face really difficulties as I had to keep track with loans repayment.

9. Interviewee 17: (MF-Mufesakin)

a. My experience with MF is positive. I think that it's a good thing. Before getting MF money (loan) my business was down. I lost inventory and sales were low and I could not make profit. Ever since I got Mufesakin's loan, my business is again prosperous and I am doing pretty well.

b. A friend of mine is a FINCA client and he asked me if I could be his witness or guarantor to get a loan. I agreed and after FINCA's loan officers visited my shop, they gave him the loan. He requested US$ 3,000 but got US$ 2,000. He bought a car and does taxi with this car. He got the loan in February and he's on track with reimbursement and will be done in September. We know the secret and it helps when you mean business.

c. We are aware that today things are good but one day they might change. We have seen the government closing banks and MF institutions here, so we are not naïve but have no choice than working with institutions that project confidence. FINCA and MUFESAKIN are among these institutions.

d. "During the interview, a state tax collector stopped by and was very complaisant with the client. He told him that he's a good boy and he sees that his business is growing… keep it that way, he said, and I will talk to you later… Indeed, he meant that he will be back when I am gone to get his tip (corruption) which will not be reported as state tax.

10. Interviewee 19: (Non Members)

a. Q5. We are not clients of any MF institution. We try our best to work with our own money and face circumstances without loans from financial institutions. There are issues in both the client side and the financial institution side. Hardship in this city makes people careless about financial commitment. They take money as loan but misuse or mismanage it. At the group level also, there are some leaders of solidarity groups or village banks who have left with money, penalizing members. On the other hand, financial institutions are not fair about their loans. Their reimbursement cycle is too tide and their interest rate on loans are too high. The all system seems not helping people to grow their business.

b. Loans and credit in general are not bad things. It is the system which is not friendly to us. A friend of us is pushing us to get loans but we are still hesitating about this commitment. We see people getting into trouble and losing their belongings because they owe money.
c. One of our major issues in embarking into the village banking business is the group's responsibility when one or few members default. We do not see why we shall pay for an insolvent member.
d. Q.17. Money is not circulated and we do not know why.
e. Q48. We have saving but not with a financial institution but we keep it home in a safe place. In the past, almost twenty years ago, we used to save money with a financial institution but we lost that money and never recovered from that lost. That's why we are very careful with financial institutions, whether banks or MFI.

11. <u>Interviewee 20</u>: (Non Member)

a. Q5. I have been approached by many friends and loan officers to get into the loans business. I am still thinking about it and haven't yet decided whether to go with that. I have a trust issue. In the past, cooperatives have been a disgrace because they lost people's deposits. Recently in 2002, a microcredit in Kingabwa collected people's deposits and savings but they just disappear and again people lost money.

12. Interviewee 21: (Non Member)

a. Q5. I have tried MF experience in 2007 with an MFI and got US$ 100 loan to pay US$ 130 (It should be FINCA). I paid back all their money but understood that this just a form of exploitation of the poor working for an institution that get richer while small vendors get poorer. I stopped after one cycle and I am not ready to go through this stress again.

b. If you ask me about any positive impact of microfinance, I can say that the fact of lending money at their rate (although high) compared to street lender is a good think. In the street, you borrow money for almost 100% monthly interest. Still, from my experience, the MFI is not better. With street vendor, you have the full month to work with the money borrowed but with MFI money, you have to start paying back the week following the loan.

c. Q14a. Diversification in selling goods allows us to survive. With my "Ligablo", I offer a variety of goods and at the end of the day I can sell for US$ 50 or more.

d. Q17. The national economy seems not very functional. We do not sell as we did in the past. If you ask me why, I would say (1) competition is getting tougher because everyone wants to sell. Five years ago, I was the only vendor in this corner. Today you can see that we are more than five bagging for the same client. (2) It seems also that the government does not pay people so there are less and less buyers. (3) People’s purchasing power has decreased due to inflation.

e. Q43. Food and education are the priority and we are cutting on other stuff such as clothing and leisure.
f. Q46. we do survive by God’s will. I have a big family and sometimes I do not understand how we make it to the end of the month.

13. Interviewee 22: (Non Member)
    a. Q11. I have a bank account with Procredit but never asked for a loan. I do not think I am ready for that. My current sales, profit and income do not allow me to afford a loan.
    b. I used to work for a phone company. I just quit because the salary is lower than transportation expense. There is no benefit. I prefer concentrate my efforts to grow my own business. Still it is very difficult.

14. Interviewee 24: (MF-FINCA DRC)
    a. I do business together with my wife and we work with FINCA and Procredit. So far, we have no issues with their loans. We find it very helpful. We sell big volume and pay back without any problem.
    b. Q18. You do not play game with loans by buying stuff with that money the day you get it from the bank or MFI. You are better off if all is invested and then profit can be used for household expenses.

15. Interviewee 25: (Non Member)

    a. Q17. Money is not circulated. State employees are not paid.

16. Interviewee 28: (Non Member)

    a. Q5. I am not aware of MF activities. I might become a member if I have information and if I conclude that it will help my business to grow.

17. Interviewee 30: (MF-FINCA)

    a. Q5. I was a member of a microcredit institution located at UZAM place in Limete (neighborhood of Kinshasa). After 5 years, the microcredit closed and their managers disappeared. People lost their savings, including myself. I became later a client of FINCA.
    b. In general, things are well organized with FINCA. I just was not lucky and became ill; my sales decreased and I could not pay regularly my loan back. However, FINCA's approach is good and helpful.
    c. Q26. Due to illness. The one think I do not like with FINCA is that they do not care about people's health. Even if you are seriously ill you have to pay back your loan on time. I owed FINCA US$ 20 and received threats from loan officers. According to them even a dead body must pay back their loan.

18. Interviewee 31: (Non Member)

    a. Q5. I do not like banker. They use people and steal their money. My friend was hurt by a bank or microfinance and never recovered his money. These people are nice when they want your money. As soon as your money is in their hands, they become arrogant and sometimes disappear with people's money.

19. Interviewee 32: (Non Member)
    a. I am afraid of debt. I do not like owing someone. I heard about Procredit Bank but I am still not sure if I have to take their money.
    b. Q28. We use "Carte" or "Likelemba" to save some portion of our daily profit in order to have a margin at the end of the month. Household and business expenses are mingled and without this strategy, one will definitely put all the profit into household expenses.
    c. Q46. we survive by the will of God. It's hard in this country. Every time when you have to deal with family expenses, you have headache.
    d. Q48. I use Carte and Likelemba as a way of saving money. There is no local bank in the neighborhood and so I am using the traditional strategy so far. I am thinking about opening an account but I am not yet sure.

20. Interviewee 33: (Non Member)
    a. Q5. You ask why I am not an MF client. Well, I am interested but still checking on finding a good institution.
    b. Q.17. Sales have decreased due to a slow economy but also at this specific time because kids are going back to school. Usually during this period, people spend for school and less for other household items.

21. Interviewee 34: (MF FINCA)

a. Q11. Loans help a lot. Prior to FINCA and other MF institutions, people lend money asking 50% interest monthly. Finca's rate is 4 or 5% monthly. This is good. The fact is that it's tough to find someone lending you money in this city.

b. I will take a break and won't take a new loan. If you want to know why, loan repayment is stressful. I need a break. Paying back loans every two weeks is very challenging. I am more in favor of a monthly repayment cycle. I will be back with Finca if they adopt a monthly repayment policy for groups.

c. Q20. MF institutions are growing but clients are suffering and not making good progress.

d. Q26. Sales are usually little higher when you just start your loan cycle. After few repayments, sales decrease drastically because most of the capital is going back to MF as part of loan reimbursement.

e. Q35. It's hard to buy things (assets) with loans. I hope to buy a freezer with my savings with Finca.

22. Interviewee 35: (Non Member)

a. Q5. I have a bad experience with MF institutions. First with FINCA where I was a good client but few people in our group did not pay back their last portion of loans; so FINCA decided to punish all of us. This was a debacle for my business. I was expecting to get US$ 1000 to grow my business but they wanted the recreate a new group and start over with less loans. I just took my US$ 250 savings and left. Another microcredit called “GALALET” promised to lend people money after they open an account and deposit 10% of the requested loan. I wanted to try them first and deposited US$ 10 to get 100 dollars. The microcredit was closed and I never recovered my money.

b. I cannot understand why MFI and banks are trying to make money on us. We are small entrepreneurs and poor people and how come they want to become rich using us.

c. I heard about Procredit and many people say good things about them, but I do not have experience with them. People still do not trust financial institutions as they did in the past (80s). My only hope is that this time people won’t be again victims of the state and banks mismanagement.

23. Interviewee 37: (Non Member)

  a. Q5. I am interested in borrowing US$ 5000 but I do not know where to go. In the past, I tried an institution called “GALALET” but they failed and closed doors. I got a US$ 500 for a 6 months period.

24. Interviewee 40: (Non Member)

  a. Q5. Loan is very problematic. When you take a loan and use it, you get in trouble in paying it back.

25. Interviewee 41: (Non Member)

a. Q5. I do not like loans. Some people got involved into this loan business and are in trouble. I prefer working with my own capital than taking loans.

b. Q.48. I have some savings but I keep it home, not with a financial institution.

26. Interviewee 42: (Non Member)

a. Q5. I have never heard about MF activities.

b. Q48. I have some saving under my mattress, not with a financial institution.

27. Interviewee 45: (MF-FINCA)

a. Q11. I am a client of FINCA and have no issue with their loan methodology. However, I feel stress out and want to stop or at least take a break. Sales are down and it is getting harder to pay back loans on a timely basis. Currently, US$ 90 was taken from my saving account with FINCA to cover a portion of my loan that was not paid on time. If sales improved, I hope to be back on track but it is hard.

b. Q26. Before joining FINCA my sales were great, may be due to good economic conditions in the country. Nowadays, it is not the same anymore. Commerce is becoming a tough business. When you add up loans and their repayment cycle, you feel suffocated.

c. Q26. Sales are down because the social classes of people who buy our goods are not paid on time, if at all. Their purchasing power diminishes every day. We had higher expectations with the post-conflict era but we are disappointed. The gap between rich and poor are growing faster. Foreigners (Indian, Chinese and few other Asian nationalities) are competing with us at lower price and some time in a better working environment, attracting those with money. Low income people who are supposed to buy our goods are not paid and have no money. In this environment, our sales keep plunging deeper and deeper.

28. Interviewee 47: (MF-FINCA)

    a. Q5. Before joining FINCA, I heard a lot of bad things about microfinance. But since I joined, I am ok and have no problem. There is nothing to be afraid of.
    b. What we appreciate more with FINCA is that they are honest with their clients' money. If you decide to leave and have saving with them they give you back your money without question.
    c. *"The interviewer observed that client had only one product (rice) on a stall while she usually sells 5 to 6 diversified products. It was revealed that the client was at the end of a loan cycle. Usually, it was explained, at the beginning of a loan cycle, MF clients buy a lot of merchandise (inventory) but with loan repayment and household expense, their inventory starts decreasing and get sometimes to a single item. Clients expect to start over the cycle with the new loan cycle. The problem with this strategy is that sometime MF does not give clients the level of loan expected to be back on track with inventory. Most of time, they get less due to issues with individual*

clients or the group during the repayment cycle. With less money than expected, people get frustrated and experience decrease in their activities."

d. Q35. *The major asset clients seem to have is savings with MF. There seems to be no really assets acquisition with loans (Interviewer's presumption at this stage).*

e. Q48. I had a deposit/saving account with Banque du Peuple in 1997 but lost this money with the financial crisis of the 90s and the change of regime. So I have never worked with a financial institution ever since until came FINCA. I am still scared but hope this time to have a better experience.

29. Interviewee 49: (MF-FINCA)

a. Q5. My husband was against the idea to become client of a MF institution. He told me that their money was not regular capital but superstitious magical money that has bad consequences. You will never make profit out of this money, he said.

b. Q5. I still practice "Likelemba" and "Carte" (traditional saving and deposit practices closed to ROSCAS).

c. Q18. I don't play game with FINCA money. I am very scared and put all into my business.

d. Q44. *With the burden of loan, very little is put in improving standard of living. Essential items such as food and schooling see some improvement but in general MF clients concentrate on paying back loans on time and save as much as they can (Interviewer early observation).*

30. Interviewee 50: (MF-FINCA)

    a. Q17. Money is not circulated among buyers.
    b. Q18. Usually, you invest all in your business and then you can use profit for household expenses.
    c. Q26. I say the same because usually at the beginning of the loan cycle you will have a lot of inventory and experience high sales. But, when repayment starts your sales decrease because you do not have any more a diversified stall with many products. You do concentrate only on few products which are highly profitable. At the end of the cycle, sales are generally much lower. Sometimes you have to take from your own money to pay back the last portions of the MF loan.
    d. Q35. You do not try to acquire assets with loans but concentrate on saving as much as you can.
    e. Q42. The day prior to loan repayment, a household depending only on the woman business can experience a complete diet with almost nothing to eat.

f. "*Remittance seems to be part of a survival strategy with household. When you compare stated income and the expenses in Q43 you realize that their expenses are higher than their income" (Interviewer's earlier observation).*

31. Interviewee 56: (Non Member)

    a. Q5. I do not like MF institutions. If you take their money, they will confiscate all your goods. I prefer borrow from friends than financial institutions. It's very attractive to take money, but paying back is not easy. In addition, MF institutions repayment cycle is very stressful.

b. Q48. I do not save with financial institutions but use “Carte” or “Likelemba”.

32. Interviewee 59: (Non Member)

a. Q48. I save through “Likelemba” or “Carte” but not with MF institution.

33. Interviewee 61: (Non Member)

a. Q48. I have savings but I cannot tell you where. I haven’t taken loan yet but just save.

34. Interviewee 62: (MF-FINCA)

a. Q11. I wish to have higher amount of loans to buy higher volume of inventory. Loans can help if used properly. My feeling is that we don’t know the value of loans or credits. Most of us have issues with credits because we mix household and business expenses. You see for instance that when someone gets a US$ 400 loan they will put US$ 100 in household expenses.

b. Loans’ money should remain into commerce. If business and household are mixed, this is a recipe for trouble.

c. I also do work with Procredit, a bank practicing microfinance. I received loans from Procredit while working with Finca. I am ok with that.

35. Interviewee 63: (MF-FINCA)

a. Q5. I am a FINCA client but I have issues with their higher interest rate and repayment cycle. I think that Procredit has a better policy in terms of repayment. One month repayment cycle seems reasonable.

36. Interviewee 64: (MF-FINCA)

a. Q11. I am a veteran of Finca and had good record until recently when I experienced illness in the family. My child was sick and later died. During my child's illness I couldn't afford to pay back my loan on time. I owed US$ 130 but had US$ 140 of savings with FINCA. What happened is that I requested that FINCA takes my savings and then I took a break because my credit score with them was so bad and I was so stressful. After a break, I resumed and started from scratch.

b. One thing is not clear to me: FINCA requests that clients provide 25% of the requested loan as a deposit or saving prior to loan disbursement. This amount does not bear interest but clients pay back money borrowed with interest. This is not fair.

c. Q18. Learning from my previous experience with FINCA, I invest ¾ of the loan and keep ¼ with me. Even with my savings, I always keep most of that home and not with FINCA.

d. On a positive note, one should recognize that prior to FINCA street lenders requested US$50 on top of every US$ 100 loan per month.

e. Q35. It's almost impossible to buy assets with FINCA's money. It helps with food, some clothes and in case of sickness. Saving is what we concentrate on. Sales are low and therefore profit is also very low. You can't amass assets with FINCA money.

37. <u>Interviewee 65</u>: (MF-FINCA)

a. Q5. I love FINCA, they are great. We need such institutions to help us with capital money for our business to grow. The key or secret is to invest in business and not use some money for personal or household needs.

b. Sales here are cyclical. They are up during certain period of the year and down during others. Those without commerce experience complain but veterans like us know that during this time of the year, sales are low.

38. <u>Interviewee 66</u>: (MF-FINCA)

a. Q18. I am a Christian and do not like to lie. To be honest, most of us do not put 100% of loans into business. You invest into your business what you feel necessary and spend some money for other needs.

b. Q20. Currently, I am not a client of another financial institution. In the past, I tried working with a financial institution called CODEV but they disappeared with people's money. After that another microfinance institution called "GALLALET" promised to lend money after a deposit. I tried with US$ 10 but they also disappeared with people's money.

c. Q26. My sales decreased due to illness. I became sick as I started working with FINCA. Hospital bills, household expenses and the burden of loan just were too much for me.
d. Q35. The only asset I had with FINCA's money is a suitcase. The remaining went to food, clothes and some savings
e. Q47. Income is not higher if you consider that you have to pay back your loan with a portion of this income.

39. Interviewee 67: (Non Member)
    a. I am not a client of a microfinance or bank but many of my followers in the church are clients of MF institutions. I understand that they borrow money as a group and when one person defaults the other pay. This is not fair and I guess this is why more and more people are skeptical with MF institutions. Group punishment is not a fair practice. I heard a lot of bad stories about MF: people's belongings are taken if they are late or do not pay back loans; some are hiding or moving to other neighborhoods; savings are retained and not given easily.

40. Interviewee 70: (MF-FINCA)
    a. You ask me the pros and cons of FINCA: FINCA is a good institution and they really help us to access capital for our business to grow. However, it mostly helps to pay for food, clothes and in some extend medical expenses and school. Savings is a good component of their approach because it forces you

to save. More and more women concentrate their efforts in saving as much as they can and then at the end of the loan cycle part of this saving can be used to acquire an asset or reinforce your capital. To be successful, it is good to have your own capital first from which you take care of your household and then leave FINCA money alone until you complete your loan cycle.

b. Q18. I invest the full amount of my loan into my business but I have a strategy: if for instance I get US$450, I will put first US$ 300 and keep the rest on hands. When inventory decreases I then use the other US$ 150 to boost my business.

41. <u>Interviewee 71</u>: (MF-FINCA)

a. Q13. Monthly repayment schedule will be more helpful to us. The bi-weekly system is very difficult and doesn't help us.
b. I became a Procredit client now 5 months. I combine membership with both microfinance institutions. So far, I am just saving with Procredit and haven't yet taken a loan from them.
c. *The interviewer noticed that a village banking receiving loan is not always a homogenous group. Generally, there is a core of rooted business women, like Mrs. Tshibidi, who bring other women to fulfill the requirement of MFI to have around 25 women per village banking. The core group of women has stable businesses with previous existing capital but is in need of more capital for diversification or larger inventory. The remaining women have less*

prosperous businesses and in some cases are new in handling small business. These are the type of clients who usually defaults during the loan cycle. The core prosperous women therefore take the risk of bringing less experienced women to fulfill MFI requirement and in many cases they pay for few defaults. However, the core women seem to reduce this risk by borrowing more capital than the less experienced women. In a typical banking village, the top borrower can easily get US$ 500 while the bottom one takes US$ 50 dollars. Of course, the group uses social pressure to recover the money they paid for defaulted clients.

d. What I have acquired as assets from FINCA are: flooring my house, a freezer, and my savings with two microfinance institutions: FINCA and Procredit.

42. Interviewee 72: (MF-FINCA)

a. Q11. I have only one complains against FINCA which is that they don't pay interest on our savings but we do pay interest on their loans. You are talking about risks, yes, but they are better off because they keep our savings and use them for their own purpose.
b. Q13. A monthly repayment will be more reasonable than the current bi-weekly repayment schedule.
c. Q35. It's hard to acquire assets with FINCA's money. So far, I have got just a freezer. The remaining has gone into food and schooling.

43. Interviewee 73: (MF-FINCA)

   a. Q5. We are stuck with FINCA and Procredit because they are so far the sole financial institutions inspiring confidence. We have been disappointed with many financial institutions in the past.
   b. Q11. I have however to mention that I went recently through a very frustrated experience with FINCA. I was expected to receive US$ 1500 loan for this cycle. This is the result of a long period of discipline I have shown as a good and reliable client. Instead I got only US$ 950. The reason was that I had questioned our loan officer's way of treating women and I guess it was a way to punish me for being outspoken.

44. Interviewee 74: (Non Member)

   a. Q5. I don't know about microfinance and never thought becoming a member.
   b. Q17. Sales are very low due to a standstill of the national economy. People are not paid and money doesn't circulate.
   c. Q48. I don't have formal saving but I practice "Carte" and "Likelemba" as a way to save.

45. Interviewee 75: (Non Member)

   a. Q5. I am an independent businessman and I am in the bakery business. As you can see I employ four full time employees and employ eighteen women part-time who are my distributors. I have the infrastructure and the market to produce and distribute up to five hundred dollars production value of cakes per day. However, I have a lot of constraints, mainly the lack of an oven that is capable for such production.

b. I am not a client of either a bank or an MFI. In this country, you must avoid enrolling or be part of financial institutions because your own money can become your enemy.

c. As a principle, I am not against loans or credits. My only issue with current MFI is that their cap is to low and small for me. I sometimes joke with FINCA women and tell them that instead of borrowing from FINCA they can borrow from me. But, they don't take me seriously while I am indeed capable of lending them what they get from FINCA. When it comes to me, I think that if I have to engage into loans business, I need more that what is currently offered by microfinance institutions.

d. Q17. My sales are very high and have increased a lot during the last year. I haven't done any advertisement but more word-of-mouth among distributors and I am really well positioned to sell even more than what I am producing currently.

e. Q48. I have pretty good savings.

46. Interviewee 76: (MF-FINCA)

a. Q35: I lost my furniture during last year's flood that occurred in my neighborhood. In any circumstance, it's difficult to buy furniture or appliances with FINCA's money, either the loan itself or its profit. I also have noticed that FINCA does not care about its clients' social development. They just care about their money.

47. Interviewee 77: (Non Member)

   a. Q5. I have heard about FINCA and few other microcredit institutions. I will never be part of them because I was informed that even if a family member passes away on the day you have to pay back their loan they don't care and expect to get their money on that same day.
   b. In the past, we have seen financial scams like that where people lost their money because they trust these institutions. I don't trust them.
   c. Definitely I need money to boost my small business because with my current capital it's tough to develop my business.

48. Interviewee 78: (Bank of Africa)

   a. Q5. I work with Bank of Africa and have just an account where I deposit money. I haven't borrowed their money. FINCA's clients have a lot of problems. Many people consider the all microcredit business as dirty business.

49. Interviewee 79: (Non Member)

   a. It's very difficult to live in this country. Can you tell Americans that we're suffering and that we need help? Can you imagine that kids in this country have a chance to eat meat and drink soda only in December during the holidays? The government in this country is irresponsible. My husband was a police and was killed by a car. None helped with his funeral and no insurance has been paid. I am myself a policewoman and can you imagine that I got only US$ 50 for salary?
   b. Q5. I would like to access capital and run a restaurant.

50. Interviewee 81: (Non Member)

a. Q.5. I am currently client with no financial institution. I used to be FINCA's client but left. I experienced hardship during the last cycle and couldn't keep track with repayment. All my savings were taken and I received only US$ 10 when leaving.

b. Q11. Usually, you experience serious difficulties during the last month of the loan cycle: your inventory is gone, the principal is gone, your own capital is at its lowest, and sales are very low because you do not have enough and diversified inventory. Loan brings you a lot of stress. I am a Christian and I am supposed to be happy with the standard of living God allows me to have, but the day before paying back your loan you feel so low that even prayers do not help. I feel better now that I am out of that loans' business.

c. Q35. I don't remember buying assets with FINCA's money. How can you acquire something when working under these conditions?

51. Interviewee 82: (MF-FINCA)

a. Q5. FINCA is helping people here in Kinshasa. FINCA gives you money without collateral and takes the risk of losing its money.

b. Q18. You must invest all in your business otherwise you will get into trouble.

52. Interviewee 85: (MF-Procredit)

a. Q5. Procredit is the financial institution that has brought people back to the financial services industry. Procredit has projected trust and confidence by providing loans, allowing deposits, introduce debit cards and ATM in Kinshasa. No institution has done what Procredit has done. Procredit is the leading financial institution.

b. The down side is the reimbursement schedule: client start paying back loans one month following the disbursement of the loan. When for instance someone gets US$ 7500 loans with a repayment schedule of US$ 1000 per month; this doesn't allow invest the all money into your business. Usually, people will invest just US$ 6500 and keep a thousand to pay back the first payment. When you compare to Europe or America, this is exploitation and not help. FINCA is even worse because they request repayment two weeks after the disbursement of loans *(<u>Notice</u>: two weeks only apply for village banking or group lending. Individual borrowers pay back after one month as required by Procredit)*.

c. Q18. When looking at this carefully, loans as provided by MFI destroyed people's businesses in the long term. When the repayment is due people just do irrational things to be able to pay back the loan: down prices, borrow at interest from other sources, or even selling their belongings.

53. <u>Interviewee 86</u>: (MF-Advans)

a. Q5. When Advans Director asks why in a city of almost 10 million people, his bank has only a thousand clients after one year of operations; well, the answer is not complicated: first, loans' conditions are beyond the capacity of almost all the people of this city. His bank must be flexible. (2) The amount given is too low to suit our business' needs. Usually, you don't get the amount you request. It's always less than what is requested. What financial institutions do not know is that when you request a specific amount, this is because you think that it will fit your business needs. When you get less than your business monetary needs, everything is to be revised and we are not happy with this behavior by financial institutions. Procredit started well and used to be an excellent partner, but now they have also becoming like others.

b. Q17. The political situation in this country is bad and this is not good for businesses. The macroeconomic environment is not improving, people are not paid regularly and this impacts our businesses.
c. Q20. Yes, I have an account with Trust merchant Bank. I applied for US$ 15000 loans but I am still waiting to hear from them. This is frustrating. Indeed, I am thinking to stop working with banks and just count on my own funds.
d. Q26. When you start the loan cycle, you feel like you have a lot of inventory and sales are good; but when you start paying back the loan, sales decrease considerably.
e. Q51. The truth is that every passing day I am worse off. I can't put all on MFI. I think that it's the combination of bad politics, mediocre macroeconomic environment, and of course MFI lending policies.

54. <u>Interviewee 87</u>: (MF-FINCA)

a. Q20. I love FINCA and will go nowhere else. I heard about their new savings program and I am looking forward to have a saving account.
b. Q.26. Access to more money as capital has been determinant to increase my sales volume since I joined FINCA.
c. Q35. The real impact of the lending practice of FINCA has been on improving standard of living, access to more capital that allows diversification and therefore more income and profit, and of course savings. It's not easy to buy household assets with FINCA money.
d. Q48. I have to mention that due to the current policy surrounding the saving account (you can't access this money until the end of the loan cycle), usually we always keep some savings home, practice "Likelemba" and "Carte" as alternative savings mechanisms.

55. <u>Interviewee 89</u>: (MF-FINCA)

a. Q5. In my first group, the loan officer (Papa Pierre) always asked us to right down all our assets and capital on a paper sheet so that we are aware of our capacity and responsibility while borrowing money from FINCA.
b. Q11. I am proud of FINCA because they help reduce poverty in our country and request very low interest rate when you compared it to street lenders.
c. Q20. I am just with FINCA and afraid of other financial institutions. Although I take FINCA's loan I do not like debt.

d. Q35. What I can say that I acquired with FINCA's money is a freezer, a fan, and glasses. Overall however, FINCA has changed my life in a very positive way.

56. Interviewee 90: (MF-Advans)

a. Q13. When it comes to repayment, MFI imposes its conditions which are not flexible.

b. Q17. Sales are lower if compared to last year due mostly to economic crisis in the country.

c. Q35. Overall, loans haven't really helped me to acquire assets. Most of what I have as assets existed before getting into Advans Bank business.

d. Q47. I am not so satisfied with the all package with Advans because I am not getting where I need to be. I have a project that requires more than US$ 25000 but I can't find a financial institution to finance that.

e. When Advans Director asks why in a city of almost 10 million people, his bank has only a thousand clients after a year; well, let me elaborate a bit on that:

- Confidence issue: what motivated people to get involved with financial institutions in the post-conflict DRC is first the fact that MFI offered loans and were searching for clients, coming to neighborhoods and markets to find clients. The "credit" or "loan" component attracted people of all strata, those who have never experienced financial services before and those who have lost their money in the past when the entire system bankrupted. Indeed, when someone is ready to make first a move in an untrusted environment, this brings some level of confidence. As you can notice, people go to PROCREDIT, ADVANS and FINCA. Very few go to BCDC (DRC's largest commercial bank).

- Decrease of Confidence: when MFI started their business in DRC, all were great and fine: they gave as much money as people wanted and the numbers were growing faster at all levels (clients, loans, and deposits). Today, things have changed. MFI understood that they are so wanted by a population so motivated to trust again financial institutions that they have changed their behavior to start operating like commercial banks. Clients are getting frustrated with MFI. When you request a certain amount, you always receive less than requested, disrupting your business plan provisions. In this country, and especially in the capital city of Kinshasa, word-of-mouth is a very effective advertisement means. People talk and understand slowly that MFI are changing and therefore they must also change their behavior towards MFI.
- Stress: In this country, social life is mingled with business. It happens often that on the day of repayment, a client has a funeral, a sickness or other social emergency. Here, MFI are not flexible at all and loan officers behave unprofessionally, sometimes threatening people. As I told you before, word-of-mouth is an effective communication tool. People talk and know about what others are going through and as a result people are becoming reluctant vis-à-vis the financial institutions. Advans, a newcomer microfinance institution, is therefore a victim of this phenomenon.

- Interest Rate: if it's true that MFI rates are lower when compared to street lenders, clearly it's more and more obvious that MFI exploit us. They lend us money using monthly interest rate (5% more or less) but when you translate it into yearly rate, you find out that we pay 30%, 40% and sometimes 60%. This is a shame because none pays such a rate in Europe and in America.
- What is the future: I do encourage what's happening in the financial services industry. Indeed, MFI have created jobs by providing the necessary funding for small businesses to remain operative and also for new people to enter the market and new lines to be part of the DRC's business framework. We need more MFI to enter the country in order for competition to take place and improve the entire financial services provision environment.

57. Interviewee 91: (MF-Advans)

   a. *Interviewer understood from the field that "Diversification" is a critical variable allowing MFI clients to have higher profits than non MFI clients. Access to additional capital, through MFI, provides clients with an opportunity to add up new lines of business which in turn increase sales volume and consequently profit.*

   b. Q5. Individuals do not go to BCDC. Only companies and government officials work with them. In fact, those commercial banks are not interested to work with small businesses like us.

c. Q5. I am Advans' first client and I feel privileged doing business with them. I am in my third loan and overall I have borrowed around US$ 40000 with the. Their loans have helped boosting my business and I have not experienced problems paying them back.

d. When Advans Director asks why in a city of almost 10 million people, his bank has only a thousand clients after a year; well, this is what I can say: their loan's requirements are not easy to fulfill. I remember that the first time when I requested to borrow US$ 7600, I had to surrender my house's ownership. Advans requests collateral for higher amount. In addition, advans never gives you the requested amount. The first time I requested US$ 15000 but got half; the second time I requested US$ 25000 and got also half. This third time I wanted US$ 35000 but got just US$ 25000.

e. I can understand why Advans is careful with loans because there are really issues with people in this city. There are some who just take money without planning how to pay it back. At the same time, there are good people and hard workers who cannot access loans because of collateral. I agree with the bank that we need to maintain the system and therefore banks shall make sure that they can get their money back to continue operating in the country.

58. <u>Interviewee 92</u>: (MF-Cooperative CHARITE).

a. Q11. Loans help in some extent but our business needs are higher than what MFI propose.

b. Yes, I am still a Procredit client but I have experienced a lot of problems with them. I have been a client with Procredit for years and had good record with them. I first got US$ 4000, then US$ 8000 and finally US$ 13500. I travel to Western African countries and Dubai to buy stuff to sell here in Kinshasa. I have some ten years in this business. Lastly, I lost my merchandises with the freight company. I had 28 bags of merchandises and came back to Kinshasa waiting for my goods to arrive. My merchandises never arrived and therefore I was unable to pay back my loan. I explained to Procredit that I was unable to pay but they did not understand. Until now, I have this issue with them. I told them that they could give me another loan to replace the capital I have lost so that I will be able to pay back their loans. They refused. I went to two other banks (TMB and Advans) but they denied my request. Finally I was approved by a cooperative that lend me US$ 4000 to pay back in three months.

59. Interviewee 93: (MF-Procredit)

a. Q5. I am a Procredit client since this Mf institution started its operations in this country. I have recently requested a grace period of three months so that I can pay only interests and not the principal.

b. Q11. After many years with Procredit, I have concluded that banks barely help us. They don't care about our businesses' health. I haven't seen my personal capital growing as a result of using Procredit's loans. I am indeed tempted to stop borrowing money and work with my own money. First of all, MFI do not give us enough time to work with the loans and require that one month after you start paying back the money. Second, I cannot take stress anymore. Repayment week is very stressful.