

No. 61 February 2010

Greg Chen, Stephen Rasmussen and Xavier Reille

Growth and Vulnerabilities in Microfinance

rom 2004 to 2008 microfinance enjoyed unprecedented growth in emerging markets. According to data from the Microfinance Information Exchange (MIX), the sector expanded at historic rates, with average annual asset growth of 39 percent, accumulating total assets of over US\$60 billion by December 2008. Microfinance benefited from widespread international recognition as a development tool. It was promoted by many national governments eager to bridge the financial inclusion gap, and it was elevated onto the agendas of the United Nations and G8. Donors and socially oriented investors recognized the potential for social and financial returns and directed increasing funding toward microfinance. The global performance of the microfinance sector has been impressive with solid asset quality and stable return on assets.

An increase in commercial funding to the sector has enabled microfinance to grow well beyond what could have been possible with just donor and government support—the primary source of funding a decade ago. This impressive growth means that millions more poor people are included in the formal financial system. However, a few countries are showing signs of stress, with regionalor national-scale microfinance loan delinquency crises emerging within the past 24 months. Have these expanding microfinance markets grown too fast? Are they simply the victims of the global financial crisis, or are there other reasons for the difficulties?

This Focus Note distills lessons from four microfinance markets: Nicaragua, Morocco, Bosnia and Herzegovina (BiH), and Pakistan (see Figure 1). These countries have all experienced a microfinance repayment crisis after a period of high growth and are important microfinance markets in their respective regions. In all four cases, CGAP compiled case studies combining data analysis with wide-ranging interviews with microfinance institution (MFI) managers, investors, and industry analysts. These case studies do not indicate that the global economic recession is a primary cause of the repayment crises, though it was among the various contextual factors affecting borrowers' repayment capacity. Instead, the case studies reveal that three vulnerabilities within the microfinance industry lie at the core of the problems:

Figure 1: Four Countries with Recent Microfinance Repayment Crises



- 1. Concentrated market competition and multiple borrowing.
- 2. Overstretched MFI systems and controls.
- 3. Erosion of MFI lending discipline.

This Focus Note begins by briefly telling the story of recent growth in the four countries leading into the credit delinquency crises. The second section describes the key contextual factors that affected the severity and spread of the crises. The third section breaks down the three internal industry vulnerabilities that lie at the heart of the problems. This is followed by a discussion on how market infrastructure and tools can help to mitigate some of the dangers. The note concludes by placing these experiences within the broader context of the global microfinance story and makes recommendations to strengthen the industry.

2004 to 2008: The Growth Story

The microfinance industry grew at unprecedented rates over the past five years. Growth was driven by increasingly competent and confident MFIs with a social mission to increase outreach to the poor and the unbanked. At the same time, there were also strong incentives for MFIs to grow since funding, national influence, and international recognition all flowed to the largest players. Figure 2 illustrates how fast our four focal countries expanded their microcredit loan portfolios, with compound annual growth rates (CAGR)¹ between 33 percent and 67 percent, in line with or above the MIX average of 43 percent for the same period.

Growth Was Led by Credit Services

MFI market expansion was driven by MFIs that relied on credit products and credit delivery methods common in microfinance. There are, however, substantial differences in the credit approaches in the four countries. Lending directly to individuals or microenterprises is the preferred approach in BiH and Nicaragua, whereas lending through groups dominates in Morocco and Pakistan. Expansion was driven by a combination of the addition of branches in new markets and growth in existing markets through larger loans and new products. Increases in loan size were particularly pronounced in Nicaragua, BiH, and Morocco. But the most common characteristic in all four countries was that savings was neither a major

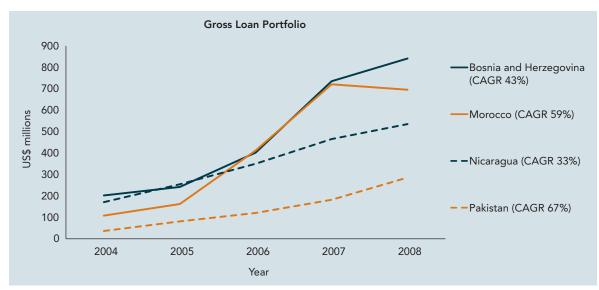
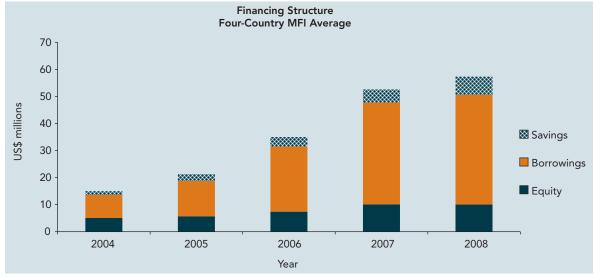


Figure 2: Growth of MFIs

Source: MIX data, Pakistan data from the Pakistan Microfinance Network.

1 CAGR represents the year-over-year growth rate over a specified period.





Source: MIX panel data.

service nor a large source of funds (see Figure 3). The ratio of savings deposits to outstanding loans in each country remained under 10 percent throughout the period, in sharp contrast to the MIX global average of 46 percent.²

Fueled by Abundant Funding— Especially Debt

During this period donors and social investors began to channel larger amounts of funds to MFIs across the globe, generating a significant supply "push" behind the growth story. The abundance of funding gave MFIs greater confidence as well as the capital to grow at a faster pace. The stock of cross-border investments in microfinance reached US\$10 billion by 2008, a seven-fold increase over the prior five years.³ Foreign investors concentrated their investments in a few select countries, including BiH and Nicaragua.⁴ Many MFIs relied on debt capital from foreign lenders to support their growth. In addition, MFIs sourced capital on their local markets through commercial banks and local apex funds. This was especially pronounced in Morocco where 85 percent of microfinance assets were financed by loans from commercial banks at the end of 2008.⁵ In Pakistan loans from a national apex fund and domestic commercial banks largely replaced earlier donor support. The emphasis on MFI borrowing contributed to a rise in financial leverage—the ratio of MFIs' total assets to their equity base—rising from 3 to 5.5 between 2004 and 2008 in our four focal countries.⁶

Initially, Financial Performance Remained Solid

Early in the growth period, MFI financial performance was strong in these four countries compared to global benchmarks. MFIs maintained

² Calculated based on data for 914 MFIs in 2008. Median is 29%.

³ CGAP funding flows research.

⁴ Fifty-one percent of development finance institutions'—government-sponsored financial institutions promoting economic development outstanding portfolio for microfinance as of December 2008 was concentrated in 10 countries (Russia, Bulgaria, Peru, Morocco, Serbia, Romania, Ukraine, BiH, Ecuador, and Azerbaijan).

⁵ Morocco Central Bank, December 2008.

⁶ Nonbank financial institutions in the MIX data set followed a similar trend, with a combined financial leverage ratio increasing from 2.9 to 4.25 for the same period.

good portfolio quality, stable net interest margins, and stable or increasing profitability. Combined with higher financial leverage, this performance improved return on equity in Morocco and BiH through 2007 as shown in Figure 4. This sound financial performance gave MFIs and investors reasons to be optimistic,⁷ though new risks were looming.

Later, Credit Quality Deteriorated and Growth Slowed

The growth increased outreach, which had long been sought in microfinance, but it was only after several years of growth that credit repayment problems began. Signs of industry stress were reported among industry players in 2007, but delinquency problems did not appear in MFI reports until early 2008 in Morocco, and in the other countries not until late 2008 or early 2009. Figure 5 shows the sharp rise in portfolio-at-risk (PAR)⁸ by June 2009.⁹ In three of the countries PAR exceeded 10 percent, the threshold used here to define a serious repayment crisis. Only BiH reported PAR of less than 10 percent, but this was on account of aggressive loan write-offs.¹⁰ This sharp rise in PAR is a sobering reminder of how volatile microfinance asset quality can be.

Some of the unique elements of each country's microfinance loan repayment crisis add to our understanding of what happened.

 Nicaragua's delinquency crisis affected all 22 major MFIs. A large pocket of delinquency developed in one northern region at the epicenter of the *no pago* (no payment) movement. Here a group of borrowers with



Figure 4: MFI Profitability

Source: MIX panel data.

⁷ Credit risk ranked only eighth in *Microfinance Banana Skins Report* 2007 (an annual publication on industry risk by the Center for the Study of Financial Innovation) during the credit boom but had risen to the top risk by the time the second survey was done in April 2009. http://www.citibank.com/citi/microfinance/data/news090703a1.pdf

⁸ PAR is calculated using the following sources: BiH—AMFI MCO Network data; Morocco—MIX data for 2004–2008 and JAIDA sources for June 2009 estimate; Nicaragua—Asomif Network data; Pakistan—MIX data for 2004–2008, CGAP estimate for June 2009.

⁹ Throughout this paper we use the standard measure of PAR of loans with payments more than 30 days late (i.e., PAR 30 days).

¹⁰ An MFI's PAR can be reduced by aggressively writing off loans. The decision to write off loans is usually at the discretion of an MFI's board. The June 2009 write-off ratios in the four focal countries were BiH, 4.1%; Pakistan, 3.66%; Morocco, 2.90%; and Nicaragua, 1.84%. Write-offs in Nicaragua were calculated using composite data from the MFIs Banex and Pro-Credit; for Pakistan the figure is derived from a sample of five MFIs.

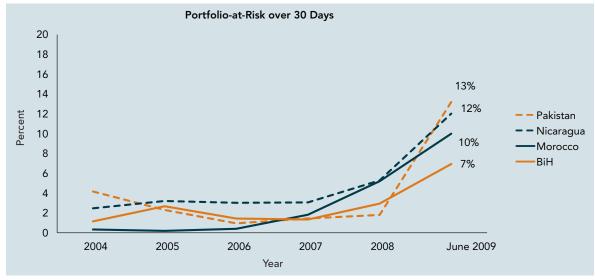


Figure 5: Rising Loan Delinquency in MFIs

Source: See Footnote 8.

strong political connections and support from the ruling party collectively decided to forgo their repayment obligations.

- In Morocco all 12 MFIs began to experience rising delinquency, but the problem spiked sharply when the merger and acquisition of a large distressed MFI became public.¹¹
- BiH's problems rose to the surface in late 2008 closely following the recession in Europe. Nearly all the 12 largest MFIs experienced a sharp rise in PAR, reaching 7 percent in June 2009. This figure would have been even higher except that MFIs had already begun to aggressively write off loans.
- In Pakistan microfinance was hit by a wave of borrower groups refusing to repay their loans in late 2008 in the central part of Punjab Province in semi-urban areas adjacent to the provincial capital of Lahore. The impact was initially concentrated in one MFI, but at least one other MFI has had a sharp rise in PAR in 2009, and it is likely that at least three MFIs lending in this same region now face significant repayment difficulties.

Context Matters...

Loan delinquency crises are complex events made more difficult to interpret by contextual forces. The four case studies show that three contextual forces affected the pace and scope of the crises: the macroeconomy, local events, and contagion factors. These contextual forces, however, were not the primary causes.

Macroeconomy: Global Economic Recession

Microfinance has earned a reputation as a resilient industry emerging largely unscathed through the East Asian crisis of 1997 and Latin American crisis of 2000. The global economic recession beginning in 2008 has been more widespread and severe. In some cases, microfinance borrowers have been affected by the economic downturn, job losses, and declining flow of remittances. Late payments on loans have recently risen across the microfinance industry. The MIX median for PAR rose to nearly 3 percent by December 2008, and the Symbiotics¹²

¹¹ See Reille (2010).

¹² Symbiotics is a microfinance investment intermediary based in Switzerland. Since December 2005 Symbiotics has produced the SYM 50 index based on monthly performance data from 50 large MFIs.

SYM 50 median PAR rose to over 4.5 percent by June 2009 (see Figure 6). But these increases were mild compared to the delinquency crises in our four countries, and many countries have managed to sustain strong repayment during the global economic recession. The four case studies reveal that the economic recession was an aggravating factor but not a principal cause of the repayment crises. Most of the MFI managers interviewed by CGAP didn't name the global crisis as the primary cause of their recent repayment problems.

Local Events: Politicians, Religious Leaders, and Borrower Associations

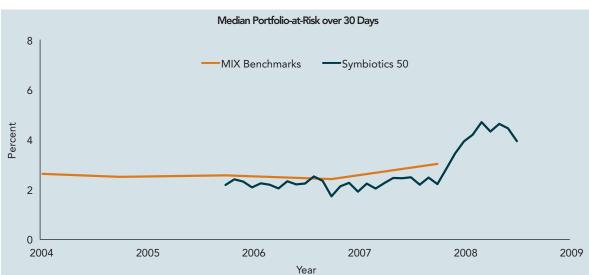
As microfinance grew, it inevitably attracted more attention, sometimes unwelcome attention. This has included resistance from local political leaders or religious institutions voicing objections, such as the poor should not have to repay loans, the poor are not in a position to negotiate favorable terms, women should not be borrowers, or simply, microfinance is not a part of the solution to the problems of the poor. Sometimes MFI practices draw criticism (e.g., unsavory loan collection methods). At times this has led to groups of borrowers being organized to speak out against MFIs and to even going so far as to refuse to repay

Figure 6: Loan Delinguency in MFIs Globally

loans. The no pago movement organized by a politically influential group of borrowers created a sizeable pocket of delinquency in a northern region of Nicaragua. In Pakistan a loan waiver proclamation by a local politician, and the spread of false loan waiver news stories, gave momentum to the mass default there. These local events influenced the crises and the public dialogue about the crises, but they were symptoms of underlying vulnerabilities within the microfinance industry itself and not root causes of the crises.

Contagion Factors: How Far and Fast Can Credit Crises Spread?

Repayment problems in microfinance have typically been more confined events that did not affect markets at regional or national levels. However, when news or rumors spread quickly through media or social channels, the chances of a wider and deeper repayment crisis increase and confidence in the sector can decline. The precipitous takeover of a large MFI in Morocco signaled that it might not be able to continue to provide loans, dampening incentives to repay. The discussion of this in the press accelerated the failure of this MFI and even affected other MFIs. The political support by President Ortega of the no pago movement at the



Source: Symbiotics, November 2009; MIX Benchmarks, December 2008.

	% active borrowers with loans from >1 MFI	Sources
Nicaragua	40 (2009)	Interview with director of Nicaraguan MFI
Morocco	40 (2007)	Central bank and credit information sharing among the five largest MFIs
	39 (2008)	
	29 (2009)	
BiH	40 (2009)	MFI clients survey, MiBOSPO
Pakistan	21 (2009) Nationwide	Pakistan Microfinance Network
	30 (2009) Districts with repayment crisis	

Table 1: Levels of Multiple Borrowing

beginning of the crisis received press coverage that widened and deepened the repayment problems in Nicaragua. In Pakistan, social networks aided by mobile telephone connections rapidly escalated a small local problem into a wider regional crisis across semi-urban, Punjabi-speaking, low-income communities. These social networks can also set the boundaries beyond which a crisis is unlikely to spread. The refusal of borrower groups in Pakistan to repay did not spread to rural areas or regions with cultures distinctly different from the crisisaffected areas.

The Heart of the Problems...

While many factors influence the course of a crisis, the case studies reveal that three vulnerabilities within the microfinance industry lie at the heart of the problems.

Concentrated Market Competition and Multiple Borrowing

Growth naturally introduced higher levels of competition in our four case countries. One factor that intensified the competition was that leading MFIs did not spread their services out evenly and instead competed more aggressively in concentrated geographic regions. This lending concentration increased the likelihood that clients borrowed from more than one MFI. In Morocco, the central bank estimated that 40 percent of borrowers had loans from more than one MFI just as the repayment crisis began. There are similar precrisis estimates for Nicaragua, BiH, and Pakistan. (See Table 1.)

Concentration is partly due to simple probability: as MFIs grow they are more likely to run into other MFIs. But there are deliberate decisions by MFIs that reinforce this tendency. MFIs often devise strategies that prioritize markets with greater economic activity and higher population density, increasing the likelihood of overlapping with other MFIs targeting those same areas for the same reasons. In Pakistan and Morocco it had been a common practice among some MFIs to follow other MFIs into local markets so that they can lend to the same borrower groups. Early entrants are the first to screen and train new borrowers whereas later arrivals can skip over these up-front preparatory steps. Managers report that this practice lowers client acquisition costs,¹³ at least in the short run.

13 This practice makes an MFI's expansion costs appear lower and more appealing to prospective investors, but it understates the likely future costs once the MFI begins to expand into untouched new markets.

Multiple borrowing is not a new phenomenon. As highlighted in Portfolios of the Poor, poor households regularly borrow from multiple sources to smooth their cashflows (Collins, Morduch, Rutherford, and Ruthven 2009). Competition enables clients to benefit from wider choice as microfinance transforms from a sellers' to a buyers' market. As one microfinance leader in India remarked: "Remember that until 2-3 years ago, customers had no choice" (Srinivasan 2009). By accessing loans from several MFIs or alternating between loans, a borrower is less constrained by the rigid loan repayment schedules typical of microfinance loans. Some evidence show that multiple borrowing may even be associated with better repayment rates in some environments (Krishnaswamy 2007).

While the benefits can be substantial, competition can introduce new market dynamics that are not always easy to see. One expert notes: "The popular forms of microcredit have thrived precisely because they imposed restraint on both lenders and borrowers, such as through joint liability and those rigid weekly payments.... However, the arrival of *competition* has at times severely tested these methods by enabling people to quietly borrow from more than one MFI at a time" (Roodman 2009).

Growth in our four countries introduced two new dynamics that altered basic market behavior.

Borrowers are less dependent on a single MFI. One of the underlying premises of microfinance is that borrowers repay their loans in order to sustain a relationship that allows them to get another, often larger, loan. This delicate relationship between lender and borrower can be gradually undermined as ever higher levels of multiple borrowing take hold in a crowded market. Borrowers can default with one MFI, whether by choice or out of sheer necessity, and still retain their borrowing relationship with other MFIs. They may not even have much incentive left to try to work things out with the lender. The balance of MFI to borrower relationships was even more delicate in the four countries since the relationships were almost exclusively for loans and did not include deeper ties around savings, other financial services, or even provision of nonfinancial services. The diminished incentive to repay means that late payments are more likely to occur and, in some cases, to gain momentum leading to a larger repayment crisis.

Borrowers can borrow larger total amounts than before. With more choices, borrowers have the option to increase their total borrowings. Many MFIs, especially in group-based lending, keep their loan sizes small expecting that their borrowers will be able to meet their full borrowing needs from additional sources. This tacit loan syndication lowers an MFI's exposure to any single borrower and also means borrowers have access to additional liquidity from which to repay their various loans. In these ways multiple borrowing can be beneficial to borrowers and the overall market.

Yet these same conditions also make it more likely that some clients will begin to borrow amounts beyond their means. In our focal countries borrowers often moved from having no choices of formal credit to having several choices within a few years, rapidly increasing their ability to borrow more. The common practice of gradually raising loan sizes to ensure borrowers remain within their repayment limits is less useful as a risk management tool when borrowers can easily raise their total borrowings from multiple sources. A book about the credit crisis of 1999 in Bolivia made an apt analogy, "Apparently credit is like good food: when seated at the table in front of a feast, many people eat too much and regret it later ... " (Rhyne 2001). The wide range of credit options can lead some borrowers to take on repayment obligations that exceed their cashflow. While it is difficult to precisely define when a borrower becomes over-indebted,¹⁴ or to measure informal

credit obligations, it is clear that many borrowers' total debt exposure increased significantly in our four countries. This was particularly true in BiH and Morocco. A study estimated that 16 percent of borrowers in BiH reported being close to exceeding their repayment capacity (EFSE/MFC 2008). An MFI manager in BiH remarked in retrospect, "We gave clients more than they could handle. At the time some of them could pay but now because of the economy they can't."

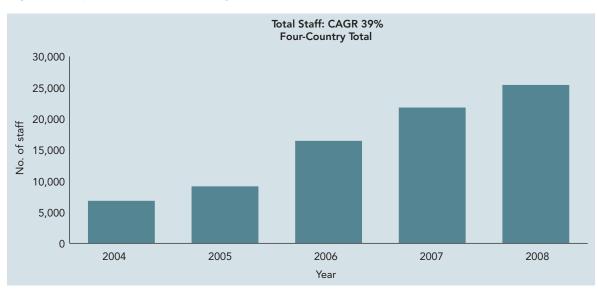
The four case countries illustrate how concentrated lending and competition, particularly when introduced rapidly, can diminish incentives to repay and can weaken the risk-mitigating effects of MFI loan size limits. Subtle changes in repayment incentives and amounts of borrowing can change market dynamics and potentially lead to repayment crises. In some circumstances MFIs adapt to these changes and manage risk well. This has been the reputation of Bolivia over the last decade following a repayment crisis in 1999, for example. But our four case countries show that more competitive market conditions can increase credit risks.



Overstretched MFI Systems and Controls

As growth kicks in MFIs are stretched in new ways, and three kinds of capacity gaps were found in our case countries.

Adding large numbers of staff in a short time can mean new staff are not well prepared for their jobs. MFIs must recruit, train, and promote large numbers of staff to grow. MFIs in the four countries added nearly 40 percent new staff each year. MFIs in Pakistan had the largest expansion of staff, with a net increase of 9,600 individuals from 2004 to 2008. Under normal conditions, staff might receive three to six months of on-the-job training before assuming new responsibilities. Rapid growth requires MFIs to assign staff more quickly into responsible positions, sometimes resulting in less care being taken in recruitment, training, and preparation. Managers also reported that staff shifted from one MFI to another more frequently as demand for new staff across MFIs escalated. Maintaining a consistent staff culture is more difficult in growth environments.¹⁵ (See Figure 7.)



Source: MIX data, Pakistan data from the Pakistan Microfinance Network.

14 Over-indebtedness is usually defined as when a borrower's repayment obligations of loan principal and interest exceed his or her cashflows.

15 MIX data do not show any discernable patterns in the total borrowers-to-staff ratios. We speculate that this is due to the rapid introduction of new staff who begin with few clients which is blended together with the higher productivity of more experienced staff. The two factors combined may largely cancel each other out for significant stretches of time during periods of higher growth.

Rapid growth places a higher premium on a strong middle management cadre. Most strong MFIs have established a sound head office but few have the requisite depth at a middle-management level to support rapid growth. When an MFI is still small, the head office can provide direct oversight of field operations. Rapid growth changes this, as senior management must deal with increasing pressures from external stakeholders, such as investors and regulators, even as their operations grow. It puts a premium on capable mid-level managers to oversee more distant large-scale operations. Typically, frontline branch staff are promoted to fill middle-management positions. These newly minted middle managers may be experienced in sales and loan recovery, but they must make a switch to the different skills and outlook required for management. Looking back, an MFI manager in Pakistan regrets overburdening regional managers with supervision responsibilities for as many as 75 branches. This MFI is rethinking its entire middle-management approach. Another manager in Pakistan, whose MFI appears to have avoided many of the worst repayment problems, noted, "Any organization that grows beyond its supervisory capacity can end up facing high defaults."

Growth strains internal controls that are critical to maintain discipline and minimize fraud. Inadequate internal controls were cited as the most common weakness by MFIs in BiH, Morocco, and Nicaragua. From 2005 to 2008 the internal audit staff of a leading MFI in Morocco doubled whereas the total staff grew fivefold. Straining to meet growth targets combined with less strict oversight compliance undermined internal controls. MFIs in Pakistan failed to effectively implement policies requiring visits to the borrowers' homes and did not enforce rules to ensure that loans were disbursed directly to the end-borrowers. Looser internal controls created gaps that led to lapses in credit discipline described in the next section. In Morocco a leading MFI grew by 150 percent in 2006 with an obsolete management information system producing misleading reports contributing to the delinquency crisis soon after.

In the countries that have already experienced deteriorations of credit quality MFIs acknowledge that their internal capacity did not keep pace. As an MFI director in BiH remarked, "We were focused on competing instead of building our capacity." An investor added, "These MFIs were growing so rapidly, they didn't have time to put proper risk management in place, and they didn't see the downturn coming."

Erosion of MFI Credit Discipline

In growing and competitive markets MFIs are likely to take more risks to acquire new customers and expand their product offerings. An MFI manager in BiH recalled, "There was just something in the air to compete. Other MFIs started to come to our region and to take a piece of our pie, so we decided to jump and do the same things." The attitudes and priorities of MFI managers filtered down to frontline staff who were given short-term focused performance incentives that emphasized growth and market share. In some cases these incentives came at the expense of credit discipline and contributed to the later delinquency crises.

MFIs intent on making profits and growing fast emphasize operational efficiency. Managers search for cost savings by reducing the frequency of group meetings, streamlining borrower analysis, or using new delivery infrastructure. Often these new credit approaches are popular with clients who can access services even more quickly and easily. However, these changes in credit underwriting and delivery must be balanced with an accurate assessment of a borrower's credit capacity, which requires sound knowledge of the behavior and livelihoods of clients. One of the risks of growth is that MFIs may neglect customer services and relationships, even losing the face-to-face relationships with their clients that are critical to credit quality.

MFIs in Morocco and Nicaragua increased loan sizes between 2002 and 2008 by 132 percent and 68 percent, respectively. These increases were due to a greater focus on individual small business lending and the addition of new housing and consumer loans to existing borrowers. Some MFIs in Morocco and BiH rushed to develop new products, but did so without sound borrower assessment tools or proper staff training. An International Finance Corporation (IFC) study¹⁶ calculated that 40 percent of the delinquency in Morocco was due to changes in loan policies, such as loan size increases and the introduction of new products. Shifting to individual lending also requires more skilled analysis of borrowers' cash flows than group approaches, and introducing individual lending has been challenging in microfinance under the best of circumstances.

In the group-lending approach in Pakistan there was also a troubling rise in the use of informal agents to manage groups. Loan officers focused on meeting volume targets increasingly delegated loan processes to these female agents who began to amass loans from multiple MFIs. In some cases the borrowers listed in the group never received any loans. The widespread refusal to repay loans, which began in 2008 in Pakistan, was driven by these agents who had gained unusual power over the entire lending process. Over time the relationship of loan officers with borrowers had weakened to such an extent that when the agents revolted against the MFIs it became much harder to recover loans (Burki 2009). The borrowers, where they existed, were controlled by agents who did not have the same loyalty to the MFI as loan officers did.

Staff incentives are effective for improving efficiency and overall MFI performance, but they can also have unintended effects. Incentive schemes normally measure and reward lending volumes and portfolio quality monthly or quarterly. Staff are tempted to increase their short-term remuneration, sometimes at the expense of healthier, longterm client relationships. Under pressure to meet targets, and with limited supervisory oversight, frontline staff occasionally resort to unsavory collection practices that do long-term damage to client relationships. There are few examples of staff incentive schemes that incorporate long-term client satisfaction as a meaningful indicator.¹⁷ As one MFI manager in BiH remarked looking back on recent repayment troubles:

We tolerated some credit officers that went overboard. They were overstretched because they wanted to earn more bonuses. But they also wanted our institution to be the first in the market. Some of our loan officers had caseloads of more than 600 clients two years ago. This was too much, and we are still working on reducing caseload.

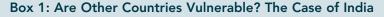
Target-driven, high growth can tempt MFIs to relax their lending discipline to reach volume and increase credit risk. These problems often grow undetected for some time, making MFIs susceptible to a larger scale delinquency crisis.

The Role of Market Infrastructure

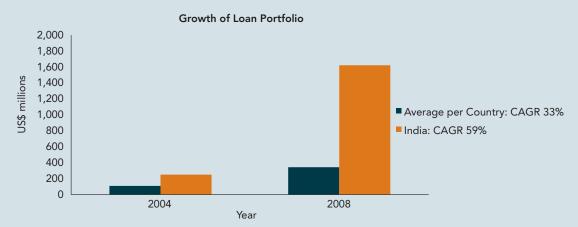
Over the past decade significant investments have been made to develop a robust industry market

16 IFC private research, November 2008.

¹⁷ IFMR Trust in India is testing client wealth measures as the basis for staff incentives.



India is home to the fastest growing MFIs in the world. A net 8.5 million active borrowers were added in the fiscal year ending March 2009. Within India there is considerable debate about whether a repayment crisis is possible. At the December 2009 Srijan investors conference panelists debated "Microfinance and Sub-Prime: Is the Comparison Real?" There is no evidence in asset quality data of any widespread repayment crisis in the fiscal year that ended in March 2009. Nevertheless, a number of industry analysts have highlighted industry vulnerabilities.



Source: MIX panel data.

What is the extent of multiple borrowing? India is a huge market with a low total penetration rate, but half of all MFI lending is in only three of India's 28 states and further concentrated within those three states. The levels of multiple borrowing from formal sources go up even higher if the loans of the large-scale self-help group systems are factored in. A recent delinquency outbreak in one part of Karnataka State in early 2009 occurred in towns where more than half a dozen MFIs were lending. At the same time, efforts are underway to push expansion into underserved regions. This geographic diversification may reduce the levels of lending concentration and possibly mitigate some risks. Recognizing the need, some of India's largest MFIs have recently formed an association that aims to invest in a credit bureau and enforce caps on the number of loans and amounts MFIs can lend to any individual.

Is institutional capacity overstretched? Indian MFIs are subject to significant scrutiny from their private equity investors who often undertake more rigorous due diligence than many donor- or government-funded investments. At the same time, the growth is unprecedented. Since 2005 Indian MFIs have grown their total staff numbers more than fourfold, adding nearly 20,000 net new staff in 2008 alone, according to MIX data. The founder of one of India's leading rating agencies recently noted that his team finds branches where trainee managers are training fresh staff.^a Growth is still heavily driven by the largest five organizations, but the next 10 largest MFIs are also growing fast.

Are MFIs losing credit discipline? Indian MFIs rely on group lending and have not ventured into new loan products on a large scale. There are reports of sharp rises in loan sizes in some places, as well as increasing loan officer caseloads, and the use of agents to organize groups (Srinivasan 2009). CRISIL Ratings^b notes a link between growth pressures and loosening credit standards, such as reduced waiting time for loans, no longer staggering initial loan disbursements among group members, and fewer post-disbursement borrower checks. However, the most recent industry data from March 2009 continued to show solid asset quality.

Views within India on vulnerabilities in microfinance vary widely. One MFI manager commented on the recent troubles in Karnataka State, "These are external disturbances that do not change the underlying credit quality or the credit behavior of the consumers" (Srinivasan 2009). The CRISIL report strikes a more cautionary note, "MFIs risk management practices have weakened over the past couple of years on account of a shift in focus towards business growth and network expansion.... The overall asset quality of MFIs is healthy; however, this is expected to decline marginally."

Notes:

a. Statement by Sanjay Sinha, managing director of M-CRIL, 27 October 2009, New Delhi at the Microfinance India Summit. b. http://www.crisil.com/index.jsp

infrastructure to provide investors and MFIs with accurate and timely information on microfinance performance. Reliable and comparable reporting on MFIs is essential to assess risks and opportunity. Market infrastructure investments include disclosure standards on financial performance, standards for external audits, external ratings, and credit information bureaus (CIBs). Social performance assessment tools are increasingly available and can offer insight into client satisfaction and can improve credit risk management. More progress and investment is needed, however, to keep pace with rapid changes in microfinance markets. Growth has exposed vulnerabilities in microfinance that market infrastructure initiatives must take into account in the future. A recent CGAP publication notes that "...MFIs operate with risks that investors need to be concerned about. Unfortunately, external audits, ratings, evaluations and even supervision often fail to identify the primary risk-faulty representation of portfolio quality ... " (Christen and Flaming 2009).

External Audits. According to MIX, the quality of MFI audits improved as auditors familiarized themselves with the microfinance business and built their expertise in this growing market. A number of audit firms carved out specialty groups to service the MFI market. The presentation of MFI financial statements improved considerably, and over 250 MFIs now have financial audits compliant with International Financial Reporting Standards. Yet it is unreasonable to expect that financial audits alone can reliably assess the quality of MFI credit portfolios. Audits provide a professional review of financial statements, accounting policies, and internal control. But microfinance audits often do not include reconciliation of loan accounts with a meaningful sample of clients nor can audits adequately assess the underlying quality of many thousands (in some cases millions) of outstanding

loans. Essential as they are, audits did little to detect or mitigate the crises in our four focal countries. It is unlikely that standard audits would ever be able to provide warning of large-scale repayment crises in time.

Ratings. Ratings by mainstream financial sector rating agencies as well as by the four specialized microfinance rating agencies¹⁸ have become common in microfinance. Collectively these agencies completed 450 microfinance ratings in 2008. The methodologies used by specialized rating agencies offer insightful assessments of MFI institutional performance. However, MFI ratings preceding the repayment crises in the four focal countries did not emphasize strongly enough the risks and vulnerabilities discussed in this paper. The ratings of two collapsed MFIs in Nicaragua and Morocco failed to identify weaknesses in lending methodology and internal controls. The ratings in BiH more consistently highlighted competition and multiple borrowing, but continued to give MFIs strong ratings, with the largest seven MFIs receiving A or A- ratings. A financial rating agency in Pakistan gave a BBB+/A-3 grade with a stable outlook to an MFI that, within 12 months, was in a serious repayment crisis.

Rating agencies should give more weight to business environment and market dynamics, but it is unlikely that standard ratings approaches can offer reliable advance warnings of deteriorations in portfolio quality. It is even more important for MFI managers and investors to step up their own due diligence to better assess credit and market risks.

Portfolio Testing. The limitations of standard audits and rating tools to provide advance warning of possible repayment crises mean it is increasingly important for MFIs and their investors to use additional portfolio quality assessment measures.

More frequent use of portfolio testing tools, such as those developed by CGAP and MicroSave,¹⁹ conducted by appropriately skilled teams would enhance confidence in microcredit portfolio quality reports. Rigorous portfolio reviews are not cheap, but they offer a tool to help mitigate risk and build robust institutions. In a growing microfinance industry with ever more at stake, the time has come for more widespread and regular use of such tools.

Credit Information Bureaus. CIBs, which provide credit histories of individual borrowers, are still new in microfinance, and only a handful of countries have well functioning CIBs serving the microfinance industry. In our four focal markets, only Nicaragua had well-functioning CIBs, but even Nicaragua was hampered by the separation of CIBs for regulated and nonregulated MFIs. In Pakistan only microfinance banks must submit data to a CIB but this leaves out nongovernmental organizations that still service the largest number of microfinance borrowers. Morocco and BiH began CIB projects in 2005, but they became operational only after the repayment crises had already started.

Almost without exception microfinance managers who have lived through repayment crises wish they had access to a well-functioning CIB much earlier. As one MFI leader in Nicaragua said, "Don't wait until the problems are there before putting a credit bureau in place." In our four countries precrisis attempts to strengthen CIBs were not effective, and it was only after the crises erupted that CIB initiatives have gained momentum as MFIs finally feel the need to make this investment. Experiences show that CIBs are no longer a luxury but are becoming essential for credit risk management. In increasingly competitive markets, CIBs provide critical information on clients' debt exposure and repayment behaviors that even the very best MFI cannot generate alone. CIBs create

the right kind of incentives for loan repayment, and they facilitate access to finance by building client credit histories. Even so, the benefits should not be overstated. CIBs are not a substitute for sound credit methodology or credit discipline. A CIB alone is not sufficient to prevent the dangers posed by reckless MFI behaviors.

Conclusion: What Are the Lessons Microfinance Should Take from These Recent Repayment Crises?

This Focus Note sheds light on recent repayment crises affecting growing microfinance markets in Nicaragua, Morocco, BiH, and Pakistan. The case studies show that external forces, such as macroeconomic conditions, local politics and events, and contagion, can all affect the speed and spread of a delinquency crisis. However, these contextual factors, including the recent global economic recession, were not the primary causes of the repayment crises. Instead three kinds of vulnerabilities prevalent within these growing microfinance markets were at the heart of the problems: lending concentration and multiple borrowing, overstretched MFI capacity, and a loss of MFI credit discipline.

These four cases of repayment crises have arisen recently in what remains a wider microfinance success story. Microfinance has established that it can grow and sustain high asset quality and financial returns. It can attract social and commercial investors and offer valued services to large numbers of poor people. The growth of microfinance brings many welcome, indeed essential, benefits to the underserved poor.

Large-scale repayment crises, like the ones described in this paper, have been rare but they are not new in microfinance. There is a good historical track record of adaptation and response.

19 http://www.cgap.org/p/site/c/template.rc/1.9.36521/, http://www.microsave.org/toolkit/loan-portfolio-audit-toolkit

Several high-profile markets, such as Bolivia, have experienced significant episodes of repayment problems.²⁰ The response to these earlier crises ensured that the industry adapted to changing market conditions and client demands.

The four more recent crises discussed in this paper also offer lessons we can use to build a stronger microfinance industry in the years ahead. MFI managers, MFI investors, and policy makers should give more attention to the growth model of microfinance. In the first decade of this century, the focus was on expanding access to services. As a result, millions of clients have gained access to microcredit, thanks to high-growth institutions fuelled by abundant funds. In the next decade, the focus should be on **sustainable growth**. To help achieve this we offer three specific recommendations:

- In an increasingly competitive environment, MFIs should balance their growth objectives with the need to improve the quality of client services and ensure the long-term sustainability of client relationships. More emphasis will be needed to regularly assess client satisfaction and the behavioral dynamics of markets.
- Credit information bureaus are an essential component of the market infrastructure for microfinance. CIBs alone will not prevent

delinquency problems, but they are critical to improving credit risk management and to managing multiple borrowing. Their development and wide use should be accelerated on a global basis even before microfinance markets become highly competitive or over-concentrated.

 Financial access mapping through the provision of reliable information on the geographic and socioeconomic penetration of microfinance services would help identify both underserved and saturated markets. Such data provided on a regular, timely basis can help identify risks and opportunities in certain geographies, empowering MFI managers, investors, and regulators with useful information.

These recommendations on their own would strengthen the microfinance industry in many countries. But there is a wider lesson and call for action. The recent delinquency crises are a reminder that microfinance remains a risk management business. The microfinance industry can justifiably emphasize its strong historical financial and social performance. Yet new risks and challenges are being discovered as microfinance develops. MFI managers, investors, and regulators should look for and be open to discussions of these new risks and work to find the most appropriate mitigation measures.

20 Bolivia experienced a microfinance repayment crisis in 1999 following several years of rapid expansion.

References

Burki, Hussan-Bano. 2009. "Unraveling the Delinquency Problem (2008/9) in Punjab." MicroNote No. 10. Pakistan Microfinance Network.

CGAP. 2009. "CGAP Funder Survey 2009." Washington, D.C.: CGAP. http://www.cgap.org/ gm/document-1.9.40544/Funder%20Surveys%20 Snapshots%202009%20Global.pdf

Christen, Robert, and Mark Flaming. 2009. "Due Diligence Guidelines for the Review of Microcredit Loan Portfolios: A Tiered Approach." Technical Guide. Washington, D.C.: CGAP.

Collins, Daryl, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven. 2009. Portfolios of the Poor: How the World's Poor Live on \$2 a Day. Princeton, N.J.: Princeton University Press.

EFSE/MFC. 2008. "Pilot Study: Access of Low-Income Households to Financial Services in BiH."

Holtmann, M., et al. 2002. "Developing Staff Incentive Scheme." Microsave. http://www. microfinancegateway.org/p/site/m//template. rc/1.9.29659

Holtmann, M., and M. Grammling. 2005. "A Toolkit for Designing and Implementing Staff Incentive Schemes." Microsave. http://www. microfinancegateway.org/p/site/m//template. rc/1.9.29429 Krishnaswamy, Karuna. 2007. "Competition and multiple borrowing in the Indian microfinance sector." Center for Microfinance, IFMR, Chennai. Working Paper.

Lascelles, David. 2008. *Microfinance Banana Skins* 2008: *Risk in a booming industry*. Center for the Study of Financial Innovation. http://www.citibank. com/citi/microfinance/data/news080303b.pdf

———. 2009. Microfinance Banana Skins 2009: Confronting crisis and change. Center for the Study of Financial Innovation. http://www.citibank.com/ citi/microfinance/data/news090703a1.pdf

Reille, Xavier. 2010. "The Rise, Fall, and Recovery of the Microfinance Sector in Morocco." Brief. Washington, D.C.: CGAP. http://www.cgap.org/ gm/document-1.9.41164/Morocco_Brief.pdf

Rhyne, Elisabeth. 2001. "Mainstreaming Microfinance: How Lending to the Poor Began, Grew and Came of Age in Bolivia." Kumarian Press.

Roodman, David. 2009. Microfinance Open Book Blog. Chapter 7. http://blogs.cgdev.org/open_ book/.

Srinivasan, N. 2009. *Microfinance India State of the Sector Report 2009*. Sage Publications India.

ФССАР

No. 61 February 2010

Please share this Focus Note with your colleagues or request extra copies of this paper or others in this series.

> CGAP welcomes your comments on this paper.

All CGAP publications are available on the CGAP Web site at www.cgap.org.

CGAP 1818 H Street, NW MSN P3-300 Washington, DC 20433 USA

Tel: 202-473-9594 Fax: 202-522-3744

Email: cgap@worldbank.org © CGAP, 2010

The authors of this Focus Note are Greg Chen, Stephen Rasmussen, and Xavier Reille. The Focus Note was written with research support from Christoph Kneiding and Meritxell Martinez. The authors would like to thank Ann Duval for her analysis on BiH and Adrian Gonzalez (MIX), Sarah Forster (Geoeconomics), and Rich Rosenberg and Jeannette Thomas (both at CGAP) for extensive comments and guidance in writing this Focus Note.

The suggested citation for this Focus Note is as follows:

Chen, Greg, Stephen Rasmussen, and Xavier Reille. 2010. "Growth and Vulnerabilities in Microfinance." Focus Note 61. Washington, D.C.: CGAP, February.

