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The New Moneylenders: Are the Poor Being Exploited by High Microcredit Interest Rates?

Over the past two decades, institutions that make microloans to low-income borrowers in developing and transition economies have focused increasingly on making their lending operations financially sustainable by charging interest rates that are high enough to cover all their costs. They argue that doing so will best ensure the permanence and expansion of the services they provide. Sustainable (i.e., profitable) microfinance providers can continue to serve their clients without needing ongoing infusions of subsidies, and can fund exponential growth of services for new clients by tapping commercial sources, including deposits from the public.

The problem is that administrative costs are inevitably higher for tiny microlending than for normal bank lending. For instance, lending $100,000 in 1,000 loans of $100 each will obviously require a lot more in staff salaries than making a single loan of $100,000. Consequently, interest rates in sustainable microfinance institutions (MFIs) have to be substantially higher than the rates charged on normal bank loans.

As a result, MFIs that claim to be helping poor people nevertheless charge them interest rates that are considerably above the rates richer borrowers pay at banks. No wonder this seems wrong to observers who do not understand, or do not agree with, the argument that MFIs can usually serve their poor customers best by operating sustainably, rather than by generating losses that require constant infusions of undependable subsidies.

In today's microfinance industry, there is still some debate about whether and when long-term subsidies might be justified in order to reach particularly challenging groups of clients. But there is now widespread agreement, within the industry at least, that in most situations MFIs ought to pursue financial sustainability by being as efficient as they can and by charging interest rates and fees high enough to cover the costs of their lending and other services.[1,2]

Nevertheless, accepting the importance of financial sustainability does not end the discussion of interest rates, and where to draw the line is a complex issue. An interest charge represents money taken out of clients' pockets, and it is unreasonable if it not only covers the costs of lending but also deposits "excessive" profits into the pockets of an MFI's private owners. Even an interest rate that only covers costs and includes no profit can still be unreasonable if the costs are excessively high because of avoidable inefficiencies.

High microloan interest rates have been criticized since the beginning of the modern microfinance movement in the late 1970s. But the criticism has intensified in the past few years, and legislated interest rate caps are being discussed in a growing number of countries. Part of the reason for the increased concern about rates is simply that microfinance is drawing ever more public attention, including political attention. Another factor is that quite a few MFIs are now being transformed into private commercial corporations.

In the early years most MFIs were ownerless not-for-profit associations, often referred to as nongovernmental organizations (NGOs). If an NGO generates a profit, the money normally stays in the institution and is used to fund additional services. But many NGO MFIs have eventually wanted to add deposit-taking to their activities, because they

1 The term "microfinance" usually refers to the provision of financial services to poor and low-income clients who have little or no access to conventional banks. The term is often used in a more specific sense, referring to institutions that use new techniques developed over the past 30 years to deliver microcredit—tiny loans—to informal microentrepreneurs. The range of services can include not only microcredit but also savings, insurance, and money transfers. This paper focuses on interest rates charged on microcredit; it does not address other microfinance services.

2 Among borrowers who have loans from nongovernmental organizations and private MFIs, a majority are served by financially sustainable institutions (Gonzalez and Rosenberg 2006).

No. 15
February 2009

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see savings services as valuable for their clients and because capturing deposits allows them to fund expansion of their microlending. When NGOs approach a government banking authority for a license to take deposits, they are usually required to reorganize their businesses into for-profit shareholder-owned corporations. Once this happens, profits can wind up in the pockets of private shareholders, inevitably raising the specter of such owners making extreme returns on their investment by charging abusive interest rates to poor borrowers who have little bargaining power because their other credit options are limited.

A firestorm of controversy erupted in April 2007 when shareholders of Compartamos, a Mexican MFI with a banking license, sold a part of their shares in a public offering at an astonishingly high price, which made some of the individual sellers instant millionaires. One important reason for the high price was that Compartamos was charging its clients very high interest rates and making very high profits. The annualized interest rate on loans was above 85 percent (not including a 15 percent tax paid by clients), producing an annual return of 55 percent on shareholders' equity (Rosenberg 2007).

In fact, most MFIs charge interest rates well below those that provoked controversy in the case of Compartamos. But the story tapped into a deep well of concern about high microcredit interest rates and the trend toward commercialization of microfinance.

This paper asks whether microcredit rates are abusively high. Obviously there can be no one-size-fits-all answer to this question, not only because there are huge variations in the interest rates and related circumstances of individual MFIs around the world, but also because there is no agreed standard for what is abusive. There is an intense dispute about how high interest rates and profits would have to be to qualify as excessive, and indeed about whether terms like this have any useful meaning, at least in the arena of for-profit microfinance.

In this paper, the authors are not using any theoretical framework or benchmark against which to measure what is excessive or not. We present available data, and then form our own admittedly intuitive judgment about the reasonableness of the general picture appearing from that data. Of course, readers will apply their own criteria or intuition to the data in judging whether rates or profits strike them as "abusive," "exploitative," "excessive," "unreasonable," etc.

Some MFIs are charging their clients rates that seem hard to justify from a development perspective. Rosenberg (2007) argues that this was the case at Compartamos, at least after it became able to fund expansion of its services from other sources besides retained profits.[3] But are these rare exceptions, or do they represent a pervasive problem in the industry?

We approach the question from several perspectives. In the first section, we report on how high microcredit rates actually are around the world. Then we look at how those rates compare with the cost of other forms of credit often available to low-income people, including consumer credit, credit unions, and informal moneylenders. The section closes with a look at trends: are microcredit rates moving up or down?

In the second section we "deconstruct" interest rates by looking at what they fund. Mathematically, an MFI's interest yield is equal to the sum of costs and profit on its loan portfolio. Most people would agree that it is fair to criticize an MFI's interest rates as unreasonable only if its profit or some controllable element of its costs is unreasonable. In addition to profits, we analyze MFIs' cost of funds, loan loss expenses, and operating (i.e., administrative) costs.

3 On the other hand, some defenders of Compartamos argue that its example—including its high profits—have benefited potential borrowers by supercharging the expansion of microcredit services in Mexico.

The third section briefly considers the question of whether we can rely on competition to bring down interest rates and profits.

The final section summarizes the findings and our conclusion that, despite occasional exceptions, MFI interest rates generally seem quite reasonable and that there is no evidence of any widespread pattern of abuse.

A Note on MFI Data. Financial information on MFIs is drawn from the databases of the Microfinance Information Exchange (MIX). Not all MFIs report to MIX, but those that do (currently over 1,400 MFIs) account for over 58 million borrowers worldwide in 98 countries.[4] MIX maintains two different, though overlapping, MFI databases. The MicroBanking Bulletin (MBB) dataset currently includes 890 institutions that report their data confidentially. MBB adjusts the financial information of these MFIs to compensate for the effect of any subsidies they receive and, thus, tries to present a picture of what the industry would look like if it had to pay market cost for all of its resources. MBB organizes MFIs into "peer groups" of institutions with similar characteristics, and reports overall peer group performance. The other dataset is MIX Market (www.mixmarket.org), which publicly reports individual performance of over 1,300 MFIs, but does not adjust the reported data.[5] Most MFIs are included in both datasets.

MFIs that report to MBB but not to MIX Market are guaranteed that individually identifiable data about their institutions will not be disclosed publicly. Thus, we report only aggregate results, and we generally cannot discuss what is happening in particular MFIs.

When analyzing revenues, costs, and profits, we usually use a large database that includes the 555 *sustainable* MFIs that reported their results to MIX for 2006.[6] Why only sustainable MFIs? The reason is that much of the analysis in this paper depends on relationships between interest rates and costs. We usually exclude unsustainable MFIs because their interest rates are not constrained by their costs—that is, an unsustainable MFI can set its interest rates as low as it wants no matter how high its costs are, as long as some donor or government is willing to provide the subsidy necessary to cover the losses. Not surprisingly, sustainable MFIs tend to charge higher interest rates than unsustainable MFIs. The average interest yield (weighted by loan portfolio) for MFIs reporting to MIX in 2006 was 28.1 percent for sustainable MFIs, compared with 20.5 percent for unsustainable MFIs.[7] Thus, if we had included unsustainable MFIs in our analysis, the interest rates reported in the paper would have been substantially lower.

One might assume that sustainable (i.e., profitable) MFIs are typically for-profit commercial companies, but this is not the case. In fact, almost two-thirds of the 555 sustainable MFIs are NGOs, cooperatives, public banks, or other not-for-profit organizations.

When tracking recent year-to-year trend lines, we have had to use a smaller data set: all 175 sustainable MFIs who reported their data both for 2003 and 2006. These sustainable MFIs are a minority of the MFIs reporting to MIX, but they account for about half of all the borrowers and microloan portfolio amounts that were reported by participating MFIs (both public and private) each year. We believe this set is large enough and representative enough to give a meaningful picture of recent industry trends at a worldwide level. For a snapshot of levels at a particular point in time, the larger dataset—all 555 sustainable MFIs reporting in 2006—is obviously more reliable.[8]

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4 Our definition of "microfinance institution" here is somewhat circular: an institution that *describes itself* as providing "microfinance." Almost all of these institutions make use of the new microcredit methods that have been developed in the past 30 years. It is important to recognize that poor and low-income clients get financial services from many other institutions that usually do not describe themselves, and are not described by others, as doing microfinance. See Christen, Rosenberg, and Jayadeva (2004).

5 In the rest of the paper, the term "MIX MFIs" includes those MFIs that report to MBB, MIX Market, or both.

6 MFIs were classified as sustainable if their adjusted return on assets, or their unadjusted return when adjusted return was not available, was positive.

7 Includes all countries with three or more MFIs reporting.

8 The paper is based on MIX data through 2006, updated as of April 2008. MIX data for 2007 became available in October 2008, too late for inclusion in this paper.

In presenting data from these two sets, we do not use simple averages or distributions, because doing so would distort the picture of the industry by giving as much weight to a tiny MFI with 1,000 clients as to a huge one with a million clients. Instead, we give more weight to larger MFIs. Usually we weight by the size of the MFIs' gross loan portfolio (GLP), because most of the income, costs, and profits are analyzed as percentages of loan portfolio. Occasionally we also weight by numbers of clients.[9]

In looking at interest rates, we use interest yield on GLP, which is the total amount of cash borrowers pay the MFI during a period for interest and loan fees divided by the average outstanding GLP over the same period. As a measure of what clients are actually paying, this is far more meaningful than an MFI's stated interest rate.[10]

Finally, readers may occasionally notice a seeming disparity in data—for example, interest yields, costs, or profits may be somewhat different in different graphs or tables. There are several reasons for these differences:

- Point-in-time data are usually based on all 555 sustainable MFIs reporting to MIX for 2006, while trend-line data are based on a different set—the 175 sustainable MFIs that reported for both 2003 and 2006.
- Some figures present average values, which will differ from the median shown in a graph reporting the distribution of individual values.
- The ratios being reported may have different denominators. For instance, administrative costs as a percentage of interest earnings will look much higher than the same administrative costs expressed as a percentage of GLP.

How High Are Microcredit Interest Rates? Where Are They Moving?

2006 Interest Rate Levels

Most MFIs charge interest rates far below those that have provoked controversy in the case of Compartamos. In 2006, the most recent year available, the median interest income for sustainable MFIs in MIX, weighted by GLP, was 26.4 percent of loans outstanding.[11] Figure 1 shows the distribution of interest yields, worldwide and by region, compared with Compartamos' interest yield. The regional breakdown consists of East Asia and the Pacific (EAP), Eastern Europe and Central Asia (EECA), Latin America and the Caribbean (LAC), Middle East and North Africa (MENA), South Asia (SA), and Sub-Saharan Africa (SSA).

The Compartamos case was striking and prompted a lot of discussion. But it is a serious mistake to assume that Compartamos' interest rates were typical of the industry, or even of a substantial part of the industry. In fact, less than 1 percent of MFI borrowers worldwide were paying rates as high as Compartamos was charging.

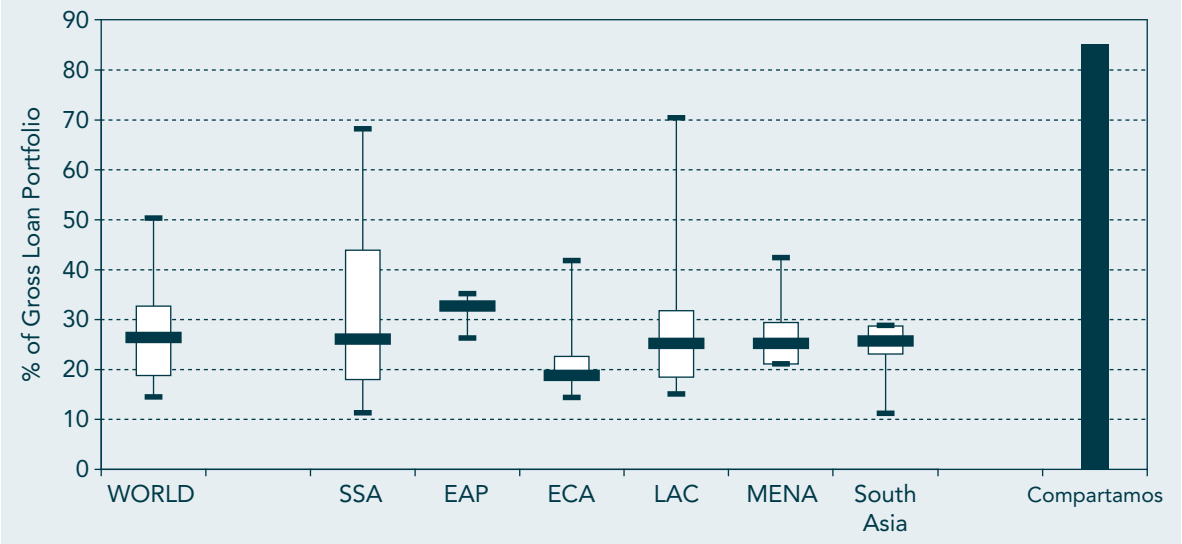
Some MFIs require borrowers to make compulsory deposits before they can receive a loan; borrowers typically must maintain these deposits during the life of the loan. The interest rates borrowers receive on these deposits are well below the rates borrowers pay on their loans. The effect of such deposit requirements is to reduce the net additional cash borrowers realize from their loans and, thus, to increase the effective cost of the loan to them. About one-third of the sustainable MFIs reporting to MIX for 2006 required

9 Weighted averages will be familiar to most readers, but perhaps not weighted distributions. The concept is that all MFIs are spread out along a line, in order of their interest yield (for example). In a normal unweighted distribution, each MFI occupies the same amount of space along the line, regardless of the MFI's size. In a weighted distribution, each MFI occupies a space proportional to the size of its loan portfolio (for instance). Once this line is assembled, the median is a point halfway along its distance, and the 90th percentile (for instance) is a point one-tenth below the high end of the line.

10 Some MFIs offer multiple loan products that may entail varying levels of cost and profit. The interest yield calculated by MIX in such cases represents combined interest and fee income divided by the combined portfolio.

11 When the interest yields of the individual MFIs are weighted by number of borrowers, the median is 28.7 percent. The *average* yield weighted by GLP is 28.4 percent.

Figure 1: Interest Income as Percentage of Gross Loan Portfolio, 2006



Note: 555 sustainable MFIs reporting to MIX, distribution weighted by gross loan portfolio. The thick horizontal bars represent medians; the top and bottom of the white boxes represent the 75th and 25th percentiles, respectively; and the high and low short bars represent the 95th and 5th percentiles, respectively.

such savings deposits, and on average these MFIs are smaller than the ones that do not use compulsory savings. Data limitations prevent us from calculating the additional cost due to compulsory savings in individual institutions.

It is important to keep the interest and fees paid to the MFI in context: they are only part of borrowers' total loan costs. Transaction costs can be substantial, including for instance the time borrowers have to spend away from their businesses, their transportation expenses, and the negative impact of delays in receiving loan funds. Because interest charges can be quantified easily, they tend to receive much more attention than borrowers' transaction costs. In fact, these transaction costs often represent a greater expense for the borrower than the interest being charged on the loan. Sometimes borrowers with other credit options are willing to pay a higher interest rate to an MFI because the MFI loan entails lower transaction costs (Adams, Graham, and von Pischke 1984; Meyer and Cuevas 1992; Robinson 2001; Tran 1998; and Cuevas 1989).

Microcredit Rates vs. Other Small-Loan Rates

How expensive is microcredit compared with other credit available to poor and low-income borrowers? Answering this question poses data challenges. From MIX we have good country-by-country information on interest rates for a large set of MFIs (using the most recently reported year, as of March 2008). But it has been much more difficult to assemble information on rates for consumer credit or credit unions; the challenges of determining rates for informal moneylenders are even greater.

We found small amounts of published country data and supplemented them by canvassing our contacts in various countries.[12] We cannot guarantee the accuracy of each piece of information we were given. And in some cases, it is hard to be precise about the effective annual rate based on that information. However, we think we have enough to start drawing a rough general picture, at least with respect to consumer credit and informal credit rates.

12 The data permitted comparison of microlending rates to at least one form of alternative credit in 36 countries: Cambodia, Indonesia, the Philippines, and Thailand (EAP); Armenia, Bosnia and Herzegovina, Kyrgyzstan, Mongolia, Romania, Serbia/Montenegro, Tajikistan, and Uzbekistan (EECA); Bolivia, Colombia, Ecuador, Mexico, Peru, and Nicaragua (LAC); Morocco, Jordan, and Egypt (MENA); Nepal, Bangladesh, Sri Lanka, India, and Pakistan (SA); and Cameroon, Congo, Ghana, Ethiopia, Kenya, Madagascar, Senegal, Tanzania, Togo, and Zambia (SSA).

Table 1: MFI Rates vs. Consumer Lending Rates

Lower than credit card/ consumer interest rates	Close to credit card/ consumer rates	Higher than credit card/ consumer rates
Bangladesh	Armenia	Cameroon
Bolivia	Bosnia and Herzegovina	Morocco
Cambodia	Colombia	Peru
Congo	Ecuador	Senegal
Ethiopia	Egypt	Tanzania
India	Ghana	Uzbekistan
Indonesia	Madagascar	Zambia
Jordan	Mexico	
Kenya	Romania	
Kyrgyzstan	Tajikistan	
Mongolia		
Nepal		
Nicaragua		
Pakistan		
Philippines		
Serbia/Montenegro		
Sri Lanka		
Togo		
Thailand		

Note: Latest available year; MIX data for sustainable MFIs, CGAP research for consumer lending rates.

Consumer credit. Table 1 compares loan rates in sustainable MFIs with consumer credit rates in 36 countries for which we had reports. Consumer credit includes credit cards, installment loans for furniture or appliances, and other similar loan products. MFI rates appear lower than consumer credit rates in a majority of these countries; they are higher than consumer credit rates in less than one-fifth of the countries.[13]

In consumer lending, borrowers are typically salaried, so assessing creditworthiness usually can be done automatically, using computerized scoring algorithms. By contrast, microlending tends to require a more labor-intensive relationship between loan officer and client. In light of this higher cost, one might expect microcredit rates to average higher than consumer credit rates, rather than lower, as appears to be the actual case. On the other hand, credit cards may involve more frequent transactions than microcredit, which could offset their cost advantage in terms of borrower evaluation. Installment financing of merchandise would not seem more transaction-intensive than microcredit, and these "hire-purchase" lenders usually have collateral and the means to sell it when repossessed. Notwithstanding these factors, the general picture suggests that microcredit rates are on average lower than consumer rates.

Informal credit. We found 34 reports on rates for informal lending (mainly unregistered moneylenders and pawnshops) in 21 countries and the West African Monetary Union. In all of those countries except Ghana, microcredit rates were lower—usually far lower—than informal rates. The median informal rate reported was 10–25 percent per *month*. Rates of 5–20 percent per *day* were reported in five countries.

13 Some of the consumer credit rates reported to us may be lower than the true effective cost of the loans once payment timing and fees—especially annual fees—are factored in. The rates used for MFIs are actual interest yield on portfolio, which is a more reliable index of actual cash cost to the client. None of the rates we analyzed includes clients' transaction costs, such as time or travel.

Both informal credit and microcredit are generally uncollateralized and are used by lower income borrowers. But there are big differences, the most important of which from the customer's perspective is that informal loans are usually available very quickly. It is commonly assumed that the astronomical rates found in informal lending reflect moneylenders' exploitation of poor borrowers' lack of options and weak bargaining power. However, a body of research suggests this characterization is only occasionally accurate. Usually, the biggest driver of high informal rates is the high cost of such lending.[14]

Credit Unions. We were able to compare MFI rates with credit union rates in only 10 countries. The average MFI rate in these countries was usually higher than the rates reported to us for regular credit union loans (Table 2). However, in five cases where credit unions also have a special product aimed at lower end microcredit clients, MFI rates have tended to be about the same or lower.

Table 2: MFI Rates vs. Credit Union Rates

Regular **credit union loan products:**		**Specialized credit union *microcredit* products:**	
Bolivia	=	Bolivia	=
Colombia	+	Colombia	–
Ecuador	+	Ecuador	=, –
Ethiopia	+	Peru	=
India	+	Philippines	=
Kenya	=		
Mexico	+		
Nepal	=		
Peru	+		
Philippines	+		

Notes:
+ *MFI rates generally* higher *than credit union rates.*
– *MFI rates generally* lower *than credit union rates.*
= *MFI and credit union rates generally in* same range.

It is difficult to draw conclusions from these comparisons with credit unions, for reasons that go beyond the small sample size. MFIs often claim that they are reaching poorer customers than credit unions are, though there is little statistical evidence about whether this is the case.[15] Other dimensions of the comparison are ambiguous as well—for instance, loan officers in many MFIs spend much of their time in neighborhoods bringing services to clients where they live and work, whereas this is much less common in credit unions. Nor is it clear what to make of the comparison between MFI rates and the rates credit unions charge for their special microcredit programs, because many of these credit union programs are aimed at a low-end village banking clientele, which may in fact be poorer than the average clientele of the country's MFIs. Finally, most of our credit union data come from relatively small groups of credit unions that have been recipients of technical assistance from the World Council of Credit Unions, and that may not be typical of credit unions in their country.

Credit unions have been serving some substantial number of poor and low-income clients for many years. It would be very useful to have research that gives a clearer picture of how they stack up against MFIs in terms of outreach, loan products, costs, and interest charges.

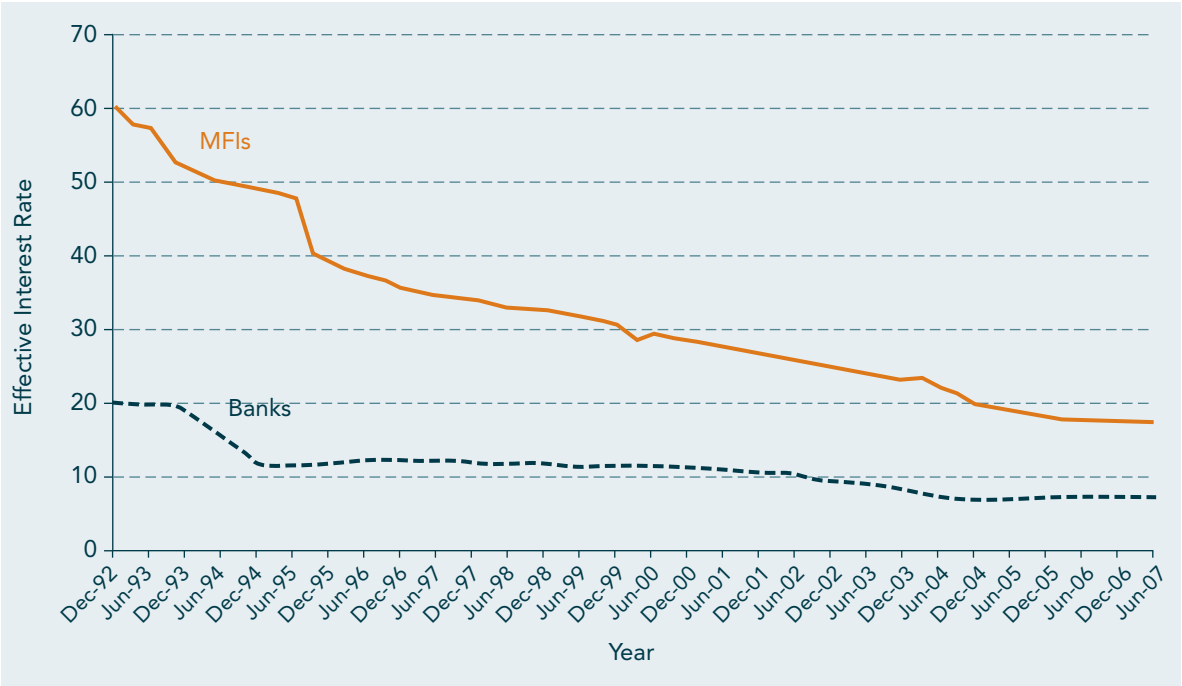
Are MFI Rates Climbing or Dropping?

Microcredit techniques and the institutions that employ them are relatively new, having sprung up over the last 20–30 years. The industry is still in a nascent state in most countries. Standard theory would lead us to expect reductions of costs (driven

14 See, for example, Robinson (2001).

15 Grace (2007) reports 2006 data from 11 Ecuadoran credit unions that are affiliated with the World Council of Credit Unions. Average per capita income of members was in the bottom quartile of the national distribution. A third of the loans were identified as microenterprise loans. Loan balances below $1,000 accounted for only 7.7 percent of the outstanding loan portfolio, but 36.1 percent of the number of active borrowers.

Figure 2: Evolution of Bolivian Microcredit Rates, 1992–2007



Sources: Gonzalez-Vega, Claudio, and Villafani-Ibarnegaray (2007) and Banking Superintendency data.

by learning curve and economies of scale) and prices (driven by competition). Have such reductions in fact happened? Bolivia is a frequently cited case where the answer is clearly yes: from 1992 to 2007, microcredit interest rates dropped 43 percentage points, from about 60 percent to about 17 percent (Figure 2). During the same period, bank rates dropped only about 12 percentage points.

But is the Bolivia case representative? In Bangladesh, another microcredit pioneer, interest rates have not dropped substantially (though rates there started out quite low). What has been the worldwide pattern in recent years?

To answer these questions, we used data from the set of 175 sustainable MFIs that reported to MIX in both 2003 and 2006. Figure 3 shows that the interest yield on their combined loan portfolio has been dropping quite fast over the period everywhere except for South Asia, averaging 2.3 percentage points each year.[16]

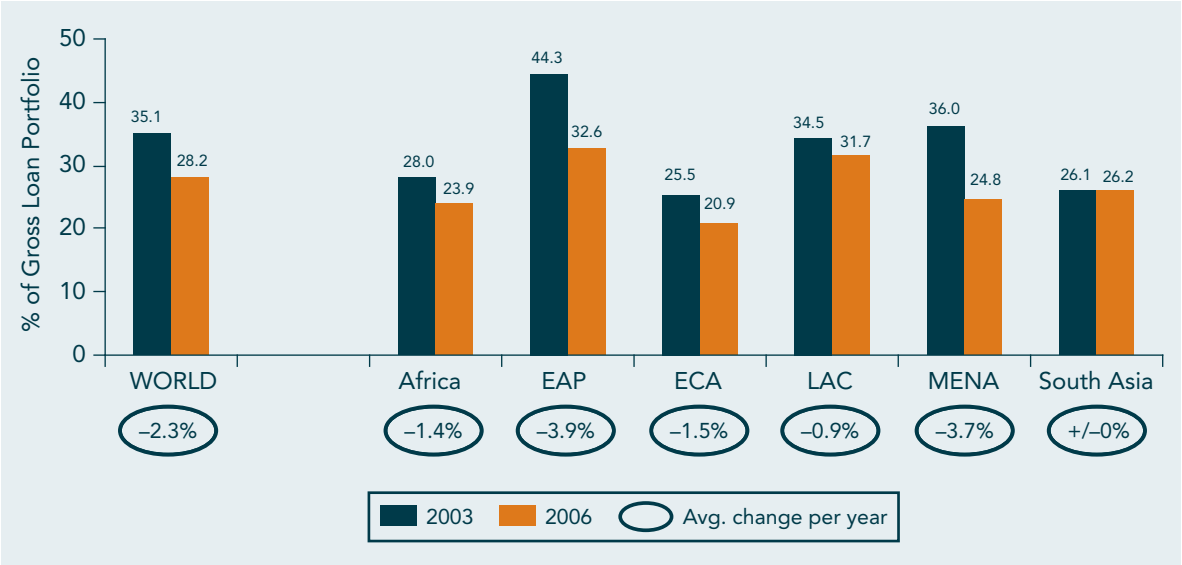
A separate analysis for 2000–2005, using a larger dataset of MFIs, but a somewhat less rigorous methodology, showed even steeper declines—3.4 percent per year. During the same period, loan rates for commercial banks in developing and transition economies fell by about 0.8 percent per year.[17]

Later in this paper we look more closely at the question of whether competition is driving the decline in rates. But regardless of how it is explained, the substantial downward trend in rates is certainly encouraging.

16 If interest yield is calculated individually for each MFI and then weighted by number of borrowers, the 2003 worldwide average was 33.0 percent, dropping an average of 1.2 percent a year to 29.3 percent in 2006.

17 Calculated from *International Financial Statistics* (IMF).

Figure 3: Interest Yield Trends, 2003–2006



Note: Total Interest and Fee Income/Average Total GLP: average of 175 sustainable MIX MFIs, weighted by loan portfolio.

The Components of Microcredit Interest Rates

Four main components are reflected in an MFI's interest rate: cost of funds, loan loss expenses, operating expenses, and profits. In this section, we break out these components and discuss how they may affect interest rate trends.

MFIs use their interest income to cover costs, and the difference between income and costs is profit (or loss). A simplified version of the relevant formula is

Income from loans = Cost of funds + Loan loss expense + Operating expense + Profit [18,19]

Lowering interest rates would require lowering one of the four components on the right side of the equation. If we want to judge whether interest rates are reasonable, the most direct approach is to look at whether each of these components that are funded from interest income is at a reasonable level.

Figure 4 shows the relative importance of each of those elements, expressed as a percentage of after-tax income. Worldwide, operating expenses consume more than half of income, followed by funding costs, profits, and loan losses.

Cost of Funds

The relatively high price MFIs have to pay for money they borrow contributes substantially to the interest they charge borrowers. As of 2006, total funding cost (interest expense) for 554 sustainable MFIs was equivalent to 8.3 percent of their total average GLP for the year (Figure 5).

Figure 6 shows no downward trend in cost of funds (here expressed as the ratio of interest expense to loan portfolio) for MFIs worldwide.

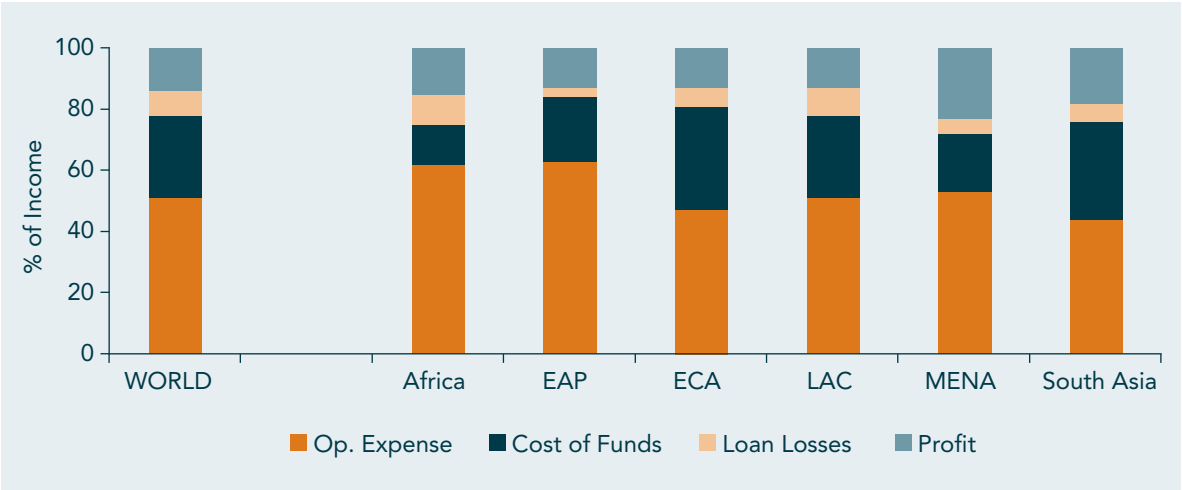
18 "Operating expense" is the term used by MIX to describe personnel and administrative costs, such as salaries, depreciation, maintenance, etc.
19 The full formula is

Income from loans + Other income = Cost of funds + Loan loss expense + Operating expense + Tax +Profit

We want to look at costs and profit as percentages of loan portfolio, but taxes and other income do not relate directly to the portfolio. In addition, the current MIX reporting structure does not allow us to derive taxes and other income as separate items: we can calculate them only as a single net figure (i.e., other income – taxes). To solve these problems for the purposes of Figure 6, below, we have netted out taxes against other income on the left side of the equation, leaving us with the formula

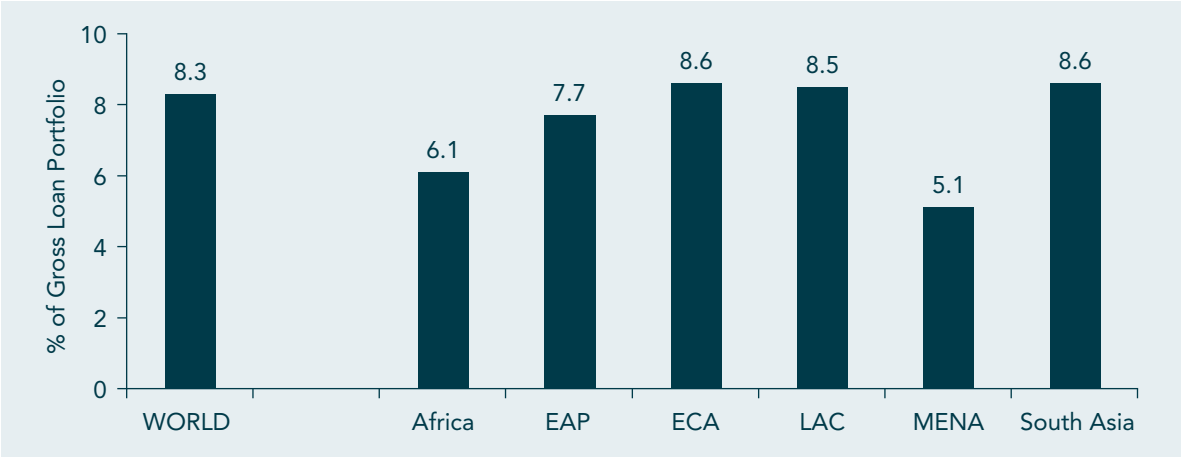
Income from loans + (Other income – Taxes) = Cost of funds + Loan loss expense + Operating expense + Profit

Figure 4: Costs and Profits as Percentage of Income, 2006



Note: 554 sustainable MFIs reporting to MIX for 2006 weighted by GLP. The Unit Desa system of Bank Rakyat Indonesia is excluded from this calculation because its reported cost of funds reflects artificial pricing arrangements between Unit Desa and the rest of the bank. The income on which the percentages are based is interest yield plus other income minus taxes.

Figure 5: Average Cost of Funds (Interest Expense) as Percentage of GLP, 2006



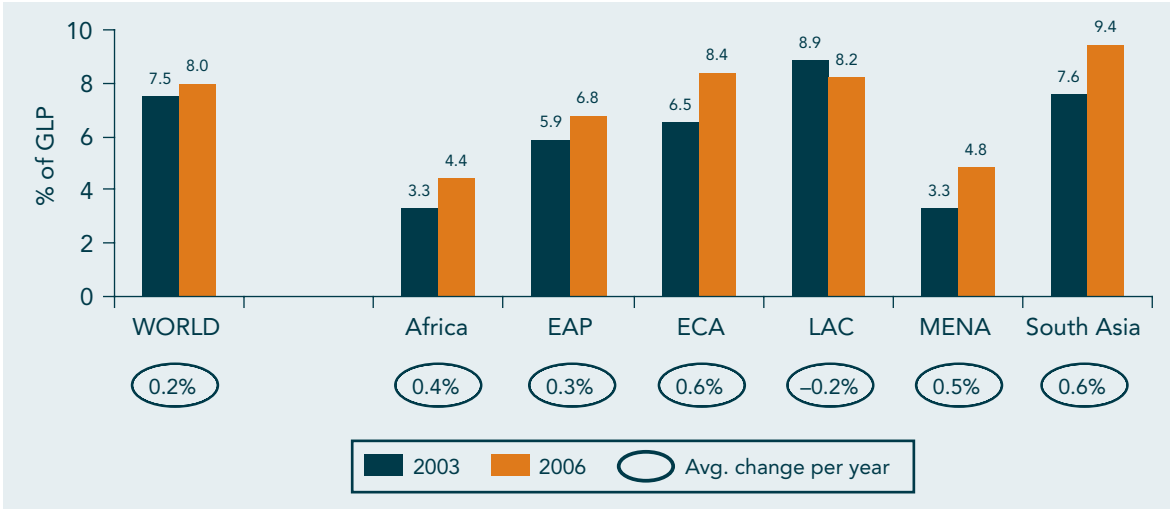
Note: 554 sustainable MFIs (without BRI) reporting to MIX, weighted by GLP.

Compared with commercial banks, MFIs tend to be less leveraged—that is, less of their portfolio and other assets is funded by liabilities on which they have to pay interest. Figure 7 compares MFIs' interest expense with their liabilities rather than with their loan portfolio, and shows that their borrowings have been relatively expensive—averaging 5.1 percent in 2006, compared with about 3 percent for commercial banks in the same countries.[20]

Are MFI managers prejudicing their borrowers by incurring unnecessarily high funding costs? In general, it would seem unfair to criticize MFI managers much on this score, because even though they can control

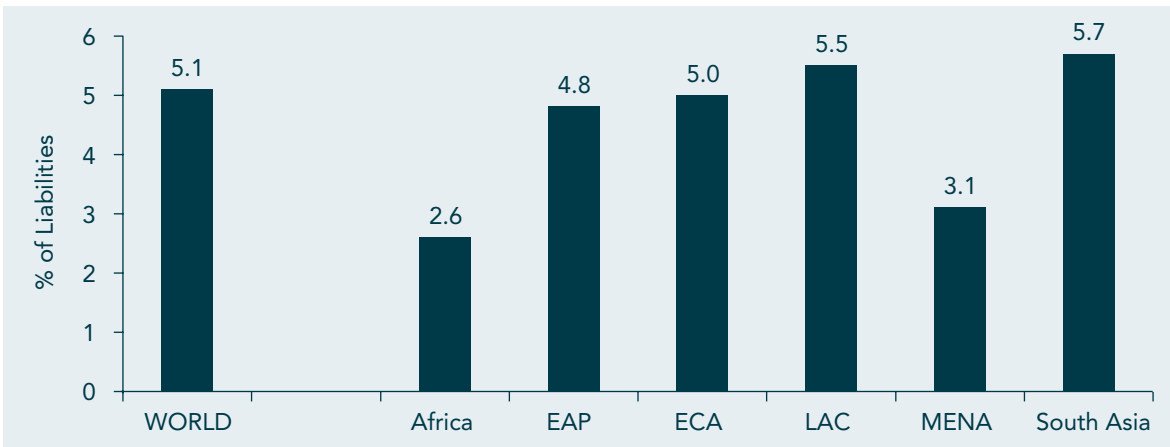
20 Commercial bank computation by Christoph Kneiding based on the most recent BankScope data for countries that have MFIs reporting to MIX, weighted by liabilities.

Figure 6: Trend in Funding Costs (Interest Expense as Percentage of GLP), 2003–2006



Note: MIX data for 174 sustainable MFIs reporting in both years. BRI has been excluded because its reported cost of funds is artificial.

Figure 7: MFI Interest Expense as Percentage of Liabilities, 2006



Note: 554 sustainable MIX MFIs, weighted by liabilities

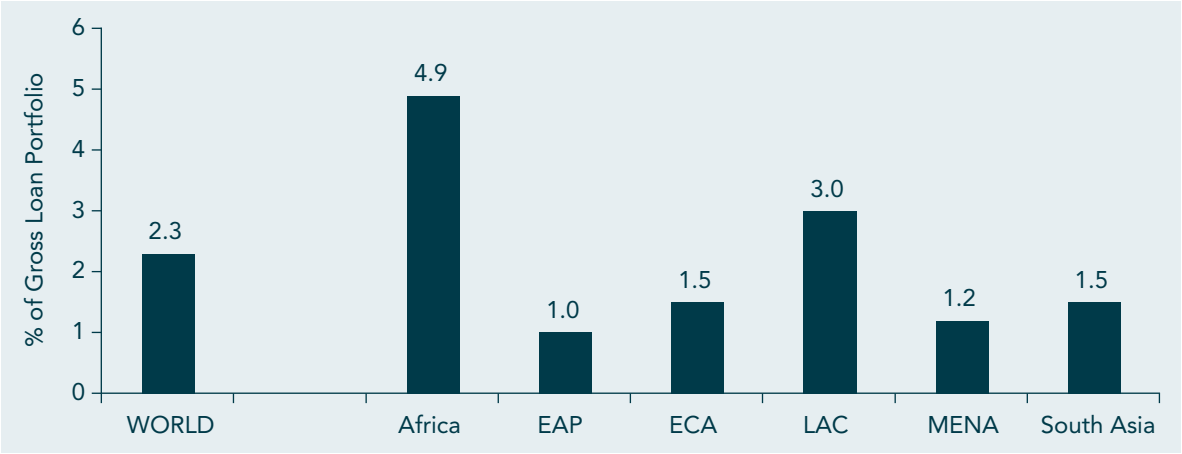
their own operations, they usually have little control over their rate of borrowing/funding costs. Most of them get funding where they can find it and tend to be price takers rather than price makers when it comes to the interest rates they pay. Increasing reliance on deposit funding will lower costs over the longer term, as regulators authorize more MFIs to take savings. However, this option is unavailable to managers of MFIs if their country does not have the enabling regulation, or if their business is not yet solid enough to meet the hurdle for depository licensing.

Loan Loss Expenses

Loan losses due to borrower default have relatively little effect on MFI interest rates, for the simple reason that such losses are quite low in most MFIs, especially in large ones that account for most of the market. Figure 8 shows the global and regional medians for loan losses, weighted by portfolio.

As a point of reference, the general rule of thumb in microcredit is that annual loan losses of more than

Figure 8. Global and Regional Loan Losses as Percentage of GLP, Averages for 2006



Note: Data from 555 sustainable MFIs reporting to MIX for 2006, weighted by gross loan portfolio.

about 5 percent tend to become unsustainable. Above that level, loan collection must be improved quickly and substantially or it will spin out of control. MFIs usually have delinquency and default rates well below those of commercial banks in their countries. (Interestingly, emerging evidence also suggests that MFIs are more stable than banks when it comes to the effect of general economic stress on their loan collection [Gonzalez 2007].)

The high average loan loss rate for Africa (4.9 percent) is driven by a few outliers.[21]

Figure 9 shows 2003–2006 trends in loan losses. Regional trends vary, but loan losses measured globally are down slightly. Further improvement *might* be possible, but there seems to be little room for an improvement big enough to have a substantial effect on the interest rates clients have to pay. Indeed, loan loss rates can go too low. An MFI that has no loan losses at all is probably being too risk-averse in its selection of borrowers, which hurts not only the expansion of poor people's access to finance but also the MFI's own profitability. If there is any widespread abuse in microcredit interest rates today, it certainly cannot be traced back to excessive loan loss expense.

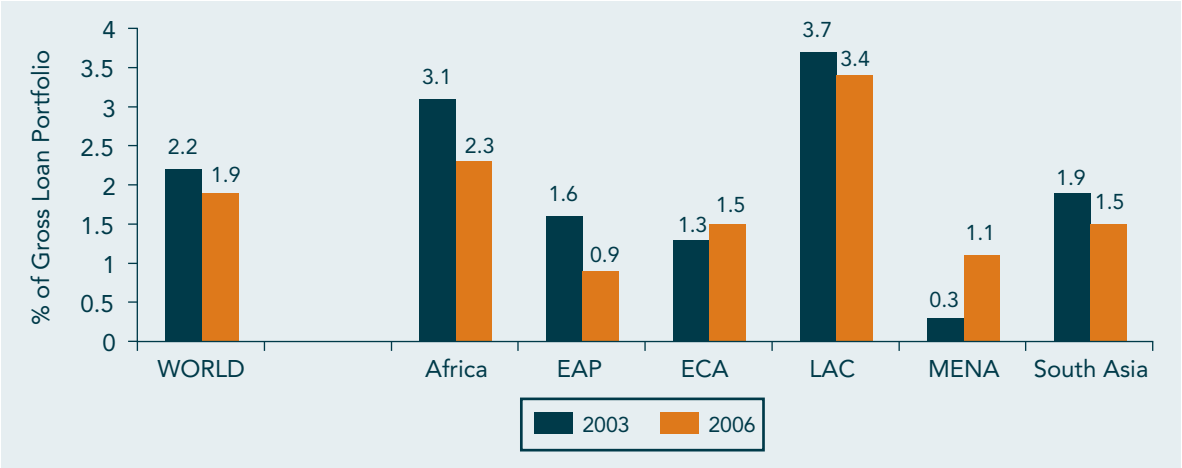
Operating Expenses (Efficiency)

[Compared to other topics in this paper, analysis of whether MFI operating expenses are "reasonable" is relatively complex. The following is a brief summary. Readers who want a more detailed discussion, including data and sources, should refer to the Appendix at the back of this paper, and then return to the section on profit beginning on page 15.]

21 The 2006 distribution of loan losses, weighted by GLP, was

Region	5%	25%	Median	75%	95%
Africa	0.3	0.7	2.3	3.9	22.4
EAP	0.1	0.9	0.9	0.9	1.1
ECA	0.3	0.8	1.6	2.0	2.7
LAC	0.8	1.2	2.2	3.6	10.0
MENA	0.0	0.2	1.8	1.8	2.0
SA	0.0	0.4	1.7	2.4	2.7
World	0.2	0.9	1.6	2.7	5.7

Figure 9: Annual Loan Losses as Percentage of GLP, 2003–2006



Note: 175 sustainable MIX MFIs.

The majority of MFIs' interest income goes to pay operating costs (salaries and other administrative costs), which are about 60 percent of total MFI costs. The worldwide median operating expense was 11.4 percent of GLP in 2006. Ninety percent of the values lie between 7.9 percent and 33.7 percent. The range is considerably narrower if Africa is excluded.

Are MFIs reasonably efficient, or do their operating expenses include substantial waste? Unfortunately, one cannot calculate an answer from available performance statistics. MFIs vary widely in a range of factors that affect operating costs, including not only loan sizes but also age, scale, client location and density, type of loans provided (e.g., group versus individual lending), client stability, communication and transport infrastructure, salary levels, and rural versus urban location. MIX categorizes MFIs into various peer groups for rough comparison purposes, but each peer group contains so wide a range of circumstances that one cannot confidently judge an MFI's efficiency just by comparing its indicators with those of its peer group, let alone judge whether the peer group as a whole is reasonably efficient.

Currently at least, the only reliable way to tell whether an MFI's operating costs are appropriate is to conduct an on-the-ground study of its individual situation and operations, including many factors that aren't part of any public database. Nevertheless, there are a number of considerations that shed light on issues surrounding operating costs.

Effect of small loan sizes. The principal justification offered for high microcredit interest rates is the claim that administrative costs are inevitably higher when placing a given amount in many tiny loans rather than in a few big loans. This claim sounds plausible in theory and is confirmed by the data. Regression analysis shows a strong inverse relationship between loan size and operating expense, even after screening out the effects of other variables, such as age, scale, productivity, legal status, savings mobilization, region, macroeconomic environment, and some proxies for physical infrastructure.

Economies of scale. Even though small loans cost more to administer than big ones, we might look for those costs to be lowered by economies of scale as MFIs grow larger. Some observers express disappointment that the growth in size of MFIs has not improved efficiency as much as they expected: shouldn't an MFI that can spread its fixed operating costs over a million borrowers have a much lower cost per loan, and be able to charge a lower interest rate, than an MFI with only a few thousand clients?

Regression analysis produces a surprising answer: MFIs appear to capture most of their scale benefits by the time they reach about 2,000 clients. They gain relatively little from scale economies after that very early point. This is probably because microcredit is so labor intensive: salaries make up the majority of most MFIs' operating expenses, and fixed costs are relatively low compared with variable costs. MFIs that are still small enough to reap major economies of scale account for only a tiny percentage of microcredit loans and customers. In short, economies of scale cannot do much to offset the added expense that comes from making very small microcredit loans.

Trend of operating costs. Analysis of the set of 175 sustainable MFIs that reported to MIX for both 2003 and 2006 reveals good news. Worldwide, the ratio of operating expense to loan portfolio declined about 1 percentage point per year, from 15.6 percent in 2003 to 12.7 percent in 2006. This pattern held for all regions except South Asia, where operating costs were already quite low in 2003. What is causing this improvement in efficiency, and can we expect it to continue?

Learning curve and competition. One driver—perhaps the most important driver—of improved MFI efficiency seems to be the increasing age of large MFIs as the industry develops. As institutions mature, they learn their business better and are able to control costs more effectively. Regression analysis shows that the age of an MFI is strongly associated with lower operating costs, even after separating out the effects of loan size, scale, and other relevant variables. Not surprisingly, the effect weakens over time, but it continues for quite a while. Operating cost as a percentage of loan portfolio tends to drop by 2–8 percentage points for each of the first six years, 1–2 points for each of the next five years, and less than 1 point for each year thereafter.

We do not have a good statistical proxy for the competitiveness of an MFI's market, so we cannot quantify how much of this age effect can be attributed to competition. However, it's likely that most of the effect is due to the learning curve, because relatively few MFI markets are competitive yet.

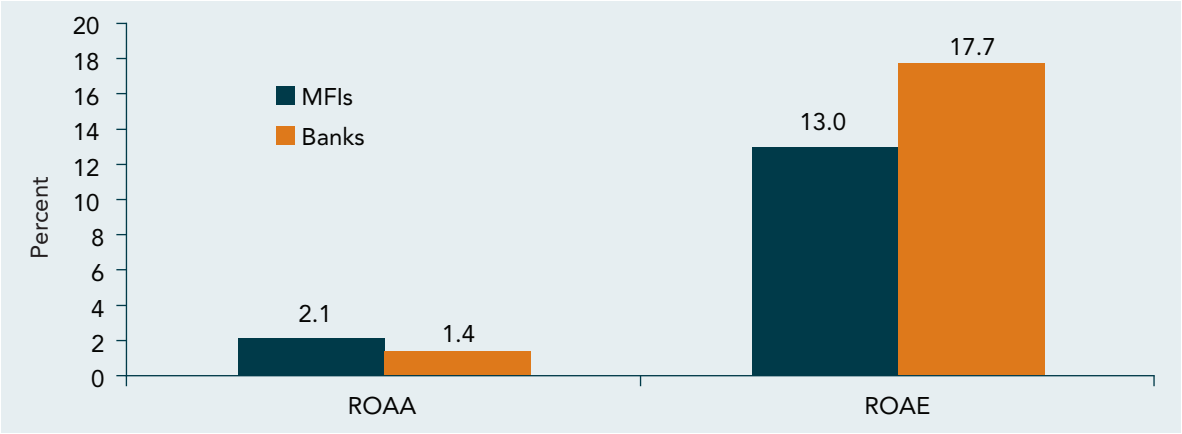
Loan size and mission drift. Since smaller loans are associated with higher operating expenses, an MFI could reduce its operating expense ratio by simply making larger loans. If an MFI whose borrowers all have $100 loans suddenly lets these borrowers double their loan size, or finds new borrowers who want larger loans, the MFI does not need to double its staff or other administrative expenses. Is the downward trend in MFI costs nothing more than the result of increasing loan sizes, which might reflect a movement toward serving a richer clientele?[22]

Up to this point we have analyzed operating expense divided by loan portfolio. Of two MFIs with equally competent and efficient management, the one with larger loans would automatically look better using this measure. We can avoid this distortion by looking at operating expense divided by the number of borrowers, thus removing loan size from the calculation. This "cost per borrower" shows the same downward trend from 2003 to 2006. What we are seeing is real efficiency improvement, not just a statistical result produced by larger loans.

Still, these analyses don't tell us how much avoidable "fat" is built into MFI operating expenses. Because most microfinance markets are so young and because most are not yet competitive, it is unrealistic to expect MFIs in those markets to be operating at the most efficient levels possible. Immature industries always have some level of correctable inefficiency, and it is not easy to think of a reason why microfinance should be any different. We know of no evidence suggesting

22 Some observers interpret growth in average loan sizes as a sign of "mission drift" away from poor clients, but it is far from clear how often this is valid. The link between loan size and client poverty is only a very rough one at best. Most MFIs have a sequential ladder of loan sizes for clients, and the very small loans at the beginning of that ladder often reflect the MFI's risk management policy rather than the actual needs or repayment capacity of the borrowers. When borrowers move into later and larger loans, or when the MFI relaxes its size limits on initial loans, the MFI's average loan size will climb even if there has been no change in the kind of client it is serving. And even where the MFI is adding better off clients (i.e., small business operators) as it grows, that does not necessarily mean restricting service for poorer customers. A much more reliable way to judge mission drift is to look at the character of the villages, towns, and neighborhoods where the MFI is opening its new branches.

Figure 10: Returns on Average Assets and Equity—MFIs vs. Banks



Note: Asset-weighted averages of all MIX MFIs with 2006 data available, except BRI Unit Desa, whose reported equity is artificially low because of its relationship to the larger bank. Most MFIs in the sample report to MBB, where their returns are adjusted to compensate for the effects of subsidy. Bank data by Christoph Kneiding, based on the most recent year available in Bankscope, for countries that have MFIs reporting to MIX.

that MFIs in general are out of line with the normal evolution of efficiency for businesses in immature markets. And the pronounced downward trend in costs is highly encouraging.

Profit

Of the four components of microcredit interest rates, profit is the one that is most obviously subject to management control. It is also the most controversial. Some observers are uncomfortable with the notion of private parties making any profit from microlending, which they view as a service to poor people, and not as a business opportunity. Others accept the idea of private profits in microlending, but are concerned that MFIs will exploit the weak bargaining position of their borrowers to extract abusive levels of profit. Still others think that high profits in the early stages are a positive good, because high returns will attract more investment and more rapid outreach of services to people who need them, and because they are confident that competition will eventually moderate those profits.

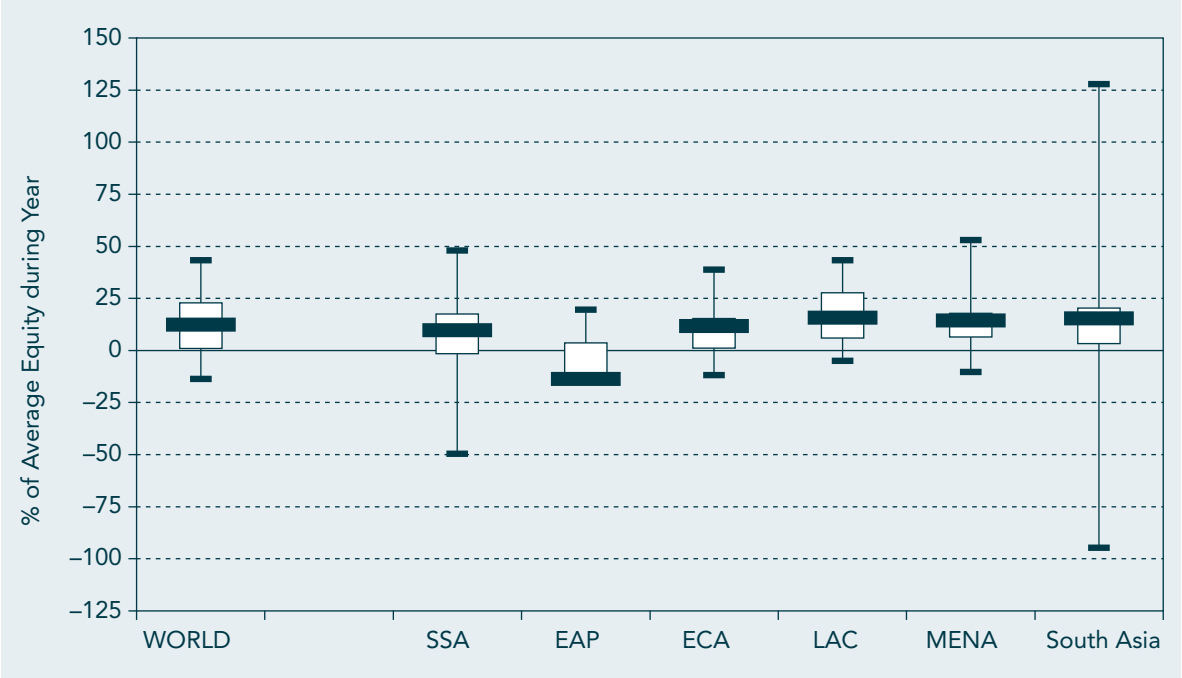
How high are MFI profits? In most countries, the microcredit market is still immature, with low penetration of the potential clientele by MFIs and little competition so far. Standard economic theory predicts that profits will be higher in such markets than in more developed markets where competition constrains prices. Figure 10 compares MFI profitability with bank profitability, measured by both return on assets and return on equity. When profit is measured against assets, it does seem to average higher for MFIs than it does for banks, most of which face more competition than the MFIs in their countries do.

But compared with MFIs, banks can leverage their capital structure more: that is, they fund more of their assets with other people's money—deposits and other borrowings—rather than with their own equity. As a result MFIs, despite their higher return on assets, do considerably less well than banks in producing returns for their owners. Return on equity averages about 5 percent lower for MFIs than for banks. (Note that we are including all MIX MFIs here, not just the profitable ones, because profitability is the variable being examined, and MFIs are being compared against all banks, including the unprofitable ones.)[23]

Figure 11 gives the distribution of return on equity for all MIX MFIs. Overall, the returns are moderate, at least by commercial standards. However, some of

23 Including the unprofitable MFIs here does not affect the results as much as one might think. Over half of MIX MFIs are unprofitable, but they account for only about a fifth of the world loan portfolio or world assets, which reduces their influence in an average or distribution that is weighted by those variables.

Figure 11: Distribution of MFI Returns on Average Equity, 2006



Note: All MIX MFIs with 2006 data available, except BRI Unit Desa, weighted by GLP. The thick horizontal bars represent medians; the top and bottom of the white boxes represent the 75th and 25th percentiles, respectively; and the high and low short bars represent the 95th and 5th percentiles, respectively.

the profits look quite high in the upper percentiles. Further analysis of these most profitable MFIs sheds some light.

To begin with, the top 5 percent of the distribution in South Asia seems to be extremely profitable.[24] However, the very high figure shown there for return on equity is driven by a few Indian MFIs with very odd balance sheets: almost no equity and therefore extremely high leverage. As the denominator of the ratio (equity) gets close to zero, the calculation produces very high numbers, even if profits in relation to loan portfolio or assets are moderate. The return on assets at the 95th percentile in South Asia is 11.2 percent, which is similar to the comparable figure for other regions.

Turning from South Asia back to the worldwide distribution summarized in Figure 11, we find that the most profitable 10 percent of worldwide loan portfolio (i.e., at or above the 90th percentile, which is not shown in the figure) produced 2006 returns on equity above 35 percent. Over two-thirds of the MFIs with these high returns were not-for-profit organizations. Absent illegal manipulation, net earnings of NGOs do not go into private pockets, but remain in the organizations to fund further expansion of financial or other services for their target clientele. One of the very-high-profit MFIs is a large government operation. Profits of government MFIs are available to expand outreach or to fund other government priorities. Such profits would be captured by private pockets only in cases of corruption, and we know of no reason to think that microfinance-generated profits would be more subject to corruption than any other government revenues.

The remaining third of these most profitable MFIs are organized as for-profit business corporations. Most of them started out as not-for-profit NGOs and

24 The 127 percent figure here represents, not the most profitable 5 percent of the MFIs in South Asia, but rather the most profitable 5 percent of the loan portfolios in South Asia. The large losses in the lower percentiles for EAP is driven by a single huge government MFI—the Vietnam Bank for Social Policies.

transformed to qualify for a deposit-taking license, or for some other reason. In such cases, the NGO usually retains some significant portion of the shares, and the profits accruing to those shares stay in the NGO to fund its work. Finally, some significant part of the shares in the for-profit MFIs is owned by private individuals or companies. Profits on those privately owned shares—and only those profits—make their way sooner or later into private pockets. Again, the high profits accruing to private owners of MFIs in the top 5 or 10 percent of the profit distribution are exceptional rather than typical in the microfinance industry. But they are not insignificant, and they do raise a question of appropriateness.

Some observers think it is immoral for private parties to take a profit, or anything but a minimal profit, out of services to the poor (a view that has been expressed by Nobel laureate Muhammad Yunus). To them, those high profits going to private parties are abusive by definition, as are most of the lower profits reported in our data, at least to the extent that they're being captured privately.

Other observers think that commercial investment, which requires returns at least as high as those found in ordinary banks, will enable microfinance services to reach a greater number of poor clients faster. From this perspective, the appropriateness of high-end profits in this minority of cases can be addressed only by investigating individual circumstances, including most importantly the risk investors took on when they put in their capital without knowing what the results would be. CGAP has published such a review for Compartamos (Rosenberg 2007).

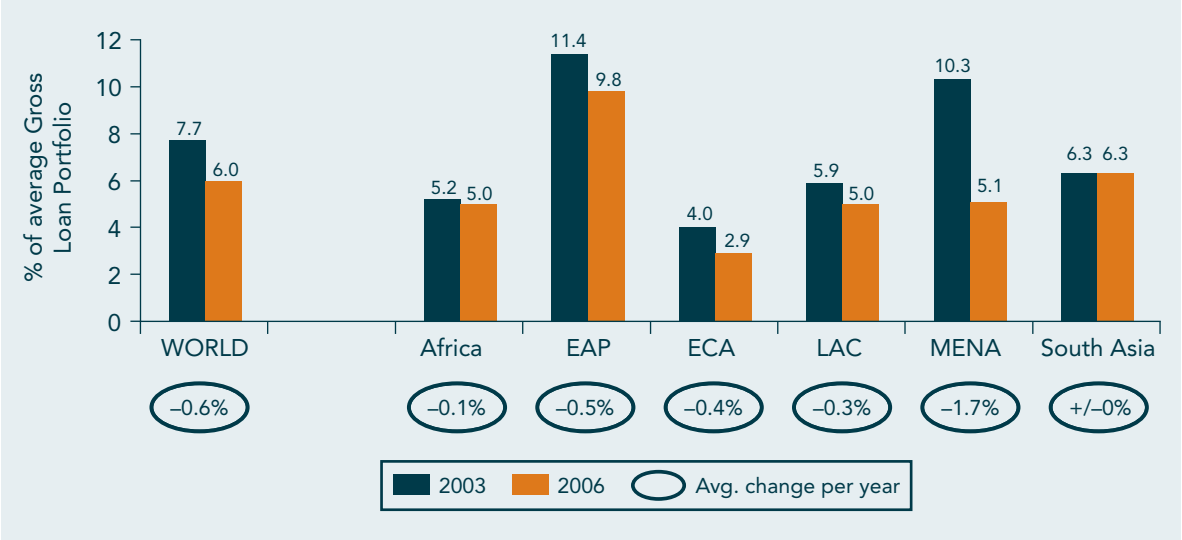
In the past few years there has been a proliferation of international investment funds (microfinance investment vehicles—MIVs) that lend to MFIs or invest in their shares. The objectives of MIV investors cover a spectrum. At one end are public development finance institutions whose core objective is development, and who typically are willing to accept higher risks or lower returns than a commercial investor would. At the other end are commercial actors who may like the cachet of microfinance, but have no intention of investing in any MFI whose risk-return profile is not competitive from a purely commercial standpoint. An unpublished 2008 CGAP study found that the composition of MIV funding has been changing in recent years. The majority of MIV money is now coming from investors at or near the fully commercial end of the spectrum. MIV investments are heavily concentrated in the largest MFIs. Three quarters of MIV money goes into loans to MFIs, which are, of course, less risky than the other quarter that is invested in equity.

What kind of profits are MIVs making? Assembling data is not easy, but the CGAP study was able to analyze returns for a set of MIVs that were organized in 2002. The average annual return reported for debt investments has been 6.3 percent. The reported return on riskier equity investments has been 12.5 percent. Both figures reflect gross returns; they do not include the effect of the funds' administrative costs, which tend to range from 2 to 6 percent, mostly toward the lower end. These returns are respectable but far from spectacular, especially considering the relatively brief track record of MFIs in most countries, and the fact that most MIV investments face substantial country risk, including currency and political risks.

Are MFI profits rising or falling? Figure 12 presents weighted average after tax profits (interest yield + other income – expenses – taxes) the same way that earlier figures have shown funding costs, loan losses, and operating costs—namely, as a percentage of loan portfolio for the 175 sustainable MFIs that reported their performance to MIX Market/MBB for both 2003 and 2006. There has been a substantial downward trend—0.6 percentage points (about one-tenth of their value) each year.

What is the impact of profits on interest rates? It is axiomatic that if MFIs were to shrink their profits, they could charge their clients lower interest rates. But how much lower? Figure 13 looks at net MFI profits (including profits from other activities besides lending) in relation to the interest they collect from

Figure 12: After-Tax Profit as Percentage of Average GLP, 2003–2006



Note: GLP-weighted average of 175 sustainable MIX MFIs.

borrowers. It tells us how much an MFI could reduce the interest it charges if it completely eliminated all profit. This is, of course, a drastic and unrealistic scenario. The MFI would be forgoing not only returns to its owners but also growth in equity capital to expand the business.

Figure 13 shows that an MFI at the median could reduce its interest rate by 17 percent of the interest rate (not 17 percent of the loan amount). In other words, completely eliminating all profit would reduce the median MFI's interest rate by only about one-sixth, an effect that is smaller than many people might expect. By way of comparison, the hypothetical interest reduction by eliminating all profit is less than the drop in rates that actually happened from 2003 to 2006. If all sustainable MFIs swore off profits tomorrow, they would still have to charge interest rates that might look abusive to those who don't understand the high costs that tiny lending inevitably entails.

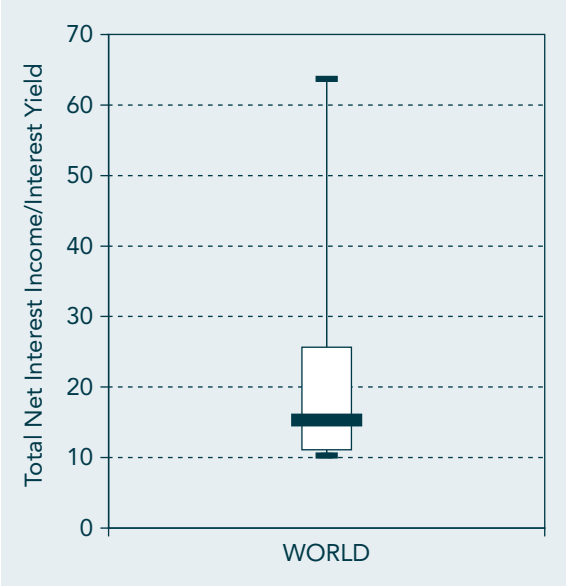
Cutting out profit would have more substantial effects at the upper percentiles, especially the top 5 percent, where interest rates could be shaved by almost two-thirds. One of the things going on here is that MFIs above the 75th percentile get a lot more of their income from sources other than lending. Over 20 percent of their income comes from nonlending activities (mainly other financial services and returns on investments), compared with 7.5 percent for the other three quartiles. Lowering interest rates enough to eliminate all profit would mean that these MFIs would be subsidizing losses on their loan portfolio with the net income from other activities.

Competition

People who are enthusiastic about the commercialization of microfinance have sometimes taken it as an article of faith that markets will eventually approach saturation, at which point competition will put downward pressure on interest rates, forcing MFIs to lower their profits and become more efficient. But it is not guaranteed that such effects will always occur. For instance, credit card rates in the oversaturated U.S. market have proved stickier than other credit rates, probably due in considerable part to the substantial time investment required for a customer to search for and switch to a new card with better terms (Calem and Mester 1995 and Ausubel 1991). Also, lenders might compete for customers by increasing their advertising, or enhancing service quality, instead of lowering their interest rates (Bertrand et al. 2005 and Wright and Alamgir 2004).

It is widely thought that microloan customers are not very sensitive to interest rate changes. If true, this would reduce competition's downward effect on

Figure 13: MFI Net Income as Percentage of Interest Yield, 2006



Note: 555 sustainable MIX MFIs, weighted by loan portfolio. The thick horizontal bar represents medians; the top and bottom of the white box represent the 75th and 25th percentiles, respectively; and the high and low short bars represent the 95th and 5th percentiles, respectively.

rates, profits, and costs. But two recent studies have found considerable price sensitivity among customers of a Bangladesh microlender and a South African consumer finance provider (Dehejia, Montgomery, and Morduch 2005 and Karlan and Zinman 2007). Three other CGAP-commissioned studies are testing interest rate sensitivity in other markets. The Gates Foundation is also investing in such research.

David Porteous (2006) has analyzed microcredit competition and its effects in Boliva, Uganda, and Bangladesh. At the time of his study (2005), interest rates had not yet declined much in Uganda, but Porteous judged that the microcredit industry was still in a consolidation phase there and thus that classical competition theory would not yet predict price competition. Markets in Bolivia and Bangladesh were more highly saturated. Interest rates had indeed declined steeply in Bolivia, but considerably less in Bangladesh. Porteous reported that the rate reductions that had occurred there resulted more from political pressure than from competition.

Interest rates, profits, and operating costs started out much lower in Bangladesh than was typical elsewhere in the world, probably mainly due to the attitudes of pioneers there toward the business. Thus, there was less room for reductions than in some other places. Nevertheless, some large Bangladesh MFIs are now generating profits that are high enough to suggest room for further interest rate reduction.[25]

It is unclear why competition isn't squeezing profits in Bangladesh more seriously. One possibility is that many or even most borrowers with more than one option may want to borrow more than any single MFI will lend them, and so they take multiple loans wherever they can get them, even if one of the providers is more expensive than another. MFI managers in Bangladesh report high levels of multiple indebtedness. Another theoretical explanation would be implicit collusion among the few MFIs that occupy most of the market.

Blaine Stephens (2007) reviewed 2003–2005 trends in four competitive microcredit markets—Bolivia, Bosnia, Morocco, and Peru—and found interest rates and operating expenses had dropped in parallel each year in all four markets. As the market in Cambodia has become more competitive, interest rates there have dropped by about a half between 2000 and 2007, according to Eric Duflos, a senior microfinance analyst from CGAP.[26] A forthcoming MIX Benchmarking report for Mexico, where competition has set in quite recently, shows modest declines in interest rates and profits during 2007. Knowledgeable observers tell us that microfinance is becoming competitive in important markets in India and that it has resulted in downward pressure on interest rates.

25 Return on average equity for 2006 was 26.1 percent at ASA, 23.3 percent at BRAC, and 22.2 percent at Grameen. Return on average assets was 14.4 percent for ASA, 6.9 percent for BRAC, and 2.4 percent for the more heavily leveraged Grameen (MIX Market data). ASA and BRAC are launching major efforts to move into other countries, and we speculate that they are probably using their profits to finance this major expansion of services.

26 According to unweighted MIX data, median MFI interest rates in Cambodia dropped from 42 percent in 2003 to 32 percent in 2006.

Taken together, these data points suggest that competition may not inevitably produce lower interest rates, profits, and operating expenses in all markets, but that such effects do appear to be happening in most of the markets now regarded as competitive. Present data suggest an optimistic picture, but it is still too soon for any robust prediction about how universal the lower-interest-rates-through-competition scenario will be. Perhaps the more relevant fact is the substantial worldwide decline in interest rates, administrative costs, and profits that we observed earlier in the paper. All this is distinctly positive for borrowers, who may not care very much whether we attribute it to competition or some other factor.

Summary and Conclusions

The question we have tried to address is whether microcredit borrowers are being abused by unreasonably high interest rates. Here are what we see as the highlights of the evidence we have assembled.

Level of Interest Rates

- Using the best data available, the median interest rate for sustainable (i.e., profitable) MFIs was about 26 percent in 2006. The 85 percent interest rates that drew so much attention to the Mexican MFI Compartamos are truly exceptional, rather than representative of the industry.
- MFI interest rates have been declining by 2.3 percentage points a year since 2003, much faster than bank rates.

Comparison with Other Rates Paid by Low-Income Borrowers

- MFI rates are significantly lower than consumer and credit card rates in most of the 36 countries for which we had rate indications, and significantly higher than those rates in only a fifth of the countries.
- Based on 34 reports from 21 countries, MFI rates were almost always lower—usually vastly lower—than rates charged by informal lenders.
- MFI rates were typically higher than credit union rates in the 10 countries for which we found data. In the cases where the credit unions offered a specialized microcredit product, their interest charges tended to be the same as, or higher than, prevailing MFI rates. However, it is hard to make much of this information, not only because the sample size is so small, but also because we know so little about the comparability of customers and products.

Cost of Funds

- MFIs have to pay more than banks pay when they leverage their equity with liabilities, and their cost of funds as a percentage of loan portfolio showed no sign of dropping 2003–2006. But MFI managers don't usually have much control over these costs, in the medium term at least.

Loan Losses

- MFI interest rates are not being inflated by unreasonable loan losses. In fact, default rates are very low—about 1.9 percent in 2006.

Administrative Expenses

- Tiny loans require higher administrative expenses, which are not substantially offset by economies of scale. On the other hand, the learning curve of MFIs as they age produces substantial reductions.
- Administrative costs are the largest single contributor to interest rates, but they have been declining by 1 percentage point per year since 2003. This decline appears to be a true improvement in the cost of serving each borrower, not just the result of expanding loan sizes.
- We have no statistical way to quantify how much avoidable fat remains to be trimmed from MFI operating costs. Given the finding that the level of these costs is strongly related to the age of the MFI, it would be unrealistic not to expect substantial inefficiency at a time when most MFIs are relatively young, and when most national microfinance markets are immature and noncompetitive. We are

unaware of any evidence to suggest that MFIs in general are out of line with the normal evolution of efficiency for businesses in such markets.

Profits

- MFIs on average have higher returns on assets than commercial banks do, but MFIs produce considerably lower returns on equity for their owners. The average return on MFI owners' equity in 2006 was moderate—12.3 percent, compared with 17.7 percent for banks. The very high profits that have drawn so much attention to Compartamos are outliers, not at all typical of the industry.
- At the same time, the most profitable 10 percent of the worldwide microcredit portfolio produced returns on equity above 34 percent in 2006, a level that is no doubt high enough to raise concerns about appropriateness for some observers. Much of this profit is captured by NGOs and never reaches private pockets. But some of it does go to private investors. A judgment about whether such profits are "abusive" would depend not only on the observer's standard for what is a reasonable profit but also on investigation of individual MFI circumstances, including the risk levels faced by investors when they committed their funds.
- The burgeoning volume of money passing through international microfinance investment funds is coming mainly from investors who are not willing to accept higher risks or lower returns for the sake of social objectives. Yet the profits generated by these funds seem unimpressive so far.
- Profits of sustainable MFIs, measured as a percentage of loan portfolio, have been dropping by about one-tenth (0.6 percentage points) per year since 2003.
- Profits are not a predominant driver of interest rates. For the median MFI, the extreme and unrealistic scenario of complete elimination of all profit would cause its interest rate to drop by only about one-sixth. Such an interest reduction would not be insignificant, but it would still leave microcredit rates at levels that might look abusive to politicians and the public, neither of whom usually understand the high costs that tiny lending inevitably entails.

Competition

- One cannot assume that competition will always lower interest rates. Interest rates appear to have dropped in the markets where microcredit has already become competitive, except for Bangladesh. But it is still too early to make any robust prediction about how universal the lower-interest-rates-through-competition scenario will be.
- Whatever the role that competition plays, the important fact is that interest rates, profits, and administrative costs have shown a marked downward trend in recent years.

How all this information is put together is up to each reader. We approach the issue from a development perspective, where the main concern is not financial results but rather client benefit—including, of course, those future clients who will get access to financial services as new investment expands the outreach of MFIs. A few MFIs have charged their borrowers interest rates that may be considerably higher than what would make sense from this perspective. Indeed, it would be astonishing if this were not the case, given the diversity of the industry and the scarcity of competitive markets.

The real question is whether unreasonable MFI lending rates are more than occasional exceptions. We do not find evidence suggesting any widespread pattern of borrower exploitation by abusive MFI interest rates. We do find strong empirical support for the proposition that operating costs are much higher for tiny microloans than for normal bank loans, so sustainable interest rates for microloans have to be significantly higher than normal bank interest rates. We are encouraged by the rapid decline in interest rates, operating costs, and profits in recent years, and we would expect this trend to continue in the medium-term future.

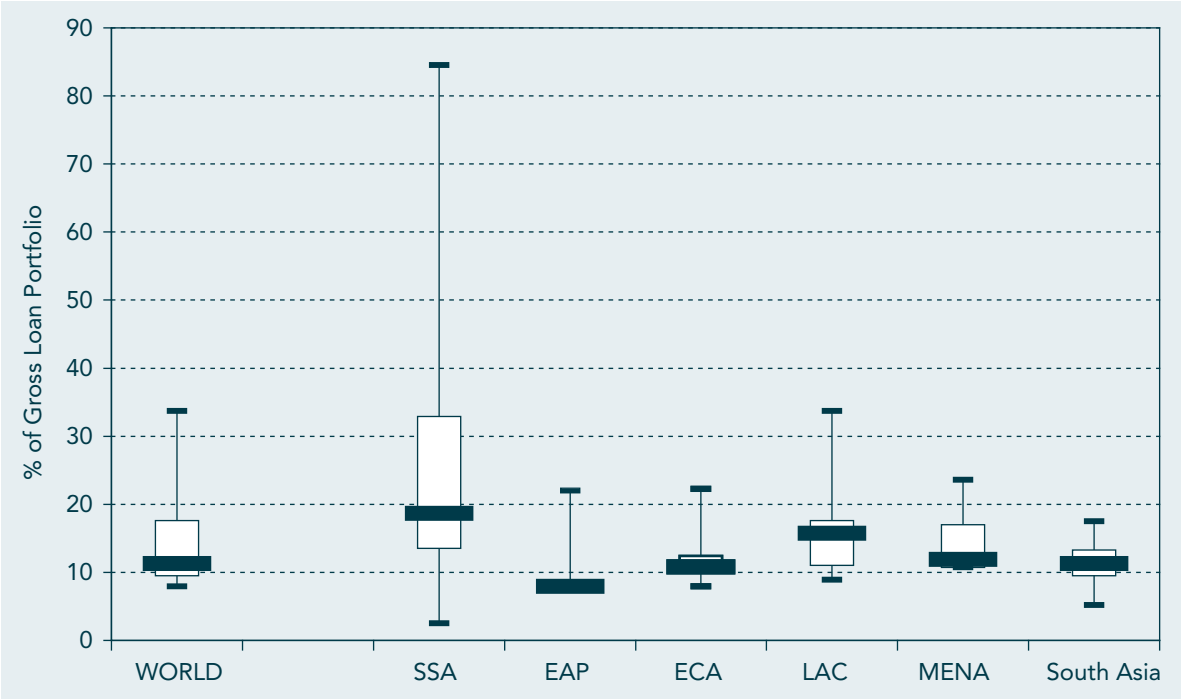
Appendix. Operating Expenses

Operating expenses constitute the majority of MFI costs. As shown in Figure A-1, the worldwide median for operating expense ratio (OER—salaries and other administrative costs divided by GLP) was 11.4 percent for 2006.[27]

Effect of small loan sizes. The principal justification offered for high microcredit interest rates is the claim that administrative costs are inevitably higher when placing a given amount in many tiny loans rather than a few big loans. This claim sounds plausible enough in theory, and Figure A-2 suggests that it stands up empirically. This figure shows the results of a regression analysis testing the relationship between average loan size and OER, both measured as percentage of gross national income per capita (GNIPC). The regression screened out the effect of other variables, such as age, scale, productivity, legal status, savings mobilization, region, macroeconomic environment, and some proxies for physical infrastructure.

It is clear that loan administration will cost MFIs more than it costs banks that make much larger loans. But is the actual level of operating costs for most MFIs the inevitable result of loan size, or does it reflect unreasonable inefficiency? One cannot calculate an answer to this question from available performance statistics. MFIs vary widely in a range of factors that affect operating costs, including not only loan sizes but also age, scale, client location and density, type of loans provided (e.g., group versus individual lending), client stability, communication and transport infrastructure, salary levels, and rural versus urban location. MIX categorizes MFIs into various peer groups for rough comparison purposes, but each peer group contains so wide a range of circumstances that one cannot confidently judge an MFI's efficiency just by comparing its indicators with those of its peer

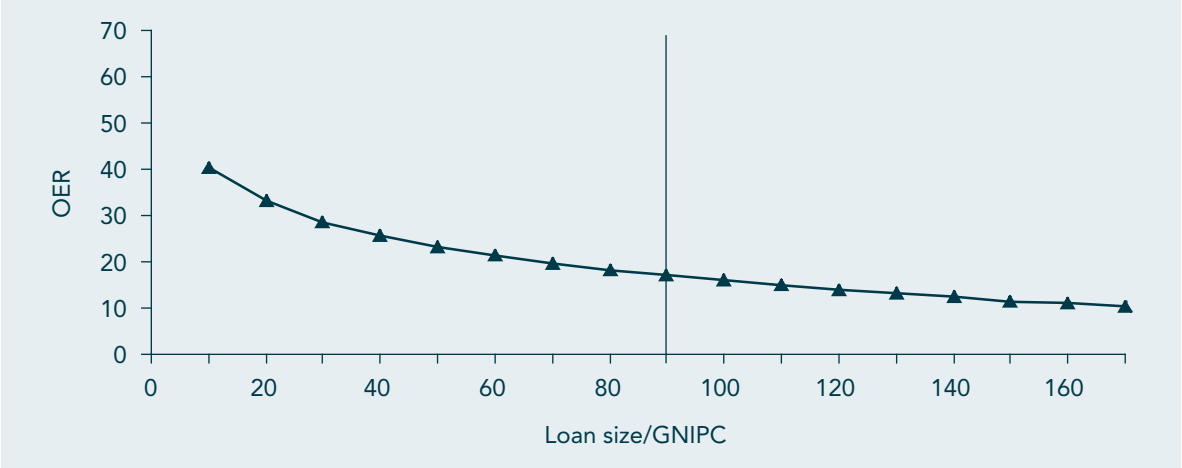
Figure A-1: Distribution of Operating Expense Ratio, 2006



Note: 555 Sustainable MIX MFIs, weighted by GLP. The thick horizontal bars represent medians; the top and bottom of the white boxes represent the 75th and 25th percentiles, respectively; and the high and low short bars represent the 95th and 5th percentiles, respectively.

27 This paper's version of the operating expense ratio (operating expense/GLP) is different from the one used by MIX (operating expense/total assets).

Figure A-2: Predicted Change in Operating Expense Ratio, by Loan Size



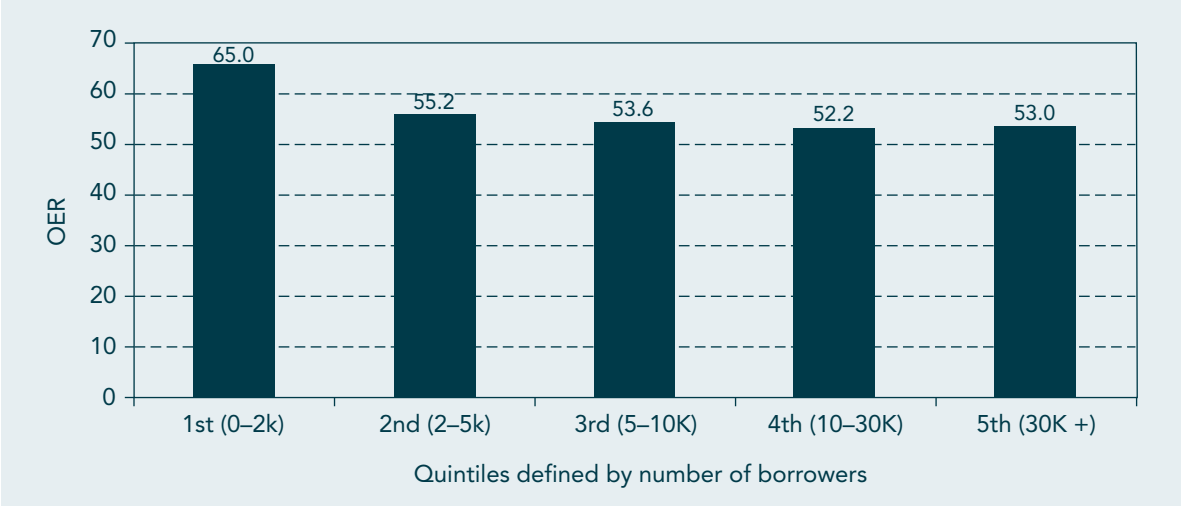
Note: Regression results based on 1,144 MIX Market and MBB MFIs reporting data for 1999–2006. The percentage scale at the left of the figure measures relative change, but does not correspond to absolute operating cost levels (Gonzalez Forthcoming).

group, let alone judge whether the peer group as a whole is reasonably efficient.

The only reliable way to tell whether an MFI's operating costs are appropriate is to conduct an on-the-ground study of its individual situation and operations, including many factors that aren't part of any public database. Nevertheless, there are a number of considerations that shed light on issues surrounding operating costs.

Economies of scale. Even though small loans cost more to administer than big ones, we might look for those costs to be lowered by economies of scale as MFIs grow larger. Some observers express disappointment that the growth in size of MFIs has not improved efficiency as much as they expected: shouldn't an MFI that can spread its fixed operating costs over a million borrowers have a much lower cost per loan, and be able to charge a lower interest rate, than an MFI with only a few thousand clients? The regression result in Figure A-3 is surprising. MFIs appear to capture most of their scale benefits by the time they reach about 2,000 clients; they appear to gain relatively little from scale economies after that very early point. This is probably because

Figure A-3: Predicted Change in Operating Expense/GLP Ratio, by Scale



Note: Regression results based on 1,144 MIX/MBB MFIs reporting data for 1999–2006 (Gonzalez Forthcoming). The percentages shown to the left of the graph show relative costs but do not correspond to actual cost levels.

microcredit is so labor intensive: salaries make up the majority of most MFIs' operating expenses, and fixed costs are relatively low compared with variable costs. MFIs that are still small enough to reap major economies of scale account for only a tiny percentage of microcredit loans and customers. In short, economies of scale cannot do much to offset the added expense that comes from making very small microcredit loans.

Trend of operating costs. Figure A-4 shows good news. MFI efficiency has improved substantially—i.e., operating costs have declined—in recent years in all regions except South Asia, where operating costs were already quite low.

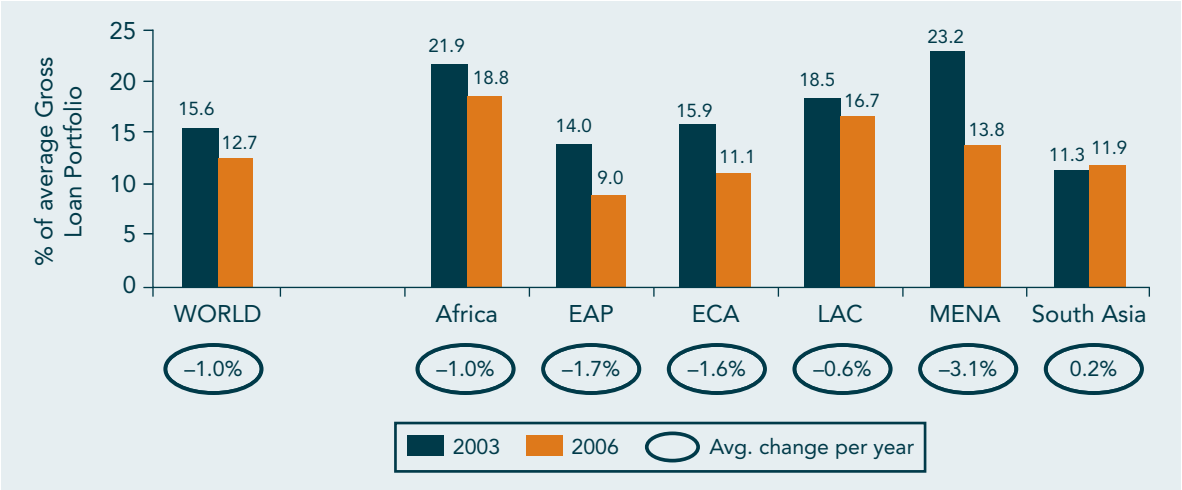
Why are operating cost ratios dropping: learning curve, loan size, or competition? The decline in operating costs is a major contributor to the decline in interest rates that borrowers are paying. What is causing this improvement in efficiency, and can we expect it to continue?

Learning curve. One driver—perhaps the most important driver—of improved MFI efficiency seems to be the increasing age of large MFIs as the industry develops. As institutions mature, they learn their business better and are able to control costs more effectively. Regression analysis (Figure A-5) shows that the age of an MFI is strongly associated with lower operating costs, even after separating out the effects of loan size, scale, and other relevant variables. Not surprisingly, the effect weakens over time, but it continues for quite a while. The operating expense ratio tends to drop by 2–8 percentage points for each of the first six years, 1–2 points for each of the next five years, and less than 1 point for each year thereafter.

We do not have a good statistical proxy for the competitiveness of an MFI's market, so we cannot quantify how much of this age effect can be attributed to competition. However, it's likely that most of the effect is due to the learning curve, because relatively few MFI markets are competitive yet.

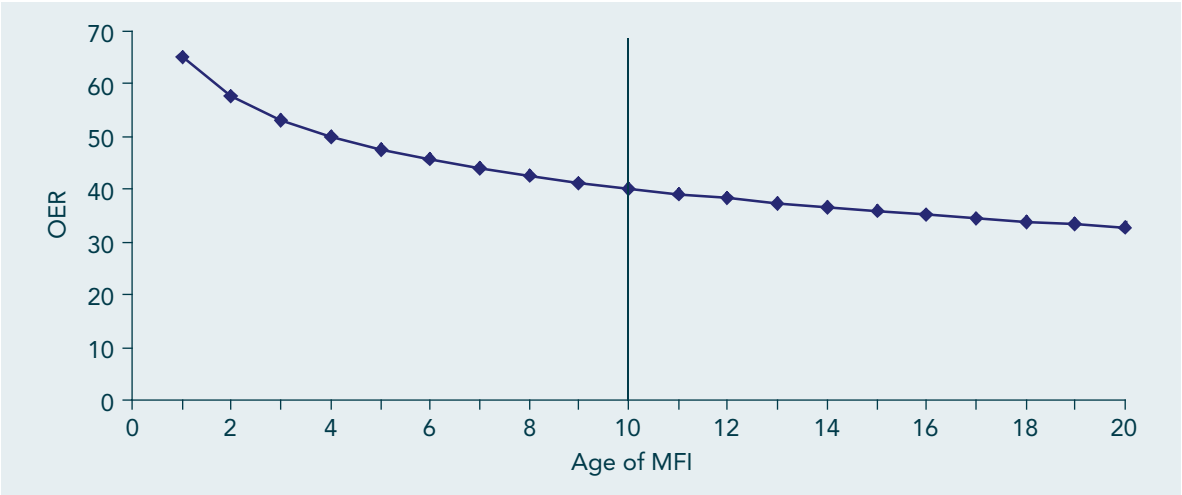
Loan size and mission drift. Since smaller loans are associated with higher operating expenses, an MFI could reduce its operating expense ratio by simply making larger loans. If an MFI whose borrowers all have $100 loans suddenly lets these borrowers double their loan size, or finds new borrowers who want larger loans, the MFI does not need to double its staff or other administrative expenses. Are the improvements in efficiency shown in Figure A-4 nothing more than the result of increasing loan sizes,

Figure A-4: Operating Costs as Percentage of GLP, 2003–2006



Note: 175 sustainable MFIs reporting to MIX for both 2003 and 2006.

Figure A-5: Predicted Change in Operating Expense/GLP, by Age of MFI



Note: Regression results based on 1,144 MIX Market and MBB MFIs reporting data for 1999–2006 (Gonzalez Forthcoming). The percentage scale at the left of the figure measures predicted relative change, but does not correspond to actual operating cost levels.

which might reflect a movement toward serving a richer clientele?[28]

Figure A-4 reported the most common measure of efficiency: Operating expense ratio, which is administrative cost divided by the amount of the loan portfolio. This operating expense ratio automatically makes MFIs with larger loan sizes look better.

A more useful measure for our immediate purpose is administrative cost divided by the number of borrowers. Normalizing the resulting "cost per borrower" by expressing it as a percentage of per capita national income produces an indicator that is better at describing MFIs from different countries without automatically giving an advantage to those that make larger loans, or that have lower labor costs in their country.

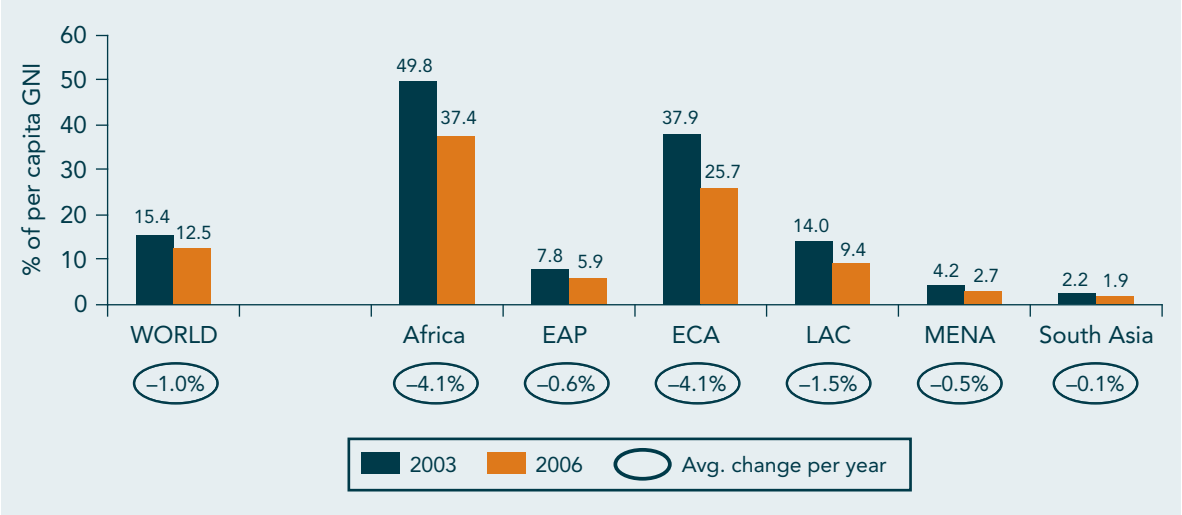
Figure A-6, which shows the 2003–2006 efficiency trend using normalized cost per borrower, suggests that the efficiency gains are not simply the result of larger loan sizes, but that they reflect true improvement in the cost of serving each client. The same conclusion can be drawn from the regression in Figure A-5, which shows that the learning curve drives a strong efficiency improvement even after screening out the impact of loan size.

Will cost per borrower tell us which managers are efficient and which are wasteful? Measuring normalized cost per borrower, rather than cost per dollar lent, filters out the effect of loan size and, to a lesser extent, country differences in labor and other input costs. But this measure does not filter out the effect of many other variables that impinge on an MFI's cost, such as geographical density of clients, transport and communications infrastructure, or the flexibility and sophistication of the products offered to clients.

Also, MFIs report their total administrative expenses. They are seldom able to separate costs associated with

28 Some observers interpret growth in average loan sizes as a sign of "mission drift" away from poor clients, but it is far from clear how often this is valid. The link between loan size and client poverty is only a very rough one at best. Most MFIs have a sequential ladder of loan sizes for clients, and the very small loans at the beginning of that ladder often reflect the MFI's risk management policy rather than the actual needs or repayment capacity of the borrowers. When borrowers move into later and larger loans, or when the MFI relaxes its size limits on initial loans, the MFI's average loan size will climb even if there has been no change in the kind of client it is serving. And even where the MFI is adding better off clients (for instance small business operators) as it grows, that does not necessarily mean restricting service for poorer customers. A much more reliable way to judge mission drift is to look at the character of the villages, towns, and neighborhoods where the MFI is opening its new branches.

Figure A-6: Operating Expenses Per Borrower as Percentage of Per Capita Gross National Income



Note: 175 sustainable MFIs reporting to MIX for both years, weighted by GLP.

lending from costs associated with other products, like savings. So if an MFI adds savings services, its reported cost per borrower will rise, but this doesn't signal deterioration in efficiency.

Finally, at a certain level, larger loan sizes do translate into larger administrative expenses per borrower—for instance, small business loans need more sophisticated and expensive analysis than microloans, so one would not expect to see cost per borrower as low in Eastern Europe as it is in South Asia. As a result of all these factors, one cannot automatically conclude, for example, that managers of East Asian MFIs are more efficient than managers in Latin America, just because the former have a lower cost per borrower.

The various factors that impinge on cost per borrower affect individual MFIs differently. However, they stay more or less the same for a given MFI from one year to the next, so the overall decline in cost per borrower shown in Figure A-6 very probably reflects true efficiency improvement.

We know of no statistical approach that can directly measure whether MFI administrative costs are abusively high today. But the data have permitted us to make some relevant observations. The plausible argument that costs need to be higher when smaller loans are being delivered is supported by regression analysis of a large set of MFIs. MFI operating cost levels have dropped substantially in recent years, and we have seen that this represents real operating improvements, not just the effect of increasing loan sizes. Regression analysis suggests that much of this improvement reflects the learning curve as MFIs gain experience.

This still doesn't tell us how much avoidable "fat" is built into MFI operating expenses. Because most microfinance markets are so young and because most are not yet competitive, it would be unrealistic to expect MFIs in those markets to be operating at the most efficient levels possible. Immature industries always have some level of correctable inefficiency. We know of no evidence suggesting that MFIs in general are out of line with the normal evolution of efficiency for businesses in immature markets. Finally, the year-to-year cost of operating expenses shows an encouraging decline, however we measure it.

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No. 15
February 2009

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The following is a suggested citation for this Occasional Paper:
Rosenberg, Richard, Adrian Gonzalez, and Sushma Narain. 2009. "The New Moneylenders: Are the Poor Being Exploited by High Microcredit Interest Rates?" Occasional Paper 15. Washington, D.C.: CGAP.