Microfinance in evolution
An industry between crisis and advancement

For a long time it seemed that microfinance could accomplish social and financial goals simultaneously and without frictions. The number of people gaining access to financial services climbed steadily, while microfinance became increasingly commercialised and transformed into a more and more financially efficient industry. Sustainability of market growth was rarely questioned during that time.

Following the international financial crisis and global recession, microfinance experienced its first serious setback in 2008: Asset growth slowed markedly, profitability declined and portfolio risk rose. Despite all problems, microfinance continued to grow and managed to remain a profitable business, at least when considering the global aggregate.

Excessive market growth combined with insufficient institutional capabilities has caused problems in many countries. While initially it was assumed that the industry’s problems were triggered by the global crisis and the following recession, a consensus is now emerging that problems are rooted much deeper, i.e. within the characteristics of the microfinance industry as they have developed over time.

Excessive profit-orientation in some parts of the market did not only affect social objectives, it also raised moral hazard among staff of microfinance institutions and their clients. Problems emerged as some MFIs expanded too quickly, rolled out new products or expanded into different markets without the required institutional capabilities and controls.

In order to enter a sustainable growth path, microfinance has to achieve a new balance between social and commercial objectives. To this end, client focus needs to be put back at the core of all operations. This does not mean to return to the origins of microfinance, but rather to find a new “socio-commercial” approach to serving the poor.

* The authors would like to thank Asad Mahmood and Rocio Cavazos for valuable comments and support, as well as Marten Leijon for providing access to the MIX Market database.
Introduction

Microfinance has long been considered a powerful tool for sustainable development. The idea of granting loans at fair conditions to alleviate financial constraints of the poor has gained widespread acceptance among academics, investors and the public sector alike. The market for microcredit has expanded over many years, with microfinance institutions (MFIs) extending loans to more than 200 million clients by the end of 2010 (see figure 1). Through various socio-economic ties of the borrowers and their families, microfinance has impacted upon the lives of around 1 billion people in emerging markets and developing countries.

Over the last ten years, development policy has focused on improving financial access for as many people as possible. For some time it seemed that development objectives and commercial profitability could be accomplished simultaneously and without friction. Sustainability of market growth was rarely questioned, as microfinance was transformed into a more and more financially efficient industry. The market experienced notable growth rates in terms of both the number of borrowers as well as asset volume (see figure 2), while delivering a stable return on assets of 2-3%. Many institutions were able to achieve high growth rates by retaining profits and by attracting additional funds from commercial sources. Over time, an increasing share of institutions no longer depended on donations to expand their business, although many MFIs still benefit from them.

Following the international financial crisis that started in 2007, market growth and MFI performance started to deteriorate. Microfinance experienced its first serious setback at the global level, and in some countries faced outright crisis. Globally, portfolio at risk 30 (PAR30), i.e. the share of the portfolio for which payments are more than 30 days overdue, rose from less than 3% in 2007 to more than 5% in 2009, reflecting problems of overborrowing. The rise in delinquencies went along with a decline in MFI profits and a sharp fall in asset growth rates.

While, initially, it was assumed that the industry’s problems were caused by the financial crisis and the subsequent recession, a consensus is now emerging that problems were rooted to a large extent within the microfinance industry. While the approach of commercialisation was successful in giving more people access to financial services, the social aspect of microfinance was neglected in some cases. To better understand how problems in microfinance evolved, we take a closer look at past trends and structural developments in this market. In particular, we relate the widespread decrease in MFI performance to market growth, the change in client base and lending methodology. Our analysis is based primarily on data of individual MFIs provided by The MIX Market (see box 3 for a brief description of the database).

The paper is organised as follows. Chapter 1 describes the current state of the market and takes stock of the commercialisation in microfinance. It shows that the market has matured and become more efficient over the last decade. Chapter 2 looks into the recent increase in delinquency rates and the general deterioration of MFI financial performance. It explores how structural changes in microfinance have altered repayment and lending behaviour, resulting in multiple borrowing and client overindebtedness in some countries. Chapter 3 concludes by discussing how a focus on client needs can help reconcile financial and social objectives.
Microfinance in evolution

1. Trends and structural changes in microfinance

Almost 30 years after the first microfinance institutions were founded, the microfinance market is still in evolution. When microfinance started to expand during the 1980s, it was about lending to the rural poor for income-generating purposes – mainly through solidarity group loans of small and smallest amounts. Since then, microfinance has evolved into a more comprehensive development tool, with the aim to supply access to financial services for all unbeaked people in emerging and developing markets.

Besides the traditional microcredit, i.e. the financing of small entrepreneurs and start-ups, microfinance today refers to payment services, savings accounts, insurance and other financial services that can be offered on a small scale. Along with a widening of the product range, the base of microfinance customers and the ways of serving them have changed, too. Group lending has been increasingly replaced by individual contracting, and MFIs have expanded into urban areas and started to target wealthier clients.

Expansion of an idea into new markets and regions

Microfinance has its root in Bangladesh, where experimenting with microloans for the rural poor started in the 1970s. From there, the concept spread rapidly across the globe. Today, most borrowers still live in rural South Asia and the East Asia and Pacific (EAP) region (see figure 4). Over time, microfinance has expanded also in Latin America and the Caribbean (LAC), in Eastern Europe and Central Asia (EECA), and in Sub-Saharan Africa (Sub-S. Africa). ¹ Note that the average loan size is generally larger in the latter regions, compared with South Asia and East Asia and Pacific, where microfinance has its roots (see figure 5).

The expansion of microfinance across the globe went hand in hand with an expansion into urban areas in higher- as well as low-income countries, although, in quite a few countries microfinance focused on urban areas right from the start. In the Latin American countries, but also in EECA and the Middle East and North Africa (MENA), average loan size doubled between 2002 and 2010, which partly reflects the increasing share of wealthier clients. In 2010, more than 60% of the wealthier and almost 50% of the poorer clients were served in urban areas (see figure 6).²

The expansion of microfinance was also accompanied by a shift from group to individual lending. Because group lending is more difficult to apply in urban areas, and wealthier borrowers prefer individual contracts, individual lending is predominantly used in these cases. A shift towards individual contracts can also be observed in rural areas and in lending to low-income clients. Today, more than 90% of microcredit to higher-income and more than 50% to low-income clients is provided on an individual basis (see figure 6).³ While the share of group lending remains highest in South Asia, individual lending has long been the norm in most parts of Latin America and Eastern Europe.

In addition, an increasing share of loans is granted today to finance household needs rather than investments, i.e. on average 25% of MFI total lending volume. The actual number is likely to be higher, as MFIs cannot completely control what purpose a loan is actually used for. Survey evidence suggests that most loans are at least partly used for non-business purposes.⁴ It should be noted though

¹ Microfinance programmes also exist in advanced countries, such as Germany and the US.
² Unfortunately, comparable figures are not available for the period before 2008.
³ Again, comparable data are not available for the period before 2008.
⁴ For example, Johnston and Morduch (2007) find that half of the loan sums in Indonesia were not used for business investments.
that non-business credit is often used not only for consumption needs, but also to pay education or medical fees.

The changing landscape of microfinance suppliers

At the early stages of the market, microcredit was provided mainly by donor-supported non-profit NGOs. With microfinance expanding into new segments and growing into a more commercialised industry, the landscape of MFIs has evolved, too. Several strategies could be observed: First, non-government organisations have upscaled their status from NGO to bank or non-bank financial institution to be able to tap different sources of funding (e.g. banks can take deposits) and to distribute profits. BancoSol in Bolivia was among the first to pursue such upscaling in 1992. Second, instead of upscaling an existing NGO, donors often set up a so-called greenfield bank, which specialises in microlending yet processes a banking license from the very beginning. Third, commercial banks have entered the market for microlending by creating a microfinance department at a for-profit organisation, a strategy dubbed downscaling.

Structural indicators of MFIs in 2010

<table>
<thead>
<tr>
<th></th>
<th>NGOs</th>
<th>NBFIs</th>
<th>Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of borrowers</td>
<td>10,387</td>
<td>10,644</td>
<td>34,412</td>
</tr>
<tr>
<td>Number of depositors</td>
<td>0</td>
<td>0</td>
<td>43,402</td>
</tr>
<tr>
<td>Gross loan portfolio (USD m, median)</td>
<td>3,945</td>
<td>7,292</td>
<td>77,354</td>
</tr>
<tr>
<td>Average loan size (USD, median)</td>
<td>315</td>
<td>670</td>
<td>2202</td>
</tr>
<tr>
<td>Average loan size /GNI per capita (median)</td>
<td>15%</td>
<td>32%</td>
<td>63%</td>
</tr>
<tr>
<td>Portfolio yield (real, median)</td>
<td>21%</td>
<td>27%</td>
<td>16%</td>
</tr>
<tr>
<td>Share of loan portfolio in urban areas (mean)</td>
<td>49%</td>
<td>51%</td>
<td>61%</td>
</tr>
<tr>
<td>Share of loan portfolio in individual loan contracts (mean)</td>
<td>53%</td>
<td>64%</td>
<td>81%</td>
</tr>
<tr>
<td>Share of loan portfolio in household lending (mean)</td>
<td>11%</td>
<td>16%</td>
<td>23%</td>
</tr>
<tr>
<td>Share of institutions with for-profit status</td>
<td>3.4%</td>
<td>81%</td>
<td>98%</td>
</tr>
<tr>
<td>Share of institutions targeting low-income people</td>
<td>76%</td>
<td>61%</td>
<td>49%</td>
</tr>
<tr>
<td>Large institutions in terms of number of borrowers</td>
<td>28%</td>
<td>32%</td>
<td>60%</td>
</tr>
<tr>
<td>Distribution of MFIs in the MIX Market dataset</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of number of institutions</td>
<td>33%</td>
<td>35%</td>
<td>8%</td>
</tr>
<tr>
<td>Share of total borrowers</td>
<td>30%</td>
<td>39%</td>
<td>28%</td>
</tr>
<tr>
<td>Share of total assets</td>
<td>12%</td>
<td>28%</td>
<td>52%</td>
</tr>
</tbody>
</table>

* Based on data provided by the MIX Market; possibly subject to a self-selection bias as MFIs choose to be included in the survey.

Sources: MIX Market, DB Research

Today, the market for microlending can be broadly classified by the different types of institution and the target groups they mainly serve. Table 9 compares key characteristics of the three major groups of microfinance suppliers, namely NGOs, NBFIs and banks. The way NGOs offer their services is still closest to the origins of microfinance. These institutions are usually small with around 10,000 borrowers, while targeting mainly lower-income clients on a non-profit basis. Moreover, NGOs more often operate in rural areas and use group lending rather than individual types of contracts with an average loan size of USD 315.

The term "absurd gap" is a widely used citation of Michael Chu’s, then CEO of ACCION International, who used the term at a conference in Washington D.C. on September 27th, 1994.
The commercialisation approach

The idea of commercialisation in microfinance emerged in the late 1980s against the backdrop of neo-liberal thinking in economics and politics. With the experience of failed state interventions in rural credit markets, it was argued that subsidy dependency creates inefficiencies which hinder growth and prevent the search for other sources of financing, such as retail deposits or commercial funding.

Observing that the poor are able and willing to borrow sometimes at very high rates from local moneylenders, i.e. loan demand being rather inelastic to loan price, the development policy objective of microfinancing was further sharpened: The aim became to overcome credit constraints and meet demand efficiently, rather than supply the poor with cheap loans. MFIs were expected to be able to charge market-based, cost-covering interest rates without diminishing demand. By retaining profits and attracting commercial funding, MFIs would then be able to grow faster. In so doing, commercially operating MFIs would reach many more people and achieve much more for poverty alleviation than subsidised institutions could do, ideally creating a ‘win-win’ situation.

Criticism of the commercialisation approach has been based on three grounds. First, it has been argued that excessive profit-orientation could drive interest rates up, preventing potential borrowers from taking out loans or leaving borrowers no room to manoeuvre. Second, commercialisation of microfinance could crowd-out credit supply to the poor, since serving wealthier clients is often more profitable than serving the poor. Third, criticism has been based on ethical concerns: Since profits are ultimately generated from banking the poor, MFIs based on ethical concerns: Since profits are ultimately generated from banking the poor, MFIs

Over the past few years, NGOs seem to have lost their role as the primary vehicle for microlending, while the relative importance of non-bank financial institutions (NBFIs) and banks has increased. NBFIs now serve the largest number of clients. The median NBFI serves about the same number of borrowers as the median NGO, but has an average loan size that is double the size compared to the NGO. NBFIs are foremost active in EECAs, but are also present in Latin America, Sub-Saharan Africa and South Asia.

Banks are in general for-profit organisations, much larger in terms of borrowers and assets and allowed to take in deposits. They are typically active in urban areas, target the upper end of microfinance customers, and use mainly individual contracts. With a median loan size of USD 2,200, banks have played an important role in bringing microfinance to the wealthier regions and clients.

A development programme turning commercial

Until the 1990s, microfinance was mainly seen as an impact-driven development programme based on the support of governments and private donors. MFIs typically charged below-market interest rates and did not necessarily operate on a self-sufficient basis. Even Grameen Bank, which achieved high repayment rates, relied on external support. Subsidisation was accompanied by a number of problems. For instance, donor-supported development banks in India were prone to elite capture, where parts of a village benefited from subsidised rates and the resulting transfer of funds, while others did not. A number of failures among heavily subsidised state-owned development banks finally led to the conviction that MFIs should become commercially-oriented and seek operational self-sufficiency.

From a development policy perspective, it was argued that commercialisation of the microfinance business would be conducive to social objectives. Since commercially operating MFIs would make use of existing funds more efficiently and have a strong incentive to grow, they would also be better able to close the perceived gap between supply and demand in microfinance (see box 8 for a discussion of the “absurd gap” in serving the poor). Despite early criticism of the commercialisation approach (see box 10), the general concept has gained widespread acceptance among MFIs, investors and donors alike. Nowadays, most MFIs hold on to some elements of commercialisation, or follow the “best practices” in microfinancing, a guideline of how MFIs should work under the commercialisation approach, regardless of their official profit status.

More recently, commercialisation in combination with excessive profit-orientation has often been cited as the main cause for the problems in microfinance. Excessive profit-orientation is made responsible for driving interest rates up, transferring wealth from the poor to MFI managers and owners, as well as for an increasing share of overindebted borrowers among MFI clients. Recent cases of excessive profit-orientation are for instance provided by SKS in India and Compartamos in Mexico, which have departed very far from their social mission (see case studies 1 and 2 on pages 6 and 10, respectively).

Efficiency gains in serving the poor

In microfinance, operating costs are the largest single contributor to interest rates, unlike in traditional banking, where refinancing costs are more relevant. Operating expenses tend to be especially high for lower-income clients, i.e.

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6 See Hulme and Mosley (1996) for further background on this paradigm shift in microfinance.

7 "Best practices" were first laid out in the so-called Pink Book published in 1995. See CGAP (2006) for the second, most recent edition.
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The median MFI is profitable

Return on assets by type of institution, median

Efficiency gains in serving the poor

Operational self-sufficiency by target groups, median

Note: Operational self-sufficiency (OSS) is defined as: Financial revenue / (financial expense + impairment loss + operating expense)

Sources: MIX Market, DB Research

Low-income clients pay higher rates

Gross portfolio yield (real) by target groups, median

Sources: MIX Market, DB Research

higher than for wealthier clients (see figure 11). This has to do primarily with the size of loans in addition to the specific needs of the targeted client group. Granting loans of USD 100 to a hundred low-income clients requires more effort and higher staff expenses than granting a single loan of USD 10,000 to a wealthier client. The size of institutions matters, too, with larger institutions being in general more efficient than smaller ones.

By now, most MFIs operate on a self-sufficient basis, measured by revenues to total expenses. This holds true for both commercially operating institutions as well as for non-profit MFIs. Efficiency gains could be observed in particular among MFIs serving a lower-income clientele. Self-sufficiency for those MFIs has significantly improved over the last ten years from 100% to 110% (see figure 12). By contrast, lending to higher-income clients or a broad clientele has been sustainable already for some time. For those two groups operational self-sufficiency has stagnated over the past decade and even declined between 2008 and 2009.

Looking at the data over time, it seems that efficiency gains have largely been achieved without raising real rates. In fact, the median MFI experienced a reduction in gross portfolio yield between 2003 and 2010 by about 6 percentage points (see figure 13). The overall level of portfolio yield has declined over the past few years, partly because efficiency gains have been passed on to clients. This effect has been most pronounced for MFIs serving lower-income clients and for those serving a broad clientele, so that the spread between lower- and higher-income clients has closed over time. Traditionally, lower-income clients pay higher interest rates (and create higher gross yields), reflecting the different cost structure of MFIs targeting this specific market segment.

Meanwhile, return on assets for the median MFI fluctuated between 1% and 3% in the period under consideration (see figure 14). Return volatility differs among the groups of institutions: NGOs which typically serve lower-income clients, have been able to deliver rather stable returns also during the crisis. This result

Case study 1: Excessive profit-orientation at Compartamos

The case of Banco Compartamos in Mexico has often been cited, both as an example of a successful MFI and as a case of what can go wrong in microfinance. Along with SKS in Andhra Pradesh, the case now stands for excessive profit-orientation in microfinance and the risks that accompany it.

Compartamos was founded as an NGO in 1990. Ten years later, it collected USD 6 m in fresh equity from its managers and international investors, such as ACCION, IFC and CGAP and was transformed into a regulated for-profit joint-stock corporation. Having gained a full banking license in 2006, Compartamos finally went public in 2007. It sold 30% of its shares in a secondary offering to institutional investors. At that time, the company was valued at USD 1.5 bn and the owners made huge profits on their investment, corresponding to a return on investment of roughly 100% per year.

Between 2000 and 2007, the number of borrowers grew from 60,000 to 800,000. While the company had been highly successful in increasing the number of borrowers, its commercial success raised serious issues regarding the balance of social and commercial goals in microfinance. While the company did not operate very efficiently, it was able to lend small amounts at very high interest rates of up to 80% in nominal terms and up to 130% effectively, according to some estimates. One fourth of the interest income was retained as profit, which allowed Compartamos to increase equity capital on average by 53% per year. The company’s going public then revealed that a substantial transfer of wealth from clients to shareholders was taking place.

In the case of Compartamos, as in other cases, MFIs did not ensure that loans were used for productive purposes, which would improve the client’s situation sustainably, rather than for short-term consumption needs. Moreover, MFIs took advantage of their market leader position and charged rates that were socially not optimal. It should be noted though that despite being charged very high rates, people were often willing and able to pay them. This allowed Compartamos to further expand its business, raising the number of clients to 2.4 million in 2011 and gaining a market share of 40%.

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8 Note that operational expenses, especially for lower- and higher-income clients, have come down over time, indicating an increase in MFI operational efficiency.
9 Facts and figures are taken from Rosenberg (2007).
matches the finding that operational self-sufficiency for MFIs serving lower income-clients has also developed very steadily. This is not surprising as higher-income clients are more likely to be part of the formal economy and more dependent on the economic cycle.\(^\text{10}\)

Interestingly, figure 16 shows that commercially operating for-profit MFIs have on average not been more profitable than institutions that operated on a non-profit basis. This finding underlines the general trend of MFIs reducing their dependency on donations and growing on a self-sustainable basis, regardless of whether they are profit-oriented or not. On balance, though, donations and subsidisations will remain an important financial buffer to cover first losses, in particular when serving the lower end of microfinance customers.

### Structural changes in MFI funding

Depending on the legal form, size and scope of their operations, MFIs use a different mix of funding sources, including donations, equity capital, borrowings and deposits. Figure 19 provides an overview of the funding mix for the different groups of institutions. It shows that the volume of deposit financing has increased over the last few years. By now, more than 50% of bank assets are on average funded by deposits. The share of deposits is much lower though for NGOs and NBFIs (on average 10-15%). Providing deposit accounts is still limited mainly to MFIs with a banking license, although more and more countries are introducing specific MFI regulation, which partly allows NBFIs to take deposits. By offering deposit accounts, MFIs benefit from a relatively low-priced

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\(^{10}\) We will show in a later section that substantial losses had to be realised by institutions serving higher-income clients, which could largely be avoided in business with low-income clients.
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Foreign investment continues to rise

USD bn, by investor type

<table>
<thead>
<tr>
<th>Year</th>
<th>Public</th>
<th>Institutional</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0.5</td>
<td>0.6</td>
<td>1.5</td>
</tr>
<tr>
<td>2006</td>
<td>2.3</td>
<td>3.2</td>
<td>7.5</td>
</tr>
<tr>
<td>2007</td>
<td>4.8</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>2008</td>
<td>7</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>2009</td>
<td>1.2</td>
<td>1.7</td>
<td>3.5</td>
</tr>
<tr>
<td>2010</td>
<td>0.6</td>
<td>1</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Source: El-Zoghbi et al. (2011)

MIV market growth

Annual growth rate of assets under management

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Rate</td>
<td>6%</td>
<td>34%</td>
<td>25%</td>
<td>10%</td>
<td>21%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Source: Symbiotics

Performance of MIVs

Annual return

- Return SMX MIV Debt EUR
- Return SMX MIV Debt USD

Source: Syminvest

and stable source of funding. At the same time, clients are able to use deposit accounts as an effective means to smooth income volatility.\(^{11}\)

Meanwhile, commercialisation in microfinance has lead to an increase in MFI leverage over the last decade. Again, this could be observed for all types of institutions, most notably for NBFIs for which the debt-to-equity ratio has tripled between 2002 and 2010 (see figure 18). Traditionally, banks maintain a higher leverage ratio than other groups of institutions, also due to the possibility of taking deposits. The higher leverage ratio of banks allows them to increase return on equity during good times, but also leaves equity investors more vulnerable in a crisis situation.

Furthermore, figure 19 shows that the average amount of donations has come down in recent years to almost negligible size for all groups of institutions. The decline was especially pronounced for NBFIs, with the share of donations declining between 2002 and 2010 from 10% to less than 1%. The data support the view that ongoing commercialisation of the industry has created a situation in which the average MFI no longer depends on donations, although some institutions, mainly NGOs, still benefit from them.

Foreign funding continues to rise

Over the last decade, the total volume and share of foreign funding have increased, too. Ten years ago, foreign funds were almost exclusively provided by public investors. But with microfinance becoming known as an attractive investment opportunity, private investors have become a second important source of funding.\(^{12}\) Between 2005 and 2007, foreign investments in microfinance increased five-fold, with the stock of private investment growing faster than public investment (see figure 20). Hence, the means provided by private retail and institutional investors, foundations, development agencies and NGOs have become an important source of MFI funding. In 2010, foreign investors had directly invested in MFIs an amount of USD 13 bn, 82% in the form of debt-financing and 18% in the form of equity.\(^{13}\) Total commitment by foreign institutions to microfinance, including guarantees, market building investments, loans to governments and donations, had reached USD 21 bn in 2009.

While public investors often channel funds to MFIs through development finance institutions (DFIs), private investors mainly invest in microfinance investment vehicles (MIVs), which then channel the funds to MFIs. Until 2007, the volume of debt and equity financing provided through MIVs grew rapidly, with growth rates peaking in 2007 at 86% (see figure 21). Since then MIV growth has come down markedly, but has remained positive throughout recent years. A similar picture can be observed with respect to MIV performance. Average MIV return has halved since the peak in 2007/2008, but has remained positive since then (see figure 22). Institutional investors often prefer investing in somewhat larger MFIs, which are better able to absorb larger amounts compared to smaller institutions. However, the larger institutions are at the same time more exposed to the economic cycle, which may help explain volatility in MIV returns.\(^{14}\)

When the financial crisis escalated in 2008, policy makers and market participants were concerned that international investors would curtail their engagement in microfinance, which would provoke a liquidity shortage among MFIs. However, a large-scale funding crunch among MFIs could largely be

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\(^{11}\) Some observers even see deposit accounts as the better instrument for poverty alleviation. See for example Allen (2007) for a discussion of the advantages of microsaving.

\(^{12}\) See Dieckmann (2007).

\(^{13}\) See El-Zoghbi et al. (2011) for more detailed information on cross-border funding.

\(^{14}\) Returns to development finance institutions (DFIs) may have been affected in a similar way. When lending directly to MFIs, they tend to even focus on the larger institutions compared to MIVs.
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avoided, as only a few smaller MFIs experienced funding problems. To the extent that a lack of private funding would threaten MFIs, the development finance institutions stood ready to fill the gap. MIVs thus weathered the crisis relatively well. Although the pace of MIV growth declined markedly between 2008 and 2010, it remained positive throughout this period.

2. Recent problems in microfinance

Over the past few years, professionalisation and commercialisation of MFIs provided the basis for growth and prosperity of the microfinance industry. Former financial constraints of MFIs were increasingly relaxed, as the industry was able to attract private funds in addition to funds provided by development institutions and local governments. Between 2003 and 2008, MFI asset volume grew on average by 35% per year, and microfinance was seen by many as a secure and profitable investment opportunity.

However, in 2008, more and more borrowers were unable to repay their loans. MFI average portfolio quality started to deteriorate and MFIs had to realise write-offs, which in turn weighed on their profitability. Between 2007 and 2009, the portion of the portfolio deemed at risk because payments are more than 30 days overdue (PAR30) doubled, while return on assets fell from 2.4% to 1.8% for the median MFI (see figure 23). Overall asset growth rates declined from their 45% peak in 2007 to 15% in 2008. Although microfinance was not as severely hit by the global crisis as other market segments, the notion that performance of microfinance as an asset class is largely uncorrelated to global financial markets has not been validated. But while it may seem logical to draw a connecting line between the crises in microfinance and the global financial crisis, it is worth to take a deeper look into what exactly happened since 2008 and before.

Microfinance-specific problems rather than global crisis

There are several channels through which the global financial crisis may have affected microfinance in emerging markets. As discussed earlier, foreign investors could have ceased to provide funds to MFIs. However, the data show that this was not the case, at least not to a significant extent, as foreign funding growth dropped but remained positive throughout the crisis. A more relevant channel for contagion has certainly been the global economic crisis, which followed the financial crisis. A number of emerging market countries were affected by a decline in remittances and a deterioration of trade balances. In some cases, this has reduced borrowers’ ability to service their debt.

However, even causal evidence casts doubt on the notion that problems in the MFI industry are exclusively or even mainly related to the financial crisis. True, for some countries, a more direct line can be drawn from the global crisis to domestic problems in microfinance than for others. Serbia and Moldova, for instance, experienced a decrease in GNP of more than 4% in 2009, partly due to the global crisis. Here, the MFIs PAR30 increased to 10%. However, other countries, such as Ukraine, Tajikistan or Argentina, experienced problems in microfinance but were less affected by global turmoil and even remained on a rather stable economic growth path. Portfolio at risk of MFIs in Syria, Haiti and Niger increased already in 2007, in Togo, Bangladesh and Chile in 2008, i.e. before the downturn of the global economy. The microfinance crisis in the Indian state of Andhra Pradesh followed suit in 2010, but was driven by home-made problems rather than the global crisis (see case study 2 on the following page: Bad practice in Andhra Pradesh).

15 It is plausible to assume a time lag between the deterioration in macroeconomic conditions and the increase in delinquency rates. So in countries that experienced problems already in 2008, the global economic downturn could not have been at the root of problems in microfinance.
In fact, microfinance developed rather heterogeneously across regions already before the recent problems became imminent. For instance, lending in Sub-Saharan Africa has always been more risky for economic and political reasons and, as a consequence, profits of MFIs operating there have been more volatile. By contrast, MFIs in Eastern Europe and Central Asia (EECA) have been operating, for the larger part of the region, in a rather stable macroeconomic environment, although income levels as well as macroeconomic and structural conditions in which MFIs operate differ across countries.

Figure 24 shows that MFIs operating in higher income regions tend to be more profitable than those operating in lower-income regions. It also shows that in most regions MFI profitability took a hit in 2008/2009, from which MFIs only partly recovered in 2010. The largest decrease in the return on assets could be observed for the median MFI in Eastern Europe and Central Asia (EECA). The quite developed microfinance market with a closely meshed branch network in EECA had been booming for some time. Yet, with the beginning of the financial crisis in 2008, the return on assets halved from 3% to 1.5% and the PAR30 shot up from 1% to 4% (see figures 24 and 25). A similar development could be observed for Latin America and the Caribbean (LAC), with a comparable decrease in the return on assets and an increase in the PAR30 from 4% to almost 6%. Likewise, MFIs in East Asia and Pacific (EAP) and Sub-Saharan Africa came under pressure. Only MFI profitability in South Asia and Middle East and Northern Africa (MENA) remained relatively stable between 2008 and 2010.

Case study 2: Bad practice in Andhra Pradesh

The microfinance crisis in the state of Andhra Pradesh in India provides a prominent example of how problems in microfinance are rooted within the industry, rather than having a global origin.

The Indian state of Andhra Pradesh is one of the most saturated and competitive microfinance markets worldwide, with private MFIs and state-subsidised schemes competing against each other. The private MFIs are growing faster and operating more aggressively than the state-owned schemes, achieving a repayment rate of almost 100% for a long time. Although problems in some microfinance institutions started to appear already in 2006, private MFIs continued to grow until 2009. In that year alone, the ten leading MFIs of Andhra Pradesh doubled their client base.

Over time, the focus of MFIs had shifted largely from a social mission to an aggressive commercialisation approach. Incentives for MFI staff were set accordingly: People from the top management to the loan officers were strongly incentivised to achieve fast growth and raise profits. Being able to attract sufficient funding from domestic and foreign sources, MFIs could fully concentrate on the expansion of their lending business.

While MFIs were rather successful in expanding their loan books, the average debt outstanding per household soon was more than eight times higher than the national average, with 84% of households taking out more than two loans and the median household four. At that time, the market share of SKS in Andhra Pradesh was larger than that of the largest commercial bank. However, the fast expansion of the market could no longer be sustained. At the height of the boom, following the IPO of SKS in August 2010, the government reacted to mounting criticism of the sector. It published a list of 123 victims of private MFIs and investigated 76 cases where loan officers were blamed to have driven overindebted borrowers to suicide. The boom finally came to a halt by the end of November 2010, when the government imposed strict regulation on privately operated MFIs, leading to a temporary freeze of the market.

Excessive market growth and saturation at the core of problems

Even if problems in microfinance seem to be rooted within the industry rather than the global economy, there are some striking similarities among countries that experienced deterioration in MFI portfolio quality. Most of those countries either recorded high market growth rates or had reached a penetration rate at
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Some striking similarities among problem countries

The countries can roughly be clustered into four groups: first, countries with above-average market growth (>20% per year) and low market penetration (<10%), such as Morocco, Costa Rica or Afghanistan; second, countries with low market growth but high market penetration rates, for instance, Sri Lanka and Mongolia; third, countries or regions with high growth rates in saturated markets, like Bosnia & Herzegovina and Andhra Pradesh. Interestingly, the number of problem countries experiencing both high market growth and high penetration rate, is rather small. However, only 5 out of 40 identified countries that experienced a significant deterioration in portfolio quality did not fall in either of the defined categories. Among them are Moldova and Bulgaria for which external factors played an important role. Other countries suffered from idiosyncratic problems, such as Nicaragua where the government prompted borrowers not to repay their loans.

Imprudent lending in fast growing markets

What we observe is a negative correlation between market growth and portfolio quality. Although no clear causation can be inferred from our analysis, it is likely that some causal links exist. The literature has brought forward a number of explanations as to why high market growth goes hand in hand with deterioration in portfolio quality. Two main channels have been identified: first, as the

17 González (2010) finds a negative impact of market penetration on MFI portfolio quality, if more than 8% of the total population has taken out a microloan.

18 Politicians, including President Ortega, supported the previously small and local “No Pago movement”, encouraging clients in public to stop repaying their microloans.
Potential pool of new clients shrinks, MFIs in fast growing markets find it difficult to acquire new low-risk borrowers among the poor. As a consequence, MFIs tend to grant credit to higher risk borrowers, expand into urban areas and target wealthier clients. Second, fast growing MFIs cannot keep up with hiring and training new staff, so that the case-load of loan officers increases, while quality of monitoring decreases.

Both effects reinforce each other, as untrained and inexperienced loan officers are not only less efficient in monitoring existing loans, but also have more difficulties in identifying and targeting low-risk clients. Especially in the urban areas, and when offering individual contracts, borrower selection and monitoring requires better trained staff. Hence, excessive growth in these markets can lead to a situation where selection and monitoring quality decreases and the borrower pool becomes more risky.

Case study 3: Microcredit bubble in Bosnia & Herzegovina

The microfinance market of Bosnia & Herzegovina provides a vivid example of how fast market growth can lead to saturation, excessive competition, imprudent lending and a subsequent bust of the bubble in microlending.

Before the crisis in 2009, the microfinance market in Bosnia & Herzegovina experienced high growth rates of 38% p.a. on average, mainly financed by foreign investors that provided debt financing. Bosnia & Herzegovina was a primary target for international investors because of the good financial performance of MFIs during the growth years. Development Finance Institutions (DFIs) were also heavily involved, partly due to political reasons. All this ensured that MFIs had access to abundant means for expanding their business. However, the rapid expansion of the business came at the cost of declining staff and monitoring quality. As up to 40% of new staff was needed in a year in order to keep up with market growth, quality of new hires suffered and loan officers were often left with a heavier case load, weakening the borrower-lender relationship.

Prior to the crisis, microlending in Bosnia & Herzegovina reached a market penetration rate of 20%, in some regions even higher. As MFIs were competing fiercely for the same target groups, MFI clients were able borrow to from multiple lenders and to increase their total loan amount, without their creditors knowing about it. About 40% of all borrowers took out loans from more than one MFI. By 2008, at least 16% of the borrowers were beyond their repayment capacity. At this time, more and more clients could only repay their existing loans by taking out new ones, which ultimately led to the deterioration of MFI loan portfolios. The bubble finally collapsed with the recession in 2009, when GDP shrank by 8% and remittances fell by 25% (figure 31). The average PAR30 of MFIs rose from 1% to 11% in 2009 and return on assets became negative. The general economic downturn thus triggered a crisis, which had been looming for some time below the surface, caused by structural deficiencies and excessive market growth.

See Chen et al. (2010) for a further discussion of the crisis in Bosnia & Herzegovina as well as on similar situations in Pakistan, Morocco and Nicaragua.

Overborrowing in saturated markets

Competition is typically seen as a positive for clients, as it leads to lower interest rates, and better service and product quality. However, problems arise if MFIs compete in a saturated market that is not adequately regulated and supervised and where traditional means to manage credit risk, such as collateralisation and credit registers, are lacking.

In a saturated market, borrowers find it easier to take out credit in excess of their repayment capacities (overborrowing). They can do so by going to several MFIs (multiple borrowing), which are not aware of the client’s credit record and are willing to lend in order to increase their business volume. In fact, empirical evidence shows that overborrowing is closely related to multiple borrowing. With multiple borrowing, the borrower can choose to default strategically on one or several of the loans. In the absence of credit bureaus, and if no collateral has been posted, potentially negative consequences for the borrower remain limited.

See Schicks and Rosenberg (2011) for an overview of empirical findings regarding overindebtedness.
Overborrowing and strategic default are typical problems of moral hazard in lending relationships caused by MFIs' inability to coordinate their lending decisions. These problems could in principle be solved by introducing credit bureaus or some other form of information sharing among MFIs. If these means are lacking, MFIs can still make an effort to carefully select and monitor their credit engagements.

However, incentive problems and moral hazard also exist within MFIs. The cases of Andhra Pradesh and Bosnia & Herzegovina demonstrate that problems arise in particular if MFIs decide to expand in saturated markets, competing for clients that are borrowing from other MFIs. In a competitive market environment, credit institutions are often tempted to lower their standards to gain market share. Moreover, MFIs have an incentive to keep on lending to already overindebted clients. They may decide to renew a client's loan, admitting them to the following loan cycle, or even encourage them to take out additional sums in order to avoid realising a loss on their exposure.

### Changing client base

The fast expansion of the market was often accompanied by a change in the MFIs' client base and a general increase in the number of higher-income clients among microfinance borrowers. MFIs that enter or expand into a market are typically more profit-oriented than the incumbent MFIs and tend to target the presumably more profitable wealthier borrowers. This has a twofold effect on the composition of MFI portfolios: socially oriented MFIs tend to lose profitable clients, which they often use for cross-subsidisation of poorer borrowers, and become more vulnerable to shocks. Newly entering and fast-growing institutions become increasingly exposed to higher-income but also riskier clients. Since ability to repay for wealthier borrowers depends much more on the economic cycle than for the very poor, MFIs that target wealthier clients become more exposed to general macroeconomic conditions.

Figure 32 shows that up until 2008, higher-income clients were more profitable than low-income clients. However, since 2008 profit margins in serving high-income clients had declined sharply, while it remained nearly constant or even increased for low-income clients. By 2009, profit margins had reached equally low levels for high-income clients as for low-income clients. This development was mainly due to deterioration in portfolio quality for higher-income clients. In 2009, portfolio at risk for MFIs targeting a higher-income and a broad clientele rose by about 2 percentage points, but remained almost constant for low-income clients (figure 33). Further analysis reveals that institutions targeting wealthier clients are the ones hit most by the crisis. These institutions are often more mature than their peers and operate as banks rather than NGOs.

### Weakened repayment incentives

As we have argued above, the expansion of microfinance into new markets and regions was in many cases accompanied by a shift from group to individual lending. Individual lending allows MFIs to potentially reach more clients, since contracts can be tailored to specific client needs. It also enables MFIs to offer consumer loans, which are comparatively more profitable but also riskier. Although in some places, such as Latin America and Eastern Europe, individual lending has been the predominant form for decades, the expansion of MFIs into urban regions and the targeting of wealthier clients in general meant that more

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20 The Bolivian microfinance crisis of 2000 provides a vivid example of this form of moral hazard. See Vogelgesang (2003) and Schreiner (2004) for a more detailed description.

21 See Kai (2009).
Individual vs. group lending

If a borrower does not repay his loan, it is usually very strict in terms of loan size and payment schedule, so that it does not fit every potential borrower: larger investments or investments with unsteady return, such as in agriculture, as well as irregular loans for consumption smoothing, housing or investments with unsteady return. Whether one method is more effective than the other will depend on how well the methodology is applied in practice. In cases where the expansion into new markets has been done with appropriate preparation and prevention of market failures, this may be overemphasized.

MFIs need different capabilities for group or individual lending. Whether one method is more effective than the other will depend on how well the methodology is applied in practice. In cases where the expansion into new markets has been done with appropriate preparation and prevention of market failures, this may be overemphasized.

See Hoff and Stiglitz (1990) for a discussion of asymmetric information resulting in market failure in rural credit markets. See Armendáriz and Morduch (2010) for a detailed prescription of the instruments used in microfinance to overcome these problems.

We observe that on average MFIs that use individual lending performed worse during the past few years than the average MFI. For instance, PAR30 has increased from 3% in 2008 to 5.1% in 2009 for the median MFI with more than 50% of its loan portfolio in individual contracts, while it remained constant at 1.3% for the median MFI using mainly group lending. South Asia, the region which experienced the least pronounced decline in financial performance, is also the one where MFIs are mainly active using joint liability contracts in rural areas (see figure 35). It should be noted though that the correlation we observe is jointly determined by several factors, such as the type of client served as well as the methodology used for serving them. Moreover, in quite a few countries, microfinance has historically focused on urban markets and done well. In many cases, individual lending has been applied for decades without triggering crisis.

A more general point regarding the monitoring of individual loans can still be raised. Individual contracts are potentially more prone to moral hazard than group loans, where social pressure among the group can replace monitoring by the MFI. While group lending can be used to outsource selection and monitoring costs to the borrowers, in individual contracts it is the loan officer who has to make sure that borrowers will repay their debt. Individual lending thus relies much more on a steady and close relationship between the loan officer and the borrower. Before granting a loan, the loan officer has to thoroughly assess the debt-burden capacity of the potential borrower. During the loan term, the officer has to constantly monitor the project and if the borrower fails to make a payment, decide whether some form of pressure should be exerted. This can work well if the MFI operates in a socially-oriented setting and has sufficient institutional capabilities to manage risks. But in a competitive market environment, when MFIs expand too quickly into different markets or roll out new products in a rushed, unprepared manner, the officer-client relationship may loosen, resulting in weakened repayment incentives for the borrowers.  

MFIs not always living up to their responsibilities

The crisis in microfinance is not only a crisis of the industry, but foremost a crisis of the people being granted microcredit. Instead of improving their income situation, many borrowers found themselves in a situation where they could no longer meet their financial obligations. The case of Andhra Pradesh provides a recent, most drastic example of how overindebtedness can lead to personal tragedy among microborrowers. But why were those situations not avoided in the first place?

See for example McIntosh et al. (2005) and Schrader (2009).
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Are women the better borrowers?

For many MFIs today, targeting women is part of their social mission. MFIs advocate gender equality and aim at strengthening women’s social status within the household. The Microcredit Summit Campaign finds that 74% of all microfinance clients worldwide and 82% of the poorest are women. In the MIX Market dataset, the female share was 64.5% in 2010.

In the early days of microfinance, Grameen Bank and other MFIs lent to women as their main target group, observing that women displayed better repayment behaviour than men. Women were reportedly more sensitive to social stigma, handled their financial responsibilities with more care and in general showed a better understanding of finance, as trading and financial affairs in many cultures is a typical responsibility of women.

Better repayment behaviour translates into better risk characteristics of MFIs targeting women. Over the observed period, the PAR30 was 1 ppt to 2 ppt lower for MFIs with more than 65% of female clients than for MFIs with a lower share of female clients (see figure 36).

See Armendáriz and Morduch (2010) for an in-depth discussion of gender lending.

Behavioural economics suggests that people are putting relatively more weight on present than on future income. This is especially true for the poor as they are living in vulnerable circumstances and are permanently struggling to make ends meet. Microfinance clients are tempted to ask for higher amounts, without fully considering future income and repayment possibilities. It is often the fact that borrowers can take out multiple loans, in addition to his or her urgent financing needs, which leads to overindebtedness.\(^{23}\)

MFIs are typically in a stronger position and have a clearer view of the clients’ repayment capabilities. It is thus in their responsibility and under normal circumstances also in the MFI’s interest to realistically evaluate the borrower’s debt servicing capacity. However, this requires some effort on the part of the loan officer and with the case load increasing and abundant means to distribute among borrowers, chances are that too large a loan will be granted.

Some MFIs failed to live up to their social responsibilities, instead pursuing aggressive growth strategies. As a common practice in these cases, MFIs tied remuneration of loan officers to portfolio size, thus incentivising staff to expand the loan book regardless of portfolio risk. Under these circumstances, it can be in the loan officer’s interest to approve loans which lie beyond the client’s debt capacity or even coerce clients to take out such loans.

In other cases, MFIs have not made transparent the interest and fees they charged. For example, MFIs have offered flat interest charges to potential borrowers, for which the interest payments are based on the initial loan sum and remain constant over time, although the borrower is subsequently repaying the loan. The effective interest charge is thus much higher compared with that of a standard loan contract. Especially less educated clients might not fully understand the implications of such contractual details, which can lead to an overburdening of borrowers. Problems are particularly pronounced with respect to consumer loans, which usually do not raise the borrower’s potential income, and can lead to repayment difficulties even faster.\(^{24}\)

3. Conclusions

The observed deterioration in MFI portfolio quality is related to three trends in microfinance, which weakened repayment incentives and allowed borrowers to amass a level of debt that they could not repay. First, the fast expansion of microfinance in some markets led to an increase in the share of wealthier and more risky borrowers, leaving MFIs more vulnerable to an economic downswing. Second, MFIs that now face difficulties failed to live up to the challenge of constantly adjusting their internal structure and lending policies to keep up with fast market growth. They lacked adequate risk management capacities and subordinated prudent lending to fast growth and short-term profits. Third, microfinance was introduced as a development tool in a largely non-competitive setting. But with increasing commercialisation and competition, the instruments used to overcome moral hazard and adverse selection became less effective. This weakened incentives to repay on the part of borrowers, increasing the probability of multiple borrowing and strategic default. In some cases, all three developments reinforced each other, leading to overindebtedness of MFI clients and outright crisis in the affected countries.

In order to rehabilitate microfinance as a development tool, a new balance needs to be achieved between the social development approach and the commercial approach, i.e. a new “socio-commercial approach”. Central to this

\(^{23}\) See Kappel et al. (2011).

\(^{24}\) The share of consumer lending has also been used as an early warning indicator of overindebtedness, see Kappel et al. (2010) and Schicks (2011). A strong rise in consumer lending has also been a driver of the Bolivian crisis in 2000, see Vogelgesang 2003.
idea is the insight that microfinance is not a business as any other and should and cannot work like one, but that social development goals have to remain at its core. The crisis should thus be seen as a chance to reinstall microfinance as a socially-oriented programme, which puts client needs back in the focus of its operations.

However, microfinance cannot simply return to its origin of subsidised group-lending. Rather, it is necessary to learn from the crisis and to overhaul current practices that proved unsuccessful from a development perspective. An important step in that direction is to put client needs back in the focus of all microfinance operations. This starts by learning how the clients live, what they need and demand. It goes on to designing suitable products and constantly evaluating the social impact of microlending. It also requires a culture of social responsibility among MFI owners, managers and staff. Better training of staff and a generally intensified client focus can ensure that borrower selection and repayment incentives are adequately set. Since those measures will incur additional costs, overall financial returns from microlending may be reduced compared with what has been achieved some years ago. On a positive note, however, investors will be rewarded by better social performance and less volatile financial results.

The further development of the industry should not be left to market forces alone. Many steps have already been taken or are being implemented to ensure that the crisis and its consequences will not be repeated. These include bringing client protection principles to work, strengthening market infrastructure by establishing credit bureaus, information networks etc., and improving microfinance regulation. Other initiatives that target investor awareness may accompany these measures. Social performance indicators need to be further developed and the measurement of social performance goals implemented in practice. These improvements are important and useful but should not distract from the task of bringing social objectives back in the focus of owners and financiers of microfinance institutions.

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References


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Print: ISSN 1612-314X / Internet/E-mail: ISSN 1612-3158