



Measuring the Impact of Microfinance: Taking Stock of What We Know

by Nathanael Goldberg

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About the Author

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Foreword

The global poverty crisis and resulting human suffering, environmental degradation, civil unrest and many other societal ills, are hastening the search for scaleable anti-poverty approaches. These deplorable conditions are the source of the growing interest in microcredit and, more broadly, microfinance. Of course, gatherings such as the Microcredit Summit, global support through the U.N.'s International Year of Microcredit, and articulate spokespeople such as Dr. Muhammad Yunus have also attracted worldwide attention for microfinance.



Even as we pursue efforts to scale

up microfinance through increasingly market-based approaches, we must realize that the commercialization of microfinance is a means to an end, rather than an end in and of itself. That end is the reduction and ultimate elimination of extreme poverty from the face of the earth. This cannot happen soon enough if we hope to bequeath a sustainable planet to our children and grandchildren.

If the reduction of poverty is the bottom line of microfinance, as it is for Grameen Foundation USA, then we need to ensure that most of the people who access microfinance are able to improve their socio-economic well-being within a reasonable timeframe. For those of us who have spent considerable time talking to microfinance clients about their experiences, it is easy to take this for granted. We know every client does not overcome poverty and that there are few overnight successes. Yet we are confident that the trend is solidly in the right direction. That is what motivates microfinance professionals and volunteers to work as hard as they do to achieve the kind of scale that we have seen in countries such as Bangladesh (and maddeningly few others).

In this International Year of Microcredit, we have been asked the tough questions. These include: Is there evidence that microfinance impacts poverty? If so, what does it say? Can the poorest benefit, or just those near the poverty line? Do women control the resources they receive, and are they empowered? Are there society-wide impacts?

Some have asserted that little evidence exists to answer these questions; others say the evidence paints a gloomy picture. Having lived in villages transformed by Grameen-style microfinance,

and having reviewed most of the major studies on impact, I knew that these were not valid critiques. I occasionally began pulling out studies, some dating from the 1980s but many from recent times, to refute these claims through emails, telephone calls, media interviews and the like. I kept hoping that some organization would publish a paper that compiled all the studies (except those with serious methodological flaws) and present them together, in a rigorous and unbiased way, so that we could finally have informed discussions about impact rooted in empirical data rather than ideology and emotion. There was the occasional chapter in a larger book that tried to look at the evidence of impact that were helpful, but ultimately unsatisfactory.

When I saw no such paper on the horizon, I asked recent Woodrow Wilson School graduate Nathanael Goldberg to research and write such a paper, and asked two couples who have been among our most consistent supporters – Bob and Lore Eichfeld and Henry and Holly Wendt – to underwrite the associated costs. All involved agreed to participate in the project. Nathanael spent the summer of 2005 reading scores of studies, and the fall writing up a paper that summarized the findings of the best of them. He consulted with a wide range of experts and got their input on early drafts. He did an excellent job. I hope this will be a resource for the entire industry, not just Grameen Foundation USA and its network. He is to be applauded for his diligence, fairness, rigor, and writing flair.

Some of his findings will surprise many people. For example, two major studies strongly suggest that microfinance works better for the poorest than the less poor. Second, there is strong evidence that female clients are empowered, though the data on increased adoption of family planning is less clear. Third, society-wide benefits that go beyond clients' families are apparently significant – which is a tantalizing possibility when we hear that roughly 92 million families (composed of 450 million people) are now being reached, according to the Microcredit Summit's *2005 State of the Campaign Report*. Fourth, even in cases when women take but do not use the loan themselves, they and their families benefit more than if the loan had gone directly to their husbands.

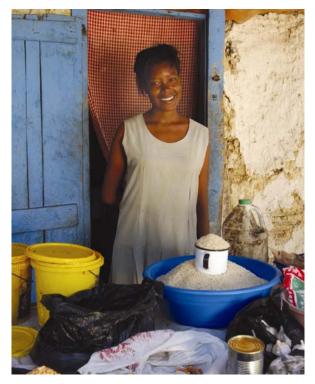
Nathanael rightly calls for more and better research, which is important if for no other reason than to show the enhanced impact of improved products and services now being delivered by microfinance institutions (MFIs). After reading this paper, even people who have not spent time in communities benefiting from microfinance will be confident that microfinance is an effective, and ever-improving, strategy for tackling the global poverty crisis.

Alex Counts, President Grameen Foundation USA Washington, DC December 2005

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Executive Summary



The prevalence of microfinance impact evaluations has increased in recent years, with programs using studies not just to prove the effectiveness of microfinance, but to improve it as well. However, the quality and rigor of microfinance impact evaluations vary greatly. This paper surveys the most significant microfinance impact evaluations that have been published as of mid-2005 and guides readers through interpreting the results and reliability of each study.

One of the first comprehensive microfinance impact assessments was **"Credit for the Alleviation of Rural Poverty: The Grameen Bank in Bangladesh," (1988)** by Mahabub Hossain. Hossain found Grameen members' average household income to be 43 percent higher than target non-participants in comparison villages, with the increase in income from Grameen highest for the landless, followed by

marginal landowners. Hossain warned it was likely that his impact findings would be overstated, however, because Grameen members were found to be younger and better educated than nonmembers who were more likely to be landless. This type of difference between participants and comparison households is prevalent among microfinance impact evaluations and limits the conclusions we can draw from many of them.

The 1998 book, *Fighting Poverty with Microcredit* by World Bank economist Shahidur Khandker, and the related paper, **"The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?"** by Khandker and Mark Pitt, a Brown University economist, were influential because they were the first serious attempt to use statistical methods to generate a truly accurate assessment of the impact of microfinance among three Bangladeshi programs: Grameen Bank, BRAC, and RD-12. The centerpiece of their findings was that every additional taka lent to a woman adds an additional 0.18 taka to annual household expenditures—an 18 percent return to income from borrowing. However, NYU economist Jonathan Morduch responded with the paper, **"Does Microfinance Really Help the Poor? New Evidence from Flagship Programs in Bangladesh"** (1998), citing serious concerns with their data and their statistical model.

With the benefit of more data, Khandker was able to improve their model, published in a 2005 update to the study, "Micro-finance and Poverty: Evidence Using Panel Data from Bangladesh." The updated findings showed that each additional 100 taka of credit to women increased total annual household expenditures by more than 20 taka. There were no returns to male borrowing at all. Khandker found that between 1991/92 and 1998/99 moderate poverty in all villages declined by 17 percentage points: 18 points in program areas and 13 percentage

points in non-program areas. Among program participants who had been members since 1991/92 poverty rates declined by more than 20 percentage points—about 3 percentage points per year. Khandker estimated that more than half of this reduction is directly attributable to microfinance, and found the impact to be greater for extreme poverty than moderate poverty, which microfinance was found to reduce by 2.2 percentage points per year and 1.6 percentage points per year, respectively. Khandker further calculated that microfinance accounted for 40 percent of the *entire* reduction of moderate poverty in rural Bangladesh.

The AIMS Studies

In 1995 the United States Agency for International Development (USAID) launched the Assessing the Impacts of Microenterprise Services (AIMS) Project, which developed five tools (two quantitative and three qualitative) designed to provide practitioners a low-cost way to measure impact and improve institutional performance. The tools recommended comparing existing clients to incoming clients and using the difference between them to estimate program impact. The idea behind the methodology was that since both the clients and the comparison households had chosen to join the program, there should be no difference in their "entrepreneurial spirit." Otherwise, higher incomes among participants might simply be driven by superior business acumen. However, some experts, notably Dean Karlan in "**Microfinance Impact Assessments: The Perils of Using New Members as a Control Group**" (2001), have called into question the validity of this type of comparison. Karlan warns that this design can yield biased estimates of impact because MFIs may have originally started to work with different types of clients than they currently serve (for instance, an MFI may have cautiously started out working with better-off communities before branching out to poorer areas), and because clients who chose to enroll earlier may differ from those who chose to wait and see before joining.

The AIMS Core Impact Assessments of SEWA (India), Zambuko Trust (Zimbabwe), and Mibanco (Peru) avoid this problem through the use of longitudinal data and non-client comparison groups. **"Managing Resources, Activities, and Risk in Urban India: The Impact of SEWA Bank" (2001)**, by Martha Chen and Donald Snodgrass, compared the impact of clients who borrowed for self-employment to those who saved with SEWA Bank without borrowing, and compared both groups to non-clients. Borrowers' income was over 25 percent greater than that of savers, and 56 percent higher than non-participants' income. Savers, too, enjoyed household income 24 percent greater than that of non-participants. These findings indicate that microfinance—credit or savings—can be quite effective. **"Microfinance Program Clients and Impact: An Assessment of Zambuko Trust, Zimbabwe" (2001)**, by Carolyn Barnes, found that while clients' income was significantly higher in 1997 than the incomes of other groups, by 1999 the difference was no longer statistically significant, though continuing clients still earned the most. **"The Impacts of Microcredit: A Case Study from Peru" (2001)**, by Elizabeth Dunn and J. Gordon Arbuckle Jr., found Mibanco clients earned \$266 more *per household member* per year than non-participants.

Wider Impacts

Empowerment

Hashemi, Schuler, and Riley, in **"Rural Credit Programs and Women's Empowerment in Bangladesh"** (1996), used a measure of the length of program participation among Grameen Bank and BRAC clients to show that each year of membership increased the likelihood of a female client being empowered by 16 percent. Even women who did not participate were more than twice as likely to be empowered simply by virtue of living in Grameen villages. This may suggest that a positive spillover from microfinance is affecting the norms in communities, but it could also imply that Grameen selects relatively empowered communities for program placement.

Contraceptive Use

"Poverty Alleviation and Empowerment: The Second Impact Assessment Study of BRAC's Rural Development Programme" (1998), by A. M. Muazzam Husain, reported that members who had been with BRAC the longest had significantly higher rates of contraceptive use. *Fighting Poverty with Microcredit* found credit provided to women *reduced* contraceptive use among participants. However, as discussed above, the results from Khandker's earlier work may be unreliable. **"The Impact of an Integrated Micro-credit Program on Women's Empowerment and Fertility Behavior in Rural Bangladesh" (1998)**, by Steele, Amin, and Naved, estimated that, even after statistically controlling for prior contraceptive use, borrowers were 1.8 times more likely to use contraceptives than the comparison group. Membership in a savings group was not found to have an effect. However, analysis of the actual number of births did not reveal a statistical relationship between either savings or credit and fertility.

Nutrition

Barbara MkNelly and Christopher Dunford, both of Freedom from Hunger, completed two comprehensive evaluations of Credit with Education programs: "Impact of Credit with Education on Mothers and Their Young Children's Nutrition: Lower Pra Rural Bank Credit with Education Program in Ghana" (1998), and "Impact of Credit with Education on Mothers and Their Young Children's Nutrition: CRECER Credit with Education Program in Bolivia" (1999). In Ghana, participants experienced an increase in monthly nonfarm income of \$36, compared to \$17 for the comparison group. Participants were more likely to breastfeed their children and more likely to delay the introduction of other foods into their babies' diets until the ideal age, and they were more likely to properly rehydrate children who had diarrhea by giving them oral rehydration solution. These impacts paid off in a significant increase in height-for-age and weight-for-age for children of participants. "Credit Programs for the Poor and the Health Status of Children in Rural Bangladesh" (2003) by Pitt, Khandker, Chowdhury, and Millimet, found substantial impact on children's health (as measured by height and arm circumference) from women's borrowing, but not from male borrowing, which had an insignificant or even negative effect.

Determinants of Impact

Control of Loan

In *Women at the Center*, Helen Todd found that a quarter of clients in her sample were turning over their entire loans to their husbands. Todd described these women as the most marginal in her sample; though they represent only 25 percent of the members, 41 percent of the borrowers who were still poor after 10 years of participation were among this group. Other studies, however, found that that even in the case where women have the least control—i.e., women channeling their entire loans—women are better off with microfinance than without. "**Rural Credit Programs and Women's Empowerment in Bangladesh**" confirms this conclusion, finding that 36 percent of Grameen and BRAC borrowers with no control of their loans could be considered empowered, compared to only 9 percent of women in comparison villages.

Incoming Poverty Level

The Second Impact Assessment Study of BRAC found that BRAC members' non-land assets were 380 percent greater than those of comparison group households, and net worth was 50 percent higher. Significantly fewer BRAC households were poor (52.1 percent of BRAC households versus 68.6 percent of the comparison group). However, subgroup analysis revealed that landless clients (the poorest clients) benefited least from the program, while those with 1-50 decimals of land ("the poor") benefited most. Another study, "Monitoring diversity of poverty outreach and impact of microfinance: a comparison of methods using data from Peru" (2005), by Copestake et al., found that impact for the wealthier half of Promuc clients was 80 percent higher than the impact for the poorer half.

However, other studies, including "Micro-finance and Poverty: Evidence Using Panel Data from Bangladesh," found that the poorest clients benefited most from participation. "The Maturing of Indian Microfinance" (2004), by EDA Rural Systems, supports this conclusion, showing that while non-poor clients most often reported an increase in household income, they didn't do much better than non-clients. Compared to non-clients, the very poor benefited most from program participation.

Family Crises

In *Women at the Center*, Helen Todd found that out of the 17 Grameen Bank borrowers who were still poor after a decade, ten of them had experienced a serious illness in the family in the three years before her study. According to Todd, the families that suffer crises were almost always forced to sell off assets to pay for medical treatment and to support the family through the loss of income from the husband or the wife. Other studies show mixed results on the effect of crises. Another Todd study, "**Paths out of Poverty: The Impact of SHARE Microfin Limited**," found though 49 percent of SHARE clients had experienced a family crisis or natural disaster in the previous four years, they were no more-or-less likely to have experienced an increase or decrease in poverty. Todd attributed their ability to cope with crises to their extraordinary savings rates. "**Moris Rasik: An Interim Impact Assessment**," edited by David Gibbons, however, corroborates Todd's earlier findings from *Women at the Center* (this time with a larger sample size). Among clients who had experienced both serious illness *and* death in the family, nearly 60 percent remained Very Poor, versus only 40 percent for those who had experienced serious illness only. These results highlight the need to further develop savings and insurance products for the poor.

Section 1: Introduction



After years of struggle, the proponents of impact measurement in the microfinance industry can claim a welldeserved victory. Today most industry leaders take the need to measure impact as a given-not just to prove the effectiveness of microfinance but to improve it as wellthanks in part to the AIMS Project, and papers such as "Measuring Transformation" by Susy Cheston and Larry Reed. As the sector continues to expand in new directions and markets, it seems an opportune time to take stock of what we know about what microfinance programs can contribute to the alleviation of poverty; and where, and for whom. Of course, such a discussion must start with the big question: does microfinance work at all as a poverty reduction strategy? For many, a typical response to this question is to cite a few famous phrases lifted from a handful of wellknown evaluations. These phrases seem to get passed along like folklore among practitioners and donors who don't have

time to read the original studies. The full studies typically present a more nuanced view than these oral histories can provide. Within those details there exists a wealth of useful information.

This paper aims to improve the level of discourse by surveying the most significant microfinance impact evaluations that have been published as of mid-2005. While the paper can only offer a snapshot of the results, here the key findings of a wide range of evaluations are compiled in one place. Every effort was made to faithfully represent and analyze the conclusions of the evaluations. However, readers are encouraged to determine for themselves the overall impact of each program by reading the original studies. In that spirit, this paper should be viewed not as a standalone document, but as a reader's guide and executive summary to a rich library of existing impact assessments. To assist readers, links to the original studies are provided in one central location at www.gfusa.org.¹

The quality and rigor of microfinance impact evaluations vary greatly. Copestake et al. (2001) aptly describe three different schools of thought in the microfinance industry about how thorough an impact evaluation should be:

The first accepts the case for doing a limited number of rigorous studies but argues that it is a specialised and expensive task. The second trusts more in the ability of practitioners to interpret and be guided by a mixture of routine monitoring and qualitative studies, more akin to market research than to academic research. A third view seeks an intermediate or 'middle range' level of assessment: cheap enough to be carried out quite widely, but sufficiently rigorous to be credible.²

¹ Where copyright restrictions limit the distribution of copyrighted material, links will be provided to sources where materials can be purchased.

² Copestake et al., "Assessing the impact of microcredit: A Zambian case study." *Journal of Development Studies* 37 no. 4 (2001), p. 82.

This paper will draw from all three camps. It will review more than enough of the most rigorous evaluations to satisfy the skeptics; it will round out the lessons from these studies with findings from the "middle range" evaluations, and where appropriate it will include results from the more "practitioner-oriented" studies, with guideposts to assist readers in identifying the reliability of each study discussed.

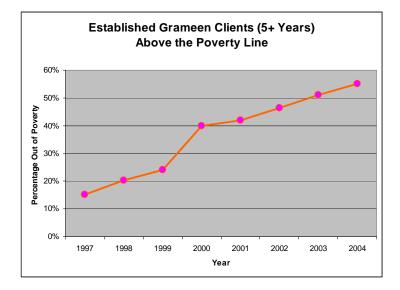
The remainder of this section will provide a brief introduction to some of the analytical issues involved in microfinance evaluations. Section 2 of the paper begins our review of the literature and attempts to answer the question: "Does microfinance work?" Section 3 will review the important contributions of the AIMS evaluations and Section 4 will look at evaluations commissioned by MFIs and their funders. Section 5 considers "wider impacts" such as empowerment, Section 6 evaluates what we know about which factors lead to greater impact, and Section 7 concludes with a discussion of the differences between approaches to the evaluation of impact, and how they might be viewed as complementary.

Monitoring vs. Impact

The Grameen Bank awards its branches up to five stars for their performance. Three stars are related to financial performance – profitability, saving mobilization, and portfolio quality. Two stars are awarded on social impact measures – whether all school-age children of Grameen borrowers are in school, and whether all Grameen families have left poverty. To make it easy to measure the final performance indicator, Grameen developed ten easily observable indicators that, when all are met, strongly suggest that a family has escaped poverty. These indicators are as follows:

- 1. The family lives in a house worth at least Tk. 25,000 (about \$380 at current exchange rates) or a house with a tin roof, and each member of the family is able to sleep on a bed instead of the floor.
- 2. Family members drink pure water of arsenic free tube-wells, boiled water or purified water.
- 3. All children in the family over six years of age are all going to school or have finished primary school.
- 4. The minimum weekly loan installment of the borrower is Tk. 200 or more.
- 5. The family uses a sanitary latrine.
- 6. Family members have adequate clothing for every day use, warm clothing for winter, and mosquito nets to protect themselves from mosquitoes.
- 7. The family has sources of additional income, such as a vegetable garden, fruit-bearing trees, etc., so that they are able to fall back on these sources of income when they need additional money.
- 8. The borrower maintains an average annual balance of Tk. 5,000 (about \$75) in her savings accounts.
- 9. No member of the family goes hungry any time of the year.
- 10. The family can take care of its health. If any member of the family falls ill, the family can afford to take all necessary steps to seek adequate healthcare.

Grameen Bank has been tracking the progress of its clients in achieving all ten indicators since 1997, and reports that 55 percent of its established members (Grameen annually surveys all clients who have been in the program more than five years) had crossed the poverty line by the end of 2004:



This is an impressive achievement, and exactly the type of information that one might hope any MFI would be tracking. Though it might seem arbitrary to determine that achieving all ten indicators constitutes movement out of poverty, in fact all poverty lines are to some degree arbitrary, and they are meant to quantify whether or not families are meeting basic needs-such as those represented in the Ten Indicators. Knowing that 55 percent of established Grameen clients never go hungry, have access to safe drinking water, and send their children to school is important to Grameen. If the number were lower, they might want to rethink their operations to see how they might achieve greater impact. This type of monitoring is important from a managerial perspective, and the Imp-Act program at the Institute of Development Studies at the University of Sussex in the UK has been influential in encouraging MFIs to adopt similar methodologies. That said, the Ten Indicators do not by themselves answer the question: does microfinance work? For that we need the counterfactual—what would have happened to these clients in the absence of Grameen. To see why, we need only consider that the Bangladeshi economy has been growing at a healthy 5 percent clip for the past several years, significantly higher than the population growth rate.³ One might reasonably wonder whether we have the program or the economy to thank for the success of Grameen's members. On the other hand, the rural poor may not benefit equally from economic growth. Many comparable examples can be constructed; the point is that a simple "pre-post" (before and after) comparison can be useful, but does not yield enough information to definitively determine the impact of the program.

Most of the studies included in this paper attempt to isolate program impact by comparing the outcomes of clients against a comparison group of non-clients. In the example above, so long as Grameen members are raising their incomes faster than non-clients we can have some assurance

³ Source: CIA World Factbook: http://www.cia.gov/cia/publications/factbook/geos/bg.html

that Grameen is having an impact.⁴ The idea is to find a comparison group consisting of people who are just like the program members except for the effect of the program—but this is notoriously difficult. Each of the studies included here attempts to do this in some fashion; for example, by choosing non-clients who were eligible for the program but didn't join, or non-clients who would have been eligible but were from a similar village where there is no MFI.

The more rigorous studies will then compare the average performance of clients to the comparison group on several independent variables (those not affected by the program; e.g., age, gender, education) or baseline characteristics (when the client entered the program; e.g., income, occupation, number of children) to verify that the two groups indeed seem very much alike. Ideally the paper will use statistical tests of means to show whether the inevitable little variations between the groups are merely due to chance or whether they differ in some meaningful way. Still, there may remain what economists call "unobservables," the characteristics that are difficult or impossible to measure. Why, exactly, didn't a given client join the program? Was she afraid she couldn't repay the loan (a common response from non-participants questioned about why they chose not to borrow)? Why, exactly, is there no MFI in that particular villageis it too far from the main road? Are the villagers too well off...or too poor? If we assume, as we would like to, that MFIs that are trying to reach the poorest clients are in fact able to do so, then comparing the income levels of clients to those of non-clients will underestimate program impacts.⁵ In this case the comparison group would have been better off to begin with, and if a program has not fully closed this gap by the time of the study, it could even appear to harm clients when in reality it does not. Of course, that programs target the poorest clients is not always a reasonable assumption, meaning, in many cases, that impacts could be overestimated.

This problem of dissimilar comparison groups is known as selection bias and is a limiting factor of most social science research and all microfinance impact studies undertaken to date. A practical but imperfect solution to selection bias is to compare existing clients to incoming clients—since both groups have opted to join the same program we don't fear that some unobserved "entrepreneurial ability" is driving the estimate of impact. Unfortunately this gets us back to the question: Why, exactly, didn't this new group of clients join the program several years ago—was it because they were afraid (making them different in some way from those who were not) or because the MFI was until now avoiding their village, either because it was too poor or too rich? Karlan (2001) examines this problem in detail; we will see later that comparisons of means can reveal that incoming clients do sometimes differ from existing clients in meaningful ways.

The only way to ensure the absence of selection bias is through experimental design: random assignment of treatment and control groups. Randomized evaluations of development projects are becoming increasingly common, and groups like the Poverty Action Lab at MIT are demonstrating that with a little creativity, randomized trials can be performed ethically and cost-effectively. Still, until now, no randomized evaluation of a microfinance program has been

⁴ This paper in no way intends to imply that every MFI should conduct time-consuming, expensive impact assessments in place of monitoring; rather the idea behind the paper is, given a wealth of existing impact assessments, it is worth examining them to get a sense of how well microfinance is working around the world. ⁵ Income *changes* could be either over- or underestimated depending on whether poorer or better-off clients and

non-clients experience faster growth.

published,⁶ so we must rely on the existing "quasi-experimental"⁷ designs described above. This discussion is not meant to disparage these studies; instead it is intended to give the reader, who may be new to the subject, the basic tools necessary to evaluate the merits and limitations of each study as we present them in an honest way. For a more thorough discussion of impact analysis see the chapter "Measuring Impacts" in Armendáriz de Aghion and Morduch (2005).

A final point worth considering throughout the paper is how the studies handle dropouts. Many MFIs have high rates of client exit; it would tell us little about the effectiveness of such programs if we compared only the clients who remained in the program—quite possibly because they were among those whose enterprises were successful enough to allow them to repay their loans and take new ones—to a comparison group. Studies deal with this issue in different ways. For MFIs with low dropout rates, some studies simply state this, assuming that bias will be minimal. Others compare a sample of dropouts to clients and comparison groups to show how their outcomes differ. The most rigorous method is to include dropouts in the treatment group with current clients.

Methodology

Two documents served as a starting point for locating studies for inclusion in this paper: "CGAP Focus Note 24: Is Microfinance an Effective Strategy to Reach the Millennium Development Goals?" (along with the related Microfinance Gateway Impact Assessment Centre), and Jonathan Morduch and Barbara Haley "Analysis of the Effects of Microfinance on Poverty Reduction." In addition, I communicated with dozens of impact specialists and practitioners (including many of the larger network organizations), who referred me to additional evaluations. In total, I reviewed nearly 100 impact evaluations. The paper, nonetheless, does feature a high proportion of Grameen-network programs, particularly in Section 4. Whether that represents a greater interest among Grameen MFIs in measuring their impact and making the results publicly available, I cannot say, but I do know that the prevalence of Grameen programs here was not intentional. If there are any high-quality evaluations I may have missed (studies that isolate impact with a comparison group, as discussed above), I invite the authors or the MFIs to submit them via email to Grameen Foundation USA at impact@gfusa.org for inclusion on the webpage where this paper will be posted, along with the studies addressed here.

These studies contain probably several thousand individual findings—far too many to discuss in this volume. I chose to favor "primary" impacts over those that require assumptions. For example, the AIMS studies tend to measure reduction in clients' risk by tracking diversification of income sources. Owning more businesses is probably a good thing, but it may not lead automatically to a reduction in financial shocks.⁸ When looking for findings on this topic, I

⁶ The Freedom from Hunger studies examined in Section 5 address selection bias at the village level by randomly assigning villages to treatment or control groups. However, they still suffer from self-selection bias by measuring the impact on participants who choose to enter the program. Upcoming work by Karlan and Morduch will re-examine this experiment and estimate the impact after taking into account the self-selection bias.

⁷ Quasi-experimental designs are evaluations in which participants are compared to observably similar, but not randomly identified, groups.

⁸ The evaluation of SHARE, discussed in Section 4, does establish a correlation between diversification of income sources and movement out of poverty.

prefer direct evidence of decreases in the variability of income and reduction in periods of hunger.

Negative impacts were sufficiently rare that they could be addressed nearly without exception, but statistically insignificant impacts (generally positive but sometimes negative) abound. While an effort was made to show what microfinance does *not* do along with what it does, it would take many more volumes to list the myriad little ways in which microfinance has not been shown to change the lives of the poor. For instance, a given program (in this case, BRAC) might be found to increase household spending on vegetables, potatoes, and milk while consumption of rice, wheat, fish, and meat declined. Since program participants were found to consume more of *each* of these items than non-participants, for the sake of brevity it would simply be reported here that the program increases food consumption, which is accurate. Again, readers are encouraged to read through the original studies to review the findings in greater detail.

A final bias: I tend to be skeptical of surveys that ask respondents "did your income increase in the last year?" Clients may either want to say yes to be supportive of the program (or to prevent fellow group members from worrying they might have repayment difficulties); or they may want to say no, fearing they might become ineligible for the program or might attract attention from tax authorities. Surveys in which the enumerators work with the respondents to estimate income are therefore preferred.⁹ The second advantage to this method is we find out *how much* income changed—not just whether it did or did not. Unfortunately, estimating income can be quite difficult, so the "did your income increase" studies are common. Therefore, while the estimates of actual changes in income are favored, both are included in the paper.

⁹ Of course, one could imagine the same manipulations cropping up in this type of survey, too, but it would be more difficult for the respondents to do so, and therefore less likely.

Section 2: Does Microfinance Work? The Story from Bangladesh and Peru



Early Studies of the Grameen Bank

The Grameen Bank, established in 1976, was the first microfinance institution (MFI) to attract international attention, so it is unsurprising that Grameen was the focus of many of the earliest microfinance evaluations. One of the first comprehensive impact assessments of Grameen Bank, "Credit for the Alleviation of Rural Poverty: The Grameen Bank in Bangladesh," by Mahabub Hossain, was published by IFPRI in 1988. Hossain

compared Grameen Bank members to eligible non-participants in Grameen villages as well as target (those who would have been eligible had Grameen been in their village) non-participants in comparison¹⁰ villages.

He found Grameen members' average household income to be 43 percent higher than that of target non-participants in comparison villages and 28 percent higher than eligible non-participants' average household income in Grameen villages, with the increase in income from Grameen highest for the landless, followed by marginal landowners. Other findings included:

- Grameen Bank members spent 8 percent more per capita on food and 13 percent more on clothing than target non-participants in Grameen villages, and 35 percent more on food and 32 percent more on clothing than target households in comparison villages.
- Members spent six times more on housing investments than the comparison group in non-Grameen villages and a third more than target non-participants in Grameen villages.

	Grameen	Target non-	participants	All ho	useholds
	Members	Grameen Comparison		Grameen	Comparison
		villages villages		villages	villages
Moderately poor (percent)	61.0	83.7	80.4	61.5	76.3
Extremely poor (percent)	48.0	76.0	74.4	47.1	54.6

Table 1: Poverty rates among Grameen Bank members vs. Non-participants, 1984-85¹¹

¹⁰ A note on terminology: many studies use the terms "control group" and "comparison group" interchangeably to refer to non-clients. I reserve "control group" to refer to experimental designs in which potential clients have been randomly assigned either to treatment or non-treatment groups. Hence, in this paper, the focus will be on comparison groups.

¹¹ Adapted from Mahabub Hossain, "Credit for the Alleviation of Rural Poverty: The Grameen Bank in Bagladesh.," IFPRI, Research Report No. 65 (Washington, DC), p. 68

Table 1 suggests that Grameen Bank members in Hossain's survey are substantially less poor than non-members, and that Grameen Bank's activities affected the poverty levels of entire villages. Most people who have visited a Grameen village will agree that Hossain's conclusions resonate with them as correct. But it's accuracy we're after, and there are important reasons why the results from "Credit for the Alleviation of Rural Poverty" may be somewhat off. Hossain reported that compared to the target group in comparison villages, Grameen members were found to be younger and better educated, while non-members were more likely to be landless. On balance, Hossain warned his impact findings would likely be overstated. On the other hand, the Grameen Bank is a fundamentally different institution today than it was when Hossain collected his data, and there may be reasons why the same results might be *understated*. Most important, only 55 percent of those surveyed by Hossain in 1985 were women. Today 96 percent of Grameen members are women. As we will see below, the impact from credit to women has been shown to be greater than credit provided to men. Thus it is difficult to determine from these studies exactly how effective Grameen is at reducing poverty as it operates today.

Helen Todd's 1996 book, *Women at the Center*, took a different, ethnographic, approach to the difficulties inherent in quasi-experimental designs. Instead of attempting another large-scale quantitative study, Helen Todd elected to ascertain the true impacts on Grameen Bank clients by spending a year in two Grameen villages. She took pains to choose representative villages, but her study did not attempt to estimate the impact on the average borrower. She observed only women in their eighth-to-tenth year of borrowing. Though she followed a total of only 64 households (40 borrowers and 24 comparison households), Todd's results were often so resounding she was able to show statistically significant¹² results even with such a small sample size.

Among her findings:

- There were 57.5 percent of borrower households who were no longer poor, compared to just 18 percent of the comparison group.
- Only 15 percent of borrower households could be classified as extremely poor, vs. 54.5 percent of the comparison group.
- All girls in Grameen Bank households had some schooling, compared to only 60 percent of the comparison group.

The World Bank-BIDS studies

After the limitations of the early studies, in 1998 the microfinance industry cheered the publication of *Fighting Poverty with Microcredit* by World Bank economist Shahidur Khandker, and the related paper, "**The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?**" (1998) by Khandker and Mark Pitt, a Brown University economist. The study, perhaps the most widely-cited evaluation of a microfinance program, was influential because it was the first serious attempt to generate a truly accurate assessment of the impact of microfinance by dealing with selection bias and non-

¹² "Statistically significant" simply means that to a given degree of certainty (often 95%) we can be sure that the relationship in the data is not merely due to chance.

random program placement. It was based on data collected by the World Bank and the Bangladesh Institute of Development Studies (BIDS) in what has commonly been referred to as "the mother of all surveys."¹³ The survey, conducted in 1991-92, contains data from 1,798 households who were either members of the Grameen Bank, BRAC, or RD-12 (a program of the Bangladesh Rural Development Board, a government agency), as well as non-member comparison households.

As discussed above, it can be difficult to accurately gauge impact from a program when we know who chose to enroll in the program in the villages where it was offered, but we don't know exactly who in a comparison village would have chosen to enroll had the program been available, and we don't know the subtle ways in which the comparison village might be better or worse off than the program village. By modeling the demand for credit on various characteristics (e.g., landholding and education), Pitt and Khandker tried to improve upon the standard comparison group by comparing borrowers to the people in non-program villages who would have been statistically most likely to have participated if given the choice. To do so they applied a complicated econometric model called "weighted exogenous sampling maximum likelihood-limited information maximum likelihood-fixed effects." Since they had only crosssectional data (from a single year), they used what is known as an instrumental variables regression to increase the accuracy of their estimates. Economists tend to agree that it is notoriously difficult to find a workable instrumental variable for microfinance programs, but Grameen Bank, BRAC, and RD-12 all share a trait which allowed Pitt and Khandker to do so: they all target poor households who own less than half an acre of land. The fact that participation is to some extent exogenously determined—in theory, those above the cutoff are not allowed to join any of the three programs-allowed Pitt and Khandker to statistically triangulate their findings and correct for selection bias.

Their results greatly encouraged the microfinance industry, demonstrating a host of positive impacts on clients and their families. The centerpiece of their findings was that every additional taka lent to a woman adds an additional 0.18 taka to annual household expenditure—an 18 percent return to income from borrowing. Notably, the returns to male borrowing were considerably lower, only 11 percent. The paper and the book reported a variety of "wider" impacts, including:

- A one percent increase in credit to Grameen women increased the probability of girls' school enrollment by 1.86 percentage points.
- A 10 percent increase in credit provided to women increased the arm circumference of girls by 6 percent.
- A one percent increase in credit to women increased the height-for-age of both boys by 1.42 percent and girls by 1.16 percent.

Unfortunately, rather than ending the debate over the effectiveness of microfinance, Pitt and Khandker's paper merely fueled the fire. NYU economist Jonathan Morduch responded with the paper: **"Does Microfinance Really Help the Poor? New Evidence from Flagship Programs in Bangladesh"** (1998), citing serious concerns with their data and their model. Morduch

¹³ Hulme relates that the survey "operated on such a scale that other researchers found difficulties in conducting fieldwork during the period of operation as research institutes, local researchers and enumerators and data analysis facilities were all 'booked up'." David Hulme, "Impact Assessment Methodologies for Microfiance: A Review." Northeastern Development Consortium Conference (Washington, DC.:AIMS, 1997)

revealed that though in theory the three MFIs limited membership to those with less than half an acre of land, in reality 20-30 percent of clients were found to be above the cutoff. Thus according to Morduch it was inappropriate to compare those with less than half an acre to those with more than half an acre of land—especially since the cutoff *was* strictly enforced for the comparison group.

Morduch's more serious criticism was of the econometric model employed by Pitt and Khandker. He argued that their method of correcting for program placement bias actually exacerbates the bias. Morduch then analyzed the data using a simpler methodology and found little evidence of impact. His results did, however, confirm Pitt and Khandker's findings that microfinance leads to consumption smoothing (consumption that is less variable over time). Pitt and Khandker found that household consumption increased most during the lean Aus season, when the poor often go hungry. Morduch's conclusions supported this, showing that access to credit reduces the variability of consumption across seasons: down 47 percent for eligible Grameen households, 54 percent for eligible BRAC households, and 51 percent for eligible BRDB households.

Pitt challenged Morduch's paper, arguing that Morduch's mistargeting critique is misplaced, as the MFIs target on the basis of *cultivable* land; therefore many borrowers would be expected to have more than half an acre of total landholdings. He reran the numbers and found slightly *larger* effects than they had in the original paper. Still, Khandker himself acknowledged in an update to the study, **"Micro-finance and Poverty: Evidence Using Panel Data from Bangladesh" (2005)**, that: "Given the sensitivity to the instruments used, there are compelling reasons to use alternative methods to demonstrate whether microfinance matters." Happily, Khandker was able to draw from a 1998/99 resurvey of the World Bank-BIDS data to improve their model. Armed with panel data (longitudinal data, from two-or-more time periods) Khandker was able to employ a simpler model to gauge the impact of the three MFIs—a much less controversial estimate because it relies on fewer assumptions. Khandker's 2005 paper may thus be the most reliable impact evaluation of a microfinance program to date.

Khandker (2005) calculated that each additional 100 taka of credit to women increased total annual household expenditures by more than 20 taka: 11.3 taka in food expenditures and 9.2 taka in nonfood expenditures. This is a greater effect than measured in the earlier paper. Actually, the marginal impact (the additional income from just the current year of borrowing) is lower, but this time Khandker was measuring the cumulative effect of borrowing. He found there are diminishing returns over time to borrowing, and this would be expected—it is no surprise that a typical borrower would experience the greatest impact from earlier loans and the relative improvements would level off over time. Of the 20.5-taka increase in consumption from each 100 taka of credit, 4.2 taka were from current borrowing (1998/99) and 16.3 taka were from past borrowing (1991/92). Interestingly, where in 1998 Pitt and Khandker found the impact on female borrowing to be higher than male borrowing, here they did not find any returns to male borrowing at all.

With the benefit of panel data, Khandker was able to compare poverty rates in 1991/92 and 1998/99 and found that moderate poverty in all villages declined by 17 percentage points: 18 points in program areas and 13 percentage points in non-program areas. Among program participants who had been members since 1991/92 poverty rates declined by more than 20

percentage points—about 3 percentage points per year. Khandker estimated that more than half of this reduction is directly attributable to microfinance, and found the impact to be greater for extreme poverty than moderate poverty, which microfinance was found to reduce by 2.2 percentage points per year and 1.6 percentage points per year, respectively.¹⁴

Further, Khandker showed that microfinance reduced poverty among *non-participants* as well moderate poverty by about 1.0 percentage point and extreme poverty by 1.3 percentage points a year—through spillover effects in which non-participants benefit from the increase in economic activity. Based on this data, he concluded that microfinance accounted for 40 percent of the *entire* reduction of moderate poverty in rural Bangladesh.

The Coleman Model

While every microfinance evaluation finds some aspects of people's lives that microfinance appears unable to improve, it is not easy to find a study in which the entire program has no apparent impact. One such study is **"The Impact of Group Lending in Northeast Thailand"** (1999), by then-ADB economist Brett Coleman, which looked at two MFIs, the Rural Friends Association and the Foundation for Integrated Agricultural Management. Coleman used a clever design to deal with selection bias. In order to determine who in the comparison villages would have chosen to enroll in village banks had they been available, he actually had interested villagers sign up a year in advance—that way he could compare borrowers to people with the same "entrepreneurial spirit," who had not been offered credit.

With this model, Coleman was able to compare the results he would have calculated—had he "naively" compared the participants to non-participants—to his estimates which correct for selection bias, and he found the naïve estimates to incorrectly show a positive impact from credit, especially on women's landholdings. This is because village bank members tended to be wealthier in the first place. The correct specification found no impact on physical assets, savings, sales, and school expenditures. The effect on household medical expenditures was negative, and female clients' borrowing from moneylenders actually increased (presumably to pay off their village bank loans). Coleman's follow-up article for the Asian Development Bank, "Microfinance in Northeast Thailand: Who Benefits and How Much?" (2002), disaggregated participation and impact by type of client, and found:

self-selected program participants are significantly wealthier than nonparticipants even prior to program intervention, and the wealthiest villagers are almost twice as likely to participate in the program than the poorer villagers. Moreover, some of the wealthiest villagers obtain a disproportionate share of program loan volume by virtue of holding influential positions as village bank committee members. Positive impact is seen largely in this wealthier group. Impact on rank and file members is significantly smaller than impact on the wealthy, and is largely insignificant.¹⁵

¹⁴ Readers may recall Khandker's estimate in *Fighting Poverty with Microcredit* that 5 percent of Grameen households left poverty each year. The new estimate is lower, either because of improvements in the model, or as Khandker argues, because of diminishing returns to additional borrowing for older members.

¹⁵ Brett Coleman, "Microfinance in Northeast Thailand: Who Benefits and How Much?", *Journal of Development Economics* 60 (Manila: Asian Development Bank, 2002), p. 3.

However, Coleman himself documented why Thailand is too peculiar a setting for the results of such a study to provide evidence for the impact of microfinance in other countries. In the villages surveyed, 63 percent of households were members of the Bank for Agriculture and Agricultural Cooperatives (BAAC), a state bank that provides subsidized credit to rural households with much higher average loan amounts than village banks. Coleman argued that since only 30 percent of BAAC members in the survey are women, only 19 percent of households (30 percent of 63 percent) in the survey included women who are BAAC members. That's still a lot, but more importantly it ignores the fungibility of credit within the household. Microfinance programs don't pretend that women borrow whether or not their husbands have access to credit-they work through women to provide credit to credit-constrained households. In this sense, fully 63 percent of surveyed households-male and female members of BAACalready had access to substantially more credit than the village banks provide. Coleman noted that the average household low-interest debt, excluding village bank debt, was 31,330 baht¹⁶ (9,342 of which was held by women), while village bank loans were capped at 7,500 baht. He wrote: "In such an environment, it should not be surprising that loans of 1,500 to 7,500 baht would have a negligible impact."¹⁷

Fordham University economist Gwen Alexander, in "An Empirical Analysis of Microfinance: Who are the Clients?" (2001), used longitudinal data from the AIMS study of Mibanco, Peru (discussed in the next section) to recreate Coleman's model. Like Coleman, she found that the naïve estimate, which ignores the effect of self-selection, overstated impact, but here she found a sizeable impact from credit of \$89 per month in additional enterprise profits, even after correcting for selection bias.¹⁸ Alexander writes: "These results should be seen as inspiring by donors and practitioners, as there is significant evidence from this data set that credit is assisting the poor."¹⁹

Still, there are several important lessons from Coleman's work. Though Thailand may not be the right place to show the impact of microfinance, it is certainly the right place to show the impact of microfinance in Thailand. Coleman's methods are credible, and the fact that he found zero impact from the programs but positive impact using naïve estimates provides strong evidence for the need to address selection bias.

 18 The naïve estimates showed additional profits of \$122.

¹⁶ At the time of the study US\$1 = 25 baht.

¹⁷ This is not to say that it is *impossible* for small loans in Thailand to have an impact. Kaboski and Townsend (2005), using a rather broad definition of microfinance, found that programs which offer enterprise credit to women increased asset growth and job mobility. Rice lenders and "buffalo banks" had negative impacts.

¹⁹ Gwen Alexander, "An Empirical Analysis of Microfinance: Who are the Clients?" Paper presented at 2001 Northeastern Universities Development Consortium Conference (2001), p. 27.

Section 3: The AIMS Studies



The previous section leaves little doubt that microfinance can be an effective tool to reduce poverty. With this section, we begin to explore where and when microfinance institutions are demonstrating impact around the world. In 1995, the United States Agency for International Development (USAID) launched the Assessing the Impacts of Microenterprise Services (AIMS) Project, which developed five tools (two quantitative and three qualitative) designed to provide practitioners a low-cost way to measure impact and improve institutional performance:

- Tool 1: Impact Survey
- Tool 2: Client Exit Survey
- Tool 3: Use of Loans, Profits and Savings Over Time
- Tool 4: Client Satisfaction
- Tool 5: Client Empowerment

The tools are intended to be used individually or in combination with each other, and practitioners are encouraged to adapt the tools to fit their circumstances and needs. AIMS tested the tools in a variety of countries and settings. The first tests were conducted in Honduras and Mali, with the MFIs ODEF and Kafo Jiginew. The two resulting reports: **"Practitioner-Led Impact Assessment: A Test in Honduras" (1998)**, by Elaine Edgcomb and Carter Garber, and **"Practitioner-Led Impact Assessment: A Test in Mali" (1998)**, by Barbara MkNelly and Karen Lippold, demonstrated that it is possible for practitioners to use the AIMS methodology to assess their performance. However, the small sample sizes of these pilot tests restrict the conclusions we can draw from the results due to lack of statistical significance, particularly in Mali.

The study of ODEF compared current clients in ODEF's village banking program and individual loan program to incoming clients and dropouts. Clients were found to have profits 75 percent higher than non-clients, and as Table 2 shows, significantly more clients than non-clients experienced increases in savings and income over the previous year.

Table 2: ODEF Clients vs. Non-clients

	Clients	Non-Clients
Monthly Profit (lempiras) ²⁰	7,214	4,125
Savings Increased (percent)	47	23
Income Increased (percent)	57	40

The study in Mali compared clients who had been with the program for one and two years to incoming clients. None of the results shown in Table 3 are statistically significant. More than likely, this is simply an issue of sample size (only around 30 clients in each group); those who

 $^{^{20}}$ At the time of the study the exchange rate was approximately US1=13 lempiras

had been with the program for two years did better in all respects, and the differences are sizeable. Income for two-year clients was 45 percent higher than that for incoming clients, and a third more reported increased household income.

	One-year Clients	Two-year Clients	Incoming Clients
Sales (US\$)	46	50	31
Profit (US\$)	10	16	11
Percent Reporting Increased Household	54	67	50
Income			
Percent Reporting Increase in Savings	54	50	36

Table 3: Encouraging but Unproven: Impact of Kafo Jiginew

Other important results, however, were significant. Current clients were significantly less likely to have experienced a period of acute food insecurity in the previous year, and the periods when they did have to eat less were significantly shorter. Current clients were less likely to have been forced to suspend their business due to a lack of working capital, and they reported hiring more workers.

Table 4: Periods of Hardship in the Previous Year

	One-year Clients	Two-year Clients	Incoming Clients
Percent Experiencing Period of Food	12	10	29
Insecurity			
Length of Food Insecurity (Months)	.25	.39	1.2
Percent Forced to Halt Business From	21	10	45
Lack of Capital			
Length of Enterprise Disruption (Weeks)	.9	.5	3.2

The comparison group used in the studies of ODEF and Kafo Jiginew—incoming clients who had not yet taken their first loan—is used extensively in the AIMS studies to deal with selection bias. As discussed in Section 1, the idea behind the methodology is that since both the clients and the comparison households have chosen to join the program, there should be no difference in their "entrepreneurial spirit." However, some experts, notably Dean Karlan in "Microfinance Impact Assessments: The Perils of Using New Members as a Control Group" (2001), have called into question the validity of this type of comparison. Karlan warns that this design can yield biased estimates of impact because MFIs may have started to work with different types of clients than they currently serve (for instance, an MFI may have cautiously started out working with better-off communities before branching out to poorer areas), and because clients who chose to enroll earlier may differ from those who chose to wait and see before joining.

The AIMS Core Impact Assessments, discussed next, avoid this problem through the use of longitudinal data and non-client comparison groups. Several evaluations discussed later in Section 3 and in Section 4, however, do use incoming clients as a comparison group. I have tried to show where incoming clients differ from current clients in a measurable way. However, readers should be aware that estimates based on this methodology have limitations as they are based on an imperfect approach.

The AIMS Core Impact Assessments

The most rigorous of the AIMS studies, the Core Impact Assessments, employed longitudinal data and comparison groups of non-clients, as well as much larger sample sizes. Curiously, the three MFIs chosen for the core studies all served (at the time of data collection) a primarily urban client base: SEWA (India), Zambuko Trust (Zimbabwe), and Mibanco (Peru). I would argue that while urban microfinance is an important part of the industry, it is not the dominant form. Though clients of Latin American MFIs are found primarily in cities, in Asia, where the vast majority of clients are located (over 90 percent, according to the Microcredit Summit Campaign's *2004 State of the Campaign Report*), microfinance is mostly a rural phenomenon. Therefore the other AIMS studies discussed below may be more representative of the impact of a "typical" microfinance program. Data from past *State of the Campaign Reports* also show that neither Zambuko nor Mibanco focuses primarily on very poor clients.²¹ Of course, not every MFI serves very poor clients, but it would have been helpful to pick a wider array of MFIs to show which types of institutions are capable of generating strong impacts.

Another unfortunate feature of the Core Impact Assessments is that while they surveyed clients in 1997 and resurveyed the same clients in 1999, the Round 1 data are not baseline data—clients had already been with the programs for some time. So the researchers would expect to see differences between groups in 1997, which diminish their ability to test for selection bias. (They can still test for differences in demographic variables which would not be expected to be affected by the program, such as age and marital status, but they cannot look for differences in income when clients entered the programs.) This also means that where changes in outcomes between survey rounds are reported we miss out on the impact that the clients experienced as new clients; therefore impact based on changes between rounds is likely understated.

SEWA Bank, India

"Managing Resources, Activities, and Risk in Urban India: The Impact of SEWA Bank" (2001), by Martha Chen and Donald Snodgrass, is especially interesting because it compared the impact of clients who borrowed for self-employment to those who saved with SEWA Bank without borrowing, and compared both groups to non-clients. (In this case, the non-clients were drawn randomly from women engaged in the informal sector in the same neighborhoods as clients in Ahmedabad, Gujarat, where SEWA is based.) Thus this study provides some much-needed evidence in the debate between those who favor a credit-led approach and those who prefer a savings-led approach.

The results are interesting in this regard. In Round 1, the borrowers were shown to be considerably better off than savers, who were in turn better off than non-participants. However, between the two rounds, the savers showed the fastest rate of income growth. Still, borrowers' income remained over 25 percent greater than savers (and 56 percent higher than non-participants). Savers, too, enjoyed household income 24 percent greater than non-participants, and these findings indicate microfinance—credit or savings—can be quite effective.

²¹ The 2000 report showed Mibanco served 18,000 "poorest" clients out of over 40,000 total clients at the time, while the 2003 report showed Zambuko served 2,557 "poorest" clients out of over 14,000 total clients.

	Borrowers	Savers	Non-Participants
Household Income Round 1 (Rs.) ²²	51,385	40,401	35,803
Household Income Round 2 (Rs.)	59,704	47,388	38,244
Annual Growth Rate (percent)	7.8	8.3	3.3
Poverty Rate Round 1 (percent) ²³	39.0	53.1	67.2
Poverty Rate Round 2 (percent)	40.9	51.2	65.6

Table 5: Impact on SEWA Borrowers and Savers

As Table 5 shows, borrowers have much lower poverty rates, but where savers and nonparticipants improved their poverty rates, poverty among borrowers actually slightly increased between rounds. In part, this reflects the greater variability in the income of borrowers: while borrowers had the most households who were able to leave poverty between rounds, they also had the most households slip back in. On the other hand, borrowers have the most households earning above \$2 per person, per day. Repeat borrowing was shown to be especially important. Compared to one–time borrowers, repeat borrowers have greater income; spend more on food, household improvements, and consumer durables; and are more likely to have girls enrolled in primary school.

Zambuko Trust, Zimbabwe

"Microfinance Program Clients and Impact: An Assessment of Zambuko Trust, Zimbabwe" (2001), by Carolyn Barnes, examined the impact of continuing clients versus new clients, as well as program dropouts and a comparison group of non-participants. The comparison group was comprised of entrepreneurs who met Zambuko's eligibility requirements, including that they had owned an enterprise for at least six months. While it is appropriate from a research perspective to utilize a comparison group that is as similar as possible to the participant group, this raises questions about the selection of Zambuko for one of the core impact assessments. This design will accurately (subject to the caveats discussed in Section 1) test the infusion of institutional credit into existing enterprises, but it will not tell us the full impact of microfinance—many MFIs fund startup enterprises as well as existing enterprises.²⁴

Like the above-stated findings, the Round 1 evidence appears to show the benefits of repeat borrowing, with only 22 percent of continuing clients earning below a dollar a day, versus 40 percent of non-clients and 42 percent of incoming clients:

	Continuing Clients	New Clients	Non-clients	Total
Below US\$1/day	22	42	40	37
Between US\$1-\$2/day	33	28	37	33
Above US\$2/day	45	30	23	30

Table 6: 199	97 Poverty	Levels of	Zambuko	Clients vs.	Non-clients	(percent)
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²² At the time of the survey US\$1 equaled approximately 36.5 Rupees

²³ Based on US\$1/day

²⁴ See, for example, Neponen (2003), which shows 37 percent of new clients of ASA (India) did not have an existing enterprise when they joined the program.

However, while the income of continuing clients was significantly higher in 1997 than the income of other groups, by 1999 the difference was no longer statistically significant, though continuing clients still earned the most.

	Continuing Clients	Departing Clients	Non-clients
1997	5,625	3,667	3,032
1999	5,507	4,466	4,243

Table 7: Average Monthly	Household Income	(Zimbabwe dollars in	1997 constant values) ²⁵
Tuble 7. Average Monthl	riouschola meome		

It is worth noting that the period between 1997 and 1999 was a highly inflationary environment, and while income fell for continuing clients in real terms, their nominal income increased dramatically, nearly in pace with inflation. These were difficult times in Zimbabwe, and where data showed a decrease in consumption of meat and dairy over the survey period, extremely poor continuing clients were able to increase their consumption of meat, fish, and chicken. The rate of school attendance among boys in client households increased, but not for girls. Many other apparent impacts were not found to be statistically significant.

Mibanco, Peru

"The Impacts of Microcredit: A Case Study from Peru" (2001), by Elizabeth Dunn and J. Gordon Arbuckle Jr., examined the impact of Mibanco, an MFI working with moderately poor clients, as well as those above the poverty line.²⁶ As in the Zambuko assessment, this study used a comparison group composed of established entrepreneurs. Here, though, the positive impact on clients was dramatic and remained significant in both rounds.²⁷ Sixteen percent of the 1997 comparison group became Mibanco clients between survey rounds; for these clients we have a true baseline measure from which we can measure the impact of credit. Regression²⁸ results showed that these new clients earned \$740 per year more than non-clients, and for all clients compared to non-participants, clients earned \$266 more per household member per year than non-participants.

The effects on employment were particularly resounding. Participation in Mibanco led to the creation of nine additional days of employment per month, including 3.26 days of employment for non-household workers. The authors calculated that based on the 40,000 Mibanco members at the end of 1999, 17,414 full-time jobs were created, with 6,259 of those jobs going to nonhousehold members-one full-time job for every 2.3 outstanding loans.

²⁵ The 1997 exchange rate was approximately US\$1=Z\$32.0

²⁶ Twenty-eight percent of Mibanco clients were classified as poor in 1997, versus 38 percent of the comparison group. Fewer than 3 percent of clients were classified as "extremely poor."

⁷ A word of caution: results are likely to be biased upward because proportionally fewer program dropouts participated in the follow-up survey, leaving successful clients overrepresented in the data. ²⁸ Statistical analysis comparing outcomes (e.g., 1999 income) of groups alike on any given set of variables (e.g.,

¹⁹⁹⁷ income).

Other AIMS Studies

ASHI, Philippines

Helen Todd's study, "Poverty **Reduced Through Microfinance:** The Impact of ASHI in the **Philippines''** (2000), answers a specific question: what is the impact on clients who stayed with ASHI through at least four loan cycles? Among clients who remained in the program (around 10 percent drop out each year), the results are clear. Over 75 percent of the women were classified as "very poor"²⁹ when they started with the program. At the time of the study only 13 percent were still "very poor," compared to 49 percent of non-clients. Only 2 percent of non-clients had left poverty altogether, compared to 22 percent of clients. Over half of



ASHI clients live in "non-poor" houses (houses that score six or above on the ASHI House Index, meaning that they are of a certain size and built out of sturdy materials with metal roofs), compared to only 24 percent of non-clients.

Poverty Status	Clients	Non-Clients
Very Poor	13%	49%
Moderately Poor	65%	49%
Non Poor	22%	2%

Table 8: Poverty Status of ASHI Clients

Perhaps even more important, ASHI clients were shown to have the elements necessary to *keep* them out of poverty. They owned considerably more productive assets and were much less likely to need to borrow from usurious sources during times of crisis: 8 percent versus 23 percent for non-clients.

²⁹ The study used a poverty index based on sources of income, asset holdings, and score on the ASHI House Index, an adaptation of the CASHPOR Housing Index.

FINCA Uganda, FOCCAS, and PRIDE Uganda

"Impact of Three Microfinance Programs in Uganda" (2001), by Carolyn Barnes, Gary Gaile, and Richard Kimbombo found that significantly more clients (43 percent) of the three programs than non-clients (31 percent) reported an increase in profits from their primary enterprise. Clients were more likely to become homeowners (10 percent vs. 1 percent) and spent significantly more on school fees for their children (and other children, too). Participants showed a greater increase in durable assets, and half of the clients increased their savings over the previous two years, compared to a third of the comparison group.

ICMC Bosnia and Herzegovina

"ICMC and Project Enterprise Bosnia and Herzegovina" (2000), by Caroline Tsilikounas, showed mixed results from program participation. This is a good example of the potential problems with using incoming clients as a comparison group: clients were on average 37.6 years old, while non-clients (those on the waiting list to join the program) averaged 33.8 years; the difference is statistically significant. In other respects the groups were similar. More clients than non-clients reported an increase in income over the previous year (40 percent of clients versus 23.7 percent of non-clients), yet more clients than non-clients saw their incomes *decrease* as well, indicating higher volatility of entrepreneurs' incomes.

5			
Income	Clients	Non-clients	
Increased	40%	23.7%	
Remained the Same	35.8%	58.8%	
Decreased	23.3%	17.5%	

Table 9: Changes in Income for ICMC Clients vs. Comparison Group

Still, clients reported higher household expenditures, and on various indices of well-being (consisting of household income, savings, and expenditures) clients scored better than nonclients in each instance. However, in some cases, scores for newer clients were higher than for older clients.

Section 4: Studies Commissioned by MFIs and their Funders

Many microfinance evaluations have been commissioned by MFIs themselves, often with the support of their donors. These are by no means of inferior quality. The programs have demonstrated an interest in determining the effectiveness of their operations (good and bad), and in order to understand their strengths and weaknesses they need accurate results. Of course, some have pointed out the potential for "publication bias" the potential for programs to trumpet their positive evaluations and hide the bad ones. We may never know the extent to which this occurs. However, the findings in this section are not out of line with studies conducted by other impartial evaluators.



BRAC, Bangladesh

BRAC, in Bangladesh, has a sizeable research and evaluation department, which has produced in-house some of the most comprehensive and bracingly honest evaluations ever conducted of a microfinance program, surveying up to 2,250 households at a time. "Poverty Alleviation and **Empowerment: The Second Impact Assessment Study of BRAC's Rural Development** Programme" (1998), by A. M. Muazzam Husain, is the follow-up to "Beacon of Hope: An Impact Assessment Study of BRAC's Rural Development Programme" (1996). With the benefit of longitudinal data, the Second Impact Assessment was able to generate a more refined estimate of impact than the first assessment, in which the comparison group was found to differ socioeconomically from the participants. Though the groups were not perfectly comparable, the panel data allowed BRAC to compare the *change* in participants versus non-participants—so long as the participants changed more, and in a positive direction, it provides pretty good evidence for impact. Unfortunately (for the data, not the households!), between the first and the second impact surveys, (1993 and 1996) 68 of the 250 members of the comparison group joined MFIs. Fifteen of the 68 joined BRAC, and they were dropped from the comparison group. The other 53 remained, however, and this should cause the impact to be underestimated as a fifth of the "non-participants" received similar financial services, even if not from BRAC.

The Second Impact Assessment reported an array of positive impacts from participation in BRAC. Among them:

- BRAC members' non-land assets were 380 percent greater than comparison group households, and net worth was 50 percent higher.
- Members had twice the savings of the comparison group.
- The percentage of BRAC households with sanitary latrines increased from 9 percent in 1993 to 26 percent in 1996, while the percentage *fell* among comparison households, from 10 percent down to 9 percent.

• There were 52.1 percent of BRAC households versus 68.6 percent of comparison households below the poverty line; for extreme poverty, it was 27 percent for BRAC and 37.2 percent of comparison households.

The numbers clearly indicated a strong positive impact from participation in BRAC, and the results show the benefits of participation increased with length of membership. However, subgroup analysis revealed that the poorest clients³⁰ benefited least from the program. For the absolute landless (in rural Bangladesh, truly the poorest of the poor), the impact of BRAC participation was *negative*. The comparison group problems discussed above are surely reducing the estimates of impact. Still, while improving the estimates might raise the measured impact on the landless to neutral or slightly positive, the program is clearly not working as well for them, and this highlights the appropriateness of BRAC's Income Generation for Vulnerable Group Development (IGVGD) program. Syed Hashemi describes the program and its impact in CGAP's Focus Note 21: **"Linking Microfinance and Safety Net Programs to Include the Poorest: The Case of IGVGD in Bangladesh" (2001)**. The goal of the program, jointly administered by BRAC and the Government of Bangladesh, is to transition households poor enough to receive grain handouts into conventional microfinance. Started as a pilot program in 1985, the latest round of the program reached nearly 300,000 women.

Participants are selected based on three criteria:

- 1. Widows or abandoned women
- 2. Own less than half an acre of land
- 3. Earn less than 300 takas per month (US\$4.50).

Forty-four percent of IGVGD households were headed by women, so these criteria can't be perfectly strict. Nonetheless, the figure at right (taken from Focus Note 21) shows how successful BRAC has been in targeting the hardcore poor.

Participants continue to receive grain handouts while they complete six months

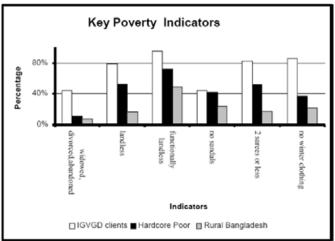


Figure reproduced from Focus Note 21

of training in topics such as vegetable gardening or raising livestock. After completion of the training, IGVGD participants are given a first loan of 2,500 taka (about US\$40), which they must repay at the same interest rate as traditional BRAC clients. A year later they are eligible for a 4,000 taka loan, after which it is expected they will transition to becoming regular microfinance clients (usually with BRAC but also with competing MFIs). Hashemi reported that about two-thirds of IGVGD clients make the transition.

Focus Note 21 documents the changes among a sample of participants from the time they entered IGVGD through three years after completing the program. The participants were still receiving grain handouts in 1996; therefore the 1999 numbers represent the lasting effects of the program.

³⁰ As in the World Bank-BIDS data, BRAC used landholdings as a proxy for poverty level.

	<i>199</i> 4	1996	1999
	(pre-program)	(end program)	(+3 years)
Monthly income (taka)	75	717	415
Percent of households earning greater than Tk. 300	7	64	31
Percent without beds	42	40	36
Percent saving with NGOs	11	34	37
Percent begging	18	2	0
Percent landless	78	62	n.a.

Table 10: Outcomes of BRAC's IGVGD Program

Recently, both ASA and the Grameen Bank have established their own programs to reach the hardcore poor. Neither involves grain handouts, but they offer very small loans with flexible repayment schedules. Grameen's Struggling Members Program (also known as its "Beggars Program," which was reaching 50,000 clients as of mid-2005) charges no interest, while ASA's "Hope for the Poorest" program charges 12 percent (flat) interest. It will be interesting to see the impact of these programs as they become more established.

The Association for Social Advancement (ASA), Bangladesh

"Impact Assessment of ASA" (1997), by Michael Brüntrup et al., was conducted at the behest of ASA's consortium of donors. The study surveyed 483 households in 1997, including a selection of newer (post-1996) and older (pre-1996) clients, as well as comparison non-participant households. The study found that among women in the survey, older ASA clients had an income of 15,000 taka, versus 6,000 taka in the comparison group. ASA members' income grew more than twice as fast as comparison households, and they owned 56 percent more assets. On average, older clients employed outside labor 35 days per year, 40 percent more than newer clients, and nearly twice as much as non-clients.

The paper includes an interesting table comparing the ownership of assets among clients and non-clients. It clearly shows that participation in ASA is associated with greater female control of assets, which grows as participation increases.

Ownership		Percent of Clients			
		Older	Newer	Comparison	
Land	by male	53	78	91	
	by female	18	7	7	
	by household (jointly)	29	14	2	
Animals	by male	3	45	32	
	by female	43	44	27	
	by household (jointly)	20	11	42	
Other	by male	42	34	52	
	by female	13	12	9	
	by household (jointly)	46	54	40	
Total assets	by male	50	68	81	
	by female	18	9	8	
	by household (jointly)	32	23	11	

Table 11: Control of Assets by Length of ASA Membership

SHARE, India

"Paths out of Poverty: The Impact of SHARE Microfin Limited in Andhra Pradesh, India" (2001), by Helen Todd, used the AIMS methodology to compare 125 SHARE clients to 104 new clients who had yet to receive any exposure to the program. The 125 mature clients had all been participants for at least three years. (Only two clients in the sample had been members for more than four years.) The participants were quite similar to the comparison group on most measures, with the exception that they were on average six years older.³¹

Todd created a poverty index composed of four elements: sources of income; productive assets; housing quality, as measured by the SML House Index (SHARE's adaptation of the CASHPOR House Index); and household dependency burden (the number of household members divided by the number of income earners).

She found dramatic differences between mature and incoming clients, as shown in Table 12:

Poverty Status	New Clients	Mature Clients	Difference
Very Poor	58%	6%	-52
Moderately Poor	39%	58%	+19
Not Poor	4%	37%	+33

Table 12: Poverty Status among SHARE clients

SHARE keeps records of each client's House Index score, assets, and occupation at the time they entered the program. This allowed Todd to document the extent to which clients have moved out of poverty. Comparable data did not exist for the comparison group, so unlike Table 12 this is not a true measure of impact, but the results are nonetheless impressive. Table 13 shows that 76.8 percent of clients have experienced a reduction in poverty of at least one category, and 38.4 percent have left poverty entirely. A small number of clients (1.6 percent) experienced a deterioration in their poverty status.

Poverty Movement	Percent
Very Poor to Moderately Poor	38.4
Very Poor to Non Poor	17.6
Moderately Poor to Non Poor	<u>20.8</u>
Subtotal: Upward Movement	76.8
No Change	21.6
Non Poor to Moderately Poor	0.8
Moderately Poor to Very Poor	<u>0.8</u>
Total	100.0

Table 13: Poverty Movement among Mature SHARE Clients

³¹ Of course, they would be expected to be 3.6 years—the average length of exposure in the sample—older on average, so most of the difference is inherent in the model. This is one of the reasons why using incoming clients will never provide a perfect comparison group.

The study examined several impacts on participants' families. Compared to incoming clients, mature clients were more likely to send sick family members to a medical clinic (58 percent vs. 46 percent), and when they did so they were more likely to send them to a private clinic (84 percent vs. 69 percent), which offers better care. The effects on children's education were less impressive. While the program had some impact on the education of boys—61 percent of the boys in participants' families had completed the grade appropriate for their age, compared to 49 percent in comparison households—it made no difference for girls. Only 37 percent of girls had completed school to their age grade and nearly half of girls had no schooling at all. Interestingly, for boys, the study found no relationship between poverty status and school attendance, but for girls there was a *negative* relationship—poor clients were more likely to send their girls to school. With this evidence, Todd concluded that the education of girls has more to do with attitudes than income.

The Activists for Social Alternatives (ASA), India

"ASA-GV Microfinance Impact Report 2003," by Helzi Neponen, used data from a unique system of pictorial diaries utilized by ASA to monitor the performance of its clients, the Internal Learning System (ILS). With ILS, illiterate clients can keep track of the changes in their own living situations, and members crosscheck each other's reports for accuracy. Though no fault of the ILS, this study serves as a prime example of the "perils" (discussed above) of using incoming clients as a comparison group. The percentage of newer clients (those with less than two years of membership) who had some schooling was 64 percent, compared to only 31 percent of older clients. That's a substantial difference, and raises questions about the comparability of the two groups. However, all is not lost. It seems clear that where newer members are better educated, the comparison will underestimate the impact; since Neponen found positive impacts, we can remain confident that ASA is at least as effective as the numbers suggest.

In the ILS study, living standards were gauged only through type of housing and food and nutrition. Long-term members reported better outcomes on both these measures. Sixty-four percent lived in tile roof and concrete houses, compared to only 50 percent of newer members (the balance lived in mud and thatch houses). Older members reported better outcomes for their children, too. Eighty percent of their sons *and* their daughters attended school, compared to 74 percent of sons and 65 percent of daughters of newer members. This is especially impressive considering the education gap among newer and older clients.

Kashf, Pakistan

"Impact Assessment of Kashf's Microfinance and Karvaan Enterprise Development Programme" (2004) was prepared for DFID by Arjumand and Associates, consultants. They surveyed 200 Kashf clients as well as a comparison group of non-clients. The non-clients were similar to the clients in most respects, except that 40 percent were salaried workers, compared to only 16 percent of Kashf clients. However, their initial incomes were nearly identical (Rs. 5,376 per month for clients vs. 5,158 for non-clients).³² One year later, Kashf clients increased their

³² At the time of the survey US\$1 equaled approximately 59 Rupees (source: Oanda.com).

average income by 31 percent, to Rs. 7,039, versus Rs. 6,206 for the comparison group. Interestingly, though the report specifically states that Kashf "focuses on the working poor as opposed to the destitute," it is the poorer of Kashf's clients that showed the strongest impact. The poverty rate among Kashf members decreased by 20 percentage points. While the increase in income among the comparison group, at 20 percent, was impressive, they were unable to make a dent in their poverty rate.

	Clients		Non-Clients	
	2002	2003	2002	2003
Average Income (Rupees)	5,376	7,039	5,158	6,206
Income Gain (Percent)		30.9		20.3
Below Poverty (Percent)	55.6	35.5	51.1	51.0

Table 14: Income Gains and Poverty F	Rates for Kashf Families
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Unfortunately, the authors did not conduct tests to determine which of these impacts are statistically significant.

CARD, Philippines

"Reaching the Poor with Effective Microcredit: Evaluation of a Grameen Bank Replication in the Philippines" (1997), by Mahabub Hossain and Catalina P. Diaz, compared older borrowers to newer borrowers, finding that productive capital as well as the ability to finance expansion from borrowers' own funds increased with the number of loans taken from CARD. Income from older borrowers' microenterprises was 3.5 times higher than newer borrowers' enterprises, and older borrowers also increased income from other sources. Regression results showed that every peso borrowed from CARD yielded 3.03 pesos in income.

Moris Rasik, Timor Leste

The situation in Timor Leste (formerly the province of East Timor, Indonesia) provides another excellent example of the need for a comparison group. As described in "**Moris Rasik: An Interim Impact Assessment**" (2005), edited by David Gibbons, the Timorese benefited from the restoration of security in 1999 following violence in East Timor, and they received substantial reconstruction assistance from abroad. The microfinance program, Moris Rasik, keeps records of the poverty status³³ of each client at the time of entry into the program; thus the authors can measure the progress clients have made out of poverty. Table 15 shows that 54 percent³⁴ of Very Poor clients experienced a decline of at least one category of poverty since joining Moris Rasik.

³³ As in the study of SHARE, above, the authors created a Poverty Index based on quality of housing (using Moris Rasik's adaptation of the CASHPOR House Index), productive assets, and the household dependency burden. The index has a maximum score of eight. A score below four is considered "very poor" while five and six are counted as "moderately poor" and seven and eight "non-poor."

^{34.52/.96=.54}

Poverty Status	At Entry to MR	Current	Difference
Very Poor	96%	44%	-52
Moderately Poor	4%	49%	+45
Non-Poor	0%	7%	+7

Table 15: Change in Poverty Status among Moris Rasik Clients

However, the measure of Moris Rasik's success must not be simply the decrease in poverty, but improvement beyond what was experienced by those without access to credit. Moris Rasik's good recordkeeping allows Gibbons to identify the portion of the clients' reduction in poverty directly attributable to the MFI. Using a comparison group of incoming clients (matched on the clients' age and household size) Gibbons shows there is a 38 percentage point difference in extreme poverty between mature clients and incoming clients, as shown in Table 16:

Table 16: Impact of Moris Rasik

Current Poverty Status	New Clients	Mature Clients	Difference
Very Poor	82%	44%	-38
Moderately Poor	18%	49%	+31
Non-Poor	0%	7%	+7

Gibbons calculated that since there should *in theory* be no difference between mature clients and new clients, other than the effect of the program, 38 of the 52 percentage points by which clients reduced their extreme poverty since entering the program—or 73 percent of the difference— could be directly attributed to the MFI. Of course, by now we have seen that there can be real differences between incoming and existing clients, so the 38 percentage point estimate of the impact of the program is open to challenge but suggests that there may be a significant positive impact nonetheless.

Local Initiatives Project, Bosnia and Herzegovina

"Impacts of Microcredit on Clients in Bosnia and Herzegovina" (2005), by Elizabeth Dunn, examined the impact of ten MFIs supported by the Local Initiatives Project, which was implemented in 1996 with US\$21.8 million financed by the World Bank through Local Initiatives Departments in the Federation of Bosnia and Herzegovina and Republika Srpska. As in Timor Leste, the region experienced rapid growth after the cessation of violence, with per capita GDP doubling in the two years following the Dayton Peace Accord. This study was able to provide a more reliable estimate of impact by using panel data. Clients and non-client entrepreneurs were interviewed in 2002 and reinterviewed in 2004. A total of 2,561 entrepreneurs were interviewed in both survey rounds, of whom 1,385 were clients, 289 were new clients, and 630 were non-clients who were screened to ensure that they were similar to clients. Additionally, 257 non-clients took loans between survey rounds and thus provide insight into the early impact of microfinance. Clients had been MFI members for 3.6 years, on average, while new clients had been members for an average of two years, and those who became clients between survey rounds had been members for one year.

The study used regression analysis to compare clients and non-clients who were similar on several baseline variables (e.g., age, income, gender, education, and displaced or returnee status from the war), finding that client households increased their income by about 900 KM (in 2004, 900 marka equaled about US\$570)³⁵ per capita more than non-client households. New clients (who were MFI members by the first survey round) did even better, earning 1100 KM per capita more than non-client households who had similar income in 2002. Dunn emphasized that these numbers are especially impressive in relation to the poverty line of 2200 KM per capita.

The study found that the programs increased the employment and wages of non-household employees, but only among the newest clients (who had joined between survey rounds). The size of the effect for these clients was 14 percent more non-household labor and 29 percent more paid in wages. Dunn theorized that this type of impact occurs immediately after the first loan and levels off over time, but more research would be needed to support such a conclusion.

Sinapi Aba Trust, Ghana

Hishigsuren et al's study of Sinapi Aba Trust: "Client Impact Monitoring Findings from Sinapi Aba Trust, Ghana" (2004), compared new (in their first loan cycle), intermediate, and mature (in their fourth cycle or above) clients. The new clients served as the primary comparison group, but as in some previous studies, this did not provide a true baseline, as they could be expected to have already experienced some impact from the program. Much more problematic, however, were the dramatic demographic differences that existed between the new and mature clients. Mature clients were, on average, 10 years older than new clients— substantially more than the average five-year difference in program participation. The study acknowledged as much, but where they found that clients were more likely to help with household decisions, it is impossible to say whether this is due to program participation or simply because women may increase their bargaining power as they age. Similarly, where a higher percentage of clients were found to talk to their children about HIV/AIDS, it was unclear whether this was from training they received, or because they might have been more likely to have children old enough for such a discussion.

Worse, where 48 percent of mature clients lived in urban areas, a much higher percentage of intermediate and new clients did so: 63 percent and 68 percent, respectively. This is especially unfortunate, because if rural clients are poorer, this fact alone may explain why the study failed to show impact on average monthly profits. Though mature clients had the highest monthly profits (US\$102 compared to US\$87 for new clients), the difference was not statistically significant.

³⁵ Source: CIA World Factbook: http://www.cia.gov/cia/publications/factbook/geos/bk.html

Section 5: Wider Impacts of Microfinance

Empowerment

Up to this point, this paper has focused on impact measured by changes in income. Section 5 considers the "wider" impacts of microfinance: e.g., changes in women's empowerment, education, and nutrition. Some of these outcomes, especially those that are intangible—like empowerment—can be especially difficult to measure, and this complicates the assessment of impact. Unlike changes in income, for which programs can explicitly target the poor, it is likely that women who choose to participate in microfinance programs are more empowered than those who do not. Therefore demonstrating that participants are more empowered than non-participants may by itself tell us little.



Hashemi, Schuler, and Riley in **"Rural Credit Programs and Women's Empowerment in Bangladesh"** (1996) could not eliminate this source of selection bias, but they limited it by statistically controlling for differences in demographic characteristics such as age, education, and wealth. They enhanced this technique by measuring the empowerment of women as a function of the length of time the women participate in the MFIs (Grameen and BRAC). In this way, the study answers the question: What is the change in empowerment among women who choose to participate in microfinance programs? Thus, even if the participants were more empowered to begin with (than those who chose not to participate), the authors showed that the MFIs have a positive effect on their empowerment.

Hashemi, Schuler, and Riley created a composite empowerment indicator based on eight components: mobility, economic security, ability to make small purchases, ability to make larger purchases, involvement in major household decisions, relative freedom from domination within the family, political and legal awareness, and involvement in political campaigning and protests. A woman was considered empowered on the composite indicator if she scored as empowered on five of eight of the subcomponents. Among 1,225 women surveyed in 1992, the authors found the levels of empowerment shown in Table 17 presented as odds ratios (the likelihood of being empowered compared to the reference category, the comparison group) for each dimension and the composite score.

	Odds Ratios				
	Membership	Grameen	BRAC	Nonmember	Comparison
	Duration	Member	Member	in Grameen	Group
Empowerment Indicator	(Years)			Village	
Mobility	1.09	1.12	1.76*	1.71*	1.00
Economic security	1.08	5.18*	2.80*	1.06	1.00
Small purchases	1.12*	3.92*	2.16*	1.25	1.00
Large purchases	1.03	3.65*	3.15*	1.62*	1.00
Major decisions	1.19*	3.45*	1.49	1.41	1.00
Not dominated by family	1.07	1.28	0.85	1.18	1.00
Political/legal awareness	1.03	1.84*	2.44*	0.83	1.00
Campaign/protest	1.12*	1.08	1.36	0.71	1.00
Contribution to family support	1.12*	6.83*	1.94*	1.45	1.00
Composite empowerment score	1.16*	7.52*	4.51*	2.41*	1.00

*Significant after adjusting for education, religion, age, surviving sons and daughters, geographic location.

The table shows that Grameen Bank members are seven and a half times as likely as the comparison group to be empowered; for BRAC it is 4.5. However, due to concerns about selection bias, the most important results are those for membership duration, which showed a significant positive effect for half the dimensions and the composite indicator, meaning the MFIs increased their members' empowerment over time. However, this raises the question: if the effect of participation over time was already accounted for, why did simply being a member of Grameen or BRAC remain significant? This residual effect reflects a combination of selection bias and the empowering effect experienced soon after joining an MFI. The women in the sample had been participants for at least 18 months; with this limitation in the data, it is unclear how much more empowered the participants were to begin with and how much they gained in the first year and a half of membership.

Similarly, women who did *not* participate were more than twice as likely to be empowered simply by virtue of living in Grameen villages. This may suggest a positive spillover from microfinance is affecting the norms in communities, but it could also imply that Grameen selects relatively empowered communities for program placement. The authors warned that they were unable to disentangle the effects with the available information.

Contraceptive Use

The Second Impact Assessment Study of BRAC reported that members who had been with BRAC the longest (more than four years) had significantly higher rates of contraceptive use. *Fighting Poverty with Microcredit* found credit provided to women *reduced* contraceptive use among participants (although Khandker attributed this result to selection bias as he found women who joined the three programs were already more likely to have used contraceptives before participating). Credit provided to *men* from the Grameen Bank, however, was shown to increase contraceptive use. Unfortunately, as discussed in Section 1, while Khandker has updated his model to provide more reliable findings, he has not yet done so for these wider impacts. The results must therefore be treated with caution until these findings are updated as well.

"The Impact of an Integrated Micro-credit Program on Women's Empowerment and Fertility Behavior in Rural Bangladesh" (1998), by Steele, Amin, and Naved, provides more insight into the savings-versus-credit question, this time on women's empowerment and fertility. Over 6,000 women were interviewed for the study in 1993, when Save the Children was expanding its coverage area for savings groups as well as beginning to partner with ASA to extend credit. More than 4,000 of the women were then reinterviewed in 1995. By looking at women signing up for a new program, the study was able to confirm the need to control for initial levels of empowerment (as Hashemi et al. were unable to do above, due to limitations in their data)—here, too, women who used contraceptives were found to be more likely to participate in the programs than nonusers. The authors estimated that, even after statistically controlling for prior contraceptive use, borrowers (who have been members for a year or more) were 1.8 times more likely to use contraceptives than the comparison group. Membership in a savings group was not found to have an effect.

However, though participation was shown to increase contraceptive use, an analysis of the actual number of births between the two years of data collection did not reveal a statistical relationship between either savings or credit and fertility. The authors argued that this was because the programs also have no significant effect on reducing fertility *desire*.³⁶ Additionally, the study showed no effect on women's mobility or decision making power, but did find that credit increased the number of years women feel their daughters should be educated, as well as the age at which they should be married. Again, savings membership was not found to have an effect.

Wages

The idea is that microfinance, by creating self-employment, can remove enough people from the rural labor market to increase wages for everybody else. (Borrower families can theoretically get a double boost if women earn profit from enterprises and their husbands' wages go up.) The evidence of such an effect is not strong based on research conducted to date. In *Fighting Poverty with Microcredit,* Khandker found only the Grameen Bank raised rural wages, and again, the conclusions that can be drawn from that study are limited. In *Women at the Center,* Helen Todd reported that the wage rates among domestic servants did not noticeably appreciate for non-borrowers. "Impact Assessment of ASA" did find that while men's wage rates were the same in old ASA villages as they were in new ones, women's wages were 36 percent higher in old ASA villages. The pattern is believable, but no effort was made to control for differences in characteristics between the villages. Perhaps the best evidence comes from Peru, where the AIMS study of Mibanco found that participants *paid* more in wages than non-client enterprises.

³⁶ However, "Impact of Grameen Bank on Situation of Poor Rural Women," by Rushidan Rahman, did show a 24 percent decline in fertility desire among Grameen women.

Nutrition

"Credit Programs for the Poor and the Health Status of Children in Rural Bangladesh" (2003), by Pitt, Khandker, Chowdhury, and Millimet, returned to the World Bank-BIDS dataset explored in Section 2, this time utilizing a special health component of the survey. The authors found substantial impact on children's health from women's borrowing, but not from male borrowing, which had an insignificant or even negative effect:

Table 18: Impact of a 10 Percent Increase in Credit

	Girls		Boys		
	Height	Arm Circumference	Height	Arm Circumference	
Credit to Women	+0.36 cm	+0.45 cm	+0.50 cm	+0.39 cm	
Credit to Men	-0.16 cm*	+0.21 cm	-0.11 cm*	-0.14 cm	

*Not statistically different from zero.

Credit with Education

Credit with Education is a methodology developed by Freedom from Hunger in which training modules in health and business skills are integrated into the regular meetings at which microfinance clients repay their loans. Modules include breastfeeding, child nutrition, and money management. Barbara MkNelly and Christopher Dunford, both of Freedom from Hunger, completed two comprehensive evaluations of Credit with Education programs: "Impact of Credit with Education on Mothers and Their Young Children's Nutrition: Lower Pra Rural Bank Credit with Education Program in Ghana" (1998), and "Impact of Credit with Education on Mothers and Their Young Children's Nutrition: CRECER Credit with Education Program in Bolivia" (1999). Both studies measured the impact of the complete programs, not just the credit or the education.³⁷ Therefore, the impact estimates represent the effects not of traditional microfinance, but of some of the many possibilities inherent in a dynamic field.

MkNelly and Dunford examined mother/child pairs in two different years to study the impact of Credit with Education on a variety of outcomes, especially child nutrition. The mother/child pairs were not the same in both years because the authors wanted to measure outcomes on young children in the same age group. The study was unique in that it randomized the rollout of the program into new villages, eliminating the program placement bias afflicting other studies. However, it did not solve self-selection bias as it compared participants who had elected to join the program to non-participants as well as a comparison group in non-program villages. As in other studies, the authors tested the demographic likeness of the three groups and found little difference among them.

³⁷ There are other studies underway to measure the impact of Credit with Education compared to the provision of credit only.

The study found a range of positive impacts on participants compared to both groups. In Ghana, participants experienced an increase in monthly nonfarm income of \$36, compared to \$18 for non-participants and \$17 for the comparison group. Participants were more likely to breastfeed their children and more likely to delay the introduction of other foods into their babies' diets until the ideal age (around six months). For older children they were able to add significantly more nutritious foods, such as beans, fish, eggs, and milk. Also a result of their education sessions, participants were more likely to properly rehydrate children who had diarrhea by giving them oral rehydration solution. These impacts paid off in a significant difference in height-forage and weight-for-age between children of participants and children in comparison communities.

In Bolivia MkNelly and Dunford found no increase in monthly non-farm profits for participants, but they did find a significant increase in profits for the household. Participant households earned more than five times as much non-farm profit as comparison households, and this may reflect the fungibility of credit within families. As in Ghana, participants demonstrated positive impacts versus comparison households in breastfeeding and children's diets. Here, though, no difference was found in children's nutritional status as measured by height- and weight-for-age. This may be related to the fact that the previous year had been an especially good harvest-the percentage of families experiencing a hungry season fell dramatically among both participants and comparison households. Among those who did experience a hungry season, however, participants were significantly less likely to have sold off animals as a coping strategy. Also complicating the evaluation, in Bolivia the authors found wide variation in the number and quality of education sessions delivered to clients. They found that the third of credit associations, which received the "best" quality education, showed significantly better children's nutrition (weight-for-age) than those who received the "worst" education, which indicates that Credit with Education when it is delivered properly may be quite effective in this regard. Unfortunately, with the participants divided into three groups, sample sizes were too small to accurately compare just the full treatment (the "best" quality) to the comparison group.

The studies also measured women's empowerment and found limited positive impacts in Ghana. Women participants had greater "say" in whether to send children to school, and were more likely to be members of community groups outside of their families, to help friends with their work, and to offer business and health advice to others. In the Bolivia study, the authors developed a composite measure of empowerment, with one point given for each of the following: 1) being a member of a group or association, 2) helping a friend with his or her work in the last six months, 3) offering health or nutrition advice, 4) offering business advice, 5) speaking at the community's general assembly meeting, 6) holding or running for elected office, and 7) hosting a community festival. Out of a maximum score of seven, participants scored significantly higher than residents of comparison communities: 4.2 versus 2.8.

Section 6: Determinants of Impact



The previous sections have reviewed a variety of situations in which microfinance has been shown to have a positive impact, as well as others in which the impact remains unproven. This section will begin to explore some of the factors which may contribute to the effectiveness of microfinance. Of course, what works is an even more difficult question than whether microfinance works, but the body of literature yields enough clues to make the discussion worthwhile. Confirming and refining these determinants of impact should provide for years of interesting studies to come.

Impact by Control of Loan

Worldwide, the Microcredit Summit Campaign reports that more than 80 percent of microfinance clients are female.³⁸ Many of the impact evaluations reviewed here are of MFIs which serve exclusively women; therefore they are in no position to address differences in impact by gender. Several do, however, and in most cases they find a higher impact from female borrowing. It is revealing that the most reliable of these studies, Khandker (2005), found substantial impact from female borrowing and no impact at all from male borrowing. At least one study, though (the assessment of ASA by Michael Brüntrup et al.), showed a greater increase in income for men than for women, and this highlights one of the factors behind the decision of many households to channel the loan from the female borrower to her husband—there may be greater returns to male enterprises.

The paper **"Who Takes the Credit? Gender, Power, and Control Over Loan Use in Loan Programs in Rural Bangladesh" (1996)**, by Anne Marie Goetz and Rina Sen Gupta, supports this notion, citing an RD-12 study which found rates of return on women's enterprises average 145 percent while men's average 211 percent. "Who Takes the Credit" is often cited for its statistic that 39 percent of women in their sample had little or no control over their loans. The stock response is to point out that in a country like Bangladesh, it is rather impressive that 61 percent of women retained full or partial control over their loans. Though many people describe their paper as reaching markedly negative conclusions about women's control over their loans, Goetz and Sen Gupta, themselves, make this same point. While they are suspicious about the

³⁸ At the end of 2003, the number was 82.5 percent, according to the "State of the Campaign Report 2004" (among clients who were very poor when they took their first loan).

implications of loan "pipelining" (women handing over loans to their husbands), they call for further evidence about the effects of the practice. They write: "It cannot simply be assumed that individual control over a loan is equivalent to empowerment, nor does the phenomenon of transferring a loan in and of itself signal a loss of power for women."³⁹ This is an eminently reasonable point. So, what's the evidence?

Helen Todd analyzed the issue in detail in *Women at the Center*, finding that a quarter ⁴⁰ of clients in her sample were pipelining their entire loans to their husbands. Todd described these women as the most marginal in her sample; though they represent only 25 percent of the members, 41 percent of the borrowers who were still poor after ten years of participation were among this group. Goetz and Sen Gupta cited a study by Rushidan Rahman which found that women Grameen members who had transferred their entire loan to a male relative had better nutritional status, and more money spent on clothing and medical care than the wives of male borrowers. This suggests that even in the case where women have the least control—i.e., women channeling their entire loans—women are better off with microfinance than without. Hashemi et al. confirm this conclusion, finding that 36 percent of Grameen and BRAC borrowers with no control of their loans could be considered empowered, compared to only 9 percent of women in comparison villages.

Goetz and Sen Gupta found considerable differences among the MFIs examined in terms of the control of loans by their female clients. Among Grameen Bank borrowers, 62 percent had full or significant control, versus only 10 percent in the "Very limited" or "No involvement" category. TMSS had 41 percent with full or partial control, RD-12 had 31 percent, and BRAC only 28 percent. The differential would seem to imply that the reason for this variation is the management approach of particular MFIs. However, Goetz and Sen Gupta pointed out that while more than 70 percent of Grameen borrowers in the sample engaged in livestock raising, a traditionally female activity in Bangladesh, women in the other MFIs operated more diverse enterprises. They argued that it would be unfair to fault the MFIs for encouraging women to invest in nontraditional activities. They also cited some positive steps to ameliorate the problem, such as Grameen Bank's insistence that investments financed by the bank (livestock, land, and housing) be registered in the woman's name; and the requirement by TMSS that its borrowers provide accurate and up-to-date accounts of loan use—encouraging women to retain some control over decision making, regardless of whether they operate the business.

³⁹ Anne Marie Goetz and Sen Gupta, "Who Takes the Credit? Gender, Power, and Control Over Loan Use in Loan Programs in Rural Bangladesh," *World Development* 24 No.1 (1996) p. 52.

⁴⁰ Todd notes this is a higher figure than found by earlier studies, and she believes this is because of her more intimate knowledge of the women in her study. However, there may be another reason. The women in Todd's sample had been with the program for ten years. Goetz and Sen Gupta showed that women's control over their loans increase with years of membership, until they have been in the program for about five years. At that point, as loan sizes increase, women have more incentive to channel their loans to their husbands, and control starts to decline. Hashemi et al., however, found no evidence for this.

Impact by Incoming Poverty Level

We have already seen in Section 1 that **"Micro-finance and Poverty: Evidence Using Panel Data from Bangladesh"** found the impact of microfinance was greater on extreme poverty than moderate poverty. **"The Maturing of Indian Microfinance"** (2004), by EDA Rural Systems, supports this conclusion, showing that while non-poor clients most often reported an increase in household income compared to non-clients, the very poor benefited most from microfinance:

Household	Very Poor	Poor	Borderline	Non-Poor	Overall
Client	41%	46%	48%	65%	52%
Non-Client	18%	29%	35%	58%	38%
Difference	+23	+17	+13	+7	+14

Table 19: Increase in Income by Poverty Level (Clients of Indian MFIs)

BRAC's own assessment of its impact found that while landless clients benefited least from the program, those with 1-50 decimals of land ("the poor") benefited most. "Monitoring diversity of poverty outreach and impact of microfinance: a comparison of methods using data from Peru" (2005), by Copestake et al., found that impact for the wealthier half of Promuc clients was 80 percent higher than the impact for the poorer half. In an earlier study, "Inequality and the Polarizing Impact of Microcredit: Evidence from Zambia's Copperbelt" (2002), Copestake found that CETZAM clients below the poverty line benefited significantly more from access to credit. However, the study looked at clients only after one year of participation, which may not have allowed enough time to show the "true" impact of the program, and, at the time, CETZAM suffered from very high dropout rates, which was sure to bias the results.

Clearly, the overall evidence is mixed and more findings would be welcome to help settle this debate. Still, the question of which group benefits *most* from microfinance is probably misguided. The evidence shows that the very poor *do* benefit from microfinance, and this justifies the decision of many programs to recruit them and to develop products that suit their needs.

Impact by Family Crisis

In *Women at the Center*, Helen Todd found that out of the 17 Grameen Bank borrowers who were still poor after a decade, ten of them had experienced a serious illness in the family in the three years before her study. In comparison, only 17 percent of the borrowers who were no longer poor experienced similar crises. According to Todd, the families that suffer crises were almost always forced to sell off assets to pay for medical treatment and to support the family through the loss of income from the husband or the wife. She found that among the members that remained poor, 41 percent had borrowed more than half the amount of their loans (from other sources) *before* they had received them from Grameen. By the time they received their loans from Grameen, there was not enough left over for productive investment, and the cycle continued—exactly what microfinance was supposed to prevent.

Other studies show mixed results on the effect of crises. Interestingly, it is another study by Helen Todd, "**Paths out of Poverty: The Impact of SHARE Microfin Limited,**" which found no relationship between family crises and movement out of poverty. Though 49 percent of SHARE clients had experienced a family crisis or natural disaster in the previous four years (with a third having experienced two or more), they were no more-or-less likely to have experienced an increase or decrease in poverty. Todd attributed their success to their extraordinary savings rates. "Moris Rasik: An Interim Impact Assessment," however, corroborates Todd's earlier findings from *Women at the Center* (this time with a larger sample size). Clients who remained Very Poor were found to spend nearly the same amount on family crises and obligations as Moderately Poor or Non-Poor clients (\$120 vs. \$116). However, among clients who had experienced both serious illness *and* death in the family, nearly 60 percent remained Very Poor, versus only 40 percent for those who had experienced serious illness only. These results highlight the need to further develop savings and insurance products for the poor.

Impact by Lending Model

The data is limited to India, but the sheer size of the Indian market, and the implications of the findings for other regions, merit a review of the evidence. **"The Maturing of Indian Microfinance"** examined the differences in outcomes between members served by "Grameen" model MFIs and Self-Help Groups (SHGs).⁴¹ SHGs are the predominant model of microfinance in India; similar to village banking, SHGs involve larger groups of about 15-20 women who hold a joint bank account and save and make loans among themselves. Often they are organized into larger "federations" of SHGs. The two models appeared to reach very similar profiles of clients: 43 percent of clients in each were below the poverty line, while 11 percent of SHG members and 8 percent of Grameen model members are "very poor." Table 20 shows that the Grameen model appeared to be more effective at reducing poverty, in several dimensions.

Client Households	SHG	Grameen model
Reported Increase in Business Income	55%	82%
Reported Increase in Household Income	41%	70%
Acquired Productive Asset Last Two Years	23%	51%
Have Multiple Sources of Income	67%	82%
Enterprises Hiring Outside Labor	4%	6%

Table 20: Poverty Reducing Effects by MFI Model

⁴¹ The study included 2,447 respondents (clients, non-clients, and dropouts) from nine SHG-MFIs, and 1,950 respondents from six Grameen-model MFIs.

Section 7: Conclusion



Does microfinance work? This review of the literature provides a wide range of evidence that microfinance programs can increase incomes and lift families out of poverty. Access to microfinance can improve children's nutrition and increase their school enrollment rates. among many other outcomes. Yet it would be imprudent to issue a blanket statement that "microfinance works," for the simple reason that there is no one "microfinance" to test. The MFIs examined in this paper serve different types of clients with a variety of services, and they operate in extremely heterogeneous regions. None, no matter how effective, can be said to definitely answer the question of whether microfinance works as a poverty-

reduction strategy on a global basis. Someone especially concerned with the effect of microfinance on family planning, or women in Eastern Europe, for example, might have a different take on the (limited) evidence. Where an impact assessment finds a microfinance program to work especially well, or not at all, it is important to consider what exactly was being tested—credit in urban or rural settings; for women or for men; for the very poor, or the not-so-poor; and so on.

On the whole, the evidence points in two directions: 1) there is much to be enthusiastic about; and 2) there is much to discover about the many ways in which microfinance works and does not work for different types of clients. This brief examination of a significant swath of the literature makes it quite clear that no study is perfect, and many suffer from serious methodological flaws. However, it would be hard to read through all of the many positive findings in these dozens of studies—noting how rarely the comparison groups showed better outcomes than clients—and not feel that microfinance is an effective tool for poverty eradication.

On the other hand, considering all the ways we have seen in which subtle differences between clients and comparison groups can affect the conclusions we draw, the evidence, as convincing as it is, is not quite good enough. It will be an enormous benefit to the entire industry when the first "incontrovertible" study is published. The only way to achieve this is through randomized control trials. Fortunately, the first of these studies is already underway. While the first use of randomized evaluations may be to prove the effectiveness of microfinance programs, MFI managers, as consumers of information, may soon start to demand randomized trials for informing their management decisions.

Proving or Improving: Bridging the Divide

Much of my communication with impact specialists on this issue focused on the perceived rift between those who use quantitative techniques to measure the impact of an MFI, and those who favor the "social performance management" promoted by the *Imp-Act* program. The latter group emphasized the importance of understanding clients' needs to design services that meet those needs. They argue that to achieve this MFIs should conduct:

- systematic monitoring of how their client profile is changing
- systematic monitoring of why some people leave the program
- follow-up research (market research that is poverty and gender aware) into clients' satisfaction with services.

The *Imp-Act* program has built up an ample body of social performance research, examples of which are discussed in their new book, *Money with a Mission*. Since the *Imp-Act* studies are focused on improving the performance of their member MFIs, they are less concerned with validating the impact of the programs to the larger microfinance community. Thus few of them use comparison groups to gauge "impact" in the academic sense of the word: the outcome clients experienced versus the outcome they would have experienced had they not participated in the program. As we saw in Section 1, the Grameen Bank's Ten Indicators are useful for social performance management (*Imp-Act* members would recommend a variety of additional tools to help Grameen to understand which of its clients are coming out of poverty, and which are not—and why) but tell us little about what would have happened to clients in the absence of the bank.

Yet, while the *Imp-Act* camp may see itself at odds with the "testing outcomes" camp, there is significant overlap between these views. The latter group called for high-quality (preferably randomized) evaluations of the impact of different product designs and business processes. The effects of different products and policies are still *outcomes*, and these can be rigorously tested, providing important information to MFI management about which processes create the biggest impact for different types of clients. *Imp-Act* members have called for the exact same thing, only employing a more qualitative methodology. They argue rightly that, though the cost of rigorous studies can be lower than people might expect, it is still out of reach of many smaller MFIs to fund this type of study. The best bet for many MFI managers, then, may be to both employ social performance management and to follow the research and learn from the better studies, deciding for themselves which findings provide information that will be valid in their specific settings. The "translation" of technical econometric results for practitioners will be especially useful in this regard.

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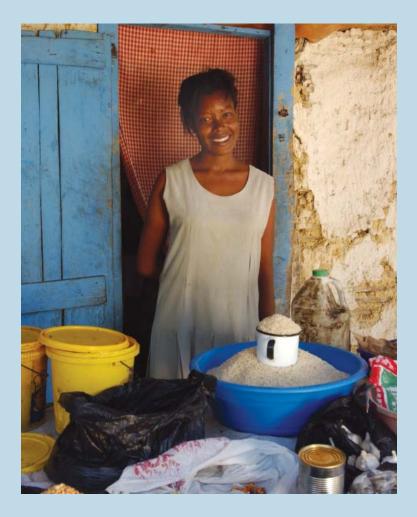
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Grameen Foundation USA is a young, dynamic, global organization that applies a powerful tool, *microfinance*, to empower the world's poorest people to escape poverty. In just seven years, GFUSA has established a global network of 52 partners in 22 countries that has impacted more than seven million poor people in Asia, Africa, the Americas and the Middle East. The organization's mission is to empower the world's poorest people to lift themselves out of poverty with dignity through access to financial services and to information. We provide financial, technical, technological, and human resource support for microfinance institutions and social entrepreneurs who seek to replicate the Grameen Bank approach, or scale up existing programs to provide financial services to the poor.

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