University of Zurich[UZH]

Department of Banking and Finance
Center for Microfinance

The Development of Microfinance Institutions in a Multi-Tier Framework

Master Thesis in Banking and Finance

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Full Text Version

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Master's Thesis
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Professor
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Advisor
Dr. Annette Krauss

Submitted in partial fulfillment of the requirements for the degree of
Master of Arts in Economics and Business Administration

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Executive Summary

Microfinance industry has achieved an unprecedented growth over the last two decades. Consequently, the landscapes of both the microfinance institutions (MFIs) and the investors have evolved to include a diverse array of institutional types. As a result of this increasing diversity, classifications of MFIs based on performance and institutional set-up emerged to address the needs of donors and investors.

Today, definitions that classify MFIs into tiers based on several dimensions that include size, maturity and sustainability are increasingly used by practitioners and researchers. However, there is no consensus on an industry-wide, global standardized framework. e-MFP (2013) proposes definitions based on three criteria that classify MFIs into three tiers.

The first objective of this thesis is to analyze the institutional development of MFIs, by investigating the changes in ownership, governance and human resources management across tiers. The second objective is to explore the commonalities and distinctive patterns in MFIs that advanced tiers over time, by examining the speed of growth, capital structure and performance.

The first part of the thesis gives a brief overview of the historical development of microfinance industry, and introduces the main types of MFIs and investors. It then reviews the different tiered classifications that emerged over time. A significant number of classifications consider the size of an MFI as the only criterion. Although, size is an important indicator for performance, it does not tell much about the level of institutional development of an MFI. Another group of classifications use vague, qualitative definitions on criteria such as profitability, governance and operational efficiency. The framework proposed by e-MFP (2013) is built around three criteria: size, sustainability and transparency. Each criteria is further defined by objective, measurable definitions. These three criteria combined serves as a proxy for institutional development of MFIs.

The second part of the thesis reports findings on the changes in ownership, governance, capital structure, human resources, speed of growth and performance of MFIs that advanced from tier 3 to tier 2 to tier 1 over time. A multiple case study is conducted to explore the changes and to assess the common distinctive patterns in those MFIs that moved up tiers. Six MFIs from Colombia, Ecuador, India, Tajikistan, Tanzania and Tunisia are selected employing the MIX Market Database, which includes 14,837 observations of 2,581 MFIs from 115 countries over the period between 1995 and 2012. Construct validity is addressed by using multiple sources of evidence: MIX Market Database for the historical cross-section MFI data; annual reports, audited financial statements, rating reports and previous case studies

on individual MFIs for the analysis. External validity is addressed through replication logic, focusing on cross-case analysis and comparison of the results. To ensure internal validity and reliability, a computer assisted qualitative data analysis software was utilized to capture, code and examine the patterns across the cases.

Findings indicate that legal status, and in turn the ownership of MFIs are more decisive than tiers in explaining the differences among the MFIs. Deposit taking MFIs have stable capital structures throughout the assessment and differ from the rest of the cases. Donated equity loses its presence while share capital and retained earnings have increasing portions with the transition to tier 2, depending on the legal status. For tier 2 and tier 1 MFIs, commercial and non-commercial borrowings are the main funding sources fueling their growth. The rate of commercial to non-commercial borrowings also increase by the tier advancement.

The findings further suggest that MFIs show the highest average growth rates during tier 3. Growth in assets and loan portfolio slightly slows down in tier 2, before cooling down in tier 1. In all three tiers, growth strategies of MFIs resemble an extensive one, marked by capacity increases and expansion. In contrast, growth of tier 2 MFIs are driven more by the increases in productivity and average loan balances.

Accelerated growth of the MFIs and the focus on productivity are followed by increases in the riskiness of portfolios, decreased profitability and mission drift. These findings challenge the common belief that MFIs become more sustainable and less risky by tier advancement.

Finally, findings reveal that tier 3 MFIs have unclear ownership structures and informal governance mechanisms which are leaded by unqualified Board of Directors (BoD) and committed managers. Typical tier 3 MFIs do not have a separate human resources department, thus hiring, training and remuneration policies are not established. Technical assistance and external guidance improve the human resources policies in transition to tier 2. Tier 2 MFIs, have BoD with members that have experience in banking and microfinance. Affiliated members from microfinance investment funds and private equity firms are also have a seat on BoD. Written rules and systematic mechanisms enhance the formalization and agency problems pose less uncertainty during the transition to tier 1.

Contents

List of Figures

List of Tables

List of Abbreviations

ACCION	Americans for Community Cooperation in Other Nations
BoU	Bank of Uganda
CAQDAS	Computer Assisted Qualitative Data Analysis Software
CGAP	Consultative Group to Assist the Poor
Contactar	Corporación Nariño Empresa y Futuro
DFI	Development Finance Institution
EIB	European Investment Bank
e-MFP	European Microfinance Platform
FINCA	The Foundation for International Community Assistance
FMO	The Netherlands Development Finance Company
FSS	Financial Self Sufficiency
GFSPL	Grameen Koota Financial Services Pvt. Ltd.
GNI	Gross National Income
IFC	International Finance Corporation
MEDA	Mennonite Economic Development Associates
MFI	Microfinance Institution
MFIF	Microfinance Investment Fund
MIS	Management Information Systems
MIX	Microfinance Information eXchange
NBFI	Non-Banking Financial Institution
NGO	Non-Governmental Organization
OSS	Operational Self Sufficiency
PAR	Portfolio at Risk
PAR 30	Portfolio at Risk 30 days overdue
PRODEM	Fundacion para la Promocion y Desarrollo de la Microempresa
ROA	Return on Assets
ROE	Return on Equity
ROSCA	Rotating Savings and Credit Association
SIDA	Swedish International Development Cooperation
SIDI	International Solidarity for Development and Investment
SME	Small and Medium-sized Enterprises

1 Introduction

1.1 Motivation

Microfinance is the provision of financial services to low-income clients, including the self-employed, who traditionally lack access to conventional banking services. These services include but not limited to savings, credit, insurance and payment transfers. Initially started with experimental initiatives to lend to the rural poor of Bangladesh and Brazil, microfinance turned out to be one of the most successful development efforts of the last decades (Ledgerwood, 1998).

Main funding sources of early MFIs were grants and subsidies provided by donors and development institutions. With microfinance expanding into new segments and growing into a more commercialized industry, the landscape of both the institutions and investors evolved as well. The global microfinance industry today is made up of a large array or organization types that include cooperatives, credit unions, non-bank financial institutions and commercial banks (Dieckmann, 2007). Because of an increasing diversity in performance and institutional set-up, donors and investors increasingly need standardized, objective criteria for the classification of MFIs. Although different classifications and frameworks to assess MFIs emerged simultaneously over time, many of these frequently used assessments failed to capture the level of the institutional development of MFIs (Microrate, 2013).

Meehan (2004) coined performance based definitions that classifies MFIs into four tiers, according to their degree of commercialization. The term "tier" since then have gained wide acceptance and tiered classifications have been used by many researchers and practitioners (Moser, 2013; e-MFP, 2013; Microrate, 2013; Oehri et al., 2010; Dieckmann, 2007; LMDF, 2013). e-MFP (2013) proposes a simple and objective three-tiered framework based on three criteria: sustainability, size and transparency. Taken together, these criteria hold the potential to serve as a meaningful proxy for the institutional development.

The existing research on the institutional development of MFIs mainly consists of case studies focusing on transformation of MFIs from NGOs to regulated financial institutions (Campion and White, 1999; Campion et al., 2001; Fernando, 2004; Hishigsuren, 2006). There is also some literature on the effects of commercialization on MFIs. Hoque et al. (2011) study the impact of commercialization on capital structure and performance, Cull et al. (2011) and Hartarska and Nadolnyak (2008) examine the implications of ratings and regulation on MFI sustainability and outreach, Bogan (2012) explores the effects of changes in capital structure on efficiency and sustainability, Tchakoute Tchuigoua (2014) studies the impact of the insti-

tutional environment on the capital structure of MFIs, Hartarska (2005) studies the impact of governance on outreach and sustainability of MFIs, Barry and Tacneng (2014) examine whether shareholder-owned MFIs financially and socially perform better than NGOs, Mersland and Strøm (2008) test whether ownership type influences the performance of MFIs, Kyereboah-Coleman (2007) looks at corporate governance and its impact on shareholder value maximization, Hudon and Traca (2011) and D'Espallier et al. (2013) study the impact of subsidy intensity on the efficiency of MFIs. To this date, no studies have evaluated the institutional development of MFIs within the newly created performance-based tier definitions.

1.2 Objective

This thesis aims at filling part of the described gap by (i) investigating the changes in ownership, governance, human resources, capital structure, portfolio quality, performance and outreach during tier advancement of MFIs and (ii) assessing the commonalities and distinctive patterns in MFIs that moved up tiers.

To address these objectives, a multiple case study of six MFIs that advanced from tier 3 to tier 2 to tier 1 between 2004 and 2012 is carried out. The six MFIs from Colombia, Ecuador, India, Tajikistan, Tanzania and Tunisia are selected from a dataset that includes 2,581 MFIs from 115 countries with 14,837 observations over the period between 1995 and 2012. A Computer Assisted Qualitative Data Analysis Software (CAQDAS) is used for coding and categorizing the relevant data obtained from multiple sources: MIX Market Database for the historical MFI data, for the breakdown of the tiers and for the distribution of MFIs to the relevant tiers; annual reports, audited financial statements, rating reports and previous case studies on individual MFIs for the analysis.

1.3 Outline

The remainder of this thesis is structured as follows: Section 2 gives a brief historical development of microfinance industry and provides an overview of different tiered classifications and frameworks to date. Section 3 describes the data and the multiple case study methodology used in the thesis and gives background information on the MFIs that are selected as cases. Section 4 elaborates on previous research on the growth, ownership, governance, capital structure, human resources and performance of MFIs and presents the findings of the analysis. Section 5 concludes and outlines directions for future work.

2 Classification of Microfinance Institutions with Tiers

2.1 History of Microfinance Industry

2.1.1 Origins

Historical antecedents of microfinance can be traced back to late nineteenth century Europe, when German credit cooperatives such as Schulze-Delitzsch, Raiffeisen and Haas facilitated loans to poor people who would otherwise be neglected by banks. These institutions took advantage of local community ties to provide loans on terms that were suboptimal for conventional banks and their methods formed the basis for cooperative movements in many other countries (Guinnane, 2001). Although cooperatives in Africa today strongly resemble those in nineteenth century Germany, the roots of modern microfinance lie in 1970s, when several development programs began providing microcredit to poor people from rural areas with no collateral and considered as unbankable by conventional banks (Guinnane, 2011; Milana and Ashta, 2012).

Most of the microcredit institutions in 1970s were structured as not-for-profit oriented NGOs. The primary focus of these institutions was on social change and poverty reduction, which was perceived as an undesired outcome of market failures as a result of imperfect information, high transactions costs, and difficulties in contract enforcement (Armendáriz de Aghion and Morduch, 2005; Stiglitz and Weiss, 1981).

The two best known of the early microcredit institutions that emerged in 1970s are ACCION, founded originally in 1961 as a community development organization in Venezuela and Grameen Bank, founded by Muhammad Yunus in Bangladesh. ACCION made its first microloan in Recife, Brazil in 1973 and The Grameen Bank started with Yunus' experiments with lending 27 US dollars from his own pocket to 42 poor people in a village next to the Chittagong University where he was teaching (Yunus, 2004; Armendáriz de Aghion and Morduch, 2005).

While ACCION's efforts were limited to Latin America until 1990s, the movement pioneered by Grameen spread rapidly throughout Bangladesh and South Asia before gaining global attention (Chu, 2007). The United Nations declared 2005 the International Year of Microcredit, when there were 3,133 microfinance institutions reaching 113,261,390 clients worldwide (Daley-Harris, 2006). In 2006, the Nobel committee awarded Yunus and the Grameen Bank the Nobel Peace Prize: "for their efforts to create economic and social development from below"(Nobel Foundation, 2006).

2.1.2 Commercialization

In the early days of the industry, microcredit institutions were supported mainly by governmental agencies and donor subsidies. The focus was mainly on the supply of credit to rural populations and training them with the goal of enterprise development. The risks inherent in agricultural lending together with the misaligned incentives led to institutions that were costly, inefficient, and not particularly effective in reaching the poor (Morduch, 1999; Cull et al., 2009b; Otero and Rhyne, 1994).

Beginning in the 1980s, the focus shifted to people in villages and towns operating non-agricultural businesses. Successful lenders achieved repayment rates of 98% and higher without the requirement that loans be secured with collateral. These experiences challenged the view that claims serving the poor can only be done with substantial subsidies and gave rise to the debate, which Robinson (2001) refers as the poverty lending versus the financial systems approach. Although both approaches share the goal of making financial services available to poor, the former aims to do so by donor and government subsidies, while the latter focuses on commercial financial intermediation with an emphasis on institutional self-sufficiency.

As the financial systems approach gained acceptance and microfinance began to be guided by market driven principles, the focus on microcredit was expanded to include a wider range of financial services, encompassing both credit and savings (Campion and White, 1999). Throughout the 1990s, microfinance NGOs have worked to reach the scale necessary to move out of donor dependent models to achieve operational self-sufficiency, embracing the financial systems approach. With increasing commercialization, the landscape of institutions has evolved as well. In 1992, PRODEM, a Bolivian NGO, transformed into the first regulated financial institution dedicated to microfinance, BancoSol. Stemming from the experience of BancoSol, numerous NGO transformations have occurred around the world.[1]

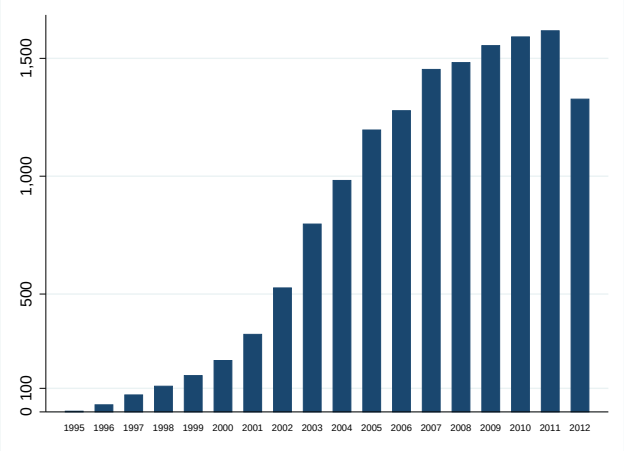
Transformation from an NGO to a regulated financial institution involved becoming licensed to be a deposit-taking institution. Instead of transforming an existing NGO, some donors set up MFIs that specialize in microfinance with a banking license from the very beginning. Additionally, some traditional banks became involved in microfinance, either by downscaling or developing a special microfinance unit (Otero and Rhyne, 1994; Lützenkirchen and Weistroffer, 2012; Ledgerwood and White, 2006).

[1]Wagenaar (2012) reports that 75 MFI transformations occurred between 1996 and 2000. 59 of these were NGO MFIs transforming into NBFI or into Bank. 43 of those NGO MFIs transformed into for-profit organizations, while 16 retained their non-profit status.

2.1.3 Types of Microfinance Institutions

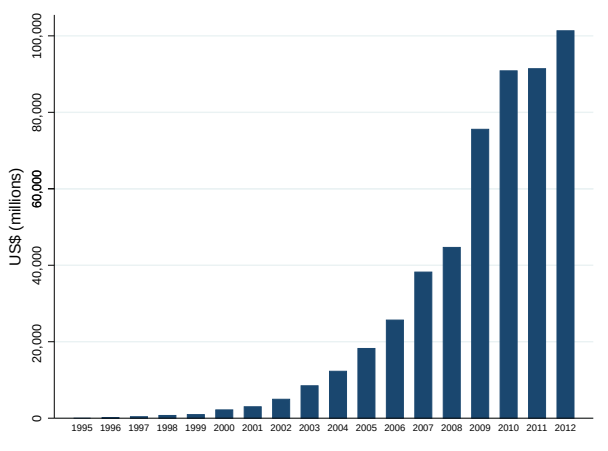
Over the last two decades, the microfinance industry has achieved significant growth in terms of both the number of institutions and the gross loan portfolio (See Figures 1 and 2). The growth has been accompanied by an increase in the complexity of the MFI landscape. The sector that once consisted of non-profit NGOs funded by donors and development agencies has turned into a global industry made up of a large array of organization types that include cooperatives, credit unions, non-bank financial institutions and commercial banks (Dieckmann, 2007).

Figure 1: Number of MFIs Reporting to MIX (per Year)



Source: MIX Market

Figure 2: Total Gross Loan Portfolio of MFIs Reporting to MIX (per Year)



Source: MIX Market

Ledgerwood (1998, p. 97) classifies MFIs into three types: (i) informal, (ii) semi-formal, and (iii) formal MFIs (see Table 1). The distinguishing factor among them is their recognition within the legal infrastructure. Informal providers are those outside the supervision under special bank laws or general commercial laws, semi-formal institutions are those that are registered entities subject to all relevant general laws, but outside the application of bank regulations and supervision, and formal institutions are those that are recognized under general laws, specific banking regulation and supervision.

In the remainder of this thesis, a narrower but widely accepted categorization based on MIX Market is used, which distinguishes MFIs into five types according to their legal status: NGO, Rural bank, Credit union, NBFI and Bank.[2]

[2]For more detailed information on individual characteristics of different legal types, See Table 24.

Table 1: Types of MFIs

Informal providers	Semi-formal institutions	Formal Institutions
Moneylenders	Credit unions	Public development banks
Traders, landlords etc.	Multipurpose cooperatives	Private development banks
Self-help groups	NGOs	Savings banks
ROSCAs		Commercial banks
Families and friends		Non-bank financial institutions

Source: Ledgerwood (1998)

2.1.4 Types of Investors

At the early stages of the industry, main sources of funding were development focused donors such as bilateral and multilateral agencies, development finance institutions (DFIs) and foundations. With the industry developing, the sources of funding have diversified significantly to include institutional investors, commercial banks, and high net worth individuals (Ledgerwood, 2013, p. 379) (See Table 2).

For most of the DFIs, bilaterals, multilaterals and foundations, microfinance is a tool to achieve development goals, such as poverty reduction, economic and social development, and financial inclusion. In contrast, for private investors, the primary objective of investment in microfinance is diversification of investment portfolios, while social objectives are of secondary importance (El-Zoghbi et al., 2011).

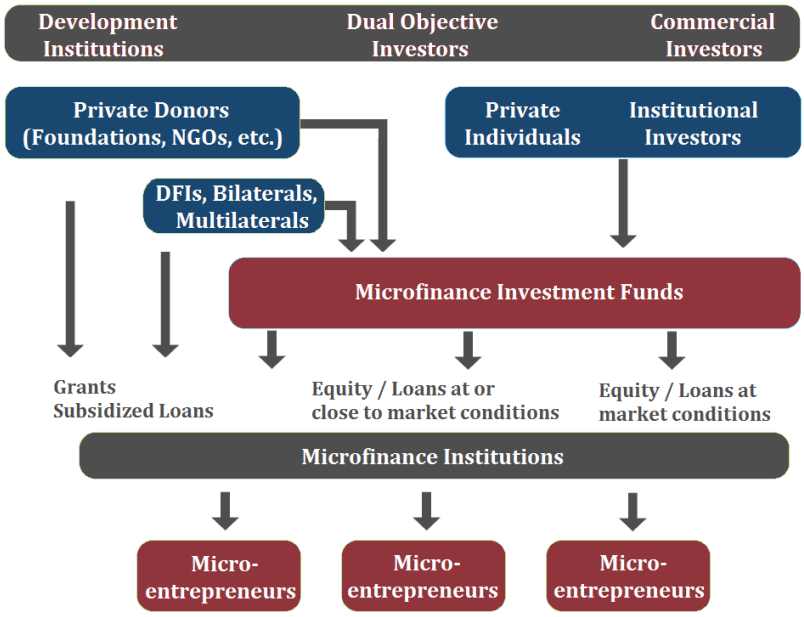
Table 2: Types of Microfinance Investors

	Examples
Bilaterals	U.S. Agency for International Development (USAID), Gesellschaft für Internationale Zusammenarbeit (GTZ), Swedish International Development Cooperation Agency (SIDA)
Multilaterals	Asian Development Bank, European Commission, International Fund for Agricultural Development
DFIs	European Bank for Reconstruction and Development (EBRD), International Finance Corporation (IFC), European Investment Bank (EIB)
NGOs	ACCION, FINCA, Kiva, Hivos
Foundations	Citi Foundation, Ford Foundation, Bill & Melinda Gates Foundation
Institutional investors	Pension Funds, Insurance Companies, Private Equity Firms
Individual investors	High Net Worth Individuls, Retail Investors, Individual Donors

Source: Ledgerwood (1998); El-Zoghbi et al. (2011)

The majority of cross-border funding for microfinance takes the form of debt, both at market rates or below-market rates (El-Zoghbi et al., 2011). DFIs and microfinance investment funds (MFIFs) are the main providers of debt funding for MFIs, which in turn use these funds primarily to finance loan portfolios. Multilaterals provide loans to governments, which in turn use the funds to lend to MFIs as capacity building purposes. Another increasing trend is DFIs' and MFIFs' direct equity investments in MFIs, which strengthen MFIs' capital structure and foster their access to additional debt funding. Additionally, DFIs use guarantees to enhance MFIs' access to funding from local banks. Bilaterals, foundations and NGOs predominantly use grants and subsidized loans to fund MFIs to boost their growth and extend the scope of services offered. Some other purposes of grants are capacity building for market infrastructure, strengthening the regulatory environment and supporting policy makers and supervisory authorities (Goodman, 2006) (See Figure 3).

Figure 3: Funding Landscape of Microfinance Investments



Source: Goodman (2006)

The increased volume of the investment and the widened variety of the funding sources brought along the requirement for a common framework with an objective set of criteria to consolidate heterogeneous practices and systems to ensure transparency and accountability of MFIs (Mersland and Strøm, 2014).

Within the microfinance industry, a common classification and indicator is the "tier" an MFI belongs to. In particular, donors and investors in the microfinance industry often refer

to tier 1, tier 2, tier 3 and sometimes tier 4 MFIs to cluster different types of MFIs into subcategories (e-MFP, 2013).

Although tier based definitions are frequently used to refer to seniority of MFIs, there is no standard definition of underlying criteria. This clearly constitutes a problematic situation where different stakeholders use and perceive the term in different contexts. The next section briefly reviews the most commonly referred tiered conceptual frameworks.

2.2 Various Tiered Frameworks

2.2.1 Tiered Banking Systems

As MFIs grew substantially and began attracting commercial funding in addition to donations, demand for frameworks ensuring prudential and non-prudential regulation of MFIs increased (Gallardo et al., 2005).

Microfinance regulation and supervision is highly contextual. One approach is to leave MFIs outside the scope of regulation, while the opposite is full regulation through the existing frameworks or through adapting the existing frameworks to take into account the specific characteristics of MFIs. A prominent example of the adaptive approach is "tiered banking" and graduated regulation, which implies differentiated regulatory requirements for institutions with different characteristics (van Greuning et al., 1999).

Uganda serves as a prime example of a country that adapted a tiered approach. In July 1999, Bank of Uganda (BoU) issued a policy statement in which MFIs are recognized as separate financial institutions. The policy established a tiered regulatory framework that addressed MFIs explicitly (Staschen, 2003). The framework distinguishes between four tiers (AMFIU, 2009) (see Table 3):

(i) *Tier 1* institutions are commercial banks; they already have sufficient capital and meet the requirements for taking deposits. They may also have operations in microfinance.

(ii) *Tier 2* institutions may offer both savings and loan products but they can neither operate cheque/current accounts nor be part of the BoU Clearing House. They may also have operations in microfinance given that they are sufficiently capitalized and meet the requirements for taking deposits.

(iii) *Tier 3* institutions are known as Microfinance Deposit Taking Institutions. Like Tier 1 and Tier 2 institutions, they meet the requirements on core capital, liquidity ratios and capital adequacy ratios in addition to the asset quality and regular reporting provisions.

(iv) *Tier 4* institutions include all other financial service providers outside BoU oversight. NGOs and community-based organizations fall under this category. These institutions usu-

ally have the role of deepening geographical and poverty outreach, mainly serving the poorer, rural clients.

Table 3: Bank of Uganda Tier Categories

Tier 1	Commercial banks
Tier 2	Credit Institutions
Tier 3	Microfinance Deposit Taking Institutions
Tier 4	All other financial services providers outside BoU oversight

Source: AMFIU (2009)

Among the several approaches, the tiered banking regulatory framework benefited the development of microfinance industry not only in Uganda but also in Bolivia, El Salvador, Nicaragua, Peru, Indonesia, Philippines, Sri Lanka, Zambia and Georgia by identifying pathways for NGOs and semi-formal MFIs to transform into formal institutions (van Greuning et al., 1999; Gallardo, 2002). Although the categorizations of BoU's and similar tiered regulatory frameworks in aforementioned countries may serve as a good proxy for commercialization, using legal status as the only criteria lacks the categorization and depth that is required by the complex stakeholder landscape.

2.2.2 Grameen Foundation Tiered Framework

The first performance based tiered segmentation that classifies MFIs according to their degree of commercialization has been developed by Meehan (2004). The term "tier" since then has gained wide acceptance in the industry and several adapted classifications has been used by many researchers and practitioners (Moser, 2013; e-MFP, 2013; Microrate, 2013; Oehri et al., 2010; Dieckmann, 2007; LMDF, 2013). Meehan (2004) classifies MFIs within four tiers and defines them as following (See Figure 4):

(i) *Tier 1* MFIs are mature and well-known institutions in their regions. They have strong financial and operational track record. Most of them are regulated or subject to some kind of supervision. These are the most attractive targets for commercial and commercially oriented investors.

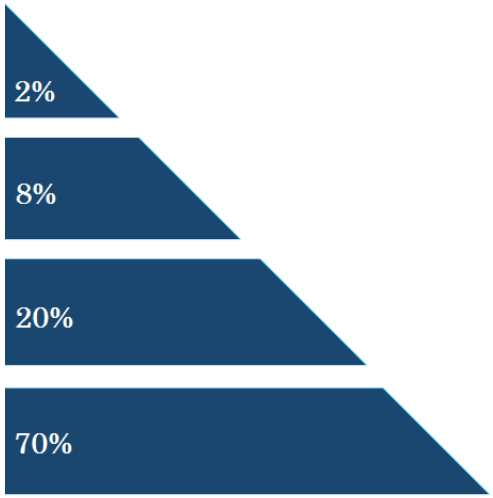
(ii) *Tier 2* MFIs are successful but smaller, younger, or simply less well known institutions at or near profitability. They are in the process of transforming or considering doing so. They receive debt financing from local and international investors, both public and institutional (Thou, 2013).

(iii) *Tier 3* Approaching profitability but having understandable shortcomings as they are nearly all young institutions. They have inadequate capital, weak MIS, or other shortcomings.

(iv) *Tier 4* The remaining 70% of all MFIs are grouped in tier 4, which consists of start-ups or weak institutions.

Figure 4: Grameen Foundation Tier Categories

Tier 1	Mature and best known MFIs with strong financial and operational track record. Most are regulated.
Tier 2	Successful but smaller, younger, or simply less well known MFIs. At or near profitability
Tier 3	Approaching profitability. Shortcomings due to young organization, lack of capital, weak MIS, or other needs.
Tier 4	Mix of unprofitable MFIs: start-ups, weak institutions or microfinance is not the main focus.



Source: Meehan (2004)

2.2.3 Other Tier Definitions

Following the work of Meehan (2004), several researchers and practitioners started to use tiered classifications, with slight differences among them. responsAbility (2013) defines tier 1 MFIs as "institutions that operate profitably, serve a well-developed client base, have an experienced management team and are often regulated and supervised", tier 2 MFIs as "smaller and younger MFIs that are profitable or are approaching profitability and are often preparing to undergo a legal transformation to become a more formal type of institution" and tier 3 MFIs as the rest.

CGAP (2010) describes top-tier MFIs as those with over 30 million US dollars in assets, second-tier MFIs as those with 5 to 30 million US dollars in assets and third-tier MFIs as those with less than 5 million US dollars in assets.

Triple Jump and Huijsman (2010) classify MFIs in four tiers based on the size of their Gross Loan Portfolio (in US dollars): tier 1 MFIs have a Gross Loan Portfolio above 50 million US dollars, tier 2 MFIs have a loan portfolio between 10 and 50 million US dollars,

tier 3 MFIs have a loan portfolio between 3 and 10 million US dollars, and tier 4 MFIs have a Gross Loan Portfolio below 3 million US dollars.

BlueOrchard (2013) refers tier 1 MFIs as those with total assets more than 75 million US dollars, tier 2 and tier 3 as MFIs with total assets of less than 75 and 30 million US dollars, respectively. Moreover, tier 2 and tier 3 MFIs are explained as "smaller, that often aim to serve a poorer clientele, frequently combining their credit offer with non-financial products aimed to help their clients to use their loans effectively or otherwise improve other aspects of their life, such as in health and education".

Although several other classifications emerged over time, the notions being used are one-dimensional and lack the capacity to capture the level of the institutional development of MFIs. Regulatory frameworks such as the BoU's distinguish MFIs only by legal status. Grameen Foundation Tiered Framework lays a good foundation but it uses vaguely defined definitions that requires an in-depth analysis of an institution by an experienced analyst. This is not only inefficient considering that there are more than 10,000 MFIs in the world, but also inappropriate for historical analysis. BlueOrchard (2013) and CGAP (2010) use asset size, and Triple Jump and Huijsman (2010) uses gross loan portfolio as the sole criteria. e-MFP (2013) proposes a simple and objective three-tiered framework that holds the potential to serve as an indicator for institutional development.

2.2.4 e-MFP Tiered Framework

Tier Criteria

e-MFP's three-tiered framework is built around three dimensions: (i) size, (ii) sustainability and (iii) transparency.

(i) *Size.* Size is an objective criteria that is easy to assess, hence a practical benchmark to differentiate among MFIs. Smaller MFIs are usually young or they operate in a smaller market. Therefore, size serves as a good proxy for the maturity of an MFI. They typically grow as they serve more clients and have larger portfolios. Cull et al. (2011) shows empirically that age and size of an MFI is positively linked with profitability since they indicate how well established the MFI is. Hartarska et al. (2013) also shows that larger MFIs are more efficient than medium and smaller MFIs.

(ii) *Sustainability.* Two common indicators of profitability for commercial banks are: return on assets (RoA), which measures the bank's ability to use its assets efficiently and return on equity (RoE), which measures the returns produced on the owners' investment (Rosenberg, 2009). These two indicators are also the ones that are most often used in mi-

crofinance research to indicate sustainability of MFIs, along with operational self-sufficiency (OSS) and financial self-sufficiency (FSS) ratios (Mersland and Strøm, 2014). Looking solely at RoA value would be misleading when assessing MFIs since profitability is not the primary objective of most MFIs. Consequently, positive and improving RoA is a more suitable indicator than the RoA value itself.

(iii) *Transparency.* Transparency refers to accurate, timely information about the financial and social performance of an MFI, including the production, verification, reporting, and use of that information (CGAP, 2012). Mature MFIs attract more interest from investors and other stakeholders. The indicator used for transparency are whether the MFI is regulated, or in the cases where no adequate regulation exists, whether it is rated. Regulation is also a precondition for most MFIs to take deposits and expand their banking functions. Ratings may also signal whether an institution is transparent.

Tier Definitions

In e-MFP's three-tiered framework; size, sustainability and transparency criteria have equal weighing, and the tier an MFI belongs to is determined by the lowest level of compliance with a given dimension. For example, if an institution appears as tier 1 in terms of size and transparency, but as tier 2 in terms of sustainability, it is considered as a tier 2 MFI.

Table 4: e-MFP Tier Definitions

	Size	Sustainability	Transparency
Tier 1	> 50 million US dollars in assets	(i) Positive RoA for at least 2 of the last 3 years AND (ii) No RoA <-5% in the last 3 years	(i) Regulated OR (ii) Rated financial institution
Tier 2	5 - 50 million US dollars in assets	(i) Positive RoA for at least 1 of the last 3 years and other years >-5% OR (ii) Positive trend in RoA in last 2 years and >-5%	Audited financial statements for at least 3 years
Tier 3	No requirement	No requirement	No requirement

Source: e-MFP (2013)

The definitions of each tier are as follows (see Table 4):

(i) *Tier 1* MFIs have assets larger than 50 million US dollars, positive RoA for at least two out of the last three years and do not have RoA lower than -5% in any of the last three years. They are also regulated by the legal authority of the country they operate in or they get rated by rating agencies.

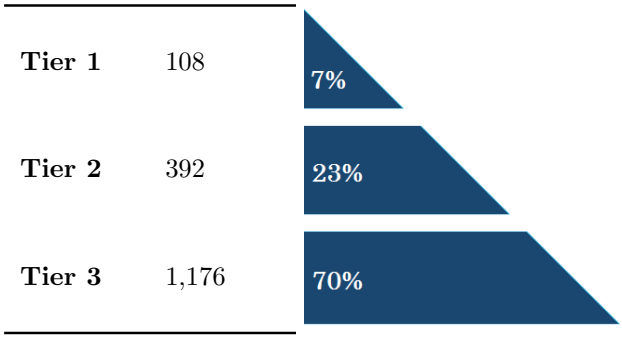
(ii) *Tier 2* MFIs have assets between 5 and 50 million US dollars. They have positive RoA for at least one out of the last three years and do not have RoA lower than -5% in the other two years. If they do not fit into the aforementioned RoA criteria, then they have an increasing RoA in last two years that do not fall below -5%. They also have published audited financial statements for each of the last three years.

(iii) *Tier 3* MFIs are the ones that do not fulfill the minimum criteria defined by the other tiers.

Tier Breakdown

e-MFP (2013) and Microrate (2013) apply the tier definitions using the data as of 2011 from the MIX Market Database[3], which comprises of 1,676 MFIs. They find that tier 1 MFIs constitute 7% of the global microfinance industry while tier 2 and tier 3 MFIs constitute 23% and 70% respectively (see Figure 5).[4]

Figure 5: e-MFP Tier Breakdown



Source: e-MFP (2013)

[3]See Section 3.1.3 for detailed information

[4]These are by no means absolute figures and in fact, tier 3 MFIs are expected to be under-represented significantly. This is due to the self-reported data of MIX Market Database. see Section 3.1.3 for more detailed information.

3 Multiple Case Study Approach to Analyze Tier Advancement

3.1 Research Design

3.1.1 Choice of Method

In broadest terms, research on microfinance institutions can be divided into two categories: supply-side and demand-side. The former uses data to understand the performance, outreach and institutional characteristics of various types of MFIs and to enable comparative analyses over time, whereas the latter seek detailed information about what and how services and product offerings are used at the individual, household, or community level (Ledgerwood, 2013, p. 115).

Supply-side research on MFIs overall face significant limitations. Microfinance is a relatively young industry with a history of no more than 20 years in most of the developing countries. Although there is a broad and growing body of literature on empirical research on MFIs, there still exists a barrier to generate large samples consisting of MFIs with similar characteristics to investigate phenomena and generalize results on large populations.

Considering the diversity of organizational types and significant differences in institutional designs, profit statuses, lending technologies and operating environments it is almost impossible to generalize in-depth findings that would apply equally to all MFIs. This heterogeneity among MFIs poses a challenge, particularly for time-series cross-section research.

According to Yin (2009, p. 4), the case study methodology allows researchers to retain the comprehensive and meaningful characteristics of actual events such as individual life cycles, group behavior, organizational and managerial processes and the maturation of industries. Yin (2009, p. 8-16) further suggests that a case study design should be considered when (i) the focus of the study is to answer "how" and "why" questions, (ii) the behavior of the subjects in the study cannot be manipulated, (iii) the aim is to cover contextual conditions that are relevant to the contemporary phenomenon under study, or (iv) the boundaries are not clear between the phenomenon and context.

This thesis investigates a situation that only applies to a small set of MFIs, using a framework that has been recently established. Moreover, to reach meaningful conclusions, structural and operational links should be traced over time. Furthermore, the conditions that are aimed to be covered are only relevant to the particular contemporary tier framework and there exists no clear boundaries between the tier definitions and the context of the MFI

performances. All of these reasons combined makes the case study methodology the only viable option.

There are three distinct types of case studies: exploratory, explanatory, and descriptive case studies. Exploratory studies aim to formulate problems, clarify concepts and form hypotheses. Explanatory studies seek to specify the nature and direction of the relationships among variables, investigate causality and generalize the results. Descriptive studies try to describe different characteristics of a phenomenon (Sue and Ritter, 2007, p. 2).

This thesis uses a hybrid approach among the three case studies, however it fits the description of the exploratory case study better than the other two. Streb (2010) states that exploratory case studies are appropriate when there is a lack of existing preliminary research and testable hypotheses, and when the research environment limits the choice of methodology. Considering the lack of previous research in analyzing the development of MFIs in a tiered context and the limitation of drawing strict conclusions with direct causality in such a complex setting, an exploratory case study provides a high degree of flexibility and independence in terms of data collection and research design.

Case study methodology is often criticized for lacking precision, reliability and validity (Tellis, 1997). According to Yin (2009, p. 40), there are four widely used tests to address the criticisms and to establish the quality of a case study research: (i) construct validity, (ii) internal validity, (iii) external validity and (iv) reliability. Construct validity tests the validity and the accuracy of the operational set of measures. It refers to the extent to which a study investigates what it claims to investigate (Denzin and Lincoln, 1994). Internal validity is the degree to which causal relationships are strong. External validity is concerned with the generalizability of the studies' results. Reliability ensures that the study can be replicated by later researchers to achieve the same results and conclusions. Yin (2009, p. 41-46) identifies several tactics to deal with these four tests (See Table 5).

In this thesis, construct validity is addressed by cross examining the same questions through different sources of evidence that includes annual reports, rating reports, websites of MFIs and financial statements. Internal validity is mainly a concern for explanatory case studies. The logic is not applicable to exploratory studies, which are not concerned with causality. Still, the issue is addressed by focusing on how and why the pattern of observation occurred, as much as possible. External validity is addressed through replication logic, focusing on cross-case analysis and comparison of the results. Finally, a CAQDAS is utilized during to capture, code and report the findings of the cases. This allows to enhance reliability through the use of a case protocol and a case study database.

Table 5: Case Study Tactics for Four Design Tests

Tests	Tactics	Phase
Construct validity	-use multiple sources of evidence	data collection
	-establish chain of evidence	data collection
	-have key informants review draft case study report	composition
Internal validity	-do pattern matching	data analysis
	-do explanation building	data analysis
	-address rival explanations	data analysis
	-use logic models	data analysis
External validity	-use theory in single-case studies	research design
	-use replication logic in multiple-case studies	research design
Reliability	-use case study protocol	data collection
	-develop case study database	data collection

Source: Yin (2009)

3.1.2 Data

This thesis uses multiple sources of data: publicly available MIX Market Database for historical MFI data, for the breakdown of the tiers and for the distribution of MFIs to the relevant tiers; annual reports, audited financial statements, rating reports and previous case studies on individual MFIs for the analysis. Two additional proprietary datasets that are not publicly available were obtained from MIX through a negotiated agreement. These datasets include the historical changes in legal status of MFIs and detailed funding structures for individual MFIs. The Online MIX Market Database was also used to gather annual diamond history of the individual MFIs, as well as country and regional statistics.

Rating reports were collected from several rating agencies: M-CRIL, Microfinanza Rating, BankWatch Ratings, Humphreys, CRISIL, MicroRate, and PlaNet Rating. The reports were obtained from the websites of the rating agencies or the section of the MIX website that provides rating reports of individual MFIs. Although the methodologies of each rating agency differ, they give in-depth assessment of governance, operations, funding, financial and social aspects of the MFIs (Hartarska and Nadolnyak, 2008). Ratings are recorded for the year for which they were conducted but in most cases, ratings were based on observations for the preceding years. For example, if an MFI was rated in 2012, it was recorded as rated in 2012, although the rating agency actually used observations for 2011 and 2010. In cases where there is no available rating in a particular year, rating(s) of the following year(s) used as substitute(s).

Finally, audited financial statements and the annual reports of the selected MFIs were

used as complementary sources. The information regarding the capital structure and the structure of the borrowings were mainly collected from these sources. When there was no rating for an MFI in a given year, annual reports were the main source for information regarding the governance and operational aspects. Table 22 summarizes the sources used for the analysis of each selected MFI.

3.1.3 MIX Market Database

Microfinance Information eXchange (MIX) is a global, not-for-profit online database of information on MFIs, regulatory insitutions and rating agencies, as well as public and private funds that invest in microfinance. It further provides background information on the countries and regions in which MFIs operate. The MIX Market Database covers an estimated 85% of clients served by MFIs (Ledgerwood, 2013, p. 118).[5] The MIX Market data are provided by the MFIs themselves. The financial data of most of the institutions reporting to MIX Market are supported by audited financial statements or rating reports, and reviewed for coherence and consistency by analysts before publication (Bauchet and Morduch, 2010).

MIX uses a so-called "diamond" system to rate MFIs in terms of their level of data disclosure. In this system, MFIs are rated on a scale of one to five, where five diamonds correspond to the highest level of disclosure (See Table 6).

Table 6: MIX Diamond Criteria

Level 1	Profile is visible.
Level 2	Level 1 and some data on products and clients for the year
Level 3	Levels 1 and 2 and some financial data for the year
Level 4	Levels 1 - 3 and audited financial statements are published for the year
Level 5	Levels 1 - 4 and rating or due diligence report is published for the year

Source: MIX Market, 03.04.2015

The data provided by MIX is accurate and in high quality, yet not representative of the complete microfinance universe. Self-reported data are vulnerable to self-selection bias and MFIs with certain legal forms may be underrepresented. The occurrence of these biases

[5] An alternative source to MIX is Microcredit Summit Campaign, a microfinance advocacy organization that promotes social change. Cull et al. (2009a) and Bauchet and Morduch (2010) state that the MIX data are more heavily inclined toward financially sustainable institutions, whereas MFIs serving poorer clients are more likely to report to Microcredit Summit Campaign.

may be more frequent in some regions than others because of the endogeneity between legal forms and countries (Krauss et al., 2012). The majority of the underrepresented institutions are smaller MFIs, savings and credit cooperatives. Hence, it is highly unlikely that MFIs that exceed certain thresholds in terms of size, performance and transparency prefer not to disclose information to MIX Market Database. Considering the scope of this thesis and its particular focus on the better performing MFIs, aforementioned shortcomings of the MIX Market Database do not pose a significant obstacle.

A more relevant drawback of the MIX Market Database for this thesis is its treatment toward some variables as static. More specifically, data for the legal status, regulatory status and diamond rating are not reported retrospectively. For instance, if the current legal status of an MFI is "Bank", it appears as "Bank" in all the previous years, even if this is not the case. The same overwriting issue exists for the diamond rating variable and the dummy variable for the regulatory status.

3.1.4 Adjustments to Tier Definitions

This thesis uses the tier definitions proposed by e-MFP (2013) and Microrate (2013) as a basis but some adjustments were made to make the definitions more quantifiable, and therefore more suitable to obtain the necessary information from the MIX Market Database (See Table 7).

The first adjustment was made under the tier 1 definition of transparency criterion. In the e-MFP framework, an MFI qualifies to be tier 1 transparent if it is a: (i) regulated financial institution or (ii) rated financial institution. The term "rated financial institution" is vaguely defined here because most of the MFIs get rated on a voluntary basis and the frequency of getting rated is not mentioned in this definition. Microrate uses an alternative definition in which a tier 1 transparent MFI is: (i) a regulated financial institution or (ii) rated at least once in the last two years. This thesis uses the diamond level of the MFI from MIX Market to determine whether the MFI is rated at least once in the last two years. If an MFI has 5 diamonds at least once in the last two years, it qualifies to be tier 1 transparent.

The second adjustment was made under the tier 2 definition of the transparency criterion. In the e-MFP framework, an MFI qualifies to be tier 2 transparent if it has audited financial statements for the last three years. This thesis uses the diamond level of the MFI from MIX Market to determine whether the MFI has audited financial statements for the last three years. If an MFI has at least 4 diamonds in all of the last three years, it qualifies to be tier 2 transparent.

Table 7: Adjusted Tier Definitions

	Size	Sustainability	Transparency
Tier 1	> 50 million US dollars in assets	(i) Positive RoA for at least 2 of the last 3 years AND (ii) No RoA <-5% in the last 3 years	(i) Regulated financial institution OR (ii) 5 diamonds from MIX at least once in the last 2 years
Tier 2	5 - 50 million US dollars in assets	(i) Positive RoA for at least 1 of the last 3 years and other 2 years >-5% OR (ii) Positive trend in RoA in last 3 years and all >-5%	Mininum of 4 diamonds from MIX at least for the last 3 years
Tier 3	< 5 million US dollars in assets	No requirement	No requirement

Source: own research, based on Microrate (2013) and e-MFP (2013)

3.1.5 Selection of Microfinance Institutions

The full sample from MIX Market Database includes 2,581 MFIs from 115 countries over the period between 1995 and 2012, and consists of 14,837 observations. From this sample, MFIs that start as tier 3 and later moved up to tier 2, and then to tier 1 between 2004 and 2012 are inspected using the size and sustainability criteria. The transparency criterion was not applied at this stage because the publicly available MIX Market Database does not report the historical data for diamond and regulatory status variables.[6] Table 8 reports the tier breakdown without the application of transparency definitions for the period between 2004-2012.

Table 8: Tier Breakdown with the Application of Size and Sustainability Criteria

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Tier 3	867	1024	1005	1087	1071	1116	1105	1120	833
Tier 2	87	129	189	252	274	294	321	307	261
Tier 1	28	43	84	114	136	143	153	166	171
Total	982	1196	1278	1453	1481	1553	1579	1593	1265

Source: own research, based on MIX Market

[6] Although the historical data for diamonds are not available in publicly available MIX Market Database, they can be found on the institutional pages of the individual MFIs on MIX Market website. These data were obtained for a limited number of MFIs.

Between 2004-2012; 567 MFIs moved up from tier 3 to tier 2, 248 MFIs moved up from tier 3 from tier 2 and 101 MFIs moved up from tier 3 to tier 2 and then to tier 1. Of those 101 MFIs that moved up from tier 3 to tier 2 and then to tier 1, 76 stayed as tier 1 after moving up. Historical data for diamonds of those 76 were obtained individually from the institutional pages of the MFIs on MIX Market website. Additionally, historical data for legal status of those MFIs were gathered from the separate MIX Market Database, which is not publicly available. Together, the transparency definitions were also applied on the data of those 76 MFIs, and 55 MFIs survived the full selection criteria (See Table 9). All of those 55 MFIs comply with the Adjusted Tier Definitions described in the Section 3.1.4.

Table 9: Number of MFIs that Moved up Tiers between 2004-2012

Tier Path	Tier Criteria Applied	Number of MFIs
-	-	2575
3 to 2	Size, Sustainability	567
2 to 1	Size, Sustainability	248
3 to 2 to 1	Size, Sustainability	101
3 to 2 to 1, stayed 1 afterwards	Size, Sustainability	76
3 to 2 to 1, stayed 1 afterwards	Size, Sustainability, Transparency	55

Source: own research, based on MIX Market, 2004-2012

MFIs operate in different countries and therefore they are subject to different regulations, restrictions and business cycles. Also, MFIs have different legal statuses and although the official names and regulations they are subject to differ in each country, MFIs in general are chartered as banks, credit unions, NBFIs, NGOs or Rural Banks. Tchakoute Tchuigoua (2010) shows that there is a significant difference in financial performance, efficiency, size, solvency and portfolio quality according to the charter type of MFIs.

It should also be noted that there is a strong link between legal status and region. Certain legal forms of MFIs are more common in some parts of the world than in others. Credit unions have a strong presence in Africa while they do not exist in Middle East and North Africa. There is a significant amount of Rural Banks in East Asia and Pacific while this type of MFIs exist only in marginal numbers in other regions. Table 10 shows the MFIs by their legal status and the regions they operate in, for the year 2012.

Eisenhardt (1989) emphasizes that the selection of cases is an important aspect of case study methodology and the selection of appropriate cases is crucial in controlling unintended variation and defining the limits for generalizing the findings. She further suggests that cases "should be chosen to replicate previous cases to fill theoretical categories and provide examples of polar types". Stake (1995, p. 437) points out that multiple case studies enable the

Table 10: Distribution of MFIs by Legal Status and Region

Region	Legal Status						
	Bank	Credit Union	NBFI	NGO	Rural Bank	Other	Total
Africa	71	148	99	75	3	2	398
East Asia and the Pacific	9	23	44	100	41	16	233
Eastern Europe and Central Asia	38	41	138	17	-	7	241
Latin America and The Caribbean	34	66	140	175	-	3	418
Middle East and North Africa	4	-	9	44	-	4	61
South Asia	14	23	78	118	11	7	251
Total	170	301	508	529	55	39	1602

Source: MIX Market, 2012

researcher to have more comprehensive knowledge, stronger interpretation and to generate more solid theories about a general condition or phenomenon. The evidence from carefully selected multiple cases are also regarded as more robust (Herriott and Firestone, 1983).

Even though the primary objective of this thesis is not examining strict causal relationships, this thesis aims to generate findings that would be transferable and lay foundations for future research directions. Therefore, selection of the cases addresses the generalization issue and tries to minimize the effect of extraneous variables on the findings.

Table 11: Distribution of the MFIs that Comply with the Selection Criteria

Region	Legal Status						
	Bank	Credit Union	NBFI	NGO	Rural Bank	Other	Total
Africa	1	1	1	2	-	-	5
East Asia and the Pacific	-	-	3	-	1	-	4
Eastern Europe and Central Asia	3	-	6		-	-	9
Latin America and The Caribbean	4	2	13	4		-	23
Middle East and North Africa	1	-	-	2	-	-	3
South Asia	1	-	5	5	-	-	11
Total	10	3	28	13	1	-	55

Source: own research, based on MIX Market, 2004-2012
Note: 5 of the 55 MFIs changed their Legal Status between 2004-2012. The data for the legal status are based on the year 2012.

Table 11 shows the distribution of the MFIs that comply with the selection criteria, by their legal status and the regions they operate in. At first, eight MFIs from five continents

with four different charter types were selected. Two of these institutions were credit unions. Both of them were regulated institutions hence qualified as tier 1 transparent, but there were not enough publicly available information about them in the form of rating reports or annual reports. For that reason, they were dropped from the analysis. The final selection of the cases consists of six MFIs: two NGOs, two Banks and two NBFIs from all regions except East Asia and the Pacific (See Table 12).

Table 12: Selected MFIs for Analysis

MFI Name	Legal Status	Region	Country
Akiba Commercial Bank	Bank	Africa	Tanzania
Contactar	NGO	Latin America and the Caribbean	Colombia
Enda Inter-Arabe	NGO	Middle East and North Africa	Tunisia
FINCA Ecuador	Bank	Latin America and the Caribbean	Ecuador
Grameen Financial Services	NBFI	South Asia	India
IMON International	NBFI	Eastern Europe and Central Asia	Tajikistan

Source: own research, based on MIX Market

3.2 Background Information for the Selected Microfinance Institutions[7]

3.2.1 Akiba Commercial Bank

Akiba was founded in 1993 as an initiative of local Tanzanian businesspeople with the aim of providing financial services to the previously unbanked and commercially under-served men and women of Tanzania. After obtaining a banking license from Bank of Tanzania and formally starting operations in 1997, Akiba maintained its status as a bank and has not made major changes in its mission and vision to date.

The mission of Akiba was stated as "to provide appropriate financial services to SMEs and households in an efficient and sustainable manner, always embracing environmental and social interest of all stakeholders", and this mission has been preserved for the years that Akiba was tier 2 and tier 1. Since its early days, Akiba established strong partnerships with local as well as international institutions such as ACCION International, FMO, SIDI, Triodos Hivos and Incofin which collectively hold the majority of the shares of the bank.

Akiba's headquarters are in Dar es Salaam and it has 16 offices in the major urban locations of Tanzania. In addition to wide range of deposit and saving products, Akiba offers a range of credit services including group and individual loans, SME loans, consumer loans and money transfer. As of 2014, Akiba has a gross loan portfolio of 41,779,433 US dollars, serving to 19,659 borrowers with an average balance of 1,428 US dollars.

Table 13: Akiba Tier Information

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Legal Status	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Diamonds	3	4	4	3	4	3	3	3	4
RoA (%)	2.55	2.29	(0.23)	1.2	1.59	2.03	1.26	0.96	1.51
Asset Size (USD mn)	24.7	31.1	29.3	37.1	44.8	55.2	60.4	65.1	77.5
Tier	3	2	2	2	2	1	1	1	1

Source: own research, based on MIX Market

[7]If not stated otherwise, the information for the MFIs are obtained from their websites, annual reports, financial statements and MIX Market. Rating Agencies for the reports are as follows: MicroFinanza for Contactar; MicroRate and PlanetRating for Enda; MicroFinanza, Humphreys and BankWatch Ratings for FINCA Ecuador; M-Cril and Crisil for GFSPL; MicroFinanza for IMON. Mori (2007) and Khaled (2003) are the case studies and assessments for Akiba and Enda respectively that were additionally used.

3.2.2 Contactar

Contactar was established in 1991 as an NGO with the joint support of local institutions such as Fundaciòn Social, Artesanías de Colombia and Corponariño to serve the rural and agricultural entrepreneurs of Nariño, Colombia. Since its foundation, Contactar retained its status as an NGO and focused on rural development in southern Colombia.

Despite a cumulative annual growth rate of 25.25% between 2004 and 2012, Contactar continues to state its mission as providing inclusive and comprehensive microfinance services primarily to rural populations and helping improve their living conditions.[8]

Contactar serves both urban and rural clients with an emphasis on the latter. As of December 2013, Contactar has a gross loan portfolio of 61,023,548 US dollars, serving to 66,386 borrowers through its 33 offices headed from the city of Pasto. In addition to individual and group loans, Contactar provides microinsurance and services such as financial education, advice in sustainable farming practices and health promotion.

Table 14: Contactar Tier Information

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Legal Status	NGO	NGO	NGO	NGO	NGO	NGO	NGO	NGO	NGO
Diamonds	3	5	3	4	5	5	3	5	5
RoA (%)	15.4	15.57	13.22	9.26	10.89	10.4	9.24	6.77	6.23
Asset Size (USD mn)	2.1	3.2	5.2	8.2	10.1	14.8	24.5	38	54.2
Tier	3	3	2	3	2	2	2	2	1

Source: own research, based on MIX Market

3.2.3 Enda Inter-Arabe

Enda Inter-Arabe was founded in 1990, as a branch of Enda Tiers-Monde, an international NGO based in Senegal. Initially started as a development organization focusing primarily on urban development and environment, Enda Inter-Arabe launched Tunisia's first microcredit program in 1995 with a total capital of US 20,000. Two founding directors Essma Ben Hamida and Michael Cracknell were committed to reducing poverty and improving living conditions of Tunisians, especially Tunisian women in accordance with the development goals of Tunisia. Following the success of the microcredit program, Enda shifted its focus from

[8] 25.25% is the CAGR of assets between 2004-2012. Contactar's portfolio growth is 22.85% for the same period.

other programs, and decided in 2000 to cater exclusively to micro-entrepreneurs. Enda has been holding its status as an NGO since its foundation.[9]

Throughout the years of observation, Enda has been sticking to its mission to contribute to the improvement of incomes and quality of life of low-income Tunisians with a socially and environmentally responsible approach.

Enda operates through 75 offices, providing services to urban and semi-urban populations. The Head Office is located in Ettadhamen neighborhood of Tunis, where the organization began its lending operations. Enda has focused on lending to low-income households and female entrepreneurs in Tunisia, offering a range of microcredit products. In addition, Enda has been providing financial literacy education for low-income communities. As of December 2013, Enda serves 231,520 active borrowers with an outstanding gross loan portfolio of 103,212,864 US dollars.

Table 15: Enda Tier Information

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Legal Status	NGO	NGO	NGO	NGO	NGO	NGO	NGO	NGO	NGO
Diamonds	4	5	5	4	5	3	4	4	5
RoA (%)	13.76	11.14	13.88	9.72	8.97	9.27	6.38	2.35	2.42
Asset Size (USD mn)	4.4	6.7	14	24.6	37.3	45.4	59.4	78.1	95.2
Tier	3	2	2	2	2	2	1	1	1

Source: own research, based on MIX Market

3.2.4 FINCA Ecuador

FINCA Ecuador was founded in 1993 as an affiliate of the FINCA International network. It began its operations in Quito, under the supervision of the Ministry of Social Welfare. In 2003, FINCA Ecuador made a decision to become a formalized institution as an NBFI, to attract more resources from local and international investors. Later, in order to mobilize savings from its clients, FINCA Ecuador became the first licensed bank within the FINCA network.

The mission of FINCA International is stated as "to provide financial services to the world's lowest-income entrepreneurs so they can create jobs, build assets and improve their standard of living."

[9]Enda Inter-Arabe had been recognized as an international NGO and out of supervision of the regulatory law until 2005, when it received authorization from the Ministry of Finance to supply micro-credit loans defined by the framework of laws.

FINCA Ecuador's products include individual and group loans, savings, village banking and insurances. As of December 2013, FINCA Ecuador serves to 41,571 borrowers with an outstanding loan portfolio of 42,229,266 US dollars.

Table 16: FINCA Ecuador Tier Information

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Legal Status	NGO	NBFI	NBFI	NBFI	Bank	Bank	Bank	Bank	Bank
Diamonds	5	5	5	4	4	5	5	5	3
RoA (%)	5.41	9.36	8.58	3.71	0.96	(0.13)	0.47	0.66	(0.71)
Asset Size (USD mn)	15.3	19.3	28	31.1	38	32.8	31.7	44.1	51.8
Tier	3	3	2	2	2	2	2	2	1

Source: own research, based on MIX Market

3.2.5 Grameen Financial Services Private Limited

Grameen Financial Services Private Limited (GSFPL) was founded in India in 1999 as a project under the NGO "T. Muniswamappa Trust" with the seed capital funding provided by Grameen Trust, to replicate the Grameen model to T. Muniswamappa Trust. Later, in October 2007, GFSPL transformed into an independent NBFI in October 2007.

The mission of GFSPL has not gone through a major change throughout the period of observation. GFSPL positioned itself to help poor women in rural areas and urban slums through microcredit, to work themselves and thereby their families out of poverty by constantly delivering need based financial services in a cost-effective manner. It still keeps it premise to transform and uplift the lives of poor and low-income families with microfinance and other development services.

GFSPL mainly operates in Maharashtra, Karnataka and Tamil Nadu states through 176 offices in urban and rural areas. Over the years, the product range of GFSPL has grown from solely microcredit to cover insurance and pension services. It also offers non-financial services including client education, healthcare initiatives, clean energy as well as water and sanitation projects. As of March 2014, GFSPL offers services to 504,688 exclusively women borrowers, who are enrolled as members of joint liability groups, with a gross loan portfolio of 136,450,581 US dollars.

Table 17: GFSPL Tier Information

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Legal Status	NGO	NGO	NGO	NBFI	NBFI	NBFI	NBFI	NBFI	NBFI
Diamonds	4	4	5	4	4	5	4	5	5
RoA (%)	(2.35)	0.21	5.55	2.14	0.17	0.4	1	(1.01)	2.19
Asset Size (USD mn)	1.9	6.9	12.6	27	29.7	68.1	65.2	62.6	99.5
Tier	3	3	2	2	2	1	1	1	1

Source: own research, based on MIX Market

3.2.6 IMON International

IMON International's origin comes from the microcredit program jointly established by Mercy Corps and the National Association of Business Women of Tajikistan in 1999. In 2005, through the re-registration of the program with the National Bank of Tajikistan, IMON began its operations under the new legal status as a Micro-lending Fund (MLF).[10] Following a transfer of all assets and operations to the newly established limited liability company, founders of IMON transformed the institution into a Micro-Lending Organization (MLO). In 2012, IMON was reorganized and completed its transformation into a deposit taking institution (MDO).

The part of the mission statement of IMON that refers to "facilitating economic development in Tajikistan and assisting in improving living standards by providing stable access to credit" stays stable between 2004-2012. On the other hand, the explicit statement of "aiming poverty alleviation and reduction of poverty related social, educational and quality of life problems" only exists for the period when IMON was a tier 3 MFI. With IMON advancing to tier 2 and tier 1 subsequently, the mission statement points the direction toward serving the economically active population.

IMON is the biggest microfinance institution in Tajikistan with more than 10 years of presence in the market. IMON operates in nearly all regions of Tajikistan, through 17 offices covering the urban and the rural areas of Sugd, Khatlon and Dushanbe. It offers variety of credit services through individual and group lending, targeting micro and small entrepreneurs, farmers and women. Since 2012, it has been offering saving products. Startup

[10] According to the Law of the Republic of Tajikistan on microfinance organizations, MFIs operate within three institutional types: Micro-lending Fund (MLF), Micro-lending Organization (MLO) and Microcredit Deposit Organization (MDO). All three institutional types are subjected to National Bank of Tajikistan supervision and fall under NBFI category (International Monetary Fund, 2008).

and training facilities are also available for women clients. As of March 2014, IMON serves 77,750 active borrowers with an outstanding portfolio of 114,021,724 US dollars.

Table 18: IMON Tier Information

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Legal Status	NGO	NBFI	NBFI	NBFI	NBFI	NBFI	NBFI	NBFI	NBFI
Diamonds	4	4	5	4	5	4	4	4	5
RoA (%)	20.32	8.52	11.02	8.71	11.67	6.8	6.5	5.07	5.87
Asset Size (USD mn)	2.1	4.3	8.5	16.1	33.3	37.2	41.1	51.3	85.6
Tier	3	3	2	2	2	2	2	1	1

Source: own research, based on MIX Market

4 Patterns of Tier Advancement

4.1 Ownership and Governance

In a narrow definition, governance is the process by which a board of directors guides an institution in implementing its mission by leadership and commitment, and protects the assets over time. In microfinance, governance refers more to the mechanisms through which donors, investors, and stakeholders ensure themselves that their funds will be used in line with the stated mission. Governance is a complex process, especially for the microfinance industry, which evolves continuously with changes in the legal, regulatory, and institutional environment. An effective governance requires adaptation to these changes (Campion and Frankiewicz, 1999; Lenssen et al., 2014).

An MFI's legal status has a direct implication on its ownership structure. Ownership in turn is closely related to its governance. The type of ownership defines the board structure and in turn its effectiveness. Many MFIs are not-for-profit organizations or they are owned by not-for-profit entities. Consequently, they often have ambiguous ownership structures. However, the growth in assets and clients frequently leads to a change in those MFIs' legal status, hence their governance (Goldberg and Palladini, 2010).

Many empirical studies in the literature look at the effects of ownership and governance on MFI performance. Barry and Tacneng (2014) observe that legal status of MFIs have a significant impact on performance, sustainability, outreach and portfolio quality. Galema et al. (2012) find that CEO/chairman duality in NGOs is associated with declining performance. Hartarska and Mersland (2012) conclude that CEO/chairman duality hinders efficiency, and managerial efficiency increases with board size up to nine members. Hartarska (2005) finds that MFIs that have a larger number of independent members on their board achieve better results. Mersland and Strøm (2009) show that local board members and internal board auditors increase MFI performance. This thesis also investigates the governance and ownership by examining the same variables but with a more in-depth focus.

Akiba differentiates itself from the rest of the cases throughout the period of assessment. Even as a tier 3 MFI, Akiba attracts important equity investors such as Triodos Bank, FMO and Incofin. Its board of directors include individuals with adequate experience and organizational structure of Akiba is well-defined. Tier 2 and tier 1 periods bring more formalization and more international representatives on the BoD. When a tier 2 MFI, ACCION boosts up investment in Akiba by acquiring 20% of the shares. Following this investment, management of Akiba is reconstructed and the new managing director is attained by ACCION.

Among the selected cases, all of the MFIs except Akiba are NGOs when they are tier 3 MFIs. Contactar and Enda stay as NGOs for the whole period of assessment, IMON and FINCA Ecuador transform from NGO to NBFI in 2004 before advancing to tier 2 in 2006, while GFSPL transforms to NBFI in 2007 when it is a tier 2 MFI. Therefore, the governance mechanisms of tier 3 intersects with those of NGO MFIs in general. By definition, NGOs have no specific owners and they are accountable to their defined missions. GFSPL operates under a Trust and has a 13 member board drawn from the trust, its staff, group members and outside stakeholders. The board is inexperienced in microfinance with none of the members having any significant experience in microfinance industry.

In line with the observations of Campion and White (1999), when NGOs transform into a shareholder owned MFI, the new capital base expands from donated equity and retained earnings to include share capital. Initially, the capital is provided by the founding NGO, as all or a portion of their loan book is exchanged for shares. In addition to the founding NGO, new owners also include international funds as in the case of IMON, employees and directors through stock ownership programs as in the case of GFSPL, and investors such as the private equity companies that took part in the transformation as in the case of GFSPL again. The new board is usually formed by representatives of the new shareholders, establishing a link between ownership and governance. For IMON and GFSPL, the transformations take place following the transition to tier 2 status, while for FINCA Ecuador, it takes place whilst in tier 3.

After the transformation, FINCA Ecuador's shares are held by the founding NGO FINCA International and a board is established with five members with high academic credentials and diverse regional and international experience and knowledge in banking, regulation and microfinance. At this stage, there is no internal rules of operation of the BoD where procedures, mechanisms and good governance practices are established. After transforming into an NBFI, IMON's BoD includes five members who form a well balanced team in terms of social and financial expertise; with one member who has extensive experience in microfinance. GFSPL is taken over by its chairman, staff and director in 2007, and it becomes a NBFI. It also establishes a formal governing board represented by professional members from diverse fields. Private equity players who played a role in transformation also have stakes in GFSPL and representatives of these institutions are on the board.

At IMON, the majority of the board members are the representatives of Mercy Corps and MEDA, who have a direct stake in the institution. The Deputy General Director of IMON is on the board which establishes a strong and direct link between ownership and governance. While this may pose a risk of concentration of power, independent internal

audit department serves as a device to control. At GFSPL, all board members are locals, which is not surprising considering the ownership structure of the MFI. As in the case for IMON, the Managing Director of GFSPL is also a board member which is generally not strictly in line with best practices and may result in a concentration of power. Managing Director of GFSPL is also the promoter of the MFI along with the chairman of the board and together, they also own a quarter of the shares. At FINCA, despite a lack of internal procedures and mechanisms for governance, delegation of power is appropriate and there exists a smoothly functioning internal audit system.

As opposed to the dramatic differences in legal status, ownership structure and composition of stakeholders between tier 3 and tier 2 MFIs, transition from tier 2 to tier 1 mostly brings qualitative changes and improvements that come with maturity of the organizations such as more committees in the BoD. One particular trend is the increase in the international members that are affiliated with international investors.

At IMON, the Deputy General Director continues to sit at the board with voting rights, which still poses a conflict of interest. Different from tier 2 period, written procedures that define strategic aims, roles and functions are implemented to formalize and strengthen governance and an Asset & Liability Committee is established in addition to the existing two committees in the board. Managing Director of GFSPL also continues to be a member of the board, which arises similar concerns as in the case of IMON. Number of board members increase from five to nine, and include representatives of the international funds that are equity holders of GFSPL such as Incofin, Micoventures and Creation Investment. GFSPL also has four new committees inside its BoD and an operational manual for credit, internal audit and human resource, to provide guidelines to the management at the head office and branches.

The two NGO MFIs, Enda and Contactar do not experience the formalization processes as the rest of the cases. During tier 3 period, Enda depends on the BoD of its founding NGO, which does not participate in decision making, but has a governance council which acts in a similar fashion but without a legal status. There exists no rules to regulate governance. Contactar has a board comprising of a committed members who have extensive knowledge in the regional context and they have a strong relationship with the CEO. On the other hand, the BoD lacks the knowledge in microfinance and thus, having difficulties in formulating policies. In practice, the CEO, who has a long experience working in Contactar, has consolidated power and influence.

As a tier 2 MFI, Enda establishes its own board with seven members who have good

knowledge in the political and legal environment. There are no committees within the board and communication is done on an informal basis. Despite a lack of establishment, they are aware of the weaknesses and put strategic goal to overcome the shortcomings. Rapid growth of the Contactar poses similar challenges in internal communication and systemic coordination among the different units of the organization. A step ahead than Enda, the composition of the BoD is modified to include two microfinance experts with extensive experience in the financing and governance of MFIs, allowing a significant improvement in the ability of the board BoD to fulfill its primary responsibilities, such as strategic direction, internal control and risk management. Governance is still in a phase of construction and consolidation while there is a growing decentralization as a result of the rapid growth. Ownership and governance of Enda and Contactar do not go trough a major change during the transition to tier 1. Although BoD of Enda still comprises of exclusively Tunisian members, two members have development backgrounds which is an improvement. For Contactar, an important lender, Incofin has an affiliated member on the board which shows the lenders' influence on strategy and operations.

4.2 Human Resources

Ledgerwood (2008) defines human resources management as the process through which an institution recruits, develops, and motivates people to accomplish its mission. Human resource management is a support function that provides staff and management the appropriate skills and incentives to achieve institutional goals and mission.

Lapenu and Pierret (2006) point out the importance of the human resources management in governance and suggest the assessment of recruitment, training, promotion and incentive systems in place to make sure there are adequate human resources available.

For the appraisal of human resources management of MFIs, CGAP suggests analyzing the availability of motivated, trained, capable staff to implement MFI's mission and existence of policies for recruitment, training, compensation, turnover, and termination of staff (Isern et al., 2008, p. 11-12).

The analysis of the selected MFIs show that typically, tier 3 MFIs do not have a separate human resources department. Although this is not a surprising fact considering their scale of operations and unsophisticated governance structure, this shows a lack of emphasis on the main functions of human resources and that the training of the staff is focused mainly on general training. The functions of human resources are delegated to other units of the organizations or external consultants are hired to update human resources policies and to develop a format for performance evaluation.

Despite the lack of an established remuneration policy, wages offered by tier 3 MFIs are in line with the market. The level of the wages compared to the country averages show differences according to the legal status of the MFIs. Small NGO MFIs GFSPL and Contactar offer wages that are below the Indian and Colombian averages respectively, whereas Akiba and IMON offer wages above the market averages (See Figures 11-16). While some MFIs have established incentive mechanisms, some others are making the preliminary efforts to implement them. For example at Contactar, there is an incentive system for loan generation, however it is not flexible enough to address specific conditions for different contexts.

FINCA Ecuador hires a consultant to study wage levels in the market, and shareholding is encouraged for loan officers, supervisors and branch managers who meet established goals. Variable salary can reach up to 5 times the fixed salary, depending on the quality of the portfolio, the number of active clients the size of the portfolio, customer retention and customer numbers. It is fair to say that tier 3 MFIs are in the development stage of their incentive mechanisms. This can further be confirmed by the inflexibility of the policies with regard to seniority of the staff, which is a reported issue at the majority of the MFIs.

There are some visible efforts regarding the systematic evaluation and training of staff in tier 3 MFIs. At Contactar there is no annual training plan for the staff. Nevertheless, through the support of the Ford Foundation, some personnel participate in various international events to understand and compare good industry practice. Also confirmed is the weak evaluation process of staff performance. FINCA, IMON and GFSPL conduct an annual evaluation of staff. Trainings are well scheduled on the basis of a specific Annual Plan drawn according to the inputs resulting from yearly needs' analysis held at branch level performance and have formal plans in temporary replacement of staff in each office. The training system for all staff members are systematic. Enda spends %10 of its operating budget on staff training, either in-house or abroad conducted by foreign trainers, local consultants and Enda staff.

When MFIs advance to tier 2, their human resources policies formalize and systematic human resources policies are implemented. Contactar, GFSPL and IMON, which used to delegate human resources function to other departments establish a human resources department headed by a human resources manager. This change brings along new recruitment systems that streamline the process and sustain institutional growth more efficiently. Overall, human resources systems of tier 2 MFIs are in line with the MFI missions and supported by administrative manual, code of ethics and other internal documents. Preliminary steps to implement practices that are commensurate with the growing complexities of operations are also made at this stage. A good example is Akiba that makes a substantial investment to its human resources department as a result of its organizational restructuring with the technical assistance received from ACCION International in conjunction with International Labour Organization. IMON is another MFI that receives technical assistance toward capacity building of personnel from SIDA, MEDA, German Agro Action and Mercy Corps.

For tier 2 MFIs, competition within the microfinance sector triggers a certain risk of staff leaving for other institutions, particularly among experienced loan officers.[11] This is more likely an implication of the development of the microfinance industry in the countries that the selected MFIs operate. There is no significant difference between the remuneration policies of tier 3 and tier 2 MFIs, except Enda. This may be a indicator for delayed reaction of the rapidly growing and successful MFIs to keep their officers and top managers. Still, some observable efforts to overcome the staff retention are made by Akiba that hires an external consultant to ensure a fair remuneration mechanism and to align the salaries and benefits toward the industry standards.

[11] It must be noted that there is a shortage of information regarding the staff turnover rates of tier 3 MFIs. Only 2 out of 12 observations have a reported value.

In terms of their training policies, MFIs do not show significant differences between the periods of tier 3 and tier 2. Some MFIs continue to use the annual training plan designed when they were tier 3. GFPSL provides refresher trainings for managers to assess, review and upgrade their existing skills. Some members of the senior staff from the Head Office also attended external training programs and short-term courses from reputed local institutions. Akiba provides training opportunities for its employees to enhance their job performance. Contactar, as with the tier 3 period, do not have an annual training plan for staff. Additionally, it still does not offer career plans for its employees. Enda continues to provide external and internal training and enjoys technical assistance from World Women Banking, EIB and IFC.

While transition of the MFIs from tier 3 to tier 2 is marked by establishment of human resources departments and implementation of formalized and systematic human resources policies, advancement to tier 1 brings strengthening of the deficiencies that were identified in previous years. Overall, the human resources policies becomes more complete, hiring decisions are formalized, trainings are systematic and incentive systems are performance based.

MFIs that report high turnover rates in preceding years develop strategies to reduce their exposure to staff turnover, start to adjust wages systematically according to the inflation and market rates, and implement a fair bonus system defined by quantitative targets. Contactar implements a new incentive system that is tied to loan volume, portfolio quality and the growth of the portfolio. All of the selected MFIs have formal remuneration and incentive policies in practice, during their tier 1 period.

Table 19 reports the descriptive statistics for the indicators related to human resources. While individual performances of MFIs show difference according to their legal status, products offered and geographical expansion, average of the indicators are in line with the general trend. All of the MFIs experience rapid and strong growth during the period of assessment. Average of the total number of staff of tier 3 observations are 116.17, while it is 295.70 and 822.73 for tier 2 and tier 1 observations respectively.

The average staff allocation ratio decreases from 52.68% to 47.77% when tier 3 MFIs become tier 2 and increases slightly to 49.07% among tier 1 observations. Staff allocation ratio is highly dependent of the operations of MFIs and their product offerings such as savings. FINCA Ecuador's transformation to a bank and accepting savings during tier 2 and Akiba's focus on diverse products other than loans are important factors that decrease this ratio. Maturing and formalizing MFIs typically hire more back office and managerial level staff. The declining trend in staff allocation ratio can be attributed to this.

Personnel productivity is another important indicator that shows how successful an MFI is in adapting its processes and procedures to its business. Overall, MFIs become more productive when they become tier 2. Borrowers per staff increases from 157.25 to 168.89 and borrowers per loan officer increases from 300.33 to 343.18. This overall trend is further confirmed by the performances of the individual MFIs except FINCA Ecuador. FINCA Ecuador shows a significant decrease in productivity ratios throughout the assessment. One reason behind this its changing clientele and decreasing group loan product offerings.[12] Another reason is its intensive rather than extensive growth strategy.[13]

The increasing productivity of tier 2 MFIs shows significant decline when they advance to tier 1. In fact, borrowers per staff and borrowers per loan officer for tier 1 observations are 148.4 and 287.13 respectively. This is open to several interpretations. First, it may indicate that MFIs crossed their natural limits to an extent that it is not optimal anymore to grow further. Decreases in efficiency and increases in operating costs also support this argument. Another interpretation is the deterioration in loan portfolios after the financial crisis of 2008 leading the MFIs to increase their quality of their operations rather than quantity.

Table 19: Descriptive Statistics for the Human Resources Indicators of the Selected MFIs

	Tier 3			Tier 2			Tier 1		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Total number of staff	116.17	20	283	295.70	56	769	822.73	302	1748
Total number of loan officers	62	9	129	145.11	25	440	455.47	73	1322
Staff allocation ratio	0.527	0.371	0.718	0.478	0.25	0.792	0.491	0.242	0.756
Staff turnover	-	-	-	0.134	0.046	0.186	0.166	0.064	0.304
Borrowers per staff	157.25	51	344	168.89	57	291	148.4	52	291
Borrowers per loan officer	300.33	97	677	343.18	158	542	287.13	116	527
Average salary / GNI per capita	6.36	1.69	24.55	7.01	1.8	24.26	7.34	1.76	23.49

Source: MIX Market

[12] A group loan with four members is considered as four borrowers. Therefore, productivity ratios are upwardly biased for MFIs that rely more on group loans. See von Stauffenberg et al. (2003) for more details.

[13] See Section 4.4 for more details on this issue.

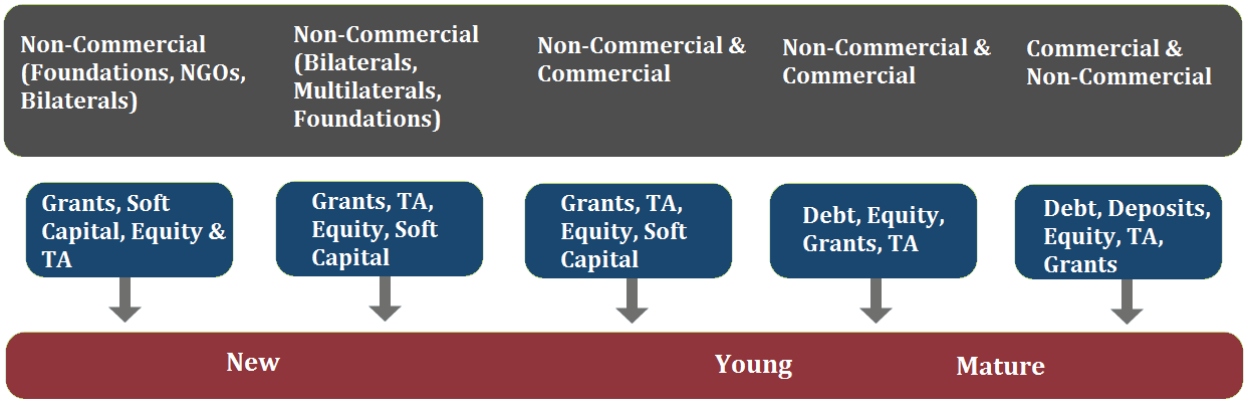
4.3 Capital Structure

Capital structure and funding sources are crucial to the financial sustainability of MFIs regardless of whether they operate as NGOs, credit unions, NBFIs or commercial banks. Significant portion of the existing research places the evolution of MFI funding sources within the context of a life cycle theory of MFI development (de Sousa-Shields and Frankiewicz, 2004; Bogan et al., 2007; Hoque et al., 2011).

According to life cycle theory, most MFIs launch their operations as NGOs with an emphasis on social objectives. Funding usually comes in the form of grants and subsidized loans from donors and DFIs. Main capital sources are retained earnings and non-commercial equity in the form of technical assistance. Debt capital obtained from bilaterals, multilaterals, foundations, NGOs, and commercial banks becomes increasingly available as MFIs mature and obtain operational self-sufficiency.

Mature, regulated MFIs in the last stage of their life-cycle have capital structures similar to those of commercial banks, which consists of deposits, equity financing, and commercial debt from international funds. Non-regulated MFIs rely on commercial bank loans, national and international development agencies, governments, foundations, and retained earnings (de Sousa-Shields and Frankiewicz, 2004; Fehr and Hishigsuren, 2006). Cull et al. (2009b) find that commercial funding and deposits seem to be the main funding source of shareholder-based MFIs, whereas non-commercial borrowings and donations are the main funding source of MFIs registered as NGOs.

Figure 6: MFI Lifecycle Stages and Typical Funding Patterns



Source: de Sousa-Shields and Frankiewicz (2004)

The investigation of the capital structure of the MFIs that moved up tiers reveals patterns that are consistent with the previous literature on life-cycle theory.[14] This comes as no surprise considering that the purpose of the tiered framework used in this thesis is to proxy for MFI maturity.

Ownership and legal status of an MFI are important determinants on its capital structure. The clear distinction between Akiba, FINCA Ecuador and the rest of the selected MFIs prove this argument further. Additionally, IMON and GFSPL change their legal status from NGO to NBFI, and corresponding changes in their capital structure can be seen clearly. In the case of Akiba and FINCA Ecuador, ability to mobilize savings is the differentiating factor. Despite these and the other idiosyncratic features of MFIs that are not captured by tier definitions, there are some common trends in funding characteristics and tier advancement of all MFIs follow similar patterns.

Akiba has a very stable capital structure that strongly resembles conventional commercial banks during tier 3, tier 2 and tier 1. It holds a debt to equity ratio around 6% and more than 90% of its liabilities are deposits throughout the period of assessment. Akiba uses a marginal amount of loan financing from Hivos Triodos Fund, a non-commercial fund that is also a shareholder of Akiba, only for 2005 and 2006. Until 2008, 34% of shareholders of Akiba already are foreign institutions such as Triodos Hivos, Triodos Fonds, FMO, SIDI, and Incofin. In 2008, prior to switching to tier 1, Akiba raises further capital by substantial equity investment from ACCION International.

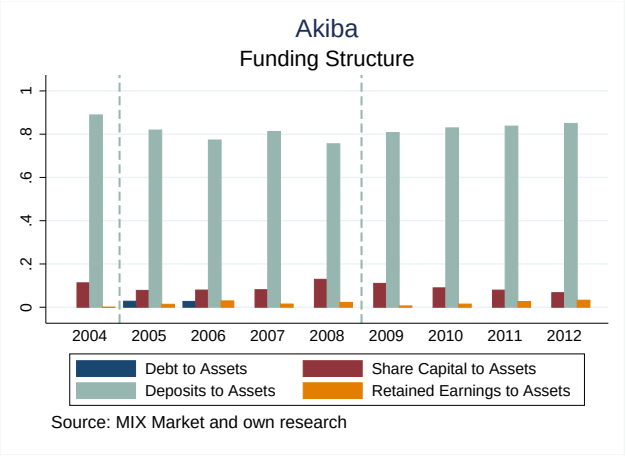
During the first year of assessment, all MFIs are tier 3 and except Akiba, all of them are NGOs. Contactar, Enda Inter-Arabe, GFSPL and IMON further have assets smaller than US 5 millions. The main funding source of IMON, Contactar and Enda is donated equity. The bulk of the remaining sources are income generated for the year or retained earnings from previous years.[15] These good performing, regulated or rated, small, tier 3 MFIs begin to attract loan funding and the determining factor of these MFIs' transition to tier 2 is the increase in their asset size, enabled by non-commercial and commercial funding.

Donated equity is an important funding source for tier 3 MFIs. In 2004, donated equity comprises of 89.8% of IMON's, 58.4% of Contactar's, 41.3% of Enda's and 11.7% of GFSPL's

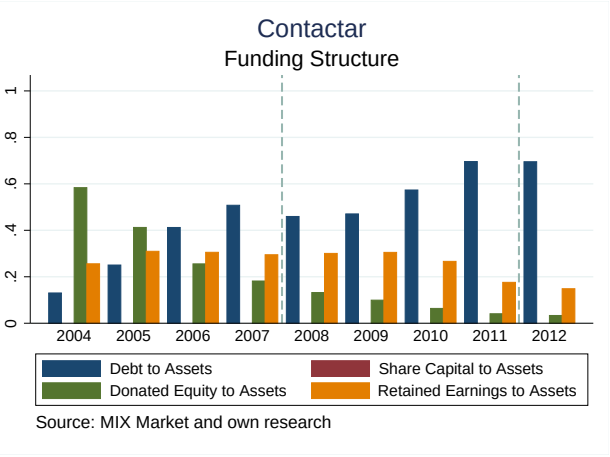
[14] An issue with the previous literature is the criteria to determine the stage of the MFI in the life-cycle. Empirical works to date generally use the age of an MFI as a dummy (Bogan et al., 2007; Bogan, 2012; Hoque et al., 2011). This fails to take into account the maturity of the overall market that the MFI operate. For instance, MFIs that are mature by age (<8-10 years) may be operating in a young market for years without any efforts to scale up. Therefore, an in-depth analysis is required to fully determine in which stage of development an MFI is.

[15] FINCA Ecuador is in a similar situation but during the process of transformation to a NBFI, grants from the founding NGO, FINCA is recorded under other liabilities.

Figure 7: Funding Structure of the Selected MFIs



Source: MIX Market and own research



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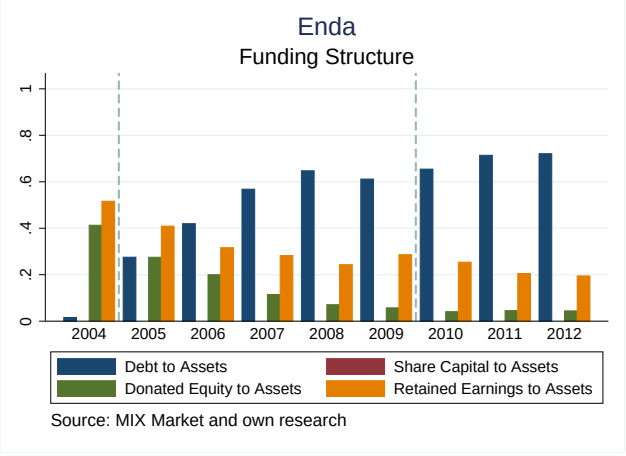

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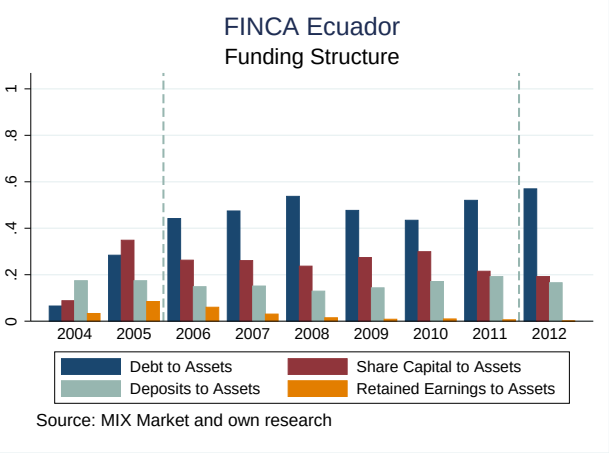

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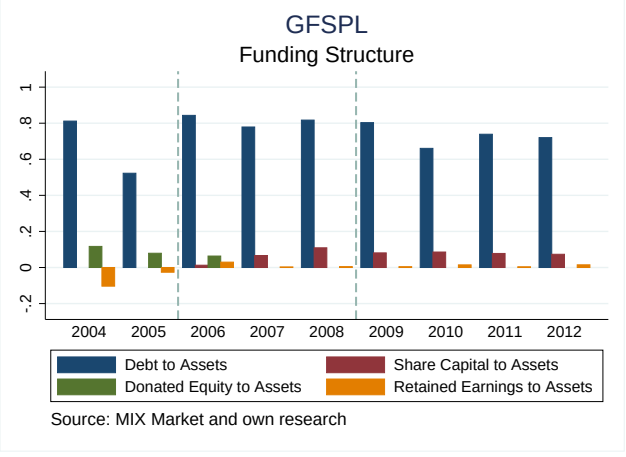

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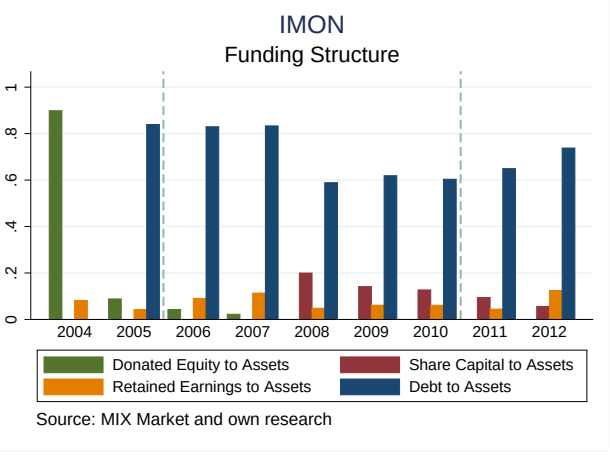


Source: MIX Market and own research

assets. However, it decreases significantly when the MFIs are tier 2. The transformation of FINCA Ecuador and IMON during this phase is an important factor in this change. Nevertheless, the same trend is evident in Enda and Contactar, which stay as NGOs.

When MFIs are tier 2, significance of donated equity gradually declines. Transformed MFIs attract share capital and those that stay as NGOs increase their retained earnings that marginalizes the ratio of donated equity to assets. Debt to assets ratio of Contactar and Enda increases significantly during tier 2 period. GFSPL and IMON more than double their borrowings but the equity investments they receive balance the debt to assets ratio. Although FINCA Ecuador transforms from an NBFI into a Bank during tier 2, it does not receive additional equity investments and its funding structure is relatively stable throughout tier 2 and tier 1.

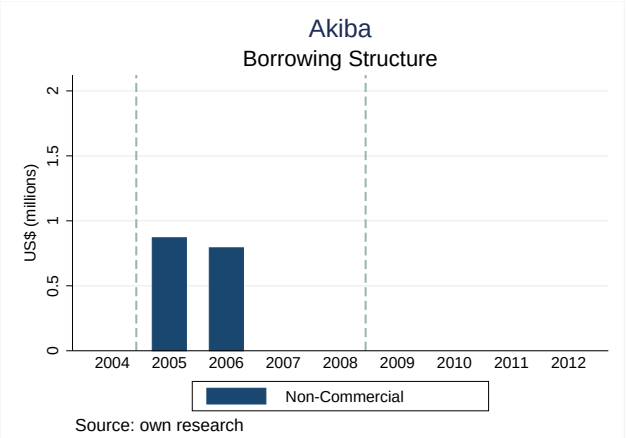
The most significant differences among tiers are the amount of debt financing used by MFIs and the composition of the sources of borrowings. There is a tremendous increase in the borrowings when MFIs switch to tier 2, and these increases eventually lead them to grow their assets over the 50 million US dollars threshold to become tier 1. Figure 8 shows the gradual increase in the borrowings over time.

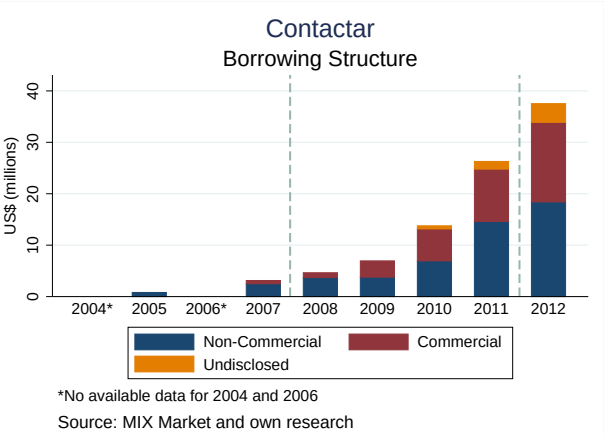
Tier 3 MFIs have limited access to debt financing, and non-commercial sources dominate the commercial sources.[16] Main borrowing sources for IMON and FINCA Ecuador are their founding NGOs. FINCA Ecuador borrows from a commercial source just before transitioning to tier 2, while IMON and Contactar rely only on non-commercial sources. GFSPL borrows from local commercial banks. Enda does not take on debt as a tier 3 MFI.

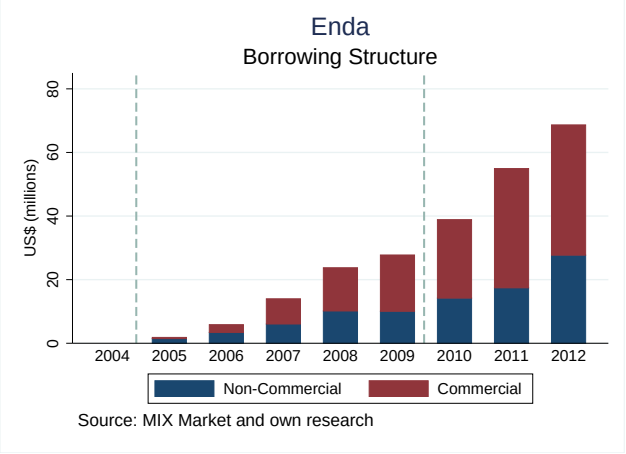
Transition to tier 2 is marked by increase in overall borrowings from both commercial and non-commercial sources. There is also a gradual increase in the ratio of commercial to non-commercial sources. IMON and Enda take out their first loans from commercial sources following to transition to tier 2, while GFSPL and FINCA Ecuador more than double their amount of borrowings. Early on, non-commercial borrowings dominate the commercial ones. Despite the significant increase in funding from both sources, growth of commercial funding is much faster. When MFIs are tier 1 institutions, the majority of their borrowings are obtained from commercial sources.

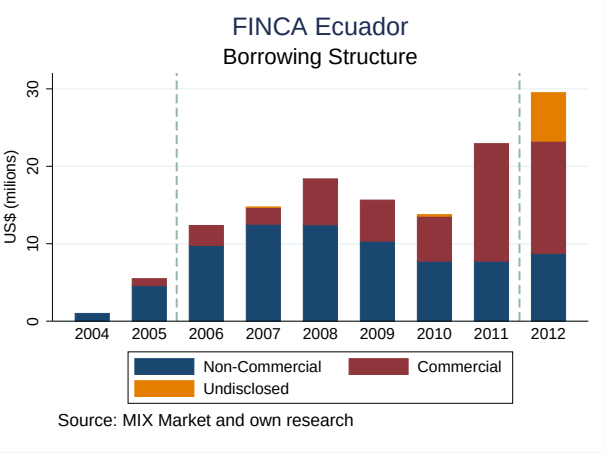
[16] Approaches to define commercial vs. non-commercial borrowings differ. Cull et al. (2009b) define commercial borrowings as those with commercial interest rates and non-commercial borrowings as those at concessional interest rates. An alternative method is to classify the funding source as commercial/non-commercial. In this thesis, the latter method is used. Based on El-Zoghbi et al. (2011), de Sousa-Shields and Frankiewicz (2004) and Goodman (2006); DFIs, Bilaterals, Multilaterals, NGOs, Foundations and Microfinance Development Funds are classified as non-commercial; whereas Commercial and Commercially Oriented MFIFs, Commercial Banks and Private Companies are classified as non-commercial. (See Table 23 for the differences among MFIFs).

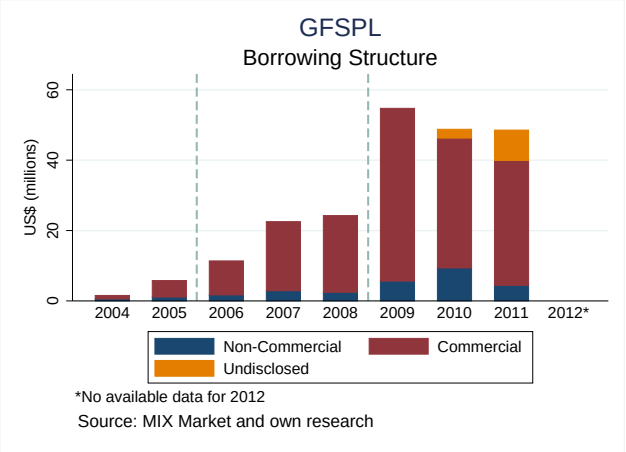
Figure 8: Borrowing Structure of the Selected MFIs











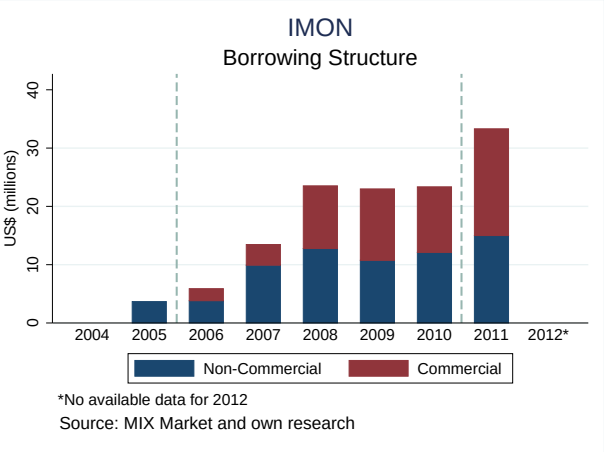


Table 20 reports the changes in more specific types of investors over time. Looking at the averages of the observations within tiers, NGOs' and foundations' significant place in the overall borrowings seem to decrease by tier advancement. This implies that growing MFIs rely less on their founding NGOs. Microfinance Development Funds seems to lend predominantly to tier 3 and tier 2 MFIs. Nonetheless, the portion of debt from Microfinance Development Funds in the overall borrowings decrease when transitioning to tier 1. Commercial Institutions and banks continuously and increasingly lend to GFSPL, Enda and Contactar. Commercial and commercially oriented MFIFs enter the picture during tier 2. DFIs, Bilaterals and Multilaterals support the MFIs regardless of the tiers and they remain as a stable funding source for MFIs during every tier.

Table 20: Descriptive Statistics for the Borrowing Structure of the Selected MFIs

	Tier 3			Tier 2			Tier 1		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
DFIs, Bilateral and Multilateral	0.1914	0	0.3197	0.2185	0	0.8	0.1747	0	0.3356
NGOs and Foundations	0.3540	0	0.7343	0.108	0	0.4117	0.0094	0	0.0492
Commercial Institutions or Companies	0.223	0	0.8093	0.2369	0	0.8986	0.4621	0	0.8158
Commercial MFIFs	0.0363	0	0.1640	0.2269	0	0.6325	0.1771	0	0.5497
Microfinance Development Funds	0.1953	0	1	0.2046	0	0.4205	0.117	0	0.2966

Source: own research
Note: Commercial MFIFs also inlude Commercially Oriented MFIFs.

4.4 Speed of Growth

An important challenge of the global microfinance industry is to fill the gap between the supply and demand of microfinance services on a sustainable basis (Fernando, 2003). The unmet demand remains huge and growth of MFIs are crucial in narrowing this wide gap. Like any enterprise, MFIs are better off growing and taking advantage of economies of scale to achieve sustainability. However, growth does not automatically bring mitigated fixed costs and an efficient organizational structure. Expansion of MFIs are often accompanied with increased rather than reduced overhead in short term, as the newly hired staff, rapid geographic expansion and the investments in infrastructure like information technology do not provide immediate results (Churchill, 1997).

Gonzalez-Vega et al. (1996) categorizes growth in two types: extensive and intensive. Extensive growth refers to increases in capacity via hiring new staff, opening new offices or expansion of other inputs. Intensive growth refers to increase in productivity with the given capacity, and can be achieved through innovations such as mobile banking or improvements in loan officer productivity. The key factors determining the type of growth strategy of an MFI are its age and its place in institutional development stage. Younger MFIs that are earlier on their development stage are more likely to grow extensively while older MFIs that are on their maturity phases are more likely to grow intensively.

The selected MFIs experience the highest average annual growth rate of assets and gross loan portfolio when they are tier 3. They have a slightly lower average annual growth rate of assets and gross loan portfolio when they are tier 2. When the MFIs are tier 1, the rate of increase in their assets and loan portfolio cools down. One particular outside factor to note is the global financial crisis of 2008. All of the MFIs are affected from the crisis to varying degrees. IMON is among the ones that hit hard, and the management alter their growth scenario and expansion plans for the following years.

The average annual growth rate of staff and borrowers also follow a similar trend as assets and gross loan portfolio, but shows differences in each MFI. Akiba, FINCA Ecuador and IMON's staff and borrower growth rates are higher when they are tier 1 than when they are tier 2. In contrast, Contactar and Enda have the highest average annual growth rate in staff and borrowers when they are tier 2.

Looking at the Table 21, average annual growth rate of tier 3 observations is 77% for assets, 83.1% for gross loan portfolio, 57.7% for total number of borrowers, 43.7% for total number of staff. The rates for the respective variables of tier 2 observations are 45%, 48.8%, 32.7% and 29.7%. Tier 1 observations show the most conservative growth rates in all of the

variables with 31.7%, 24.3%, 20.3% and 27.6% respectively (See Figure 9 for the individual performances).

The number of borrowers of tier 3 MFIs grow more than their average loan balance per borrower. The average annual growth rate of number of borrowers is 57.7% and the average annual growth rate of average loan balance per borrower is 16.5% for tier 3 observations. This shows that portfolio growth of tier 3 MFIs stems more from the growth in the number of borrowers, which indicates an extensive, horizontal growth path.

For tier 2 MFIs, growth rate of average loan balance has a more profound effect on the growth of the gross loan portfolio compared to tier 3 and tier 1 MFIs. Borrowers per loan officer ratio also makes its peak during tier 2 before decreasing again in tier 1. These factors combined indicates that tier 2 MFIs grow intensively.

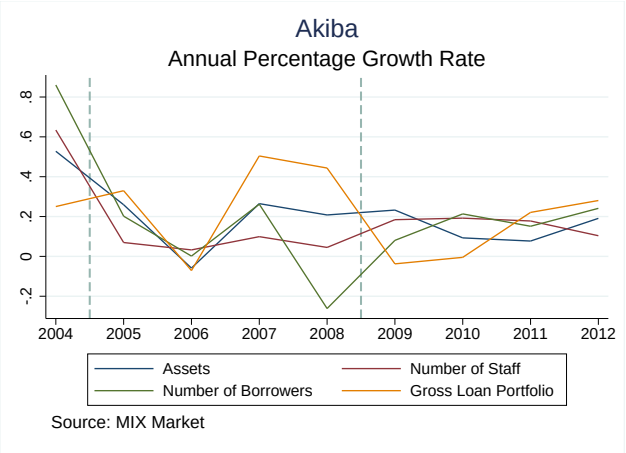
While the small size of the tier 3 MFIs would be a factor for the high growth numbers, the growth of tier 2 MFIs are fueled by the access to the wider range of funding sources. The high speed of growth in tier 2 MFIs is accompanied by substantial investments and technical assistance received toward the infrastructure, operation and human resources. MFIs also increase their productivity when they advance to tier 2 but this increase either slows down or decreases when they become tier 1. Despite these growth rates, there is not a significant increase in the portfolio risk of any of the MFIs until the 2008 global crisis.

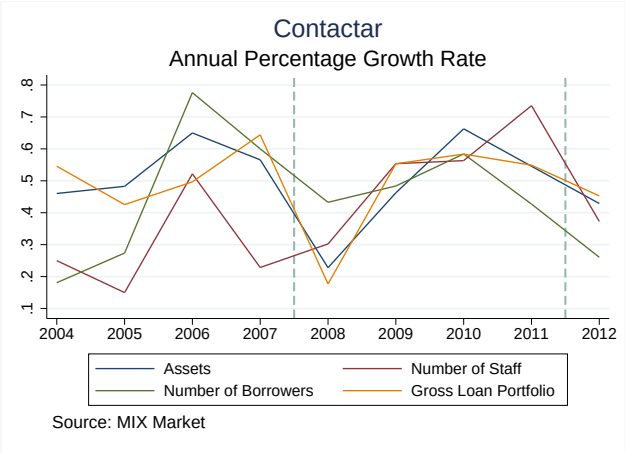
Table 21: Descriptive Statistics for the Growth Rate of the Selected MFIs

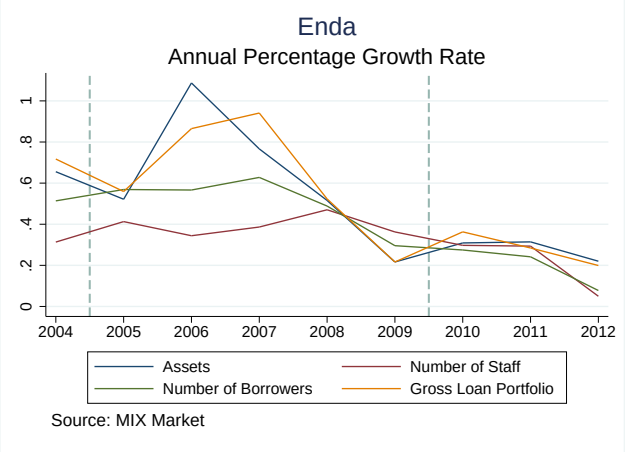
	Tier 3			Tier 2			Tier 1		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Asset Size	0.77	0.26	2.68	0.45	(0.14)	1.13	0.317	(0.044)	1.297
Number of Staff	0.437	0.15	1.160	0.297	(0.038)	0.735	0.243	(0.275)	0.795
Number of Borrowers	0.577	0.011	1.559	0.327	(0.262)	1.018	0.203	(0.089)	0.667
Gross Loan Portfolio	0.831	0.250	2.409	0.488	(0.246)	1.135	0.276	(0.232)	1.06
Average Loan Balance per Borrower	0.165	(0.328)	0.372	0.138	(0.188)	0.955	0.059	(0.180)	0.360

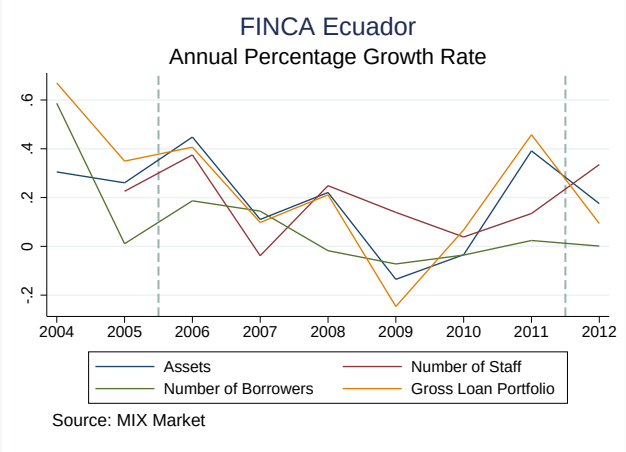
Source: own research based on MIX Market

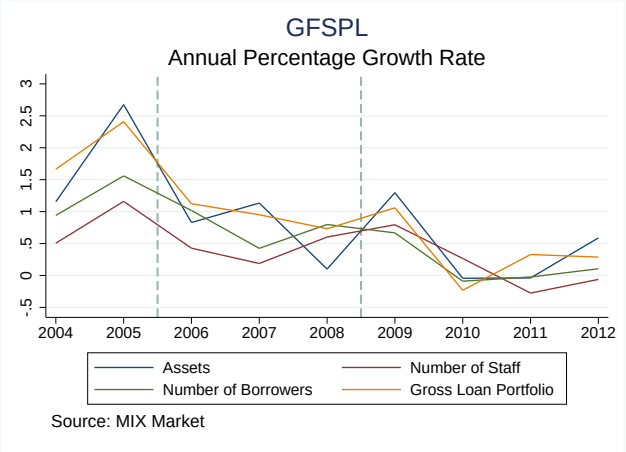
Figure 9: Growth Rate of the Selected MFIs

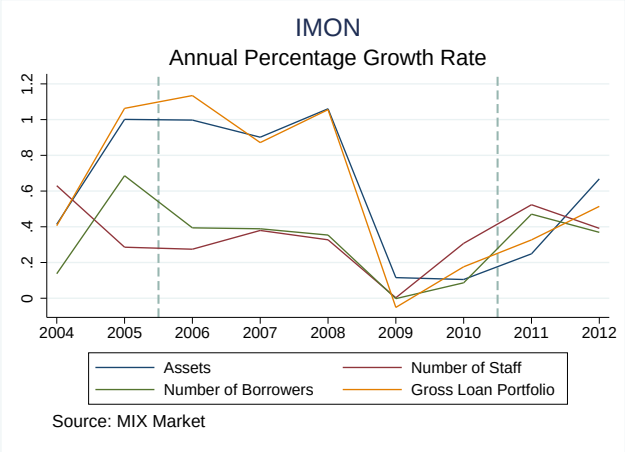












4.5 Financial Performance and Outreach

MFIs aim to achieve both financial and social objectives, managing a double bottom line. Therefore, performance of MFIs are measured according to both their outreach to poor, and their financial performance (Mersland and Strøm, 2014). Rosenberg (2009) suggests to look at portfolio quality, efficiency and profitability to assess financial performance; the number of clients and their poverty level to assess outreach. Profitability here is defined as the ability of the MFI to maintain and expand its services without depending on continuous subsidies, while efficiency refers to the ability to control the operating costs.

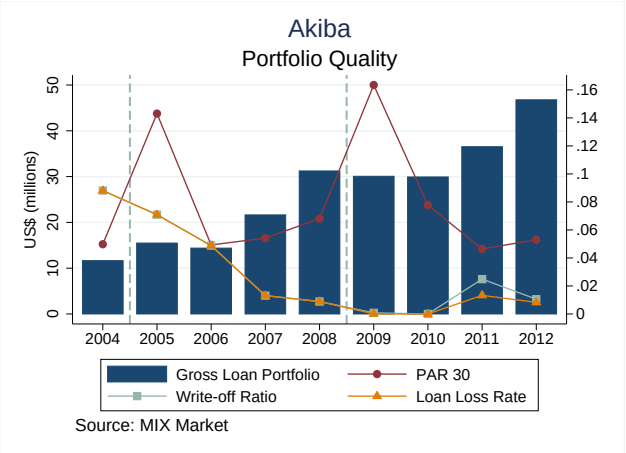
Portfolio Quality

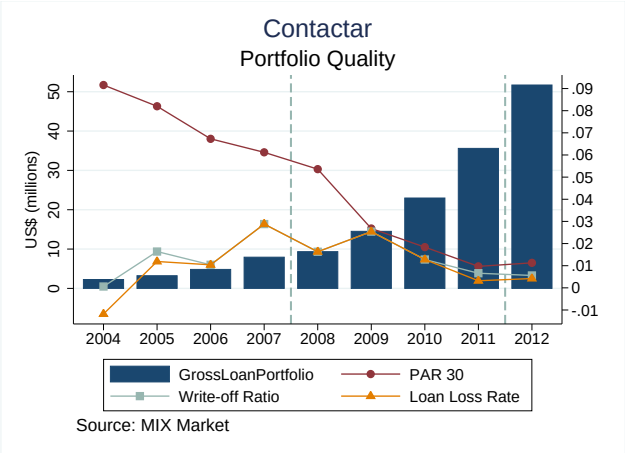
Portfolio-At-Risk 30 (PAR 30) is the most widely accepted measure of portfolio quality. It shows the amount of loans that have one or more installments of principal past due by 30 days. Ideally, PAR 30 should be analyzed in par with the the write-off ratio, which shows the percentage of loans that have been removed from the books. If increasing write-off ratio is followed by decreasing PAR in the following years, institutions may be writing off the risky loans in order to make things look better. During the period of assessment, there is no indicator of such an event. Another important issue to consider with PAR is that fast growth tends to underestimate the portfolio risk. Growing MFIs typically have lower PAR ratios considering the amount of new borrowers.

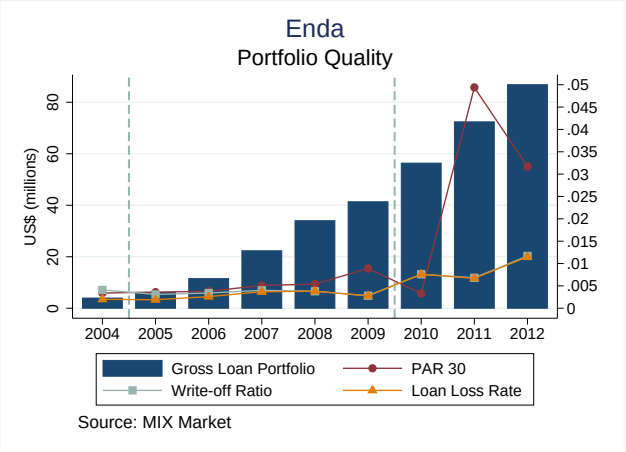
Looking at the 10, Tier 3 MFIs have reasonable PAR 30 ratios that are below the regional averages. Contactar is the only MFI with unusually high PAR 30 ratio around 9%. Akiba's PAR 30 is also high but since it is a bank that can use collaterals, increase in this ratio do not raise concerns as much as the other MFIs.

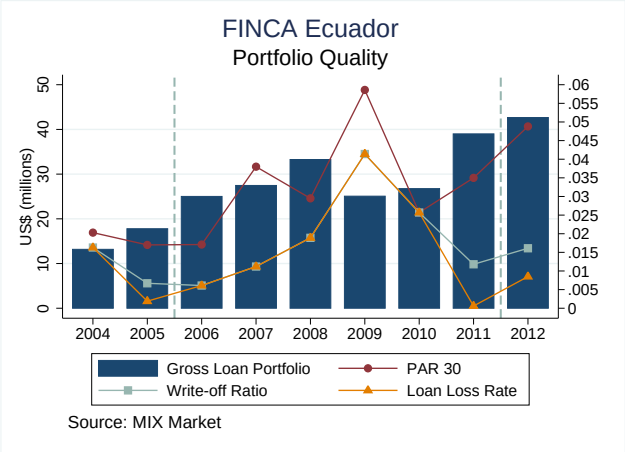
While Contactar is making gradual improvements in its high PAR ratio during tier 2 and tier 1, the opposite trend is prevalent with the rest of the MFIs. One particular event that drives up the risk is the 2008 financial crisis. The effects of the crisis can be seen clearly by the sudden jumps in the amount of loans at risk. Another factor is the increase in MFIs' average loan sizes and borrowers per staff. The MFIs grow very rapidly and to drive down the operating expenses, they increase the loan sizes and the number of borrowers that a credit officer would serve. Chasing productivity with this strategy has its shortcomings especially during downturns. Contactar's strategy is in the opposite direction. Overall, MFIs are still in par with the country averages despite the worsening performances. However, the anticipated trend toward better portfolio quality with tier advancement is not confirmed with this sample.

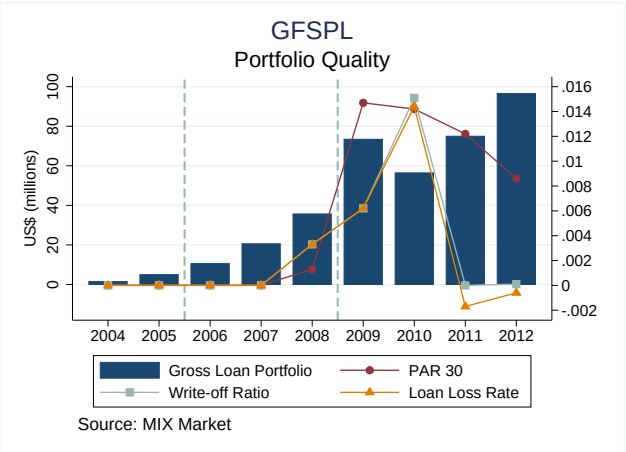
Figure 10: Portfolio Quality of the Selected MFIs

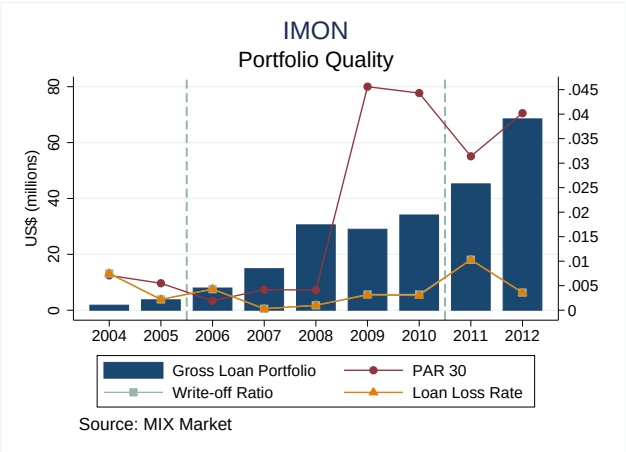












Profitability

RoA and RoE are today the two most common indicators to measure the profitability of MFIs and conventional firms in general. They are convenient measures that allow to compare an MFI's performance with other similar MFIs. Level of equity differs significantly by geographical location and legal status, therefore RoE is not very convenient in comparing cases that differ in those respects. Another popular measure to assess the MFI performance is Operational Self-Sufficiency (OSS). Especially for MFIs that do not aim to generate profits but to break even, OSS is a very relevant tool to assess financial sustainability (Mersland and Strøm, 2014).

The examination of the cases show that profitability of MFIs decrease while they move up tiers. IMON, Enda and Contactar perform better than their regional benchmarks over the whole assessment period but the gap is narrowing over time. GFSPL is in line with the South Asian average, FINCA Ecuador's profitability decreases consistently, whereas Akiba performs worse than the Africa average between 2005 and 2012. One should not forget that all of the selected MFIs survived the sustainability criteria defined by tiers and even with decreasing performances, they manage to stay above certain thresholds and do not incur consistent losses.

MFIs seem to perform the best during tier 3. OSS increases slightly when MFIs become tier 2 however, there is a gradual decline toward becoming tier 1. The same trend is evident in RoA. This can partly be explained by the fact that growing institutions that increase their access to commercial funding are less reliant on donor subsidies. Consequently, their operating expenses are not downward biased anymore and their sustainability ratios are lower.

Efficiency

Operating expense to loan portfolio and cost per borrower are two common indicators to measure whether an MFI is effectively dealing with its costs. These indicators are less prone to manipulation by management, thus they are convenient to compare different types of MFIs (von Stauffenberg et al., 2003).

According to the analysis, tier 3 MFIs are more inefficient than tier 2 MFIs. Especially IMON, GFSPL and Enda have significant efficiency gains after becoming tier 2. Rapid expansion through opening new offices and streamlining operational structures are the main reasons behind this trend in these 3 MFIs. For Akiba and FINCA Ecuador, both of the efficiency ratios are on the rise with tier advancement, indicating a decrease in efficiency.

This is more likely to be caused by their deposit taking nature. They increase their back office staff consistently, and this decreases their efficiency.

Tier 1 MFIs continue to follow the trend that the Tier 2 MFIs had while they moved up from tier 3. IMON, GFSPL and Enda continue to operate more efficiently, while the opposite is true for the rest of the MFIs.

Outreach

As already shown in the Section 4.4, all of the selected MFIs achieve tremendous growth throughout the assessment period. Overall, tier 3 observations have the highest growth rates, followed by tier 2 and tier 1 consecutively. Average growth rate in number of borrowers are 57.7% 32.7% and 20.3% for tier 3, tier 2 and tier 1 observations respectively. However, examination of individual MFIs show different trends. All of the MFIs increase the breadth of their outreach during tier 3. However, two deposit taking MFIs, FINCA Ecuador and Akiba decrease their breadth of in 2008. While Akiba bounces back, FINCA Ecuador continues to have declining trends afterward. Finally, GFSPL's total number of borrowers decrease during Tier 1.

Depth of outreach is considered as a more robust indicator for assessing the social performance of MFIs by measuring the client poverty levels. Depth of outreach is commonly measured by average loan balance and adjusted for GNI per capita to allow meaningful comparisons. Average outstanding balance/GNI below 20% is considered as an indicator of very poor clientele (Rosenberg, 2009). Among the selected cases, there is a clear distinction between NGO MFIs and the rest. Contactar continuously decreases its average loan balance per borrower/GNI and Enda stays at a stable rate around 0.8% - 1%. For the rest of the MFIs, there is an increase in average loan balance per borrower/GNI both from tier 3 to tier 2 and tier 2 to tier 1. IMON takes a step back during tier 2. Taken together with the continuous decreases in the percent of female borrowers, it is fair to state that Akiba and FINCA Ecuador experience mission drift.

5 Conclusion

Exponential growth of the microfinance industry transformed the the landscape of both the service providers and the investors. Increasing diversity in performance and institutional set-up of MFIs called for a standardized, objective criteria for the classification of MFIs. Tiered classifications based on diverse criteria gained wide acceptance among researchers and practitioners. e-MFP (2013) proposes tier definitions based on size, sustainability and transparency, which potentially serve as a proxy for institutional development of MFIs.

The objective of this thesis is twofold: first, to examine the institutional development of MFIs that advanced tiers over time; and second, to reveal the common distinctive patterns of tier advancement.

To achieve these objectives, a multiple case study of six MFIs across different regions is carried out. The cases are selected from a large sample of 2,581 MFIs with 14,837 observations. A slightly modified version of the tier definitions proposed by e-MFP (2013) are utilized to bring out the MFIs that advanced from tier 3 to tier 2 to tier 1 between 2004 and 2012. Among those, the ones that have the richest source of publicly available information are selected, with a particular attention on diversity in geographical location and legal status. Institutional development is investigated through the changes in ownership, governance and human resources policies. Capital structure, speed of growth and performance are analyzed to explore trends within and across tiers.

The findings of the analysis show that MFIs experience the highest average growth rates during tier 3. Growth rates of assets and loan portfolio decrease slightly in tier 2 before cooling down in tier 1. In all three tiers, MFIs employ extensive growth strategies by capacity increases and expansion. However, growth of tier 2 MFIs are driven more by the increases in productivity and loan sizes. Rapid growth of the MFIs and increased productivity are accompanied with riskier portfolios, decreased sustainability and mission drift. The findings on the sustainability and portfolio risk challenge the conventional wisdom.

Findings also indicate that legal status, and in turn the ownership of MFIs are determinant in capital structure and institutional development regardless of tiers. Deposit taking MFIs have stable capital structures throughout the assessment while the rest follow similar trends. Significance of donated equity as a funding source diminishes with the transition to tier 2 and MFIs' equity base is increasingly dominated by share capital and retained earnings, depending on the legal status. For tier 2 and tier 1 MFIs, debt from commercial and non-commercial sources are the main funding sources that fuel their growth. The rate of commercial to non-commercial borrowings increase by the tier advancement.

Finally, findings explore that tier 3 MFIs are characterized by unclear ownership structures and informal governance mechanisms which are guided by inexperienced BoD and committed managers. Typically, they do not have a separate human resources department and policies regarding hiring, training and compensation are not established. With technical assistance and external guidance, systematic human resources policies are implemented during the transition to become tier 2. The BoD of MFIs have more balanced members in terms of experience in banking and microfinance, and typically include representatives of MFIFs and private equity firms. Formalization continues and agency problems become less prominent during the transition to tier 1.

Limitations and Directions for Future Research

This thesis has a number of limitations and further research is needed before firm generalizations can be made. When selecting the cases, particular attention is given to include MFIs with diverse legal status and geographical region to compare and contrast findings within a broader sample. Nonetheless, the selected cases do not represent the entire MFI universe. In fact, the findings differ significantly according to the individual characteristics, most prominently the legal status.

Second, qualitative data on MFIs are fragmented and do not span the entire period of assessment for some of the selected cases. This is a common issue in microfinance research and even though particular attention was given to select cases with the richest source of information, the problem could not be avoided completely. Further research can enrich the sources of information by conducting interviews or requesting historical reports that are not publicly available.

Third, the assessments are based on a specific, limited period of time. Control for outside events and trends in the variables of interest is needed to test the significance of the findings. Future research needs to examine the influence of external factors such as the global financial crisis of 2008 and the repayment crises in the following years.

Finally, there is a trade-off between breadth and depth when selecting the optimal methodology. MFIs are extremely heterogeneous by nature, thus in-depth single case studies are required to reveal the exact patterns in a particular aspect. Similarly, there is a need for empirical research exploring the generalizability of the results to make robust conclusions. This thesis, halfway between the two, offers directions toward a more complete understanding of institutional development of MFIs.

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A Appendix

Table 22: Available Ratings and Reports for the Selected MFIs

	Akiba	GFSPL	FINCA Ecuador	Contactar	Enda	IMON
2004	-	Rating	-	-	Rating, AR	-
2005	AR	AR	Rating	Rating	Rating, AR	AR
2006	-	-	Rating	Rating	AR	Rating
2007	-	-	-	-	-	Rating, AR
2008	-	AR	-	Rating	Rating, AR	Rating
2009	AR	Rating	Rating	Rating	-	Rating
2010	AR	Rating, AR	Rating	Rating	AR	-
2011	AR	Rating, AR	Rating	Rating	AR	-
2012	AR	Rating, AR	Rating	-	-	Rating

Source: own research
Note: AR= Annual Report

Table 23: Types of Microfinance Investment Funds

	Aim	Target Investor
Commercial MFIFs	Seek financial return	Individual and Institutional investors
Commercially Oriented MFIFs	Eventually seek financial return	Bilaterals, Multilaterals, DFIs, NGOs, Foundations
Microfinance Development Funds	Seek social return, not financial return	Individual, Institutional investors, Bilaterals, Multilaterals, DFIs, NGOs, Foundations

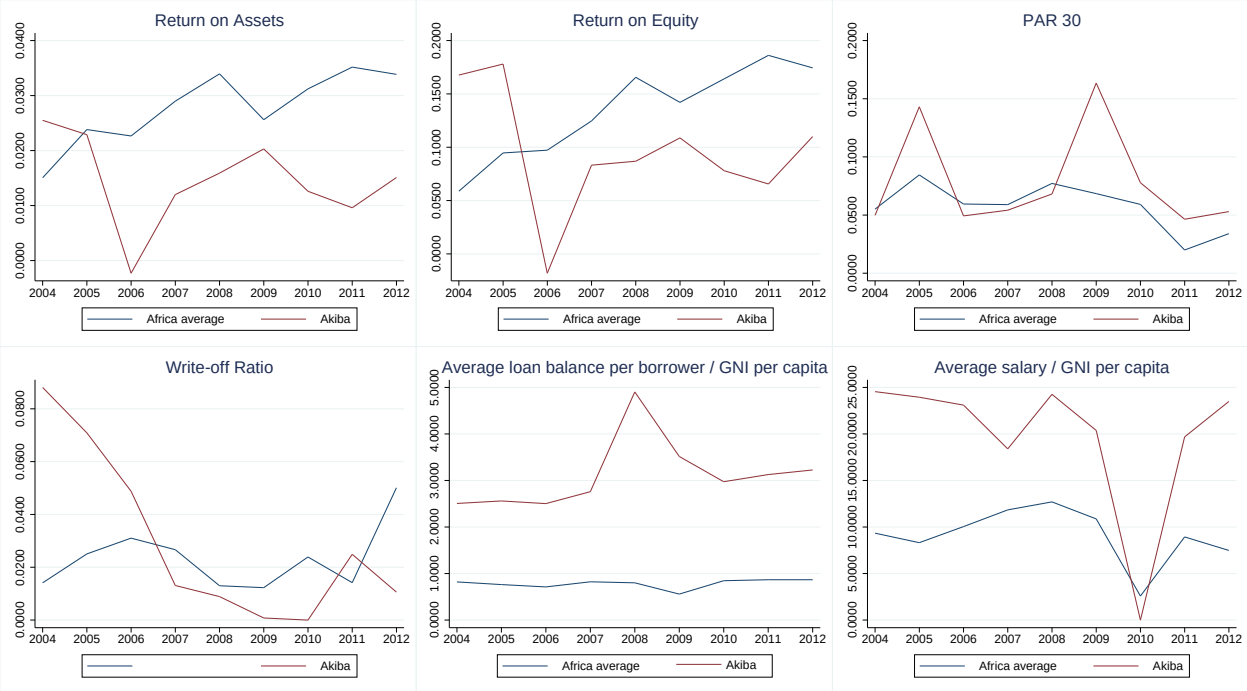
Source: Goodman (2006)

Table 24: Characteristics of MFIs by Legal Status

	Regulation	Ownership	Governance	Clients	Products	Management	Funding	Sustainability
Credit Unions	Sometimes regulated; oversight by special body	Owned by members	BoD or management selected by members	Depends on members	Savings and credit	Professional to an extent	Equity from members; deposits, debt	Medium to high
NGOs	Not regulated; sometimes government oversight	No owners	BoD appointed by founders and funders	Poor clients	Credit, financial services	Professional to an extent	Grants, donations	Low to medium
Banks	Central bank, or a specialized body	Private shareholders	BoD appointed by shareholders	Unserved or underserved individuals or SMBs	Credit, savings, insurance, payment services	Professional	Equity, debt, deposits	Varied
NBFIs	Central bank or specialized body	Public and private shareholders	BoD appointed by shareholders	Varied	Credit, leasing, insurance	Professional	Equity and debt	Medium to high
Rural Banks	Central bank, or a specialized body	Shareholders, government and/or private	BoD appointed by shareholders	Rural	Savings, Payment services	Professional to an extent	Equity, debt, savings	Medium to high

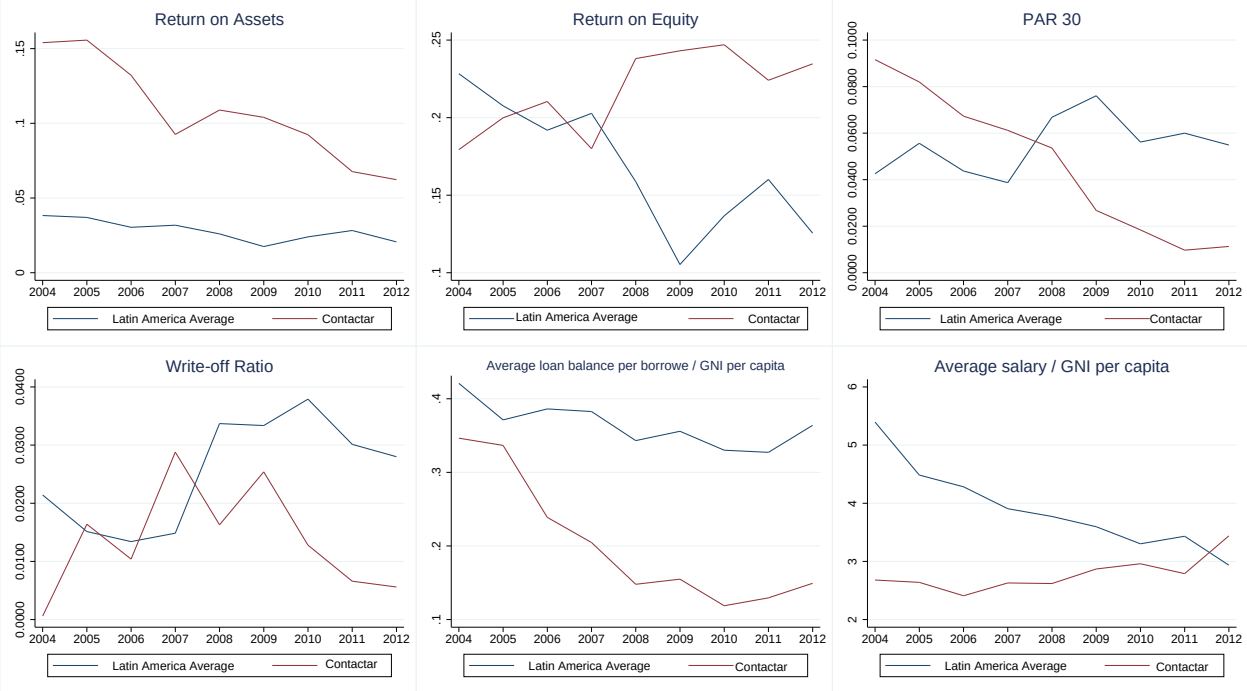
Source: Ledgerwood (2013)

Figure 11: Akiba Performance Benchmark



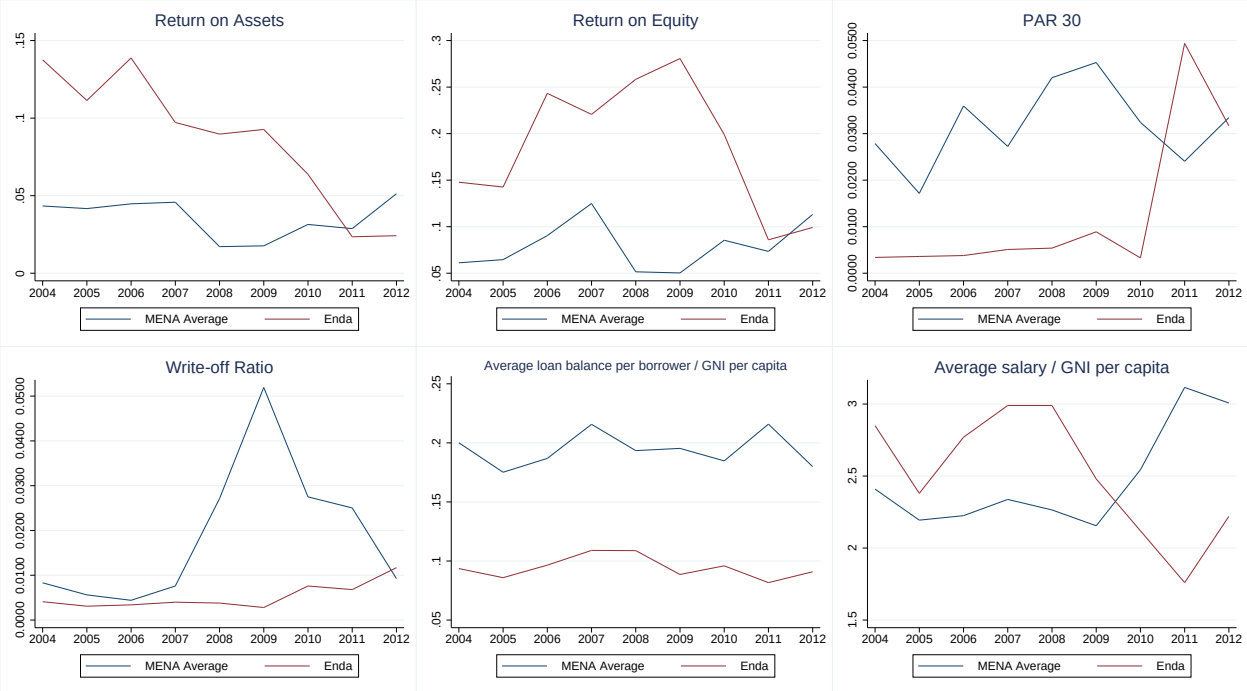
Source: own research based on MIX Market

Figure 12: Contactar Performance Benchmark



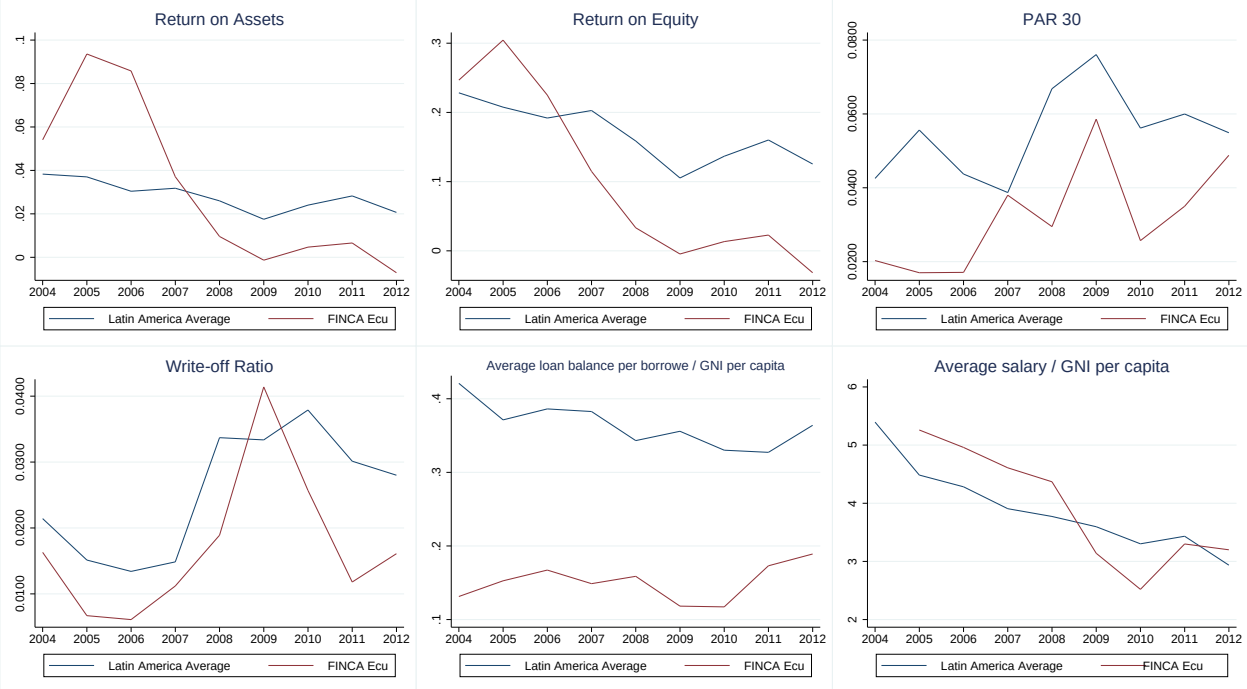
Source: own research based on MIX Market

Figure 13: Enda Performance Benchmark



Source: own research based on MIX Market

Figure 14: FINCA Ecuador Performance Benchmark

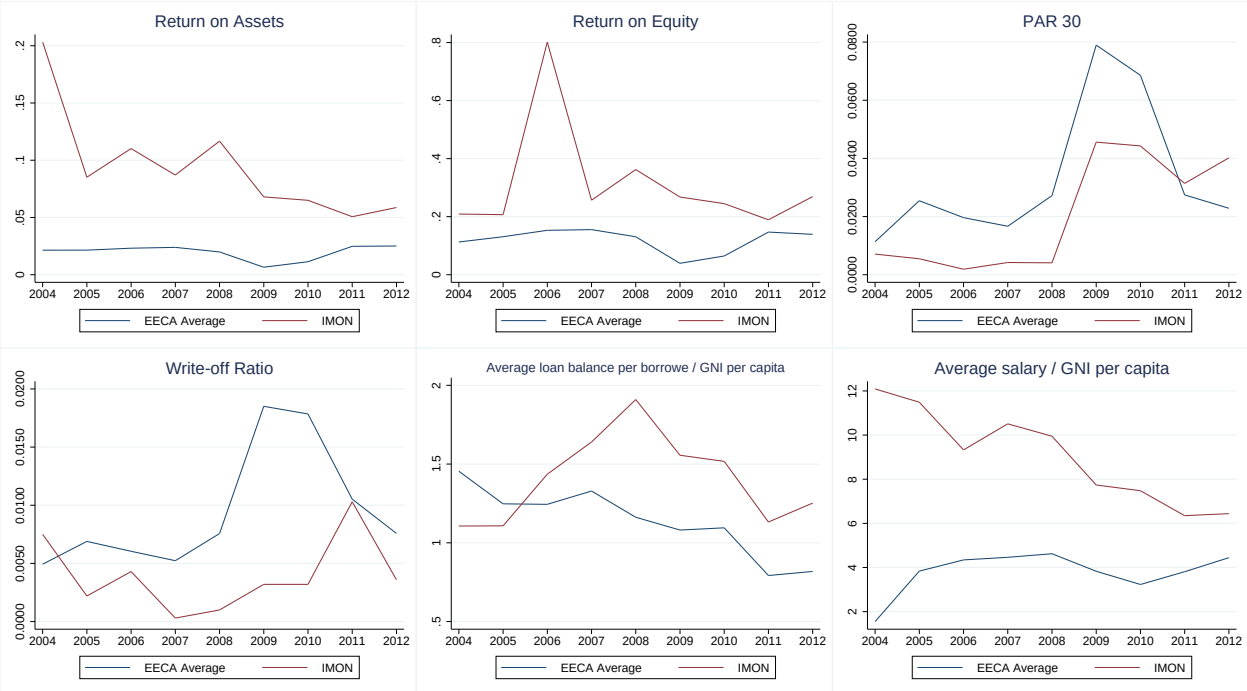


Source: own research based on MIX Market

Figure 15: GFSPL Performance Benchmark

Source: own research based on MIX Market

Figure 16: IMON Performance Benchmark



Source: own research based on MIX Market

Table 25: Akiba Statistics

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Staff	201	215	222	244	255	302	360	424	468
Loan officers	100	95	81	61	72	73	133	122	154
Other Staff	101	120	141	183	183	229	227	302	314
Staff Allocation Ratio	0.4975	0.4419	0.3649	0.2500	0.2824	0.2417	0.3694	0.2877	0.3291
Staff Turnover Ratio	-	-	-	-	0.18	0.165	0.194	0.11	0.1345
Borrowers per Staff	64	72	70	80	57	52	53	52	58
Borrower per Loan officer	129	163	192	321	201	214	143	179	176
Average salary GNI per Capita	24.55	23.95	23.10	18.40	24.26	20.38	0.00	19.69	23.49
Asset Size	24,766,854	31,189,223	29,361,177	37,135,625	44,861,107	55,290,947	60,431,588	65,089,175	77,518,846
Gross Loan Portfolio	11,645,398	15,485,341	14,383,781	21,634,805	31,229,835	30,062,885	29,918,758	36,524,661	46,766,487
Number of Offices	6	7	7	7	8	10	14	15	15
Number of Active Borrowers	12903	15507	15531	19603	14473	15638	18973	21843	27111
Return on Assets	0.0255	0.0229	(0.0023)	0.0120	0.0159	0.0203	0.0126	0.0096	0.0151
Return on Equity	0.1677	0.1780	(0.0181)	0.0832	0.0869	0.1088	0.0780	0.0656	0.1100
Operational Self Sufficiency	1.1954	1.1734	1.0330	1.1243	1.2504	1.0181	1.0651	1.0732	1.1070
Cost per borrower	285	265	274	281	367	474	525	515	489
Operating expense / loan portfolio	0.1378	0.1345	0.1406	0.1486	0.1525	0.1426	0.1570	0.1676	0.1680
Loans per staff member	-	-	70	80	57	52	53	52	58
PAR 30	0.0498	0.1431	0.0493	0.0542	0.0681	0.1635	0.0778	0.0464	0.0530
Write-off Ratio	0.0881	0.0709	0.0488	0.0131	0.0089	0.0008	0.0000	0.0249	0.0106
Loan Loss Rate	0.0881	0.0709	0.0488	0.0131	0.0089	0.0001	0.0000	0.0133	0.0083
Percent of Female Borrowers	-	-	-	0.5968	-	-	-	0.4772	0.4965
Average Loan Balance per Borrower/ GNI	2.507	2.5605	2.5031	2.7591	4.9041	3.5169	2.9736	3.1274	3.2262

Source: MIX Market

Table 26: Contactar Statistics

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Staff	20	23	35	43	56	87	136	236	324
Loan officers	11	14	13	19	25	42	69	112	151
Other Staff	9	9	22	24	31	45	67	124	173
Staff Allocation Ratio	0.5500	0.6087	0.3714	0.4419	0.4464	0.4828	0.5074	0.4746	0.4660
Staff Turnover Ratio	-	-	-	-	0.1500	0.1400	0.1520	0.1049	0.2464
Borrowers per Staff	131	145	169	220	242	231	234	193	177
Borrower per Loan officer	237	238	455	498	542	479	461	406	379
Average salary GNI per Capita	2.68	2.64	2.41	2.63	2.62	2.87	2.96	2.79	3.44
Asset Size	2,145,261	3,180,717	5,247,721	8,216,185	10,088,408	14,752,849	24,530,514	37,915,293	54,175,317
Gross Loan Portfolio	2,262,918	3,225,707	4,828,036	7,937,055	9,341,436	14,510,772	22,978,726	35,593,636	51,708,125
Number of Active Borrowers	2612	3327	5909	9455	13546	20100	31840	45441	57282
Number of Offices	2	4	5	7	10	19	22	25	28
Return on Assets	0.1540	0.1557	0.1322	0.0926	0.1089	0.1040	0.0924	0.0677	0.0623
Return on Equity	0.1794	0.1999	0.2104	0.1800	0.2381	0.2431	0.2470	0.2241	0.2347
Operational Self Sufficiency	1.8216	1.8213	1.7773	1.4328	1.4818	1.5041	1.4009	1.2646	1.2276
Cost per borrower	100	119	104	112	92	95	121	148	182
Operating expense / loan portfolio	0.1300	0.1287	0.1196	0.1349	0.1218	0.1339	0.1675	0.1980	0.2136
Loans per staff member	131	145	169	220	242	232	234	193	177
PAR 30	0.0916	0.0820	0.0673	0.0612	0.0536	0.0268	0.0184	0.0097	0.0113
Write-off Ratio	0.0006	0.0164	0.0104	0.0288	0.0163	0.0254	0.0128	0.0066	0.0056
Loan Loss Rate	(0.0118)	0.0119	0.0104	0.0288	0.0163	0.0254	0.0128	0.0032	0.0042
Percent of Female Borrowers	0.6302	0.6300	0.6030	0.5686	0.5609	0.5451	0.4392	0.4751	0.4693
Average Loan Balance per Borrower/ GNI	0.3465	0.3367	0.2389	0.2047	0.1480	0.1549	0.1188	0.1295	0.1493

Source: MIX Market

Table 27: Enda Statistics

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Staff	109	154	207	287	422	575	746	965	1013
Loan officers	72	78	103	152	221	310	395	514	560
Other Staff	37	76	104	135	201	265	351	451	453
Staff Allocation Ratio	0.6606	0.5065	0.4976	0.5296	0.5237	0.5391	0.5295	0.5326	0.5528
Staff Turnover Ratio	0.0600	0.0600	-	-	0.0700	0.0460	0.1136	0.0643	0.1122
Borrowers per Staff	146	162	189	222	225	214	210	202	207
Borrower per Loan officer	221	321	380	420	430	397	397	379	375
Average salary GNI per Capita	2.85	2.38	2.77	2.99	2.99	2.48	-	1.76	2.22
Asset Size	4,385,952	6,673,898	13,930,646	24,608,637	37,302,508	45,375,021	59,396,555	78,061,527	95,248,983
Gross Loan Portfolio	3,954,276	6,165,296	11,499,668	22,320,441	33,999,508	41,355,997	56,367,356	72,404,123	86,828,036
Number of Active Borrowers	15946	25018	39190	63794	94959	123041	156852	194743	209861
Number of Offices	16	22	30	42	51	57	58	65	67
Return on Assets	0.1376	0.1114	0.1388	0.0972	0.0897	0.0927	0.0638	0.0235	0.0242
Return on Equity	0.1478	0.1426	0.2433	0.2207	0.2584	0.2807	0.1991	0.0859	0.0992
Operational Self Sufficiency	1.4429	1.3943	1.5619	1.4335	1.4050	1.4377	1.3107	1.1159	1.1161
Cost per borrower	80	65	64	62	61	59	57	55	66
Operating expense / loan portfolio	0.3399	0.2624	0.2343	0.1893	0.1723	0.1704	0.1696	0.1474	0.1674
Loans per staff member	149	169	210	242	239	225	222	213	217
PAR 30	0.0034	0.0036	0.0038	0.0051	0.0054	0.0089	0.0033	0.0494	0.0317
Write-off Ratio	0.0041	0.0031	0.0034	0.0040	0.0038	0.0028	0.0076	0.0068	0.0117
Loan Loss Rate	0.0020	0.0019	0.0026	0.0037	0.0038	0.0028	0.0076	0.0067	0.0115
Percent of Female Borrowers	0.9400	0.8600	0.8500	0.8037	0.7666	0.7300	0.7074	0.6875	0.6795
Average Loan Balance per Borrower/ GNI	0.0936	0.0859	0.0965	0.1090	0.1088	0.0886	0.0959	0.0817	0.0909

Source: MIX Market

Table 28: FINCA Ecuador Statistics

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Staff	124	152	209	201	251	286	297	337	450
Loan officers	63	96	126	132	152	126	100	142	193
Other Staff	61	56	83	69	99	160	197	195	257
Staff Allocation Ratio	0.5081	0.6316	0.6029	0.6567	0.6056	0.4406	0.3367	0.4214	0.4289
Staff Turnover Ratio	-	-	-	-	-	-	-	-	-
Borrowers per Staff	344	284	245	291	229	187	173	156	117
Borrower per Loan officer	677	449	406	444	379	424	515	371	273
Average salary GNI per Capita	0.00	5.26	4.96	4.61	4.37	3.14	2.52	3.30	3.20
Asset Size	15,327,000	19,319,000	27,974,000	31,058,596	37,920,018	32,793,238	31,671,678	44,068,703	51,792,390
Gross Loan Portfolio	13,179,000	17,785,000	25,015,000	27,464,705	33,268,769	25,070,040	26,756,722	39,005,064	42,656,640
Number of Offices	8	8	9	10	10	10	10	10	
Number of Active Borrowers	42676	43140	51195	58584	57541	53392	51488	52722	52780
Return on Assets	0.0541	0.0936	0.0858	0.0371	0.0096	(0.0013)	0.0047	0.0066	(0.0071)
Return on Equity	0.2467	0.3045	0.2251	0.1148	0.0333	(0.0045)	0.0134	0.0228	(0.0316)
Operational Self Sufficiency	1.3576	1.6298	1.4215	1.2034	1.0708	1.0153	1.0422	1.0500	0.9880
Cost per borrower	65	86	90	93	108	112	124	153	186
Operating expense / loan portfolio	0.2152	0.2370	0.1989	0.1956	0.2059	0.2136	0.2776	0.2457	0.2505
Loans per staff member	344	284	245	291	274	213	207	177	141
PAR 30	0.0203	0.0170	0.0171	0.0380	0.0295	0.0586	0.0257	0.0350	0.0488
Write-off Ratio	0.0163	0.0067	0.0061	0.0112	0.0189	0.0414	0.0257	0.0118	0.0161
Loan Loss Rate	0.0163	0.0019	0.0061	0.0112	0.0189	0.0414	0.0257	0.0006	0.0085
Percent of Female Borrowers	0.9000	0.8718	0.8436	0.8436	0.8025	0.7476	0.7290	0.7121	0.6762
Average Loan Balance per Borrower/ GNI	0.1314	0.1527	0.1673	0.1488	0.1588	0.1183	0.1173	0.1731	0.1891

Source: MIX Market

Table 29: GFSPL Statistics

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Staff	131	283	404	480	769	1380	1748	1267	1189
Loan officers	94	154	223	380	440	669	1322	884	800
Other Staff	37	129	181	100	329	711	426	383	389
Staff Allocation Ratio	0.7176	0.5442	0.5520	0.7917	0.5722	0.4848	0.7563	0.6977	0.6728
Staff Turnover Ratio	-	-	-	-	0.1845	0.1559	0.2350	0.3042	0.2847
Borrowers per Staff	122	145	204	245	275	256	184	248	291
Borrower per Loan officer	170	266	370	310	481	527	243	355	433
Average salary GNI per Capita	1.69	1.70	1.80	2.62	2.42	1.96	2.07	2.08	2.30
Asset Size	1,879,000	6,907,028	12,635,996	26,960,681	29,670,039	68,138,395	65,151,548	62,635,389	99,474,489
Gross Loan Portfolio	1,457,207	4,967,802	10,548,107	20,584,355	35,647,924	73,420,428	56,420,124	74,948,387	96,517,838
Number of Offices	15	34	45	52	83	146	215	168	170
Number of Active Borrowers	15987	40915	82562	117647	211562	352648	321161	313610	346519
Return on Assets	(0.0235)	0.0021	0.0555	0.0214	0.0017	0.0040	0.0100	(0.0101)	0.0219
Return on Equity	16.5512	0.0482	0.7019	0.1576	0.0116	0.0256	0.0645	(0.0602)	0.1261
Operational Self Sufficiency	0.9212	1.0097	1.2771	1.0951	1.0194	1.0361	1.0487	0.9731	1.1123
Cost per borrower	23	21	18	27	21	18	23	24	21
Operating expense / loan portfolio	0.2789	0.1830	0.1393	0.1757	0.1232	0.0954	0.1333	0.1393	0.0882
Loans per staff member	122	145	402	479	466	382	264	365	498
PAR 30	0.0000	0.0000	0.0000	0.0000	0.0013	0.0147	0.0142	0.0122	0.0086
Write-off Ratio	0.0000	0.0000	0.0000	0.0000	0.0033	0.0062	0.0151	0.0000	0.0001
Loan Loss Rate	0.0000	0.0000	0.0000	0.0000	0.0033	0.0062	0.0144	(0.0017)	(0.0006)
Percent of Female Borrowers	1.0000	1.0000	1.0000	1.0000	0.9962	0.9939	0.9862	0.9943	0.9971
Average Loan Balance per Borrower/ GNI	0.1447	0.1641	0.1558	0.1842	0.1575	0.1707	0.1205	0.1613	0.1880

Source: MIX Market

Table 30: IMON Statistics

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Staff	120	153	195	276	357	358	468	713	992
Loan officers	47	61	88	116	142	147	183	359	503
Other Staff	73	92	107	160	215	211	285	354	489
Staff Allocation Ratio	0.3917	0.3987	0.4513	0.4203	0.3978	0.4106	0.3910	0.5035	0.5071
Staff Turnover Ratio	-	0.0200	0.1600	0.1400	0.1600	0.1460	0.1860	0.1050	0.1000
Borrowers per Staff	51	66	73	73	74	74	62	60	59
Borrower per Loan officer	97	167	161	161	188	185	158	118	116
Average salary GNI per Capita	12.09	11.49	9.33	10.51	9.95	7.74	7.48	6.35	6.44
Asset Size	2,128,061	4,258,687	8,506,305	16,174,505	33,329,025	37,176,438	41,074,255	51,286,609	85,554,832
Gross Loan Portfolio	1,803,130	3,719,936	7,940,607	14,860,228	30,548,721	28,980,142	34,081,595	45,216,421	68,474,473
Number of Active Borrowers	6034	10173	14182	19696	26661	26602	28900	42503	58186
Number of Offices	16	17	26	35	35	34	47	81	86
Return on Assets	0.2032	0.0852	0.1102	0.0871	0.1167	0.0680	0.0650	0.0507	0.0587
Return on Equity	0.2092	0.2070	0.8016	0.2569	0.3624	0.2678	0.2451	0.1894	0.2693
Operational Self Sufficiency	1.7179	1.3634	1.5689	1.5367	1.7532	1.4946	1.4651	1.3319	1.3755
Cost per borrower	86	103	91	102	132	129	155	174	172
Operating expense / loan portfolio	0.3173	0.3022	0.1894	0.1516	0.1351	0.1151	0.1367	0.1554	0.1521
Loans per staff member	51	67	73	73	78	75	62	60	59
PAR 30	0.0071	0.0055	0.0019	0.0042	0.0041	0.0456	0.0443	0.0314	0.0402
Write-off Ratio	0.0075	0.0022	0.0043	0.0003	0.0010	0.0032	0.0032	0.0103	0.0036
Loan Loss Rate	0.0075	0.0022	0.0043	0.0003	0.0010	0.0031	0.0030	0.0103	0.0036
Percent of Female Borrowers	0.7222	0.6050	0.5176	0.4633	0.4315	0.3961	0.3829	0.3890	0.3791
Average Loan Balance per Borrower/ GNI	1.1068	1.1081	1.4357	1.6402	1.9097	1.5563	1.5174	1.1322	1.2524

Source: MIX Market