Ending the Microfinance Crisis in Morocco: Acting early, acting right

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## ABBREVIATIONS

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<tr>
<td>APP</td>
<td>Agence du Partenariat pour le Progrès</td>
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<td>CDG</td>
<td>Caisse de Dépôt et de Gestion</td>
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<td>CGAP</td>
<td>Consultative Group to Assist the Poor</td>
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<td>DFI</td>
<td>Development Finance Institution</td>
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<td>FBP (MC)</td>
<td>Fondation Banque Populaire (pour le Micro-Crédit)</td>
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<td>FONDEP</td>
<td>Fondation pour le Développement local et le Partenariat</td>
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<td>FNAM</td>
<td>Fédération Nationale des Associations de Microcrédit au Maroc</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>MAD</td>
<td>Moroccan Dirhams</td>
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<td>MENA</td>
<td>Middle East and North Africa</td>
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<td>MCC</td>
<td>Millennium Challenge Corporation</td>
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<td>MFI</td>
<td>Microfinance Institution</td>
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<td>MIS</td>
<td>Management Information System</td>
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<td>MSME</td>
<td>Micro, Small, and Medium Enterprise</td>
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<td>NBFI</td>
<td>Non-Banking Financial Institution</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>PAR</td>
<td>Portfolio At Risk</td>
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<td>RMS</td>
<td>Réseau de Microfinance Solidaire</td>
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This project would not have been possible without the support and cooperation of so many. Thanks to Youssef Bencheqroun and the staff at Al Amana, Mohammed Allouch and the staff at Attawfiq, and Mouatassim Belghazi, Driss Bennani, and the staff at FONDEP. Without you, this project would not have been possible.

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Daniel Rozas, Karine Pinget, Mohammad Khaled, and Sarah El Yaalaoui
It has been nearly six years since the term “microfinance crisis” first appeared in the context of Morocco. Up until then, the microfinance sector in the country had been regarded as a beacon of the global microfinance movement, among the ranks of Bolivia and Bangladesh – an example for all, and for the MENA region in particular. Since then, we’ve seen a full inversion of the term. To this day, Moroccan microfinance is more often than not grouped under the heading of “microfinance crisis,” along with Bosnia, Nicaragua, and Andhra Pradesh, India.

It’s time we set things right. Of course, Morocco had a crisis in 2009. But it was far different than the examples to which it is often compared. The figures most often cited in these comparisons are dominated by the collapse of Zakoura, a badly mismanaged institution that would have imploded with or without a broader downturn in the country’s microfinance sector. The experience of the country’s other Microfinance institutions (MFIs) has been altogether different.

For one, the downturn was remarkably brief – a year after the crisis, Morocco’s other leading MFIs had already begun to see major improvements in their portfolios, a large segment of which was recording performance figures identical to what we still see today, nearly five years on. By 2011, the crisis was effectively over.

This experience can be attributed to two key factors. First, unlike in other crisis markets, Moroccan MFIs, the government, and outside supporters reacted quickly:

They set up a credit exchange, a wholesale lender that could act as a lender of last resort, and carried out sober regulatory oversight that mapped a clear path out of the crisis while avoiding the type of meddling that greatly aggravated situations in other countries. Second, even at its peak, market saturation in Morocco never reached the levels seen in other crisis markets. Certainly, there was damage to repair, but it was far more manageable.

And yet, the situation in Morocco today continues to reflect a market still under the influence of post-crisis shock. Growth has returned, but only in the most recent quarters. For three years, both MFIs and their regulators have been guided by excessive caution, some of which remains in place today. For three years, the number of clients served remained unchanged. And with even the largest MFIs still organized as non-governmental organizations (NGOs), unable to transform into shareholder-owned institutions, the Moroccan microfinance sector remains a global anomaly, limited in its capacity to expand outreach or broaden product offerings.

It is time for the sector in Morocco to shake off its post-crisis slumber, embrace the many opportunities ahead, and once again be that beacon for microfinance that lights the path for others in the Middle East and North Africa (MENA) and the world at large.

Xavier Reille
Manager of Financial Institution Group Advisory Services in Europe, Middle East, and North Africa.
Since its remarkable rise and hard fall in 2008-09, much has been written about the microfinance sector in Morocco. As memories of what is often regarded as the Moroccan microfinance crisis recede, this report takes a look at how the sector has evolved since then. Using case studies from the three leading MFIs in Morocco – Al Amana, Fondation Banque Populaire (Attawfiq), and FONDEP – as well as a wealth of data from other sources, we seek to capture the lessons that can be learned from this experience. It is also an opportunity to deepen the understanding of how the crisis evolved and look ahead to future challenges and opportunities faced by the sector.

Morocco is regularly included in the pantheon of microfinance crisis markets – Bosnia, Nicaragua, and Andhra Pradesh – which together had a major negative impact on the sector’s reputation. However, the crisis in Morocco was both less severe and shorter than the markets to which it is often compared. Indeed, the most severe period of the crisis lasted just one year and the sector had stabilized by 2011.

This is not to minimize the impact the crisis, let alone to argue over its existence. The years leading up to 2008 featured most of the hallmarks of pre-crisis markets: rapid growth, aggressive competition, poor lending discipline, accompanied by poor governance, and lax controls. On the other hand, the level of multiple borrowing was well below that of the most heated markets, and overall microfinance penetration remained moderate. Moreover, the Moroccan crisis was defined by the crisis of one institution – Zakoura – without which the microfinance crisis in Morocco looks far less serious.

The year 2009 was a major inflection point for the sector in Morocco. That year, defaults of all loan types spiked across nearly all regions of the country and multiple borrowing played a major role: clients holding two or more loans accounted for nearly half of all defaults during the crisis.

However, 2009 was also the start of the recovery. It began with an IFC-commissioned sector-wide assessment by an outside consultant, which was completed in late 2008. Its findings of serious problems in MFIs’ portfolios provided the impetus for the leading MFIs – which previously had been driven by an aggressively competitive stance – to collaborate and rapidly deploy a credit data exchange. This allowed them to rapidly shrink the levels of multiple borrowing – from 37 percent to 20 percent within a single year. Meanwhile, the government quietly facilitated the merger between the fast-imploding Zakoura and the much stronger Fondation Banque Populaire, thus helping avert a potentially greater disaster.

The quick reaction paid off. By late 2009, about a year into the crisis, the performance of the lowest-risk loans (small amounts, short terms) had already stabilized. Improvements in more complex loans (longer terms, larger amounts) took longer, but those too stabilized by mid-2010. During this period MFIs were actively revising their lending policies, strengthening internal controls, and deploying methodologies aimed at collecting overdue loans. Staff compensation grew substantially beginning in 2010, and a concurrent increase in interest rates allowed MFIs to return to profitability in 2010.

From 2011 onwards, the MFIs focused their efforts on longer-term institutional development, including modifying staff bonus formulas to reflect the changed market conditions, implementation of new training methodologies, upgrades to risk management and governance, and further improvement of overdue recovery processes. Many of these changes were supported by a joint development program between the US and Moroccan governments that provided some $15 million in technical assistance to the sector during 2011-13, as well as by a number of development finance institutions.

The Moroccan microfinance crisis also differs from the rest of the “crisis pantheon” by the level of support the sector received from the Moroccan government, Development Finance Institutions, and other actors. Thus, unlike in India, where banks cut off funding to MFIs in response to the Andhra Pradesh crisis, Moroccan MFIs did not face the liquidity squeeze that could have lengthened and deepened the crisis. Many came into the crisis with long-term bank funding in place, and were further buoyed by the entry of JAIDA, a wholesale microfinance funder launched in 2009 that was well-positioned to play the critical role of funder of last resort.
The central bank, which assumed regulatory oversight of the MFIs on the eve of the crisis in 2006, provided another stabilizing force. Its internal control regulations promulgated in 2007 set the roadmap for the MFIs to begin improving their operations, while active on-site supervision insured that problems were being addressed.

No less important is what didn’t happen: Morocco’s political class avoided the kind of destructive opportunism that undermined the microfinance sector in both Nicaragua and Andhra Pradesh. It helped that the Central Bank’s active involvement and Morocco’s long-standing support for the sector prevented the type of regulatory and policy vacuum that might have otherwise allowed opportunist politicians to push an anti-microfinance agenda.

The microfinance sector that emerged in 2011 was stronger than it had been in 2007, just prior to the crisis: The level of multiple borrowing had been halved, lending methodologies and internal controls were strengthened, and competition was less aggressive. Despite this, the sector continues to be dogged by a seemingly perplexing shift in loan performance. Until 2008, loan delinquency rates at the leading MFIs were consistently below 1 percent, yet for the past five years, delinquencies have held steady at 3-4 percent for even the lowest-risk loans.

There are no easy explanations for this apparent change, but one comes out most prominently: simply put, the relationship between borrowers and MFIs has fundamentally changed. For a multitude of reasons – less fear of authority, a decline in the social standing of the MFIs, greater awareness of the actual impact of defaulting – borrowers default in greater numbers than they used to. That shift may seem concerning when seen in the context of pre-crisis levels, but in fact it should be welcomed – the market in Morocco has matured, and repayment rates have now converged to global averages. After all, a sustainable lending operation must allow for some level of default by poor clients who for reasons beyond their control (illness or simple bad luck) cannot honor their repayment obligations.

This new market reality should not be an obstacle that prevents the sector from meeting the needs of many poor Moroccans who continue to be financially excluded. And yet, despite having stabilized in 2011, MFIs in Morocco have been unable to expand their outreach, and the number of clients served has remained static for more than three years. Loan offerings remain essentially unchanged, and while new payment and insurance products are being piloted, they remain a minor part of operations.

Part of this stasis is a reflection of post-crisis hangover, with both MFIs and their regulator remaining excessively cautious. However, part of the reason is that the MFIs are all NGOs, and not by choice, but by government mandate. In this, Morocco stands alone in the world. Large financial NGOs, even in microfinance, are a rare breed, yet Morocco features 3 of the 15 largest microfinance NGOs in the world. It is also the only country where large NGOs wholly dominate the microfinance sector. Without forward momentum on institutional transformation, the market will likely remain stagnant, with limited scope for innovation or further development.

The path ahead has many questions yet. The country’s microfinance actors – MFIs, investors, and regulators – face challenging decisions. And while the lessons they gained during the crisis will be useful to others around the world, their best beneficiary is the country’s own sector, which can apply its lessons learned to its own continuing development.
“The Moroccan microcredit sector has enjoyed one of the most extraordinary growth seen in the microfinance industry... Driven by four leading MFIs – Zakoura, Al-Amana, Fondation des Banques Populaires, and FONDEP – in 2007, Morocco had one of the most vibrant and successful microfinance sectors in the world... MFI managers, funders, and even rating agencies were complacent and did not see the looming delinquency crisis coming.”

Xavier Reille

in The Rise, Fall, and Recovery of the Microfinance Sector in Morocco, CGAP, 2009
1 | INTRODUCTION
In the fall of 2008, the Moroccan microfinance sector underwent what in economics is referred to as a “Minsky moment” – the sudden realization that the market has overshot and that the good times are coming to an end. In this particular case, the Minsky moment was a specific event – the private circulation of an IFC study that found extensive problems with the portfolios of the country’s four largest MFIs, and one in particular – Zakoura.

This study picks up from Morocco’s Minsky moment. The MFIs at the time were beginning to see unequivocal signs that the market was shifting. The lead-up to this moment has been well documented: the reckless pursuit of growth, fed by an equally reckless influx of funding, both foreign and domestic, the high rate of multiple lending, poor lending standards and equally poor back-office and management information systems (MIS), and poor governance – all have been noted as causes of the crisis.

But the exact trigger for the crisis is less clear. A plausible hypothesis may point to the slowdown in economic growth and agricultural production in 2007 as the initial trigger for the rise in delinquencies. Though the economic slowdown was short-lived (recovery took a year), a pattern had been set in motion. As borrowers began to default, others followed – defaults begat more defaults.

How did the crisis unfold and how did the MFIs and the sector at large respond? What lessons can be drawn from that experience? And where do they go from here?

This is not the first effort to answer these questions, but it is a more in-depth view than has been previously possible. This paper does not repeat the work of others. Instead, from that Minsky moment onward, it focuses on the trajectory of the crisis, as well as the long-term response efforts of MFIs, regulators, funders, and others active in the microfinance sector in Morocco.

While this study is meant to cover the full Moroccan microfinance sector, due to constraints of time and availability of data, its primary focus is on the three largest MFIs in Morocco – Al Amana, Fondation Banque Populaire (Attawfiq) and FONDEP – that together represent about 90 percent of the microfinance portfolio in the country (these three MFIs are referred to as “the case study MFIs” throughout this report). Each of them provided full cooperation during multiple interviews and agreed to share detailed historical portfolio data. In addition, we had access to data from the credit data exchange, geo-mapping data from the Centre Mohammed VI, and input from a large number of actors and participants. To the extent possible, we have also made efforts to include the experiences of smaller institutions. Finally, it should be noted that the focus is limited to the microfinance sector, without addressing the financial inclusion activities of banks and other financial institutions.

This report is organized into three key sections: 1) a review of the main drivers and factors evident during the course of the Moroccan microfinance crisis (2008-11); 2) an examination of the key responses taken by the MFIs during the course of the crisis; and 3) a review of government actions and other market-level changes that affected the nature and trajectory of the crisis. We close with a look at the future prospects for microfinance in Morocco.

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1 GDP growth in 2007 was 2.7 percent - slowest since 2000, and agricultural production (value added growth) dipped 20 percent that same year. Both saw strong growth in 2008-09.
2 See esp. Nadine Chehade and Alice Negre, Lessons Learned from the Moroccan Crisis, CGAP 2013; others referenced in passim below.
2 | WHAT MAKES THE MOROCCO CRISIS DIFFERENT?
To understand the crisis in Morocco, it helps to put the country’s experience in context. The microfinance sector saw its first global downturn following the broader financial and economic crisis in 2007-08. In many countries delinquencies grew, while portfolios shrank. Some countries – Nicaragua, Bosnia and Herzegovina, and India – experienced much deeper crises. Morocco has often been mentioned alongside this group.

But Morocco is different and it’s worth asking whether including it within the pantheon of microfinance crisis countries is appropriate. While each of the three countries saw a broad-based crisis affecting a large number of MFIs, in Morocco the crisis was dominated by an erstwhile market leader, Zakoura. The problems at Zakoura were largely of its own making – its operations were run so poorly that the organization would arguably have collapsed with or without the help of a country-wide crisis (see Box 1 on pg 12: The fall of Zakoura). And without Zakoura, the sector’s performance looks much different.

**Figure 1:**
**Without Zakoura, Moroccan MFIs converge with global trends**
*Portfolio at risk > 30 days + Writeoffs*

![Graph showing Average PAR 30 + Writeoffs](image)

**Figure 2:**
**Return on assets**

![Graph showing Average ROA](image)

Source: MIX Market, Moroccan MFI financial statements; figures are averages among MFIs reporting to MIX during the relevant years
Consider the headline measure of any credit crisis—high loan defaults. Together, the four largest Moroccan MFIs follow essentially the same trends as MFIs in Bosnia and Nicaragua. All three countries show a two-year crisis peak period in 2009-10, with a foreshadowing of things to come starting in 2007 (figure 1). The recovery period for both Bosnia and Morocco has likewise been similar, with portfolios improving over 2011-12. However, when Zakoura is factored out, the remaining three MFIs show a combined delinquency rate that only once breaches the global average (2009), and subsequently follows it almost exactly.\(^3\)

The picture looks much the same for other indicators. For example, after excluding Zakoura, the three MFIs remained profitable every year except 2009, when they recorded an average loss of 0.3 percent (ROA), close to the global average, which was near zero that year (figure 2).

Averaging the performance of the three MFIs other than Zakoura obscures some substantial differences between them—during the most difficult year (2009), combined delinquencies and write-offs varied from just under 9 percent at FBP to nearly 18 percent at FONDEP. Nevertheless, even this peak figure was well below the market average in both Nicaragua and Bosnia. Without the impact of Zakoura, one would hesitate to place Morocco in the same company as these two countries.

Though the crisis in Morocco did not reach the same depth and breadth as in Bosnia, Nicaragua, and elsewhere, that does not mean that all was well with microfinance in Morocco. Even after excluding Zakoura, during the three years from 2006 to 2009, delinquency and write-offs at Morocco’s three other MFIs grew by nearly 1300 percent. The absolute figures may not have been as great as elsewhere, but the situation was a shocking experience for a sector used to seeing delinquency rates below 1 percent and profits three times higher. The Moroccan microfinance sector may not warrant inclusion in the microfinance “crisis pantheon,” but neither should it be ignored.

There’s evidence that a greater crisis may well have been avoided through the concerted response of the MFIs,

\[\text{Loan Losses} = \frac{\text{PAR}_30 + \text{cumulative writeoffs-post-writeoff recoveries}}{\text{peak portfolio (2008 for all except 2007 for Zakoura)}}\]

Source: MIX Market, MFI financial statements;

Figure 3:
Rapid growth only partly affected performance

Note that while excluding Zakoura greatly alters the performance metrics of the overall sector in Morocco, this is not the case for either Bosnia or Nicaragua, where removing the worst-performing MFI does not appreciably change the overall performance trends.
government authorities and other sector actors, and hence the lessons learned from this experience are all the more valuable.

The factors that brought about this market correction have been well-documented. Back in 2009, Xavier Reille stated it as directly as one could: “The causes of the crisis are well known and can be summarized in two words: unsustainable growth.” That finding remains true to this day.

Of course, the issue is not just growth alone. The nature of the growth was as important as the rate. Consider how growth affected the subsequent performance of the four main actors (figure 3). Zakoura’s growth was by no means highest, but its delinquency was. Meanwhile, the growth rate of Al Amana (88 percent) was only moderately higher than FBP (76 percent), yet its subsequent delinquencies were nearly double. While growth was an important factor, the rate of growth was not the sole reason why the growth was unsustainable. Factors such as loan officer compensation levels, ability to manage high-risk loans and multiple borrowers, and quality of internal controls and governance were all important contributors that placed Moroccan MFIs on an unsustainable path.

**BOX 1: THE FALL OF ZAKOURA**

No study of the Moroccan crisis and its after-effects can be complete without at least briefly revisiting the case of Zakoura, which stands at the epicenter of the crisis. As the most widely recognized and second largest MFI in the country, Zakoura’s failure was particularly damaging. But the problems it faced were largely endemic to Zakoura. Though the specific trigger that brought on its collapse may have been common with the rest of the market, it’s likely that Zakoura would have collapsed soon enough on its own.

The scale of the problems at Zakoura – extreme growth with minimal control, leading to vast fraud and an uncollectable portfolio – were far outside the norm of other MFIs in Morocco or anywhere else. In some respects, it might be compared to the failure of Corpsoal, an MFI in Colombia that failed from problems of its own making⁴. However, because of Zakoura’s size and the timing of its troubles, a speedy resolution was critical to prevent wider impact on the broader sector, which is exactly what was done. With government encouragement and support behind the scenes, Zakoura was absorbed by Fondation Banque Populaire – a smaller MFI with a large bank standing behind it.

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⁴ Marc Labie, La perennite des systems financiers decentralises specialises dans le credit aux petites et micro-entreprises. Etude du cas Corpsoal - Finansol en Colombie. Universite of Mons Hainaut, Belgium.
3 | CAUSE AND EFFECT:
EVOLUTION OF PORTFOLIO
PERFORMANCE, 2008-13
In late 2008, concerned with market developments, IFC commissioned a private study to examine developments in the Moroccan microfinance market. The study was conducted by a consulting firm, Oliver Wyman, which was granted access to detailed portfolio data from the four largest MFIs. The study produced some worrying findings, chief among them was that the MFIs’ portfolios were seeing an unprecedented rise in delinquencies, driven largely by a shift towards riskier loans.

The study found that larger and longer-term loans contributed to increasing delinquency, along with other risk factors, such as repayment schedules containing less frequent repayment dates. And yet, upon closer examination of the report’s findings, increasing delinquency from risky loan profiles rested chiefly on the outlier performance of Zakoura; at the other lenders, the loan profiles showed little to no influence on delinquency at the time.

Here we look at the evolution of the crisis through the lens of portfolio performance of the three largest MFIs that remained following Zakoura’s collapse (the case study MFIs). Loans disbursed in 2008 show the highest lifetime default rate1 (about 9 percent), which then steadily declines until it reaches a stable level (about 5 percent) for loans disbursed from 2011 onwards (figure 4). Throughout this period, origination volume remains roughly even, at about 120,000 loans disbursed per quarter by the three case study MFIs.

**Figure 4:**
Default rate of 3 case study MFIs, by disbursement period

![Default rate of 3 case study MFIs, by disbursement period](chart)

Source: Portfolio data from case study MFIs (Al Amana, Attawfiq and FONDEP)

However, the underlying shifts during this period show a more complex pattern. The crisis can thus be separated into three distinct periods:

**Phase 1 (late 2008-09):** The crisis starts with an across-the-board impact, hitting both high- and low-risk loans, throughout the country, irrespective of penetration levels or region type (rural or urban). Multiple loans account for 30-50 percent of defaults. In response, MFIs curtail lending by around 25 percent during the course of 2008. Defaults for low-risk loans decline by year-end 2008, but remain and even climb for high-risk loans and multiple borrowers.

**Phase 2 (2009-10):** Performance begins to improve for high-risk loans, while their share of the portfolio likewise grows. A strong regional component emerges, with high default rates in certain parts of the country, which can only slightly be explained by the level of penetration or nature of the region (rural/urban). During this phase, MFIs actively respond by reducing (but not cutting off) lending in the most affected areas, but overall lending levels return largely to historical levels.

**Phase 3 (2011-12):** As MFIs become better at managing higher risk loans, their performance approaches that of low-risk loans, and the overall portfolio risk continues to decline. Geographic hotspots remain, but far fewer than during earlier phases. Lending volumes remain steady (but not growing).

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1. Default rate here is the combination of loans that are written off or >30 days overdue as of year-end 2013. The default rate of a given vintage of loans is compared to disbursements during that period, on the basis of the number of loans, not amount disbursed. This definition of default rate is used throughout the text.
HIGH-RISK LOANS

High-risk lending\(^6\) was an important factor in the crisis, but it was not the loans themselves that were necessarily high-risk – the problem was the MFIs’ apparent weakness in managing those loans. Contrary to expectations, in response to the crisis, the three case study MFIs did not reduce their high-risk loan portfolio, but actually increased it. They were able to do this while simultaneously improving their performance.

In multi-factor statistical analysis, loan maturity was the strongest single predictor of default throughout the entire period of 2008-13. On its own, this should not be surprising – longer loans tend to be larger (another risk factor), and longer terms also mean more time for loans to fall delinquent. Surprisingly, though, the share of these long-term loans remained steady and even increased slightly throughout the downturn (figure 5), even as the performance of these loans varied across the years (figure 6).

While all loans disbursed in early 2008 had elevated default rates, the case study MFIs were able to improve the performance of their short-term loans (<18 months) within less than a year, so that the performance of short-term loans disbursed in early 2009 is nearly identical to those disbursed throughout 2010-2012. Improving the performance of longer-term loans (especially 18-36 months) took more time, though these too appear to have stabilized starting with loans disbursed in mid-2010\(^7\).

This sequential pattern of improving low-risk loans first and high-risk ones later shows up with other risk profiles as well, such as the performance difference between group (lower risk) and individual (higher risk) loans.

**Figure 5:**
Key loan characteristics, by disbursement period

![Loan Characteristics Graph](image)

**Figure 6:**
Default rate by loan maturity (months)

![Default Rate Graph](image)

Dashed lines represent vintages that haven’t reached maturity, showing default levels below their future end-state.

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\(^6\) For a more precise definition of high-risk lending in this context, consult the appendix.

\(^7\) Note that these metrics use end-state performance to compare loans originated during different periods. While comparisons of period-in-time metrics (such as PAR) would show a greater delinquency overhang for long-term loans, this is not a factor in the current analysis.
MULTIPLE BORROWING

The 2008 Oliver Wyman report found that multiple borrowing was widespread, with 39 percent of the combined portfolios consisted of clients with two or more concurrent loans. Although such multiple borrowing was not found to be contributing to higher delinquencies at the time, it was noted as a major source of concern.

Figure 7:
Multiple borrowing (percent of portfolio)

Source: IFC/Oliver Wyman (Morocco); MF Focus (AP); EFSE (Bosnia)

We now have more data to put multiple borrowing in perspective (figure 7). The 39 percent multiple borrowing rate in Morocco during the height of the crisis is well below the rates in other crisis markets. The rate in peri-urban Andhra Pradesh was 62 percent, while in Bosnia it was 81 percent – more than twice the level in Morocco. Equally important is the fact that Morocco had only modest exposure to clients holding four or more loans (4 percent) – a figure that was nine times greater in Bosnia (36 percent).

Figure 8:
Decline in cross-lending 2008-13 (active loans)

Source: Credit data exchange (Al Amana); *2010 Zakoura data not available

Data from the informal credit data exchange among the large MFIs shows that multiple borrowing between the three largest MFIs and Zakoura declined very rapidly, from 37 percent in 20088 to 15 percent two years later (figure 8). And for clients with three or more loans, multiple borrowing declined even more during the same period, from 13.6 percent to 1.3 percent.

8 The multiple borrowing figure of 37 percent is based on data from the same four institutions as the 39 percent figure from the 2008 O. Wyman report. The difference is most likely due to the timing of the data (31/12/2008 for current study; 31/10/2008 for O. Wyman).
About a quarter of this reduction can be attributed to changes in lending practices, which generally (though not always) prohibited making more than two loans to a single borrower. However, half of the decline in multiple borrowing came from the write-off of concurrent loans held by former Zakoura clients. The new lending practices ensured that the written-off loans would not be replaced by new multiple loans to borrowers.

**Figure 9:**
**Default rate of three case study MFI clients**

The change in the performance of clients holding multiple loans has been no less dramatic (figure 9). During the height of the crisis, at year-end 2009, clients with multiple loans were several times more likely to default on at least one of their loans than those holding a single loan (defaults to Zakoura are not counted here).

The impact of these defaults on the shape of the crisis is complex. During the height of the crisis in 2009, multiple borrowers accounted for 30-50 percent of all defaults to the case study MFIs, which was more than double their share of portfolio⁹. But from 2010 onwards, multiple borrowers were no longer a key issue, as multiple borrowers’ repayment rates became nearly identical to those with single loans.

One can extrapolate that the introduction of the credit data exchange has been a major factor in this shift. MFIs lend second and third loans to clients with less frequency than in the past, and when they do make such loans, they now are able to base their decision on much better knowledge of those clients’ existing obligations. Indeed, all three MFIs use the credit data exchange at multiple points during the client evaluation process and have implemented strict guidelines for lending to borrowers of other institutions.

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⁹ Because reporting of written-off loans to the credit data exchange is inconsistent, the range includes impact from defaulted loans that weren’t reported as written-off, as well as counting all written-off loans, without accounting for double-counting from earlier 2008 write-offs that are reported again during subsequent years. It’s likely that the actual figure is towards the mid-40 percent range.
MARKET PENETRATION

A high proportion of multiple loans in a market is often a symptom of a more basic problem – excessive credit penetration, which at its most basic level can be measured by the number of loans per population. In 2007, when the microfinance sector in Morocco was at its peak, the country had a microfinance penetration of 4.3 percent (e.g. 4.3 loans per 100 population). By 2013, following the failure and closure of Zakoura, that figure dropped to 2.5 percent. This is well below the rate of markets that experienced a crisis, with the lowest – Bosnia – having a penetration rate of 8.0 percent prior to the crisis.

However, these penetration rates are substantially skewed by multiple borrowing, both in Morocco and in many other countries. Thus, despite the seemingly large decline in loan penetration in Morocco, the number of clients declined far less. The number of one-loan clients (i.e. non-multiple borrowers) served by the largest MFIs declined by 20 percent from its peak in 2009. The remaining largest three MFIs were able to largely replace the loss of many of Zakoura’s clients following its collapse (figure 10).

Finally, if penetration had been an important factor in Morocco’s crisis, one might expect to find some relationship between penetration levels and default rates. That relationship exists, but it is weak. Even for loans disbursed during the height of the crisis in 2008-09, the combined penetration rate of the three case study MFIs in each commune or municipality10 in Morocco explained only 6-9 percent of the likelihood of loan defaults. (For additional analysis of loan performance trends during this period, please consult the appendix.)

Figure 10:
Number of active borrowers, 000s

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Population (000s)</th>
<th>MF Loans/Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bangladesh</td>
<td>150,448</td>
<td>15.7%</td>
</tr>
<tr>
<td>2</td>
<td>Mongolia</td>
<td>2,952</td>
<td>11.9%</td>
</tr>
<tr>
<td>3</td>
<td>Nicaragua</td>
<td>5,675</td>
<td>9.4%</td>
</tr>
<tr>
<td>4</td>
<td>Peru</td>
<td>28,675</td>
<td>8.8%</td>
</tr>
<tr>
<td>5</td>
<td>Bolivia</td>
<td>9,199</td>
<td>8.5%</td>
</tr>
<tr>
<td>6</td>
<td>Bosnia &amp; Herzegovina</td>
<td>4,552</td>
<td>8.0%</td>
</tr>
<tr>
<td>7</td>
<td>Vietnam</td>
<td>85,262</td>
<td>6.8%</td>
</tr>
<tr>
<td>8</td>
<td>Kosovo</td>
<td>1,805</td>
<td>6.5%</td>
</tr>
<tr>
<td>9</td>
<td>Montenegro</td>
<td>685</td>
<td>6.4%</td>
</tr>
<tr>
<td>10</td>
<td>Armenia</td>
<td>2,972</td>
<td>6.4%</td>
</tr>
<tr>
<td>11</td>
<td>Cambodia</td>
<td>13,996</td>
<td>5.7%</td>
</tr>
<tr>
<td>12</td>
<td>India</td>
<td>11,29,865</td>
<td>5.3%</td>
</tr>
<tr>
<td>13</td>
<td>Paraguay</td>
<td>6,666</td>
<td>4.9%</td>
</tr>
<tr>
<td>14</td>
<td>Ecuador</td>
<td>11,756</td>
<td>4.5%</td>
</tr>
<tr>
<td>15</td>
<td>Colombia</td>
<td>44,380</td>
<td>4.1%</td>
</tr>
</tbody>
</table>


10 Smallest-size administrative districts in Morocco, ranging in population from less than one thousand to nearly half million. Communes are rural, whereas municipalities are urban districts (large cities are subdivided into arrondissements). As of the 2004 census, there were 1,532 communes, municipalities, and arrondissements in the country.
4 | CHANGING TIMES, CHANGING INSTITUTIONS
The downturn in Morocco may not have been exceptional by global standards, but its impact on the sector and the leading MFIs has been very large. Over the course of the downturn, the leading MFIs in Morocco underwent a number of changes, including sharing client data with competitors, increasing staff compensation, raising loan interest rates, strengthening the lending process and implementing new collections methodologies for delinquent loans, upgrading internal control and risk management capabilities, as well as improving governance.

A key part of the response has been at the sector level, where increased regulatory supervision, efforts to insure ongoing liquidity for the MFIs, and timely identification of problems and coordination of responses all combined to mitigate the impact of the downturn and avoid a potentially broader crisis. During later stages of the crisis, a large-scale effort to provide technical assistance subsequently helped put the sector on a stronger footing.

However, not all responses have been effective. The sector’s official representative body – Fédération Nationale des Associations de Microcrédit au Maroc (FNAM) – proved unable to effectively represent the sector during its most difficult period. To some degree, the recently-formed association of smaller MFIs (Réseau de Microfinance Solidaire) has been able to fill part of the gap, but the sector as a whole continues to operate without an effective industry-wide association. Data sharing among the leading MFIs has declined in quality since 2012, and the changes in governance have fallen short of what’s required, given the scale of the institutions.

THE CREDIT DATA EXCHANGE AND THE CREDIT BUREAU

Among the earliest and probably most consequential changes was the launch of a credit data exchange, through which the three case study MFIs and Zakoura exchanged data on their client portfolios. The exchange of credit information was the single largest factor that enabled the MFIs to rapidly decrease the levels of multiple borrowing in Morocco.

The credit data exchange was a simple database hosted by the largest MFI, Al Amana, to which other MFIs submitted their portfolio data each week. All participating institutions had full access. Though this effort was voluntary, it was strongly encouraged by the Central Bank.

The exchange originally contained loan-level data from the MFI portfolios. Using the clients’ national ID – an indicator collected by all four MFIs – it allowed the MFIs to identify borrowers with existing loans and determine whether they are current or delinquent. Additionally, it contained detailed loan data, including loan amount, disbursement date, and a number of other fields. This signaled a major shift – from a highly competitive field where MFIs vied for more customers and greater market share, to an open-book market, where each MFI knew almost

Figure 11:
Reporting patterns to the credit data exchange

Partial reporting measured by percent loans reported without disbursement date
FOCUS ON HUMAN RESOURCES

A major component of the MFI response has been the modifications made in the MFIs’ approach to their staff. Nothing demonstrates this as clearly as the changes in compensation. Prior to the crisis, salaries had been essentially flat at all three MFIs (figure 12). With inflation running at an average of 2 percent per year, staff salaries were actually declining in real terms. In part, this is explained by changes in growth – because of its high rate of hiring, a fast-growing MFI would have more entry-level staff than a slower-growing, more established one. This would push average salaries downward. Nevertheless, this does not explain the full picture. One well-placed observer commented that before 2008, at some MFIs staff were treated more as an expense to be minimized, rather than as producers that required investment.

Figure 12:
Average staff compensation (000s MAD)

The early implementation of the credit data exchange had another important benefit: it gave the government authorities time to establish an official credit bureau, which was launched in pilot mode in early 2014. Reporting to the credit bureau will be compulsory for all MFIs, and the credit bureau will fill in most of the gaps left by current reporting to the credit data exchange, while also providing additional data, such as borrowing history from banks and other financial institutions. However, unlike the credit data exchange, consulting the official credit bureau requires a fee for each individual entry. Although an attempt has been made to minimize the impact of this fee by heavily discounting the fee to the MFIs (relative to banks), the large MFIs continue to rely mainly on the credit data exchange, leaving the credit bureau check for the final stage of the loan approval process.
The pressures on staff became particularly acute during the crisis, when their bonuses (which were in part based on portfolio performance) shrank precipitously. Given the growing challenge of dealing with delinquent borrowers in the field, the effective reduction in pay depressed staff morale. Staff morale was further undermined by the declining image of microfinance, whose reputation as a social enterprise was being eroded. At one MFI, this came to a head with a series of staff strikes and unionization during 2010–11.

Having tackled the initial repayment crisis in 2008–09, the MFIs turned their attention to staff salaries in 2010. Over a period of just two years, average staff salaries grew by a total of 58 percent. As with flat-pay before 2008, the sudden increase involved several factors. One is simply a reflection of the fact that, with slower growth, there was a smaller percentage of new – and lower paid – hires. Then there was the change in staff profiles, with hiring of risk management and other senior-level staff shifting the average compensation rate upward.

Still, important as they are, these factors are only part of the story. Loan officer pay was also reformed. While the overall level of variable to fixed salaries changed only modestly, from 21 percent variable in 2007 to 19 percent in 2013, each of the MFIs revised its bonus formula to reflect the new market reality. For example, one MFI removed disbursement volume from the bonus calculation, maintaining only the number of new loans disbursed. This reduced the staff incentive to make ever-larger loans, even to customers less able to shoulder that burden.

The increase in compensation had a strong positive impact on morale. In part, this reflected the stabilization of bonus payments tied to portfolio performance. However, the increases also reflected the recognition, at least at some MFIs, that staff had been underpaid. In the case of Attawfiq, the increases stemmed from the merger with Zakoura, which had the highest-paid staff on average.

Compensation was only one of the changes affecting MFI staff. In the area of training, one MFI expanded loan officer training to all staff, making it easier to replace departing loan officers. It also rolled out training in the areas of IT and management skills across the organization. Another adopted a certification process as part of its staff training program. This allows employees who successfully demonstrate newly acquired skills to become eligible for promotion, thus helping the MFI increase long-term retention.

As a result of these changes, annual staff turnover rates declined on average by a third since 2008, though these figures vary substantially among the case study MFIs, from 8 percent up to 20 percent (2012 data).

**CHANGE IN PRODUCT OFFERING**

Probably the most important product change has been in loan pricing. Heavy competition and a focus on operating efficiency during the pre-crisis period had led to a significant decline in loan pricing (figure 13). But beginning in

**Figure 13:**
Portfolio yield (proxy for interest rate)

![Portfolio yield graph](source: MIX Market)
2010, the case study MFIs began to raise their effective interest rates significantly. From a low of 23 percent in 2009, portfolio yield increased to 28 percent two years later. The largest increase was at Al Amana, whose rates had been the lowest.

These pricing increases were the result of several factors. First, the average cost of debt during the period increased by 1.0 percent. Second, loan losses had grown substantially. And third, the increases in staff compensation needed to be covered. Even with these greater costs, the interest rate increases allowed the MFIs to remain profitable during this period, though at substantially reduced levels from before. By avoiding capital losses, MFIs bought themselves breathing room to deal with the evolving situation.

Aside from interest rates, the loans themselves have changed relatively little. Both the average loan size and loan maturity have remained almost completely unchanged over the past six years (figure 5). There has been criticism that the current legal cap for microfinance loans of 50,000 dirhams ($6,000) is limiting, but in truth, the case study MFIs are barely testing this limit. Fewer than 1 percent of loans originated are above 40,000 dirhams. A more recent development has been the introduction of non-credit services, such as payments and insurance; however, at least for now, this remains a small portion of operations that contributes a very limited amount of revenue.

**STRENGTHENING THE LENDING PROCESS**

As can be expected, in seeking to improve loan performance, the case study MFIs implemented a number of changes to their lending processes, though on the whole, these have been less than transformative. Moreover, the changes have been tailored to the specific needs of each individual MFI, and have not converged towards any particular common set of practices. For example, one MFI has modified its branch structure by shifting its branch managers to a purely supervisory role, changing an earlier practice whereby branch managers were responsible for their own portfolios, in addition to overseeing those of their loan officers. Meanwhile, another MFI continues to expect branch managers to manage their own portfolios, in order to retain their client management skills.

One MFI has modified its client assessment process to eliminate non-business revenues when evaluating client repayment capacity. It introduced an important change to its group-lending methodology, by having a separate loan officer perform the test of group solidarity. It has also put in place strict approval limits, for example, prohibiting branches with PAR 30 above 5 percent from disbursing second loans to clients who already have a loan with another MFI. However, this practice has not been adopted by its competitors.

**Figure 14:**
**Borrowers per staff member**

Source: MIX Market; from 2010 onwards, counting only top 3 Moroccan MFIs
The fact that lending practices have evolved differently at each MFI suggests that the weaknesses in the lending process of each institution were different, requiring a different set of solutions. Naturally, some responses were common to all, in particular the implementation of the credit data exchange.

Another change that has been consistent across all three MFIs was the reduction in the number of clients per staff member, from 236 in 2006 to 137 in 2012. However, in making this decision Moroccan MFIs have bucked the trend both globally and also among countries that had gone through a crisis (figure 14). It’s also not clear to what extent the decline in the staff-to-clients ratio among Moroccan MFIs has been driven by explicit efforts to reduce the ratio, as opposed to resulting from the lack of portfolio growth.

Another key shift among the MFIs has been in the strength of the supervisory and control process. The case study MFIs have substantially increased their internal audit and internal control departments. Currently, the combined internal audit and internal control workforce at each of the three MFIs accounts for at least 2.2 percent of total staff. While the structure of the internal audit and internal control teams varies, in each case they incorporate extensive operations both at the local/regional level, as well as at headquarters. Supervision is thus directly integrated into the lending operations themselves.

**BOX 2: BUSINESS MODEL VS. PERCEPTION: BANK OR MFI?**

Fondation Banque Populaire (Attawfiq) has weathered the crisis in Morocco better than anyone. Its delinquency rate and write-offs have certainly been well below that of its competitors. Some competitors attribute this to perception – in borrowers minds, FBP is a bank, part of the much larger Banque Populaire, despite its status as an NGO and its public branding by the unrelated name of Attawfiq. Certainly, this would be consistent with the findings of Morvant, where borrowers did view MFI loans as “gifts” or “NGO money.” Presumably, they’d be less willing to see FBP in the same light, and perhaps the local legal authorities would agree, lending them additional credibility.

This explanation may hold some water. But it’s also equally true that FBP is different in a number of respects. In its lending and collections efforts, there seems to be no magic, no “aha” element. The difference, instead, can be seen in what is any MFI’s greatest asset – its people.

FBP’s board is composed of finance experts – senior managers of Banque Populaire. It pays its staff substantially higher salaries than its peers. Its human resource systems are in a separate league – demonstrated by its successful absorption of over 923 former Zakoura staff (more than FBP’s 756 staff at the time), and retaining 787 of them nearly three years later. Many of these ex-Zakoura personnel now occupy FBP’s most senior ranks – this is quite a feat, given that FBP was taking over a failing enterprise. Whether FBP is seen as a bank or an MFI, there is no question that it runs things its own way.

The introduction of risk management as an independent function has taken a bit longer to take hold, though each of the three MFIs has been moving in this direction as well. Two of the three have a separate risk management unit in place, and the third is in the process of establishing one. Each is also at some stage of developing, piloting, or actively using a credit risk scoring model in their lending operations.
FOCUS ON COLLECTIONS

A key outcome of the increase in delinquency since 2008 has been an explicit focus on overdue collections efforts at all three MFIs. Prior to the crisis, with PAR 30 well below 1 percent, there was little need for MFIs to devote much effort to special collections for overdue loans, and such loans were handled as part of the normal collections process.

Since the crisis, all three MFIs have established units dedicated to the recovery of overdue loans. All have put in place detailed guidelines prescribing specific actions at each stage of delinquency, from “soft” efforts, such as SMS and phone reminders (including pre-due date calls to clients with history of late payments), to “hard” collections that include mailing of color-coded letters (e.g. red), letters from lawyers and, ultimately, recourse to the legal system. In all three MFIs, the collections units function as support groups, providing monitoring and reports that ultimately go to branch managers and their staff. In some cases, the collections units step in directly, most often when the “soft” collections efforts have been exhausted and outside support – whether legal counsel or an outsourced collections specialist – is needed. In other cases, the collections teams rely on their own limited staff to make calls to delinquent borrowers.

One of the MFIs has made a particular effort to focus on recoveries. First, it applies close monitoring at the branch level, actively adjusting the balance between lending and recovery activities based on the branch’s portfolio performance. Second, it has taken the step of not writing off any loans, which it finds better encourages its staff to focus on collections. And third, a portion of the incentives for both its recovery officers and loan officers is tied directly to the recoveries of overdue and written-off loans.

The results of these efforts are mixed. Recoveries are certainly taking place, but there has not been a significant shift in the share of balances recovered, whether in full or in part. However, in light of better overall portfolio performance, one cannot discount the possibility that recovery efforts of overdue loans may have encouraged better repayments among current clients.

CHANGE IN PORTFOLIO STRUCTURE

The approach to managing the overall portfolio varied greatly among the three case study MFIs. In the case of Al Amana, there was a substantial retrenchment during 2009-11, with the portfolio shrinking by a full third (figure 15). However, this was not the case at the other two MFIs, with FBPMC growing by a nearly identical amount, much of it acquired via the merger of Zakoura. The size of FONDEP’s portfolio, meanwhile, remained largely unchanged.

Figure 15:
Outstanding loan portfolio ($ millions)

![Outstanding loan portfolio chart]

Source: MIX Market
One change has been in geographic areas of operation. Since 2008, there has been a notable shift away from rural areas, with 65 percent of the portfolio of the case study MFIs being urban loans, compared to 47 percent in 2008. This is despite the fact that a substantial number of mobile lending units were deployed at two of the case study MFIs, with the objective of increasing operations in harder-to-reach remote rural areas. Part of the shift away from rural areas stemmed from the relatively worse performance of rural loans during the second phase of the crisis (2009-11), which was a reversal of the pattern seen at the beginning of the crisis (when urban loans were more likely to default). However, for at least one MFI, plans are underway to increase lending in rural areas.

MANAGING GOVERNANCE

An area that was described as a significant contributor to the crisis has been weak governance at most of the leading MFIs in Morocco. Since then, MFIs have introduced some reforms, including strengthening the audit and internal control functions along with oversight by the audit committee. However, much work remains to be done.

In risk management, among the three case study MFIs, two still don’t have a board-level risk management committee, while a third has nominally constituted such a committee, but without a dedicated risk management function to support its work.

One MFI’s board exemplifies its NGO status, with 20 directors, including high-profile individuals from business, civil society, academia, and political office, but only a few with expertise in either microfinance or finance generally. Despite the presence of a handful of board committees, such a large board makes decision-making unwieldy and discourages close, focused oversight of the MFI’s affairs. At another MFI, the board has been noted in one private report as having vested substantial concentration of power in the hands of its Director General, without sufficient counterbalancing from the other directors.

Perhaps as a result of these weaknesses, board decisions during the course of the crisis have not all been good. In the case of one MFI, following the planned resignation of its executive in 2010, the board chose to replace him with a three-person management committee, leaving the organization effectively paralyzed and unable to make effective decisions during a time when its staff morale was arguably at its lowest. The situation was corrected a year later, with the appointment of a general manager, but in the interim, more than a year of valuable time had been lost.
The key factor that distinguishes the crisis recovery process for Moroccan MFIs is the role of government and market infrastructure institutions. It can be reasonably argued that without extensive, ongoing support at the market level, Moroccan MFIs would have experienced a crisis far deeper and more damaging than they did. Moreover, this support came from multiple parties that largely complemented each other, giving the MFIs the time and space they required to adjust to the changed market reality. This support came largely in three forms: government and regulatory support, financial support, and technical assistance.

GOVERNMENT AND MARKET INFRASTRUCTURE

The microfinance sector in Morocco stands out for the level of government support it has received. Early in their development, many MFIs were capitalized or even launched with the help of government funding, via the 100 million Moroccan dirham ($10 million) Hassan II fund created in 2000.¹¹ By comparison, that year the country’s two largest MFIs, Al Amana and Zakoura, had combined loan portfolios of just over $9 million. Though full data is not available, it’s very likely that at launch, the Hassan II funds comprised well over half of the sector’s outstanding portfolio. Subsequently, the government facilitated the establishment of additional sector-level institutions, including the refinancing organization JAIDA and a US-Moroccan developmental collaboration, the Agency of Partnership for Progress (APP), that extensively supported microfinance.

In 2006, on the cusp of the crisis that was about to hit Zakoura, the Moroccan Ministry of Finance turned over the oversight and responsibility for the sector to the central bank, Bank al Maghrib. This turned out to be remarkably well-timed. It was also another manifestation of the unusual status of MFIs in the country – it is rare for central banks to bring NGOs under their oversight, yet that is exactly what Bank al Maghrib had done. The reasoning at the time was that the leading MFIs had grown too large and too complex to be effectively regulated by the Ministry of Finance, whereas Bank al Maghrib already possessed the competencies needed, due to its regulation of banks and non-banking financial institutions. While extending Bank al Maghrib’s activities to include regulation of MFIs took some adjusting, doing so fit well within its role.

It helped that the number of MFIs was also relatively small – 13 institutions in all, with the largest four comprising the vast majority of the market. Bank al Maghrib was thus able to establish direct relationships with each of the MFIs and establish a strong understanding of the market. As the crisis began to unfold in 2008, the bank hosted a meeting with the heads of all four leading MFIs (including Zakoura) and strongly encouraged them to address the rising delinquencies, including by setting up a mechanism for sharing detailed client data, thus giving the impetus for the creation of the credit data exchange that remains in place to this day. More recently, with the launch of the official credit bureau, the regulator is reprising the role by filling the reporting gap that has developed since 2012 (see figure 11, above), while also incorporating credit information from other sources, such as banks.

The relatively small size of the market has enabled the central bank to exert its influence on the sector through supervisory monitoring. In 2007, it promulgated a circular mandating minimum internal control standards for the MFIs newly under its supervision. During subsequent supervisory visits of all 13 MFIs starting in 2008, the central bank found that many institutions had inadequate internal audit and internal control systems. Many of the subsequent changes at the MFIs in this area can thus be attributed to the new regulatory oversight and emphasis on strengthening operations and internal control specifically.

In addition, the central bank played an important role in encouraging the creation of the Réseau de Microfinance Solidaire (RMS) – an association of the eight smallest MFIs in the market. Among the first priorities for RMS is establishing a common IT platform for its members that will also allow eventual reporting to the credit bureau, which most small MFIs are not yet set up to do. Over time, it aims to provide additional support, including training, back-office, and other functions. This further leverages the important support already provided by a local NGO, Centre Mohammed VI, which has been providing training and knowledge management for the microfinance sector since its establishment in 2007.

The close involvement of the central bank and the Moroccan government itself became most apparent in its ability to influence other market players, especially local banks, to continue their support of the microfinance sector. The most visible example of this was the rapid merger of Zakoura with FBP – an arm of the much larger bank, Banque Populaire. It is likely that the merger reduced the negative role that a full collapse of Zakoura could have played in undermining the image of the MFIs and thus increasing overall level of delinquencies.

Besides orchestrating the takeover of Zakoura, the Moroccan authorities played an important role in ensuring MFI access to liquidity. This was a key factor that allowed the MFIs to mitigate and manage the high portfolio delinquencies.

**MAINTAINING LIQUIDITY**

One of the biggest differences between the crisis in Morocco and similar events in other markets is the MFIs’ ability to maintain liquidity throughout. The three case study MFIs entered the crisis with liquidity ratios averaging 10 percent in 2006 – slightly below the global average of 11 percent. Despite the difficulties in the sector and the failure of Zakoura, their liquidity ratios have remained stable or increased every year since then, with the exception of Attawfiq (FBP), whose funding came from a parent bank and was thus least at risk.

This ability to maintain liquidity was due to several factors. Chief among these was that local banks – the primary source of funding for Moroccan MFIs – maintained their funding to the sector. This stands in sharp contrast to the situation in India, where six months after the Andhra Pradesh crisis private bank funding to the sector had fallen by 85 percent, forcing even MFIs otherwise unaffected by the Andhra Pradesh crisis to greatly curb their lending and shrink their portfolios (figure 17). In some cases this resulted in a substantial rise in delinquencies and extensive losses at MFIs well outside of Andhra Pradesh, and even threatened to bring down MFIs that were otherwise healthy.12

By contrast, in Morocco bank funding to the sector remained stable (figure 18). To a large degree, this was due to the MFI reliance on long-term loans, so that with little or no growth, there was no need for new loans or renewals. Still, there were no reports of banks cancelling credit lines either. It’s possible that some of the banks’ willingness to maintain credit to MFIs stemmed from quiet encouragement from the central bank. But banks were also given comfort through the support of foreign development finance institutions (DFIs), many of whom waived debt

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12 See, for example, the case of Arohan in the The Art of Graceful Exits, CFI/CGAP, Rozas 2014.
covenants to continue funding the sector. Finally, by mere chance, a new funder had arrived in Morocco that proved a key source of funding stability: JAIDA, a wholesale microfinance fund constituted in 2007 by the Moroccan government and outside development agencies. JAIDA's original purpose had been to support small MFIs, but the timing of its launch and the size of its capitalization ($40 million by 2009) meant that it was both ready and able to provide liquidity to the large MFIs as well, contributing 20 percent of their funding by 2013.

The preservation of MFIs' liquidity was a key mitigating aspect in the Moroccan crisis. It is easy to contemplate how different the picture might have looked if, starting in 2008 or 2009, the MFIs would have had to deal with not only a spike in delinquencies, but also a sudden liquidity squeeze. Judging from the effects of such a squeeze in India, it's quite probable that the magnitude of both delinquencies and ultimate losses would have been far greater.

The existence of steady funding also bought something no less important: time. Simply put, the MFIs were able to spend the early years of the crisis dealing with its immediate effects, deferring longer-term reforms to 2011 and later. And for those reforms, the MFIs also received extensive help.

Source: Sa-Dhan Bharat 2011

Source: Banque al Maghrib
The final component of market-level support was the extensive technical assistance provided to MFIs. This came mainly from DFIs, and particularly, from the US government grant provided via the Morocco-US initiative, the Agency of Partnership for Progress (APP). The APP was launched in 2009 and included a special set-aside for funding microfinance. Like JAIDA, this had been initially intended to support smaller MFIs, but the size of the grant ($40 million) meant that extending it to the market leaders was unavoidable. Indeed over half of the grant was directed to help capitalize JAIDA itself.

APP’s timing also turned out to be propitious. Because of the slow pace of the launch, the first technical assistance projects were launched only in 2011 – after the most difficult phase of the crisis had already passed. Rather than having to focus on fighting immediate dangers, MFIs were able to leverage APP technical assistance to focus on longer-term development. And because APP paid 85 percent of the cost of the projects, the program was affordable to the MFIs. The program began with a set of external ratings, which helped highlight different areas of MFI weakness. Subsequent projects were aimed at improving the areas where the MFIs had been deemed weak – risk management, internal control, and strengthening back office operations. At each of the participating MFIs, risk management teams received substantial consulting input from APP-funded consultancies. And on a more direct basis, two of the case study MFIs received a substantial number of mobile lending units to facilitate outreach to remote rural areas.

At $15 million, APP-funded projects constituted some 3 percent of the total assets of the Moroccan microfinance sector, spent and implemented during a three-year period. However, the large scale and fast pace of the project also had a downside. Too much technical assistance can overburden an MFI if the MFI lacks capacity to absorb it, and it’s reasonable to say that not all APP-funded projects were consistently beneficial.

APP was also not the sole provider of technical support. Other DFIs played their part as well. Early on during the crisis, the Oliver Wyman study commissioned by IFC in 2008 to a great extent set the stage for the sector’s positioning and reaction to a fast-developing situation. Its two main recommendations – the merger of Zakoura and implementation of an information sharing platform – were implemented within six months of the report’s dissemination. Subsequent projects funded by foreign development institutions, including in the area of governance and risk management, also played an important role in strengthening MFIs during the post-crisis period.
During the period of the crisis and immediately after, the role of FNAM – the official voice of the MFIs in the country – did not provide as much support as it could have. Part of this was driven by differences between the needs of the three leading MFIs and the remaining smaller players. This contributed to ineffective governance at the organization, where the one-member, one-vote principle by which FNAM was governed caused the needs of the large MFIs to be under-represented.

Without a mechanism for reaching agreement, the two groups of actors – the three leading MFIs and the nine remaining small institutions – took separate paths to deal with the crisis. The most prominent example of this was the credit data exchange created by the leading MFIs, but in which the smaller competitors did not participate – in part because of insufficient data reporting capability.

**BOX 3: THE IMPACT ON SMALLER MFIS**

While this report is focused primarily on the experience of the big three MFIs in Morocco that have a combined market share of some 90 percent, the role and experience of the smaller MFIs should not be ignored.

The eight smaller MFIs that have been present in Morocco for nearly as long as their larger counterparts, play an important role in the sector. Though their geographic operations often overlap with the larger players, their focus is generally on poorer, more excluded populations. Thus, the average loan size of RMS-member MFIs is less than half of the big three.

However, despite these differences, like their larger counterparts, these smaller MFIs were strongly affected by the downturn. While they too had contributed their share to the fast growth and lax lending practices of the pre-2008 market in Morocco, the impact of the downturn was in many ways disproportionately greater for these institutions.

**Figure 19:**
Default rate at small MFIs in Morocco

The portfolio quality for these smaller MFIs had always been lower. Still, their 19 percent combined PAR 30 and write-offs at the height of the downturn in 2009 was far above their larger competitors. And while MIX Market reporting post-2009 is incomplete among these MFIs, the trend nevertheless shows a clearly longer and deeper downturn for these institutions, with elevated delinquencies lasting through 2011. Part of this may be attributed to their lower resilience, with many having to shrink their portfolios. In at least one case, access to liquidity was a struggle in a way that it had not been for the larger MFIs.
One response by the smaller MFIs has been to create the Reseau de Microfinance Solidaire (RMS), as a platform to combine forces to meet common needs, exchange information and provide mutual support, and also to channel the voice of the eight smaller MFIs to government authorities and the broader public. Indeed, the market downturn hurt the small MFIs no less than their larger counterparts (see Box 3: The impact on smaller MFIs), and RMS was one way they received support at the market level – in addition to funding from JAIDA and technical assistance provided by APP and others. One present role for RMS is to provide an IT suite that small MFIs can tap into to facilitate their internal and also external reporting to the central bank and the official credit bureau (there is no plan to include them in the credit data exchange, at least for now). Over time, this may evolve into the provision of additional services, such as back-office support.

The existence of a dual set of microfinance associations in a country is not novel – a similar setup exists in India, with MFIN representing the large NBFI MFIs and Sa-Dhan representing more the smaller commercial and NGO operations. However, it is a somewhat surprising structure for a market composed of only 13 institutions, and having this separation inevitably weakens the industry’s voice. The missing role of FNAM – an association that can effectively communicate the needs of the sector – continues to be felt.

BORROWER BEHAVIOR AND THE PERCEPTION OF MICROFINANCE

This study would be incomplete without examining the important changes that affected the borrowers and their relationship with MFIs. One of the big mysteries of the Moroccan crisis is that, despite the many changes made by the case study MFIs, including more robust operations and lending standards, a large reduction in multiple borrowing, and a less competitive and slower growing microfinance sector, the default rate for even low-risk loans remains at around 4 percent – far above what Moroccan MFIs had experienced in 2007 and earlier, though consistent with global averages.

There are two ways to understand this pattern. First, the crisis itself was a watershed moment that changed borrower perceptions of microfinance and their subsequent behavior. The second is to view the microfinance crisis in the context of broader shifts in society, including the winds of change that swept across the region in 2010-11, often referred to as the Arab Spring. All factors point to the crisis itself having been brought on by more immediate factors that were largely the result of the unsustainable growth that the MFIs had been pursuing during the years leading up to the crisis.

However, by 2010, and especially 2011, defaults could no longer be attributed to lax lending or runaway competition. What accounts for this change?

A glimpse of the reason can be seen from a study by Solene Morvant, which included 79 interviews of current and potential borrowers, shopkeepers, local imams and others during 2011 – well after the peak of the crisis13. A major theme from these interviews is that microfinance was often associated with those that are in some way vested with government authority. For some borrowers, the accompanying fear was a reason for repaying on time, while for others, it was a reason to avoid repaying – whether as a form of protest against authority or the perception that the loans were in some ways equivalent to grants. Yet in neither case is debt stress the dominant factor. Indeed, the researchers explicitly challenged the “common hypothesis that there is a strong relationship between repayment defaults and borrower over-indebtedness” in Morocco.

The findings from Morvant certainly seem to explain many of the seeming data contradictions in post-2010 MFI performance in Morocco. Part of it has to do with the broader public perception of microfinance. Prior to 2008, microfinance in Morocco was seen as an important factor in the country’s efforts to fight poverty. The leading MFIs were recipients of local and international attention and awards, and the sector received extensive government support – both moral and financial, especially during its early days. Microfinance was widely feted in the media and many MFI staff viewed their work as a source of personal pride.

However, in the runup to the crisis, the MFIs’ nearly exclusive focus on growth and efficiency helped undermine that image. As bonuses tied to portfolio quality and growth metrics began to shrink in the early days of the downturn, loan officer pay fell significantly and staff morale suffered. At one MFI, some loan officers resorted to threatening borrowers that state authorities would intervene if they didn't pay, thus reinforcing the very perception found by Morvant, that microfinance was linked to the state.

A more assertive stance by borrowers also rubbed some of the sheen off of microfinance. With its image as a force for social good having been undermined, microfinance in Morocco came to be increasingly seen for what it really is – lending to the poor. For some borrowers, this highlighted the negative social overtones that credit often carries in Morocco, in part stemming from the religious prohibitions against lending with interest. This further contributed to undermining the image of the MFIs.

Finally, this shift in perceptions was reflected in media and politics. Local press articles casting microfinance in a negative light began to appear around 2009-10. And local political movements sprang up in parts of the country, notably in the southern region of Ouarzazate, where a grassroots borrowers’ association announced a repayment strike in 2010 which continues to this day.

This is not to suggest that the borrowers are somehow responsible for the problems of the MFIs. As with any lending, dealing with the local social and cultural context is an integral part of the business. And the current situation is one that the MFIs had a big hand in bringing about. Nevertheless, it does suggest that the secular shift in default rates has more to do with how the MFIs are perceived by borrowers and society more generally than with the more traditional credit risk of repayment capacity. Simply put, it’s impossible to argue that the clients of 2012-13 are more over-indebted than those in 2007.

Finally, it is also worth recognizing that the current level of defaults, which have remained stable at 3-4 percent since 2009, are in fact much closer to global average than the sub-1 percent default rate that prevailed prior to 2008. In many respects, the current rate indicates a healthier, more sustainable market. Borrower incomes do not only increase – sudden illness or income decline are risks that poor families face everywhere, so it should be no surprise that some borrowers may default. The pre-crisis delinquency levels are not coming back, and that’s a good thing.
We began this paper by reviewing the nature of what is commonly referred to as the Moroccan microfinance crisis, suggesting that the overwhelming dominance of Zakoura’s collapse in market average figures argues against placing the country’s other MFIs in the same neighborhood as those in Bosnia, Nicaragua, or Andhra Pradesh. Simply put, the performance of Al Amana, FONDEP, and Attawfiq during 2008-2010 is closer to the global average than it is to these crisis-hit markets. Reference points matter, and if the wrong ones are applied to Moroccan MFIs, the resulting decisions of where to go next are likely to be inappropriate.

With this in mind, it may be helpful to revisit how the period commonly referred to as the Moroccan microfinance crisis played out. During the years prior to 2008, most of the leading MFIs in Morocco pursued growth in an unsustainable manner, eroding the strength of their connection with both borrowers and field staff. Those with multiple loans – experiencing potentially greater debt stress and also having greater incentives to default – stopped repayments at twice the rate of others.

During this early period, MFIs also contributed to the erosion of their image. Some had initially proved oblivious to the early warnings and were unprepared to take immediate action. However, as MFI loan officers began to respond to declining bonuses by pursuing more aggressive collections, the sector’s image was tarnished. The collapse in 2009 of the most visible MFI, Zakoura, also contributed to the negative shift in perceptions of MFIs, with much of that impact coming into play during its merger with FBP in 2009 – a period when areas with significant Zakoura penetration showed significantly higher default rates for other MFIs as well.

The year 2009 marked the low point of the crisis and also the start of a fairly rapid improvement. By late 2009, the performance of short-term loans (<18 months) disbursed earlier in the year had already stabilized at delinquency levels that continue to this day. Over the next two years, performance of higher-risk loans also improved, stabilizing by 2011. As MFIs began utilizing the newly-implemented credit data exchange, multiple borrowing declined by over 50 percent in two years.

With the active support of government and other providers of market infrastructure, MFIs were able to maintain their liquidity, buying time to improve the quality of their lending and internal controls, increase staff salaries, and maintain moderate profitability by raising interest rates. By 2011, the sector can be said to have essentially fully recovered.

Nevertheless, over this period, the shift in borrower perceptions has resulted a new environment. One constant response across the industry is that the sub-1 percent level of delinquencies prior to the crisis is not coming back, and not because of continuing poor practices of the MFIs, but because their relationship with borrowers has changed irreversibly. Then again, this moderate level of portfolio performance is fully in line with global averages and reflects a healthier, more sustainable sector.
7 | LOOKING AHEAD: WHAT’S NEXT FOR MOROCCAN MFIs?
It has been several years since the leading MFIs emerged from the difficult years of 2008-10. The current market is now stable, but until at least 2013, it has been in a state of stasis, with little growth or evolution. The MFIs are as prepared as they can be to move to the next stage, so that they can expand their services to Morocco’s poor, but as yet have been limited in their ability to do so.

There is, to be sure, a sense of caution among the MFIs, a focus on continuing to address the after-effects of the crisis. With the passage of time, that is now beginning to give way to a more future-oriented focus. However, on that front, the sector faces an important obstacle. All MFIs in Morocco are currently NGOs. At the global level, this is an anomaly – indeed, of the 15 largest microfinance NGOs in the world, three are from Morocco. Only Bangladesh has more, though it is also a far poorer and much larger country with one of the deepest microfinance markets and an underdeveloped banking sector (figure 20). Even Colombia, the only other country featuring large microfinance NGOs, also has large mix of banks, NBFI s, and credit cooperatives serving the microfinance sector.

In the vast majority of cases, MFIs at the scale of the big three in Morocco are structured as commercial institutions, whether banks or NBFI s. As financial entities, NGOs face substantial challenges. They cannot raise capital to support growth or strengthen equity cushions during difficult times, which also makes NGOs less amenable to regulation, since their capital requirements cannot be adjusted when necessary. In the absence of shareholders, NGOs have difficulty constituting effective boards that can provide the expertise and accountability needed to insure the long-term sustainability of the institution. Recruiting and retaining staff capable of managing financial institutions of that size is also a challenge for non-profit organizations.

There are other limits as well. As NGOs with no ability to offer savings, MFIs cannot leverage their connection with their clients, who are often excluded from the rest of the financial sector. The efforts of Al Barid Bank to provide such services are important and laudable, but in a country the size of Morocco, it seems unrealistic to rely on a single institution to effectively meet the needs of small savers. Meanwhile, clients whose only financial provider is an MFI offering only credit are essentially being encouraged to borrow instead of saving – a message with significant social downsides. Nevertheless, collection of savings by the MFIs has not been a topic of significant discussion in the sector, and is not under serious consideration by the authorities, at least for the time being.

Other limits, such as the 50,000 dirham ($6,000) loan size cap, are actually less restrictive. While there are legitimate reasons to lift the cap in some cases – for example, to promote housing or SME lending – the presence of the cap is not the main obstacle. MFIs have not begun to significantly test these limits, and loans above 40,000 dirhams remain very rare. MFIs need to expand their capacity to lend at that level. They can do more to leverage the data available via the credit bureau, both to verify credit histories of guarantors and co-signers and also to analyze potential cross-selling opportunities.

Microfinance in Morocco, while institutionally well-developed, with an effective credit bureau and a knowledgeable regulator in place, shows far less activity than comparable countries. The Index of Market Outreach and Saturation (MIMOSA), developed by Planet Rating (and the author of this report), scores it at below 30 percent of predicted market capacity. There is clear room for sustainable growth that meets market demand. This unmet demand is acknowledged in the national microfinance strategy promoted by FNAM, Centre Mohammed VI and others, citing a goal of serving 3.2 million clients by 2020 – a three-fold increase from today’s outreach figures. However, the path to getting there remains as yet uncharted.

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APPENDIX: ANALYSIS OF PORTFOLIO TRENDS, 2008-13
To conduct this study, we had unprecedented access to a wealth of portfolio data, including detailed origination and performance data from each of the case study MFIs, historical origination data from a large portion of Zakoura’s portfolio, and an annual extract from the credit data exchange (2008-13), and geo-mapping coordinates from Centre Mohammed VI (providing coordinates for every MFI branch; working with FBP, we were also able to define the coordinates for former Zakoura branches). By combining this data with the Morocco 2004 household census, we were able to develop a map of lending activity at the commune administrative unit.

The analysis was carried out on the basis of three primary hypotheses:

1. **Defaults driven by high-risk loans.** The underlying thrust of this hypothesis is that portfolio quality issues stemmed from problems specific to the loans themselves. To facilitate effective data cross-comparability across the three MFIs we focused on three high-level product attributes that were identified in the course of interviews as driving performance: large loan amounts, long maturity periods, and individual lending methodology. Separately, we evaluated multiple lending as a loan-level risk, though because this came from a different data-source, cross-lending could not be integrated in the multi-factor analysis.

2. **Defaults driven by level of market penetration.** The basic driver of this analysis was that high penetration (percent of loans / population) is a proxy for competition as well as declining lending standards generally. Also included in this analysis was the nature of the commune (rural/urban), according to the district type (e.g. rural commune = rural; municipality or arrondissement = urban). Lending at the commune was defined by location of branch — in some cases, this may have undermined the quality of the penetration ratio, since a significant amount of lending may have taken place outside commune boundaries. For this reason, we excluded the small rural commune of Dcheira, whose penetration consistently exceeded 50 percent across multiple periods.

3. **Defaults driven by the presence of Zakoura.** During interviews, it was noted that Zakoura’s presence and subsequent collapse had a direct impact on client repayment rates to other MFIs — as people saw their friends and relatives stopping payments, they too followed suit. To test for this, we calculated the level of penetration by Zakoura in each commune, using the number of loans outstanding (both current and defaulted) at the time of the final merger with FBP (Dec 31 2010), and used this figure to test for influence on default rates of the case study MFIs. In this analysis, we controlled for total market penetration (i.e. hypothesis #2).

**Periodicity.** The bulk of the data provided by the case study MFIs was loan-level at origination and final disposition. For this type of dataset, the most suitable analysis was by vintage — taking each vintage (for example, all loans disbursed in Q1 2008, Q2 2008, etc.), and looking at the final disposition of the loans (as of final available information, in nearly all cases Dec 31 2013) to determine performance. For the purpose of evaluating contributing factors to loan performance, we analyzed Q1 for each of the years in the dataset (2008-12). For years during the most intense crisis period (2008-09), we also analyzed Q3 vintages. Note: because the vast majority of loans are relatively short-term (less than 36 months), this analysis is appropriate for loans disbursed up until end-2010. Analysis of subsequent vintages should recognize that not all the loans have yet reached final maturity, and be compared accordingly.

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15 Though we had access to the original statistics from the Haut Commissariat au Plan, for purposes of this analysis, we referred to the better-structured dataset available on Wikipedia (http://en.wikipedia.org/wiki/List_of_municipalities,_communes,_and_arrondissements_of_Morocco), which we tested for accuracy, compared to the original HCP data.
**Definition of performance.** In this analysis, we used the final disposition of the loan (either write-off or or more than 30 days delinquent as of Dec 31 2013) to determine whether the loan was in default or not. Because we did not in all cases have data on the final loan balance, performance was calculated on the basis of loan failure rate (e.g. num loans defaulted / num loans disbursed). The result should thus not be directly compared to figures for PAR or similar.

**Methodology.** The primary analysis was conducted using logistic regression. Details of exact input variables and transformations, as well as outputs for each regression are available upon request. In addition to each of the hypotheses above, the model included an analysis of all variables combined, for each period evaluated.

**Findings.** The output of the three hypotheses strongly supports the idea that the evolution of the portfolio performance of Moroccan MFIs had three distinct phases.

**Table 3:**
**Summary of model prediction strength, by hypothesis**

<table>
<thead>
<tr>
<th>Hypothesis 1: High-risk loan</th>
<th>Hypothesis 2: Total MFI penetration</th>
<th>Hypothesis 3: Zakoura penetration</th>
<th>Combined model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1-08 11.3% to 26%</td>
<td>5% to 12.5%</td>
<td>5% to 12.5% (neg)</td>
<td>19% to 43%</td>
</tr>
<tr>
<td>Q3-08 21.7% to 46.7%</td>
<td>1% to 3%</td>
<td>4.4% to 9.9% (slight neg)</td>
<td>27.5% to 60.4%</td>
</tr>
<tr>
<td>Q1-09 53.5% to 100%</td>
<td>2.8% to 8.5% (urban slight neg)</td>
<td>10% to 35% (positive)</td>
<td>35% to 100%</td>
</tr>
<tr>
<td>Q3-09 51.5% to 100%</td>
<td>3% to 9% (urban neg)</td>
<td>3% to 9% (neg)</td>
<td>50% to 100%</td>
</tr>
<tr>
<td>Q1-10 64.1% to 100%</td>
<td>9.4% to 25% (urban neg)</td>
<td>3.8% to 11.3% (neg)</td>
<td>58.5% to 100%</td>
</tr>
<tr>
<td>Q1-11 33.3% to 100%</td>
<td>2% to 4%</td>
<td>2.1% to 4.2% (neg)</td>
<td>33.3% to 100%</td>
</tr>
<tr>
<td>Q1-12 15.6% to 48.9%</td>
<td>0% to 2.2%</td>
<td>0% to 2.4% (neg)</td>
<td>14.3% to 50%</td>
</tr>
</tbody>
</table>

The first phase (represented here by the Q1-08 vintage) shows weak model strength across-the-board (including the combined model). Essentially, performance was bad for all loans, high- and low-risk, while the overall penetration rate or presence of Zakoura had little impact.

For vintages in Q1-09 and Q1-10, loan risk is an especially strong predictor, with the other hypotheses substantially less important. Beginning with the Q1-11 vintage, loan risk declines as predictor, while the other hypotheses become insignificant.

**HIGH-RISK LOANS**

Throughout the analysis, the three loan-level indicators (maturity, size, individual methodology) remain by far the best predictors of loan performance. Indeed, among these, maturity is by far the primary predictor, far outpacing the importance of either loan amount or individual methodology. This should not be surprising as longer-term loans are by nature higher risk – the longer the period, the greater the chance of unexpected events (illness, etc.) that could affect repayment. Moreover, long-maturity loans tend to be both larger and more likely to be individual rather than group.

**Figure A-2:**
**Performance of loans >24 month maturity**

Note: beginning with the late 2011 vintages, end-period performance reflects in part the fact that the loans have not yet reached maturity by as of Dec 2013.
A look at loans with maturities greater than 24 months shows a clear pattern. First, the share of defaults from these loans exceeds the share of portfolio, or put differently, their default rate is higher than that of the average loan.

However, this is particularly true for vintages Q1-09 until Q1-11. In the early part of the crisis, these loans defaulted at rates that were only slightly higher than the average loan, but as overall defaults began to decline early during the downturn, the share of defaults coming from long-maturity loans began to climb, reaching over 40 percent of all defaults for the 2010 vintages – double their share of the portfolio.

This divergence in the performance of long- and short-maturity loans began to decline starting with the Q1-11 vintage – clearly, by then MFIs had gotten better at managing longer-term loans. Interestingly, as the crisis evolved, the MFIs continuously increased the share of long-term loans originated, from 6 percent in Q1-08 to around 15 percent from mid-2010 onwards. Similar patterns hold for loan size and individual lending, though with a narrower divergence from portfolio averages.

The other key aspect of loan risk in Morocco was cross-lending. Unfortunately, the data from the credit data exchange could not be combined directly with the rest of the dataset, but it nevertheless provides clues as to how the crisis evolved. First, the pattern in defaults of clients holding multiple loans is even more striking than for those holding long-term (or similarly high-risk) loans. Through the years, there is essentially no differentiation – clients with one or two loans default at fairly similar rates, while those with three-plus loans default more (the share of clients with four-plus loans is minimal in all years, except 2008).

All this changes drastically in 2009, when defaults due to cross-lending spike, with clients holding three-plus loans defaulting at rates exceeding 40 percent. While this may seem a bit strange, note that 2009 was the worst year of the crisis. If this seems confusing, note that while the data for MFI loan portfolios is organized by origination date (e.g. by vintage), while data from the credit data exchange is a static year-end snapshot. Because the average maturity of a loan is about 16 months and delinquent loans continue to be reported past their maturity date, the vintages best reflecting 2009 cross-lending data would be early 2008 – the same ones that have the highest overall delinquency rate.

The implication of the trend is that during the earliest period of the crisis, defaults were highest among multiple
MICROFINANCE PENETRATION

Penetration rate on its own does not play an important role as a predictor of loan default. It is the strongest factor for the Q1-10 vintage, when delinquencies had already declined substantially, but even then, penetration only predicts 10-25 percent of loan defaults. Given that its predictive power is much lower during both preceding and subsequent vintages, the more likely explanation is that this is a statistical anomaly or a reflection of an external factor that happened to correlate with penetration rates. Moreover, an often quoted point that rural areas fared better, particularly during the early parts of the crisis, also largely doesn’t hold up. While there is a slight tendency for rural loans to perform better, the difference is too small to have a significant impact on overall performance.

This does not mean that geography was not a factor during this period. Indeed, defaults show strong geographic patterns that change over time. As with other indicators, the vintage most affected by the crisis – Q1 2008 – shows a broad geographic distribution of high defaults across the country, with only small pockets of low defaults. However, during the subsequent years the crisis evolved, so that loans disbursed in Q1 2009 perform well in the central region, but still show high defaults in the country’s northwest and southwest coasts. The pattern shifts yet again in Q1 2010, with much of the country, including the southwest coast performing well, but the northeast still experiencing problems and a new crisis developing in the southeast (Ouarzazate province). After three years
of crisis, the Q1 2011 vintage shows low defaults in most areas, with a few scattered communes showing elevated levels.

During these periods, one can visibly recognize MFI responses to changing situations. The levels of new lending in high-default communes decline from one period to the next, so that lending is focused more on well-performing areas (green bubbles are generally larger than red, post-2009). However, with few exceptions, lending is rarely cut off completely in any one area.

**IMPACT OF ZAKOURA**

The final hypothesis evaluated was the implication that Zakoura’s poor lending practices and ultimate demise directly affected the performance of other MFIs. If this hypothesis were true, one would expect that communes where Zakoura had high penetration would show also higher default rates among its competitors. For the most part, this was not the case. A simple comparison of default rates with Zakoura penetration levels shows no significant correlation (Figure A-5). A logistic regression that factors the impact from total market penetration shows a somewhat stronger relationship, though in the opposite direction than hypothesized. For both Q1 2008 and Q1 2010 vintages, Zakoura penetration predicts the behavior of 8-9 percent of loan defaults, by reducing the rate of default. Presumably, clients who were in default to Zakoura were less constrained in their ability to repay to other MFIs.

This finding has one important exception. The Q1 2009 vintage shows the opposite pattern: a significant positive correlation between Zakoura’s presence and defaults for other MFIs, explaining approximately 23 percent of their defaults. The greatest impact on these loans would presumably have been felt sometime during 2009-10, which is exactly when Zakoura’s failure was most prominent. Its merger with Fondation Banque Populaire was made public in May 2009.

It is plausible that awareness of Zakoura’s impending closing and merger with FBP increased clients’ willingness to default on their other microfinance loans, and that this motivation made up for the reverse tendency – greater ability to repay others because of default to Zakoura – seen during other periods. Nevertheless, one should not make too much of this finding. In the end, the presence of Zakoura in any one market proved a minor factor.

**Figure A-6:**

*Avg default rate per commune, Q1 2008 vintage*

Zakoura portfolio as of closing (Dec 2010), about 250,000 loans, disbursed mainly during 2007. Penetration = num Zakoura loans / num households in commune. Vintage applies only to non-Zakoura loans.
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