The Business Case for Adding Health Protection to Microfinance

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Executive Summary

Based on the experiences of Freedom from Hunger and its microfinance institution (MFI) partners in the Gates-funded Microfinance and Health Protection (MAHP) initiative, this paper documents the impact that health protection products can have on the financial performance of MFIs. In 2006, Freedom from Hunger set out with five MFIs—Bandhan (India), CARD (Philippines), CRECER (Bolivia), PADME (Bénin) and RCPB (Burkina Faso)—to explore whether it was possible to design and offer health-related products and services that could have positive social impact for clients while also being practical, cost-effective and even profitable for MFIs. Each MFI tested a package of health protection products that included several elements such as health education, health savings, health loans, health Microinsurance, linkages to health providers and the sale of health products in rural communities. By December 2009, the health protection products of the five MFIs were reaching a combined total of more than 300,000 microfinance clients.

Over the course of the initiative, Freedom from Hunger and the participating MFIs found that health protection products do have the potential to positively impact not only clients but also the financial bottom line of the MFI itself. This paper presents an argument for why other MFIs should consider integrating health protection products. The paper provides evidence to support the following assertions:

1. Integrated microfinance and health protection products can be inexpensive for MFIs to offer. The average annual net marginal cost to the MFIs in 2009, one to two years after product launch, was US$.29 per client, and the average total net cost (including allocated staff and overhead) was an annual $1.59 per client. These net costs resulted in a theoretical decline of overall MFI profit margin of 2 percent, from 24 percent on average to 22 percent. Some of the health protection products are expected to break even and begin earning net profits in coming years, while other non-revenue-generating ones may soon cost less per client due to increasing economies of scale.

2. The offer of health protection products has the potential to enhance MFI competitive advantage. The products appear even more affordable for MFIs when taking into account their indirect impact on client growth, client and staff retention and loan sizes. Based on preliminary evidence, the paper shows that if just 1 percent of the clients receiving health protection products at the end of 2009 had come to or stayed with the MFI as a result of these offerings, then the average total net loss from the packages would have been $.74 per client per year. If as much as 5 percent of client retention were attributable to the products, then they would have more than paid for themselves and actually contributed to net earnings.
3. The value of health protection products to clients and their communities can exceed their cost, resulting in impressive net social value creation that contributes substantively to an MFI's social mission. Highlighting some key findings of client-level outcomes research, the paper demonstrates how some health protection products have resulted in a quantifiable social benefit to clients and their communities that exceeds the MFI's cost of providing the products. Given this net social value, the paper argues, MFIs can justify absorbing the net cost as one or more of the following: an operating expense for achieving social mission, a marketing expense that pays off in reputation and competitive advantage, an avenue to favorably priced social investment funds or a way to attract donor subsidies to carry forward the provision of health protection products on a long-term basis.

The paper closes with a summary of points for further research and examination, as well as a call for more widespread experimentation with efficient combinations of services that address the two inter-related and abiding problems of poverty and ill health.

Introduction

The Connection between Microfinance and Health

Microfinance has proven itself to be a high-impact and financially self-sustaining tool for helping people make their own way out of poverty. By broadening poor people's financial options through the relatively efficient offer of small interest-bearing loans, safe savings and life insurance, microfinance institutions (MFIs) are already contributing substantially to poverty alleviation as well as general economic and social development. No single development tool can do it all, though, and the idea of microfinance as a development panacea has been visited and appropriately discarded. The complexity of poverty and the need for sustainable, long-term solutions necessitate a panoply of development tools working together to achieve Nobel Laureate Mohammed Yunus's dream of doing away with poverty altogether.

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But it is the "working together" that poses a problem. Development interventions too often do not align to give poor people the complete "tool box" that is needed. Recognition of the close relationship between their clients' economic development and other social factors, combined with a maturing and increasingly competitive microfinance market, is leading more and more MFIs to venture into "microfinance plus." But of all the value-added services being tested by MFIs, health appears to be one of the most difficult, or daunting, ones to tackle. This is unfortunate, given the centrality of ill health and its consequences in the lives of poor people.

Poverty and ill health go hand in hand. Poverty often engenders subpar living and working conditions which contribute to ill health; ill health in turn begets higher expenses that further reduce net income. A recent study in Ghana found that the cost of malaria treatment represented just 1 percent of wealthy families' income but 34 percent of poor households'.[1] In Kenya, 30 percent of all households faced "potentially catastrophic cost burdens" as a result of illness. According to the World Health Organization, every year more than 100 million people are driven below the poverty line as a result of disproportionate spending on health.[2]

Although default rates are famously low in microfinance, and there are many reasons for client default and dropout, the most cited reason is health—the illness of an MFI client herself or a member of her family. Research conducted by Freedom from Hunger at five MFIs, and corroborated by a 2009 Center for Microfinance study, also revealed that microfinance clients commonly resort to using their MFI business loans to pay healthcare expenses. Proportions who reported recently doing so ranged from 11 percent (at RCPB in Burkina Faso) to 48 percent (at Bandhan in India).[3] Thus MFIs feel the health "pinch" directly—portions of their microenterprise loans go to pay for (financially unproductive) health expenses. This can lead to default and dropout; meaning financial losses for the MFI, which loses efficiency chasing down sick, late-paying clients and bringing in new clients who take some time to build up to the larger and more profitable loans of veteran clients.

If there were a way for MFIs to help their clients reduce and manage the impact of ill health without diversifying beyond the MFIs' capacity or negatively affecting their financial self-sufficiency, many would sign on.

Purpose of this Paper

Following two decades of experience in developing and helping MFIs to successfully implement financially self-sustaining *Credit with Education* programs—which combines traditional village banking with nonformal education on health, business and financial topics—Freedom from Hunger sought to explore whether MFIs could feasibly go beyond health education to offer other types of high-value health services. In 2006, with funding from the Bill & Melinda Gates Foundation, Freedom from Hunger launched its Microfinance and Health Protection (MAHP) initiative. Five MFIs agreed to participate over a four-year period in designing, pilot testing and researching the impacts of a host of health protection products.

MAHP was initiated in the spirit of exploration and experimentation. Was it possible to design health-related products and services that would meet clients' needs in a meaningful way while also being practical for MFIs to offer? Could such services be offered on a cost-recovery or profitable basis, ensuring that they could be sustained over the long term without negatively impacting the MFI? What effect would such integrated microfinance and health products have on the health and financial well-being of MFI clients? And importantly, what would be the impact of these products on the financial well-being of the MFIs that offered them?

[1] Barat L.M., N. Palmer, S. Basu, E. Worrall, K. Hanson and A. Mills. "Do malaria control interventions reach the poor? A view through the equity lens." Am J Trop Med Hyg 2004;71 (Suppl 2):174—8.

[2] Xu, K. et al. "Protecting households from catastrophic health expenditures." Health Affairs, 2007, 6:972–983, as cited in World Health Organization's World Health Report, 2008.

[3] Clients from study samples at each MFI with access to health financing products reporting past use of at least some portion of their business loans were as follows: RCPB (Burkina Faso) 11%; CARD (Philippines) 15% enrolled in insurance and 27% dis-enrolled; CRECER (Bolivia) 27%; Bandhan (India) 48%. An independent CMF study suggested that 17% of a loan goes to health and education combined. [Kobishyn, A. 2009. "Opening the Black Box: How the Poor Use Credit in India." Microfinance Insights. Vol. 12, May/June 2009. <http://www.microfinanceinsights.com/story-details.php?sid=216&iid=11> (June 8, 2010)]

The purpose of this paper is to highlight key findings of the MAHP initiative with regard to the question: What is the impact of health protection products on the financial viability of MFIs? And given these findings, we aim to make the case for why more MFIs should add health-related products and services to their portfolios.

The Microfinance and Health Protection Initiative

MAHP MFIs and Packages

From 2006 to 2009, Freedom from Hunger and five MFI partners challenged themselves to develop health protection products that would be practical, financially sustainable, scalable, high impact for clients and replicable by other MFIs. For this initiative, Freedom from Hunger selected large, high-profile MFIs with strong financial performance, visionary leadership, strong management capacity, significant outreach in their market, a commitment to social mission, experience and/or interest in innovation, and a desire to test health protection products. We also sought a sample of MFIs representing a range of geographic, regulatory and social contexts. The following are the five participating MFIs:

Bandhan (India)

CARD (Philippines)

CRECER (Bolivia)

PADME (Bénin)

RCPB (Burkina Faso)

Three of the five MFIs were already offering *Credit with Education*, including education on health topics. As of December 2009, these five MFIs were collectively reaching more than two million clients. (Brief profiles of the MAHP MFIs are found in Appendix 1.)

...each MFI crafted a package of inter-related health protection products and services to pilot-test. The individual components ranged from health education to health financing such as health savings, health loans and health Microinsurance*, and from linkages with health providers to the distribution of health products.*

Leaders of all five MFIs viewed client health as a persistent contributor to poverty and a common reason for loan default. They were interested in exploring products and services that could be viably offered to address health-related needs. The process was launched with extensive market research in each country. Market research confirmed the hypothesis that clients were spending significant time and money to address health issues, helped identify the most common health concerns and gaps, and surfaced ideas for services that the MFI could offer in response.

On the basis of market research findings and with technical assistance from Freedom from Hunger, each MFI crafted a package of inter-related health protection products and services to pilot-test. The individual components ranged from health education to health financing such as health savings, health loans and health Microinsurance, and from linkages with health providers to the distribution of health products. Appendix 2 contains a description of each MFI's full, cohesive health protection package. Figure 1 below offers a summary of the components that were examined in the costing exercises from which this paper draws.

FIGURE 1: MICROFINANCE AND HEALTH PROTECTION PACKAGES OF THE FIVE MAHP MFIS: COMPONENTS ON WHICH COST-BENEFIT ANALYSES WERE UNDERTAKEN

MFI	MAHP Package	Description	Value Proposition
Bandhan	Health Product Sales and Health Education	Bandhan provides practical health education to its clients through optional monthly hour-long sessions held in communities. The nonformal education sessions focus on prenatal and neonatal care, preventing common illnesses and planning ahead to face health expenses. This education is reinforced by a network of "Shastho Shohayikas" (SS)—volunteers from Bandhan's credit groups—who make door-to-door visits in their communities to reinforce the health education messages, sell over-the-counter health products sourced by Bandhan, and encourage people to use local health services when appropriate.	Bandhan earns a margin on the health products sold to SS (ranging from 7 to 160 percent), which contributes to the cost of training and managing the volunteers. The potential reduction in common health problems in the communities served by Bandhan is expected to lead to healthier clients who experience fewer work days lost, lower household expenses (because of reduced illness and faster treatment), and thus better capacity to repay their loans, grow their microenterprises and take out larger loans with Bandhan.
CARD	Health Microinsurance Premium Loan and Insurance Education	CARD promotes and facilitates easy, optional, group enrollment for its clients in the national health Microinsurance program, PhilHealth, and provides a loan to cover the US$26 annual premium so that clients may pay for their coverage in small, weekly installments and thereby be assured of continuing coverage.	CARD charges 24 percent interest (flat, annual rate) on the PhilHealth premium loan, plus a 1.5 percent "Loan Redemption Fund" (LRF) fee; the resulting payment of about $.60 per week is added to the member's regular business loan and savings deposit payment, which is made to a single CARD Account Officer who visits the clients' meetings on a weekly basis. After reaching certain enrollment thresholds, CARD receives a 9.7 percent discount from PhilHealth on the premiums.
CARD[4]	Preferred Health Provider Discount Program	CARD provides all clients within a particular area with a "Healthy Pinoy" card that entitles them to discounts of 10 to 40 percent on primary and diagnostic healthcare services offered by local, private physicians, hospitals, laboratories and midwives. Clients are not required to use the service, but may do so at will without CARD's direct involvement.	This non-income-generating service contributes to CARD's social mission at a low cost and may play a role in client attraction, satisfaction and retention.

[4] CARD developed two parallel, though potentially complementary, MAHP packages and tested them in two distinct locations. Although both analyses are presented in a single paper—Costs and Benefits of Health Micro-insurance Premium Loans and Health Provider Linkages: CARD's Experience with Microfinance and Health Protection in the Philippines—they are effectively two separate cost studies, and we treat them as such here. It is anticipated that in the future, both of these complementary packages will be offered CARD-wide, with the PPP making primary health care more affordable and accessible to CARD clients, while PhilHealth ensures that clients who need higher-level care can obtain it and that clients can make use of savings that might otherwise (in the best of circumstances) be blocked as protection against a major health shock, for productive investments.

FIGURE 1: (*continued*)

MFI	MAHP Package	Description	Value Proposition
CRECER	Health Days with Mobile Health Providers	At Health Days, CRECER clients may access diagnostic and primary health care and—for a fee to them of $0 to $9—be tested for diseases such as diabetes, cervical cancer and high blood pressure by trustworthy healthcare providers who have been contracted by CRECER to travel to and perform services in the clients' own communities.	CRECER's health days do not create direct financial value for the MFI. CRECER views the health day costs as a low-cost, high-value investment that ultimately pays off in improved client loyalty, satisfaction and health—which leads in turn to better loan repayment, savings deposits and microenterprises requiring larger loans.
PADME	*Credit with Education* (focused on health)	PADME offers *Credit with Education*—village banking-style solidarity loans along with 30-minute nonformal education sessions delivered by the same field agent at repayment meetings—with a focus on health (malaria, HIV, childhood illnesses). PADME coupled the malaria education with distribution of insecticide-treated mosquito nets for a donor-subsidized price, but since that component was less widespread and consistent, the current paper focuses on the costs and benefits of *Credit with Education*.	In successful *Credit with Education* models, the interest income earned on the group loans pays for the decentralized financial service as well as the added cost of nonformal education. By extending a highly visible and high-value service that addresses the needs of people in poor, rural communities, the MFI can raise awareness about its other products in new markets, contribute to its social mission while enhancing its local reputation, and also introduce and habituate uninitiated people to formal financial services—thereby both attracting and cultivating new clients.
RCPB	Health Savings and Loans	RCPB offers a voluntary health savings product whereby clients agree to deposit a set, minimum amount (at least $1) per month into a special account devoted only to health expenses. During the first six months after opening the account (or until a minimum of $20 is accumulated, whichever comes first), the client may not access these funds. After the six-month capitalization period, clients may withdraw health savings only on presentation of health expense proof (such as a receipt or a doctor's order specifying cost of treatment). Clients with an active health savings account are entitled to apply for a health loan in cases of a verifiable, major health cost for the client or any family member.	Health savings provide RCPB clients with another reason to save at RCPB, which results in additional savings mobilization for the MFI. Since these funds are interest-free for RCPB, they provide an efficient source of more on-lending revenue. The six-month capitalization period (when health savings may not be withdrawn) supplies a relatively stable pool of funds, at least in the early months and years of the product. The health loan is offered at a 6 percent annual flat interest rate regardless of term. The health loan helps RCPB deter use of microenterprise loans, business assets or expensive moneylenders for unproductive use to address health issues—thereby protecting their repayment capacity for existing RCPB loans.

MAHP Implementation and Scale

The "MAHP packages" were rolled out beginning in 2007 (between February and November, depending on the MFI) with small-scale pilot-tests in a limited area—generally three branches per package—with the goal of reaching at least 5,000 per MFI for a combined outreach to 25,000 clients by June 2008. Management, training and monitoring tools were developed and honed during the design and pilot-test phase. By December 2009, the MAHP packages were reaching more than 300,000 clients combined. This ambitious and rapid outreach far exceeded initiative targets and is a reflection of the MFIs' satisfaction with and commitment to these health protection products. Figure 2 presents the outreach by MFI and by component.[5]

FIGURE 2: OUTREACH OF MAHP PACKAGES AND COMPONENTS AS OF DECEMBER 2009

MFI	Health Education	Health Savings	Health Loans	Health Microin-surance	Provider Linkages	Product Distribution	Total MAHP	Percentage of Total MFI Clients
Bandhan (India)	51,900	0	1,932	0	51,900	51,900	**51,900**	3%
CARD (Philippines)	152,424	0	0	13,651	138,774	0	**152,424**	16%
CRECER (Bolivia)	26,296	0	256	0	23,900	0	**26,296**	26%
PADME (Bénin)	11,290	0	0	0	0	4,023	**11,290**	23%
RCPB (Burkina Faso)	47,107	12,099	84	0	0	0	**59,746**	9%
TOTAL	**289,017**	**12,099**	**2,272**	**13,651**	**214,574**	**55,923**	**301,656**	**8%**

Client-and MFI-level Research

Outcomes research at both the client and MFI levels took place from 2007 (baselines) into 2010 (follow-ups). The client-level research studies were diverse and employed a variety of methods to examine client-level family health and economic outcomes. On one end of the spectrum, at PADME, an extensive randomized control trial was implemented in partnership with Innovations in Poverty Action. On the other end, a set of qualitative and quantitative end-line interviews were conducted at RCPB. Research at all five MFIs included the non-random selection of three "treatment" and three "comparable" branches; biannual collection of financial and other basic progress indicators; competitors analysis; environmental analysis; client and staff satisfaction surveys; client-level health and financial outcomes interviews.

In addition to these elements, Freedom from Hunger examined the costs and benefits (both financial and nonfinancial) of each MAHP package—or a subset of package components—with respect to the MFIs. A series of papers describing these analyses in detail are available as a support to this paper, which draws on

[5] Since certain components reached the same group of people while others stretched beyond to other branches, there is overlap across the components, and the columns cannot be universally added; the right-most column is the number of clients receiving the complete package of services.

them to provide an overarching summary of the findings.[6] Costing was done on the specific MAHP package components outlined in Figure 3. We employed a combination of activity-based and allocation costing to obtain the per-client costs shown beginning in Figure 4. It is important to note that, using primarily 2008–2009 data, the cost-benefit analyses were conducted on products that had been in operation for as little as several months (PADME) and as long as two years (Bandhan).

FIGURE 3: HEALTH PROTECTION PRODUCTS INCLUDED IN COST-BENEFIT ANALYSIS

MFI	Health Protection Products Analyzed	Number of Clients Receiving Products as of December 2009
CARD	Microinsurance premium loans and insurance education	13,651
RCPB	Health savings and loans	59,746
CARD[7]	Preferred health provider discount program	138,774
CRECER	Health days with mobile health providers	23,900
Bandhan	Health product sales and health education	51,900
PADME	*Credit with Education* (focus on health)	11,290

Our analysis in this report and in the underlying individual MFIs' MAHP cost-benefit papers emphasizes the cost of running the services, rather than the cost of start-up. Up-front investments in market research, product design, management time, new staff and equipment necessarily vary greatly depending on MFI context, goals, product mix selected, existing staff complement and operational structure. The MAHP MFIs spent roughly $5,000–$10,000 each on market research and product design, and in the range of $50,000–$150,000 spread over a few years on up-front investment in equipment, staff time, training and marketing to launch their health protection products. In addition, the MAHP MFIs had access to significant technical assistance from Freedom from Hunger and other experts and consultants as a result of the MAHP initiative grant from the Bill & Melinda Gates Foundation.

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[6] See www.ffhtechnical.org or Microfinance Gateway for the following papers, all © Freedom from Hunger, 2010: Costs of Health Education and Health Product Distribution: Bandhan's Experience with Microfinance and Health Protection in India; Costs and Benefits of Health Microinsurance Premium Loans and Health Provider Linkages: CARD's Experience with Microfinance and Health Protection in the Philippines; Costs and Benefits of "Health Days" for Microfinance Clients: CRECER's Experience with Mobile Health Providers in Bolivia; Costs and Benefits of Credit with Health Education: The Case of PADME in Bénin; and Costs and Benefits of Health Savings and Health Loans: RCPB's Experience with Microfinance and Health Protection in Burkina Faso.

[7] Again, due to the very different nature of CARD's two MAHP packages, we have treated them as separate packages.

The Case for Adding Health to Microfinance

Over the course of the MAHP initiative, Freedom from Hunger and the MAHP MFIs found that health protection products do have the potential to positively impact not only clients but also the financial bottom line of the MFI itself. As of mid-2010, all five MAHP MFIs were actively scaling up their health protection products. There are three good reasons that they were doing so, and three reasons why other MFIs should consider integrating health protection products as well:

1. Integrated microfinance and health protection products can be inexpensive for MFIs to offer.
2. The offer of health protection products has the potential to enhance MFI competitive advantage.
3. The value of health protection products to clients can exceed their cost, resulting in impressive net social value creation that contributes to social mission.

The remainder of this paper presents our argument for why MFIs should add health protection to their product mix, organized according to these three points.

Point 1: Inexpensive

Summary

One of the most common reactions to the proposal that MFIs couple microfinance with nonfinancial services is that "it costs too much." Since the development of *Credit with Education*, Freedom from Hunger has been devoted to the notion that, on the contrary, nonfinancial services can be combined with microfinance in creative and practical ways so that they in fact pay for themselves. One of the criteria for the MAHP package innovations was that they be sustainable—meaning that the components would either pay for themselves or could otherwise be financially sustained on an ongoing basis by the MFIs.

Although not all of the MAHP services tested are financially self-sustaining, some practitioners may be surprised to learn how little the non-revenue-generating health services examined actually cost. Our analyses revealed that their average marginal cost to the MFI in 2008–2009 was $.29 per client per year, and their average total cost to the MFI (including allocations and overhead) per client, per year was $1.59. We show that as a result of these net costs, MAHP MFIs' profit margins declined two percentage points, from 24 percent on average in 2009 to 22 percent. This section focuses on the pure financial impact of the services, before we move into other dimensions of indirect financial as well as social impact.

Direct and Total Costs

As we conducted the costing exercises, we found it useful to analyze two different levels of profitability: one applying only direct costs; and the other also taking into account the cost of allocated staff time and overhead. We found that the MAHP MFI leaders were mostly interested in how much more it cost their institutions to offer these services—the marginal cost of adding health protection products to their existing platform (the "direct cost" measure). Thus the direct cost measure of profitability does not include, for example, any salary expenses of existing staff that the MFI would pay regardless of the existence of the MAHP services (such as cashiers at RCPB's branches that offer health savings and loans). The other, more conservative—or some would contend "truer"—full-cost measure attributes some existing staff and overhead costs to the MAHP services in addition to the direct costs. This measure acknowledges that it is an MFI's

array of products and services that keep it in business, and that each should contribute its share to covering the expenses—or at least that the MFI should recognize the full, true cost of the products it offers, even if they are non-revenue-generating.

Revenue-and Non-Revenue-Generating Products

We found that in terms of financial viability, the MAHP products fell into one of two categories:

1. Revenue-generating products that break even within several years and thereafter fully pay for themselves or
2. Non-revenue-generating products that can be offered at such a low cost as to be affordable to the MFI as a general operating or marketing expense.

Revenue-generating products tested through MAHP include the following:

- Health Microinsurance premium loan and insurance education (CARD)
- Health savings and loans (RCPB)
- *Credit with Education* (PADME)

Non-revenue-generating products tested through MAHP include:

- Preferred health provider discount program (CARD)
- Health days with mobile health providers (CRECER)
- Health product sales and health education (Bandhan)[8]

As of the end of 2009, only the Microinsurance premium loan package (CARD) had broken even on a direct-cost basis and none of them had yet broken even on a full-cost basis. Both the health savings and loan package (RCPB) and the Microinsurance premium loan package (CARD) were expected to break even on a full-cost basis within a few years and to be financially viable after that.

Analysis

Net Cost of Health Protection Products

In Figure 4, we begin by listing the annual net profit (or loss) of the six unique MAHP packages, as analyzed and explained in-depth in a series of papers on the Costs and Benefits of each.[9] Column A shows the average annual per-client profit (loss) on the MAHP package in direct-cost terms, and Column B shows this with indirect staff and overhead costs included. Note that this is based on 2008–2009 data and does not account for expected economies of scale or break-even as the products mature in the coming years. Therefore, the reader should bear in mind that these represent the estimated net profit (loss) of products that had only been in operation for two to 24 months.

Note also that we consider the performance of PADME's *Credit with Education* program to be an outlier. At the beginning of 2008, the only year for which we were able to obtain full financial data, PADME's *Credit with Education* program had only been operating for two months. And over the course of that year, PADME faced numerous challenges. Not only was its *Credit with Education* program unprofitable (profitability would not be expected before the third full year of operation in any case), but the MFI's overall

[8] Although Bandhan's health product sales do generate revenues (the MFI earns a margin on the wholesale of products to the volunteer health entrepreneurs or SS), this package is neither designed nor expected ever to break even. As such, in our analyses we group it with the non-revenue-generating packages.

[9] See the five Cost-Benefit papers referenced earlier and available at www.ffhtechnical.org and the Microfinance Gateway.

profit margin in 2008 was negative (-5%). Given this context and the fact that we have many examples of MFIs that successfully offer *Credit with Education* on a self-sustaining or profitable basis, we have supplied PADME's data in Figure 2, but hereafter set PADME aside for the financial analysis.[10]

Excluding PADME then, the range of net loss on a total cost basis (including direct and allocated costs) was $.17 (CARD's preferred health provider discount program) to $4.57 (RCPB's health savings and loans) per client per year. In other words, the MFIs spent an average of $1.59 per client per year to offer these services.

FIGURE 4: HEALTH PROTECTION PRODUCTS ARE INEXPENSIVE

		A	B	C	D	E	F	G
MFI	Health Protection Products Analyzed	Annual per Client, MAHP Profit (Loss) with Direct Costs Only ($)	Annual per Client, MAHP Profit (Loss) Including Allocated Costs ($)	MFI Profit Margin 2008	Overall MFI Average Annual Revenues Per Client ($)	Overall MFI Average Annual Profit Per Client ($)	Overall MFI Net Profit Per Client After Health Services ($)	Revised Profit Margin
CARD	Microinsurance premium loans	0.19	(0.57)	12%	43	5	5	11%
RCPB	Health savings and loans	(0.03)	(4.57)	28%	237	66	62	26%
CARD	Preferred provider program	(0.10)	(0.17)	12%	43	5	5	12%
CRECER	Health days	(0.52)	(0.88)	25%	162	41	40	25%
Bandhan	Health product sales	(1.00)	(1.73)	40%	32	13	11	35%
PADME	Credit with Education	(7.41)	(9.49)	-5%	174	(9)	(18)	-10%
Average		(1.48)	(2.90)	19%	115	20	17	16%
Average without PADME	(0.29)	(1.59)	24%	103.39	26	25	22%	

[10] FINCA provides numerous examples of financially self-sustaining village banking operations in multiple different contexts. An example of an MFI providing village banking along with education—known as *Credit with Education*—on a profitable basis is CRECER in Bolivia, which reports a 25% Profit Margin and 112% Operating Self-Sufficiency (OSS). A detailed study of CRECER's costs is presented in the paper The marginal cost of integrating microfinance with education using the unified approach by Isabel Rueda Fernández, 2006. Similarly, a Freedom from Hunger study showed that *Credit with Education* adds about 6% to the cost of regular village banking (Vor der Bruegge, E., J. Dickey and C. Dunford. 1997. Cost of Education in the Freedom from Hunger version of *Credit with Education*. Research Paper No. 6. Freedom from Hunger : Davis, CA). Finally, 90% of reporting organizations offering *Credit with Education* have an OSS of more than 100% (*Credit with Education* Status Report, Freedom from Hunger, for period ending December 31, 2009).

Overall MFI Profitability

Next, we look at how these costs compare to the MFIs' average per-client earnings across all of its products and services. Column C shows 2008 profit margins as reported on the MIX Market (2008 was latest data available at time of writing). The average overall MFI profit margin was 24 percent (range was 12 percent [CARD] to 40 percent [Bandhan]).[11] Profit Margin is defined as Net Profit/Total Revenues. So in other words, in 2008 these four MFIs retained an average of $.24 for every $1 of revenue (which is mostly comprised of interest and fee earnings from loans).

We multiplied the average annual revenues per client (as determined by average loan outstanding at the end of 2009 multiplied by estimated effective annual interest rate charged by each MFI and shown in Column D) by the Profit Margin to arrive at the estimated amount of profit per client per year that each MFI retains across all of its products (Column E). The range of net profit per client per year thus ranged from $5 (CARD) to $66 (RCPB) with an average of $26.

Impact of Health Protection Products on MFI Profitability

To continue the logic, next we subtracted the average amount that each MFI spent per client to provide health protection products in 2009 to show the estimated net profit per client that received health services (Column F). Then we subtracted this and re-analyzed the profit margin (Column G). The health protection products resulted in a drop in MFI Profit Margin from 24 to 22 percent on average.[12]

Caveats on Data Interpretation

As mentioned above, one important purpose in sharing this data is to offer some ballpark figures for how much the provision of health protection products costs. However, clearly, the cost of providing precisely the same service in South Asia and in Latin America is likely to be very different due to differences in cost components such as labor and transportation. And even across MFIs in the same region, management structure and staffing approach can significantly affect overall expense. Moreover, since some of the packages were still at an early stage in the product cycle, the costs are likely over-stated; this is especially true of those that are expected to eventually break even (health Microinsurance loans, health savings and loans). Therefore, the reader should use this data with care. Note that the individual cost-benefit analyses of each package, available in the above-referenced five separate white papers, provide greater detail about the cost drivers and components that may help other MFIs to estimate what their own costs would likely be to offer something similar.[13]

The health protection products resulted in a drop in MFI Profit Margin from 24 to 22 percent on average.

It is also tempting to compare the per-client net profit (loss) across the MFIs or the products, but in addition to the extreme differences in the packages, there are other reasons to use caution. Each costing exercise and analysis was done within the specific context and product mix of the MFI, and parallel approaches were therefore impossible. This is especially true in the way allocated costs were handled. For

[11] Note that since we are treating CARD's health protection packages separately, we have also included CARD twice in the analysis, as though it were two different MFIs. The average Profit Margin across the four MFIs, only counting CARD once, was 26% (compared to 24%). In the following step we count CARD twice again in order to take into account the different impact of CARD's two different services.

[12] Although some impact of the health protection products may have already been reflected in the 2008 Profit Margins, given the products' relatively small scale in that year, we believe the contamination to be minimal. This analysis, while rough and theoretical, is intended to provide a point of reference for the likely impact of the products in 2009 and beyond.

[13] See footnote 6 above for the titles of the five papers available at www.ffhtechnical.org and the Microfinance Gateway.

example, some MFIs' total-cost net-profit calculations include management and overhead allocations made on the basis of portfolio volume or number of accounts (PADME and RCPB), while others used activity-based costing (CARD). As a result, CARD's health Microinsurance premium loans appear vastly cheaper to administer than RCPB's health savings and loans; while this may be true to some extent for a variety of reasons, one reason is the simple difference between the more precise activity-based and more general allocation-costing methods. On a direct-cost basis, the RCPB package is not far behind CARD's Microinsurance premium loan in terms of profitability.

...with an average net total cost of $1.59 per client per year for microfinance and health protection products, microfinance does indeed show promise as a cost-effective platform for the delivery of other complementary, high-impact services.

Another reason for such contrasts is individual MFI decisions about product features—such as interest rates to charge on health loans or a management fee charged at Health Days—that can dramatically affect profitability. An MFI emphasizing the financial contribution of each individual product could probably find room and reason to charge more for health protection products, thereby reducing or removing net losses. But many of the MAHP MFIs favored lower costs to clients in exchange for lower revenues or manageable net financial losses.

Benchmark Comparison of Per-Client Costs

Compared to the per-client cost of similar health-related development interventions, the net cost of the MAHP services appears low. We examined readily available costing reports on a handful of health interventions that were roughly comparable to the MAHP packages and contexts but offered by NGOs rather than MFIs (Figure 5). The average per-client cost was $5.42. Although we included a $23-per-client "face-to-face" nutrition campaign in Dominican Republic because it appeared not dissimilar to *Credit with Education* and Bandhan's health product distribution and education package, we also looked at the average without this apparent cost outlier; the revised average was $2.49. In a study of similar health-related interventions also coupled with microfinance, Pro Mujer recently found that its programs in Bolivia, Nicaragua and Peru carried a total per-client cost of between $2.60 and $9 and that business-related (as opposed to grant) revenues could successfully cover about 80 percent of those.[14] Of course this comparison is imprecise and unscientific. But this provides some indication that with an average net total cost of $1.59 per client per year for microfinance and health protection products, the MAHP packages compare favorably, and microfinance does indeed show promise as a cost-effective platform for the delivery of other complementary, high-impact services. We hope that recognition and further analysis of this might lead the health sector and global health donors to seriously consider more widespread use of microfinance as a platform for delivery of needed health interventions.

[14] Junkin, R, et al. Healthy Women, Healthy Business: A Comparative Study of Pro Mujer's Integration of Microfinance and Health Services. 2006. <healthywomenhealthybus_promujer_en_web.pdf> (June 29, 2010)

FIGURE 5: SAMPLE PER-CLIENT COSTS OF COMPARABLE HEALTH INTERVENTIONS NOT LINKED WITH MICROFINANCE

Intervention	Per-client Cost ($)	Reference*
Promotion of exclusive breastfeeding in Madagascar	0.24	1
Mass media nutrition campaigns (multiple countries)	3.00	2
Face-to-face nutrition campaign in Dominican Republic	23.00	3
Child nutrition program in Tamil Nadu	9.50	4
Private-sector delivery of primary health care in Bangladesh	0.64	5
Child health days in Ethiopia	0.56	6
Distribution of Vitamin A capsules (average of three regions)	1.00	7
Average	**5.42**	

**See Appendix 3 for reference numbers*

Restatement of Findings

In short, over the course of the MAHP initiative, Freedom from Hunger and the MFIs learned that health-related products and services could be developed and offered on a cost-effective—if not always a full cost-recovery—basis. In some cases, these products can become profitable, actually generating net income for the MFIs. But even when they do not generate any revenue at all, many MFIs can afford the relatively low cost of their provision. The MAHP MFIs' estimated "loss" in Profit Margin ranged from 0 to 5 percent with an average drop of 2 percent, from 24 to 22 percent. The following sections offer information to use in contemplating whether this 2 percent reduction in profitability is ultimately worth it for the MFIs.

> *"We see our existing microfinance operations and infrastructure as a platform from which these additional services can be sustainably offered. These services go a long way to addressing the needs of our clients and helping them overcome poverty, and if they can be offered at low or no marginal cost to our MFI, then that is a double win."*
>
> –Daouda Sawadogo, General Director, RCPB

Point 2: Competitive Advantage

Summary

Microfinance and health protection products and services appear even more affordable for MFIs when taking into account their impact on client growth and retention, loan sizes and staff morale. Anecdotal and preliminary statistical evidence suggest that these services do enhance client attraction and loyalty. We show that if just 1 percent of the MAHP clients who were active at the end of 2009 had come or stayed with the MFI due to the health protection products, then—applying the profits they generated for the MFI overall—the average effective net loss per client from the MAHP packages would be $.05 (direct costs only) and $.74 (including allocated). If as much as 5 percent client growth or retention were attributable to these products, then they would become marginally profitable, on average. Loan sizes may also increase in conjunction with

the health products, as seen at PADME. Finally, we touch on reports that staff morale has been boosted by MAHP and what impact this may have on MFIs.

...if just 1 percent of the MAHP clients had come or stayed with the MFI due to the health protection products, then the average effective net loss per client from the MAHP packages would be $.05. If as much as 5 percent client growth or retention were attributable to these products, then they would become marginally profitable, on average.

Client Growth and Retention

In the increasingly competitive and sophisticated markets in which MFIs operate, the ability to differentiate by offering unique, relevant, value-added products and services that matter to clients can make a big difference in market share. Empirical data on the health status and spending of poor people in developing countries, corroborated with extensive market research in the MAHP MFI-pilot areas indicate that ill health and the spending it entails plays an important role in the lives of MFI clients. For these reasons, it makes sense that poor people would give extra consideration to joining an MFI that offers a tool for helping them manage their health, and that existing clients might remain longer with the MFI because they appreciate not only the service itself but also, potentially, the mere fact that the MFI seems to "care" about its clients' well-being more than its competitors do.

Staff of all five of the MFIs participating in the MAHP initiative reported that the clients were highly satisfied with the MAHP products and services, and staff of three of the five MFIs (CARD, CRECER and RCPB) stated that the MAHP products and services had led to greater client growth and retention. Clients interviewed at all five MFIs reported a high level of satisfaction with the products as well. Some stated that they came to the MFI or stayed with the MFI because of these services in particular, while others said that they appreciated that the MFI "cared" as evidenced through its array of products more generally (not specifically mentioning the health protection products).

In two of the MFIs (CRECER and RCPB), we found some statistical evidence suggesting that these anecdotal assertions may be true. At CRECER, change in client retention from 2006–2008 appeared to be 3.49 percent better in branches that offered MAHP services than in otherwise comparable branches that did not. At RCPB, it appeared that about 5 percent of new clients in a one-year period from June 2008 through May 2009 may have joined the MFI with an eye to opening a health savings account and gaining access to health loans. At CARD we did observe through statistical analysis that branches offering MAHP services had a higher ratio of borrowers to savers than branches that did not—and since borrowers generate more profit for the MFI, this is a positive trend for CARD.

Although we lack concrete data from a controlled study to show with confidence that the MAHP services actually led to higher client growth and/or retention, the data that we do have, combined with emphatic staff reports, suggest that it is possible. If the offer of health protection products did in fact attract new clients or encourage existing ones to remain longer with the MFI, then the revenues associated with those clients' use of other MFI products and services could rightfully be considered indirect earnings from the health protection products.

Analysis

In this analysis, we start with the hypothesis that the MAHP packages resulted in a marginal 1 percent client retention rate and go on to examine what financial impact this would have on the MFI, based on what we know about the costs of these products. Figure 6 builds on the analysis presented in Figure 4. For reference, we list here the number of clients receiving the MAHP packages at the end of 2009. We also re-state Column F, the overall estimated annual profit per client that the MFI realizes, net of any health protection product loss. This was about $25 on average.

> *"I joined CARD because it has many benefits; my favorite benefits are the health benefits."*
>
> –Roselyn, CARD client

Next, working from the assumption that 1 percent of the clients in the MAHP area came or stayed as a result of the MAHP services, we calculate the portion of overall MFI profits that would be attributable to that 1 percent of clients in the MAHP pilot areas (Column H). This comes to $4,135 on average that, in theory, the MFI would not have realized if it had not offered MAHP products, because those clients would not have joined, would have dropped out or would have moved to a competitor.

Taking that total amount of profit accruing from the 1 percent of clients in the previous step, we redistribute these earnings back over the entire MAHP clientele, to provide an additional net profit amount per client per year (Column I). This was $.25 per client per year on average that the MFI would not have earned if not for the MAHP services, and therefore can be considered a form of MAHP-related revenue, essentially offsetting some of the MAHP operational costs.

> *"I am very appreciative of CRECER, which is the only institution that cares about my health."*
>
> –Ninfa, CRECER client for 10 years and health loan recipient

In Columns J and K, we apply this offsetting amount to the original calculation of MAHP net income (loss) per client per year, to find a revised average annual per-client MAHP cost of $.05 (direct costs only) and $1.34 (including allocated) for each MAHP package.

Considering that two of the MAHP packages presented here are revenue-generating and expected to break even in the coming years, we judged that they skew the data in a sense. Thus for comparison we also provide revised net-profit (loss) calculations with these excluded. The average net cost of non-income-generating MAHP products (CARD's preferred provider program, CRECER's health days and Bandhan's health product sales) per client per year comes to $.35 (direct cost only) and $.74 (including allocated).

FIGURE 6: FINANCIAL IMPACT OF 1 PERCENT CLIENT GROWTH ATTRIBUTABLE TO HEALTH PROTECTION*

			F	H	I	J	K
MFI	Health Protection Products Analyzed	Number of MAHP clients (#)	Overall MFI Net Profit per client after health services	MFI Net Profit Attributable to 1% of MAHP Clients	Contribution to Net Profit per client due to 1% MAHP-related growth	Revised Annual per client, MAHP Profit (Loss) with Direct Cost Only	Revised Annual per client, MAHP Profit (Loss) including Allocated Costs
CARD	Microinsurance premium loans	13,651	5	624	0.05	0.23	(0.53)
RCPB	Health savings and loans	12,099	62	7,473	0.62	0.59	(3.96)
CARD2	Preferred provider program	13,600	5	676	0.05	(0.05)	(0.12)
CRECER	Health days	14,837	40	5,991	0.40	(0.11)	(0.48)
Bandhan	Health product sales	51,900	11	5,912	0.11	(0.89)	(1.62)
Average		**21,217**	**25**	**4,135**	**0.25**	**(0.05)**	**(1.34)**
Average of non-revenue generating						**(0.35)**	**(0.74)**
Average of all packages if 5% retention were attributable to MAHP						**0.94**	**(0.36)**
Average of non-revenue generating packages if 5% retention were attributable to MAHP						**0.41**	**0.02**

** All figures in USD except as otherwise noted.*

This analysis of the impact of 1 percent client retention (or growth—though we based the calculations primarily on MFI average loan sizes, which would be lower in general for new clients) does not conclude that the hypothetical benefits of retention exceed the cost of providing the service. It does show, however, the impact that enhanced client retention can have in lowering the net cost of providing nonfinancial health protection products in particular. If client retention were actually impacted as much as 5 percent—that is, if 5 percent of clients who would otherwise have left instead remained with the MFI because of health protection products—then the non-income generating MAHP packages would have positive net income (earning an average of $.41 per client per year when looking only at marginal direct costs, and just breaking even with an average of $.02 per client per year, including allocated costs—see Figure 7).

> *"Membership to CARD bank in this unit has increased because of PhilHealth. CARD is the only MFI in the Philippines offering this kind of benefit."*
>
> –CARD branch staff member

FIGURE 7: MAHP PROFITS WITH 5 PERCENT RETENTION

	J	K
	REVISED Annual per Client, MAHP Profit (Loss) with DIRECT COSTS ONLY	REVISED Annual per Client, MAHP Profit (Loss) including ALLOCATED COSTS
Average of all packages if 5% retention were attributable to MAHP	0.94	(0.36)
Average of non-revenue generating packages if 5% retention were attributable to MAHP	0.41	0.02

** All figures in USD except as otherwise noted.*

Loan Sizes

Another hypothesis of the MAHP initiative was that by offering health products and services, over the medium to longer term, MFIs would see healthier clients who would spend less on health and take less time away from their microenterprises, eventually leading to higher capacity to take larger loans and save more. At PADME, a randomized control trial separated *Credit with Education* participants into two sets of credit groups—one set receiving village banking along with the education component and the other receiving the exact same village banking services led by the same field agents, but without any education. In comparative analyses, we observed that clients in the education groups took out significantly higher loans (average balance per person) than clients in groups that did not receive education.

At the beginning of PADME's *Credit with Education* program in December 2007, clients in the education groups held average loans that were already 19 percent higher than their non-education peers, indicating that there may have been some underlying or incidental difference in the randomly selected groups. But by December 2008, the per-client loan sizes for the education groups were 45 percent higher than the non-education clients', and as of December 2009, they were 144 percent higher. We are still exploring the meaning of this difference and any exogenous explanations, particularly given the volatile context at PADME during the period, but—especially since these were truly randomized groups—it is an interesting

finding. And since higher loan sizes mean higher interest earnings for the MFI, the finding that health education may lead to higher loans is interesting indeed. No other significant loan-size differences have yet been observed at the other MAHP MFIs.[15]

Staff Morale

During the course of our research, we happened upon qualitative evidence that staff morale has been positively impacted by the offer of MAHP services (at CARD, CRECER, PADME and RCPB[16]). At CRECER, field staff involved in the operation of the MAHP package noted that their workloads had increased as a result of the new products, but said they viewed the additional effort as "worth it" because of their clear, personal contribution to CRECER's mission. CRECER staff said that as a result of their involvement in the health protection products, they have seen impact not only on clients' financial and family health status, but also on the staff's own health knowledge and practices. One CRECER staff member stated that learning about health and how to better access preventive and primary healthcare services has "made me reflect on my own life and family, and for that I am appreciative." Similarly, at CARD, staff members involved in the promotion of PhilHealth and the Microinsurance loan said that they felt more confident in their knowledge and proud to be able to help clients as well as friends and family by sharing important information about a high-profile national program. CARD staff who work on (and also use) the Preferred Provider Program underscored their personal satisfaction from seeing the positive results on clients. Although CARD staff may be paid less than the staff of some local competing MFIs, they consistently cite CARD's important and exciting work as a reason for staying. Staff surveys at PADME and RCPB showed similar results.

...since higher loan sizes mean higher interest earnings for the MFI, the finding that health education may lead to higher loans is interesting indeed.

Staff who are satisfied with their work and can see how their efforts make a difference are likely to be more productive, creative, customer service-oriented and to stay with the MFI rather than leave for a competing institution or other sector.

Much more research is needed to determine the extent to which such positive reactions from staff may result in greater staff productivity and retention, and the theoretical result in savings or increased earnings accruing to MFIs. Nevertheless, these findings may well point to another important indirect contribution that health protection products can make to the MFI's bottom line. Staff who are satisfied with their work and can see how their efforts make a difference are likely to be more productive, creative, customer service-oriented and to stay with the MFI rather than leave for a competing institution or other sector. Were data on such impacts to be collected and quantified in a more intentional and comparative manner, we could surely attribute further cost offsets to health protection products.

[15] Nor were there significant differences between MAHP treatment and control groups in terms of PAR or average savings deposits.
[16] Staff satisfaction research was not conducted at Bandhan.

Restatement of Findings

The data presented here begin to fill in the picture of the tangible financial difference that health protection products can have via their indirect impacts on client growth and retention, average loan sizes and staff morale. We saw that even a 1 percent improvement in client growth or retention would reduce the average annual per-client cost for MAHP products and services to $1.34. Further implementation experience and research are needed to more confidently estimate the percentage of client growth and retention that can be expected from the offer of such services. But quantitative and qualitative research suggests that this is a relevant and realistic contribution to MAHP product "earnings." Moreover, while continuing research is needed, the impacts from potentially larger loan sizes due to better client health and financial position following use of the MFI's health products and services, as well as from improved staff morale would have an undeniably positive financial effect on the MFI. These other indirect benefits, if also quantified, would further diminish the net cost to the MFI from offering health products and services.

> *"In the context of regulation and our highly competitive environment, we see health protection services as our competitive advantage."*
>
> —José Auad, General Director, CRECER

Should the net financial loss from offering health products and services still seem too high to bear—if the MFI finds a reduction in profit margin unacceptable and the indirect financial impacts insufficient or unconvincing—then it is worth considering one last major benefit from the provision of health protection products and services.

Point 3: Net Social Value Creation

Summary

Employing a broader development perspective, and drawing on some compelling client-level outcome research, we explore the net value to clients and their communities of two health protection products in particular. We show that the outcomes exceed the MFIs' inputs, as represented by the net cost of the MAHP packages. We then highlight some additional client-level findings which, though not quantified, show clear social value creation. We end by pointing out three ways in which this net social value creation can help MFIs financially.

Creating a Net Positive Benefit for Clients and Their Communities

As stated early on, poor people spend a disproportionate amount of their income on health, and MFI clients not infrequently resort to their microenterprise loans to pay for health care. Health is a major symptom and cause of poverty. Let us step out of the MFI-centered perspective then for a moment, and consider this from a broader social development perspective. The first question is whether products and services like those offered by the MAHP MFIs create a value that is greater than their cost. If the answer is "yes"—as we argue further below—then from a development perspective, these products and services should exist. But then the next question is: who pays to create that net positive social benefit?

As we have shown, sometimes the costs are low enough that the beneficiaries themselves not only perceive the value but also are equipped and prepared to pay for the services in full. At CARD and RCPB, for example, the health protection packages are revenue-generating and designed and expected to break even exclusively through revenues from clients. In other cases, while the client may be unwilling or unable to (fully) pay for the service, an MFI may perceive or show the product to indirectly create financial value and therefore be worthy of being paid for upfront. Examples of this are the cases of CARD's Preferred Provider Program and CRECER's health days, for which the value of competitive advantage is justifiable reason for the MFIs to maintain the MAHP packages.

In other cases, though, there may be a social benefit created by the service that may not be coverable by MFI clients nor ever reap enough indirect financial returns to justify investment by MFIs for business reasons. In other words, that annual $.74 per-client net cost to the MFI for non-revenue-generating health protection products and services just might never be 100 percent covered by the benefits of enhanced client loyalty, loan sizes and staff morale. In this case, we need to look even more closely at the pure social impact. Whether it then falls to the MFI to pay, out of a commitment to social mission (or even a desire to attract international investor capital), or whether the MFI can succeed in attracting third-party donors who recognize the relative efficiency of using MFIs as a distribution platform for health interventions, or another solution, the absolute creation of social value should be compelling enough that one way or another the investment will be made.

Analysis

CARD's Preferred Health Provider Discount Program

Sometimes the net social benefits are readily quantifiable. In the case of CARD's Preferred Provider Program for example, we found that the value to clients far outweighed CARD's annual per-client investment of $.17. With a 10 percent discount (the discounts actually range up to 40 percent) on a doctor's visit typically costing about $5, a client would save $.50—already more than double the annual cost to CARD of maintaining the program, after a single visit at the lowest discount level.

> *"My total number of patients has increased since partnering with CARD."*
>
> —Dr. Reynolds, Hospital Mulaney, Philippines

On top of this $.33 per client in quantified social value creation at the client or community level, there is also value for the mostly rural health providers, who reported an increase in the volume of their clientele as well as satisfaction with contributing to their own mission of helping the poor and improving public health. In a country experiencing an extreme shortage of healthcare professionals—particularly in rural areas—it is notable that such a low-cost program can help boost the business of local doctors and exert positive pressure on them to remain in smaller towns. So this is one example of positive net social value creation resulting from MAHP.

PADME's Malaria Education

At PADME, our randomized control trial study examined the impacts of malaria education on a series of community-level measures, including whether households had a "good" mosquito net in the home as of early 2010.[17] In communities in which *Credit with Education* groups received malaria education (and to some

[17] The question posed in interviews did not specify whether it was an insecticide-treated net, or the precise definition of "good." For more details on this research, please see Microfinance and Health Protection Initiative: PADME Final Research Report. 2010; available at www.ffhtechnical.org.

extent, subsidized nets),[18] people were 23 percent more likely to own a good net, compared to households in communities in which *Credit with Education* clients did not receive any education. Based on local and international data regarding malaria frequency (as much as 75 percent chance per person per year),[19] the likelihood that use of a bednet will impede transmission (50%),[20] the proportion of local cases that are "serious" (20%) versus "simple,"[21] the average local cost of treatment, and average annual household income, as well as estimates of days of work lost due to illness, we estimate that each family in the area spends an average of $70 per year, or a conservative average of 13 percent of local annual income, to manage the disease. This amounts to about $493,000 in annual malaria costs for a community of 8,000 families.

...PADME's malaria education could result in average savings of $64,000 across a single community.

Because it was the dry season during the follow-up study, we have to make the assumption based on prior malaria education research conducted by Freedom from Hunger in Ghana[22] that owning a good net translates to actually using it at least during the rainy season—which we acknowledge might not be 100 percent the case. Based on this assumption, though, we show that PADME's malaria education could result in average savings of $64,000 across a single community. This means a savings per family of 2 percent of annual income, which comes to $1.60 per person for every member of the community, whether s/he personally participated in the education sessions or not. Simply the fact that the education was offered in the community made a difference in the outcomes. Assuming, based on our research data, that approximately 28 percent of the community members were *Credit with Education* clients, this amounts to a value creation of $5.72 per client—before even accounting for the savings in human suffering or loss of life when treatment fails.

We know that *Credit with Education* can be offered on a financially sustainable and even profitable basis—including in Bénin, where PADME's closest competitor does so successfully. So in theory, and the actual practice of some MFIs, the malaria education could be more than paying for itself before even taking into account the social benefits. If the service is offered profitably, or for a net cost that is less than $5.72 per client, then this is also positive social value creation. (See Appendix 4 for further details on the calculations above.)

Other Client-Level Benefits

Other social benefits are every bit as impactful, if not as readily quantifiable in financial terms. The following are examples of findings from the MAHP client-level research that represent meaningful changes in clients' lives in correlation with the offer of the MAHP packages.

[18] Note that PADME also had a limited supply of subsidized, insecticide-treated nets, which were sold by field agents in some education communities during the early part of the program.

[19] This is an estimate based on empirical data such as that cited in "Mapping Malaria Transmission in West and Central Africa" by Gemperli, Armin et al, Tropical Medicine and International Health, July 2006, showing prevalence in Bénin ranging from .2% to over .8%, combined with estimates made by a regional medical doctor and local PADME staff. Note that local clinic records showed a significantly lower number of cases per person in the population, but this is interpreted as an under-reporting due to infrequent use of formal medical facilities.

[20] Lengeler C." Insecticide-treated bed nets and curtains for preventing malaria." The Cochrane Database of Systematic Reviews 2004, Issue 2. "In areas with stable malaria, ITNs reduced the incidence of uncomplicated malarial episodes in areas of stable malaria by 50% compared to no nets…." Note that Freedom from Hunger's research on PADME did not specify whether the "good" nets in clients' homes were insecticide-treated.

[21] From official statistics on illness in the region of Pobè, Adja-Ouèrè, Kétou, as cited in Staying Healthy Means Fighting Poverty: Health Protection Options and *Credit with Education* for the Poor in the Plateau Region. Messan, F. H. 2006 for Freedom from Hunger.

[22] De la Cruz, N. et al. "Microfinance against malaria: impact of Freedom from Hunger's malaria education when delivered by rural banks in Ghana." Trans R Soc Trop Med Hyg (2009), doi:10.1016/j.trstmh.2009.03.018.

FIGURE 8: SELECT OUTCOMES FROM MAHP RESEARCH[23]

MFI	MAHP Package	Measure	Before or Control Group	After or Treatment Group
Bandhan	Health product sales and health education	Breastfed baby within one hour of birth	61%	96%
		Used oral rehydration salts to treat child with diarrhea (major cause of mortality)	60%	88%
CRECER	Health days with mobile health providers	Had never seen a doctor before attending a health day	NA	24%
		Had sought preventive health care	9%	15%
RCPB	Health savings and loans	Confident in ability to save for future health expenses	39%	58%
		Sought preventive health care	9%	24%

In addition to these data, Freedom from Hunger has observed that MFIs, which have created an ongoing mechanism for education and health-related outreach to communities, are uniquely positioned to activate this network in the case of urgent need. An example of this took place at CARD in 2009, when the MFI was able to rapidly dispatch crucial, practical information about the H1N1 virus to all of its almost one million clients nationwide (and by extension to family members, at least five million people) in a short timeframe. With the infrastructure already in place, the marginal cost of doing this is quite low. And the result is a stunning example of net social value creation.

Many of these less tangible benefits, such as rapid dissemination of urgent public health information, breastfeeding immediately after birth, seeing a doctor for the first time, and seeking preventive care have been quantified elsewhere or could be quantified based on the value of a life and the value of health. We do not propose to go to that length here.

Restatement of Findings

What we do hope to demonstrate by highlighting these examples of social value creation is that health protection products can and do have real impacts on the lives of MFI clients and their families. Where we have quantified the social value, it is easy to see that the benefits outweigh the costs. And where we have merely shared some intriguing client-level outcomes, we trust that the reader can judge whether the value of those changes exceeds the costs presented under Point 1.

We are convinced that the efficient, widespread and durable platform of microfinance, combined with the focused, practical and high-impact interventions of the health sector can achieve impressive, uniquely cost-effective and large-scale results.

But who should pay for the creation of social value? As stated earlier, we hope that this paper reaches the general notice not only of the microfinance sector but also of the global health sector and international donors and policymakers. We are convinced that the efficient, widespread and durable platform of

[23] See Microfinance and Health Protection research reports for Bandhan, CRECER and RCPB; Freedom from Hunger 2010; available at www.ffhtechnical.com or by request.

microfinance, combined with the focused, practical and high-impact interventions of the health sector can achieve impressive, uniquely cost-effective and large-scale results.

In the meantime, there are at least three ways that this net social value creation helps the MFI:

1. Substantial contribution to MFI's social mission with the net value created for clients and their communities translating to positive MFI reputation with clients, local government and others.

> *"[Microfinance and health protection] touches the core of our clients' needs, and therefore is absolutely core to what we do at CARD."*
>
> –Dr. Aris Alip, President, CARD

2. Enhancement of the MFI's image in the eyes of investors that are increasingly examining the degree to which MFIs address and meet social goals.
3. Attraction of purely philanthropic donor funds to cover the cost of the non-revenue-generating or non-self-sustaining services.

Conclusion

Through the MAHP initiative, Freedom from Hunger and five MFIs endeavored to see whether they could develop practical, scalable and high-impact health protection products that could be financially sustainable over the long term and replicable by other MFIs. A range of health protection products were developed and tested, and all of those presented here were deemed successful enough by each MFI to warrant continued scale-up and expansion more than four years after the beginning of the initiative. Our answer to the overarching question regarding the impact of health protection products on the viability of MFIs is positive. Evidence to date indicates that such products have strong potential to be sustainable over the long term and to directly and indirectly enhance the financial bottom line of MFIs.

As we showed, there are three reasons that Bandhan, CARD, CRECER, PADME and RCPB have been satisfied with their health protection products and that other MFIs may well be interested too:

1. Health protection products can be inexpensive for the MFI to provide—some products can earn net profits, while others can be absorbed as marketing or operating expense with minimal impact on overall MFI profit margin.
2. Health protection products can differentiate an MFI in a crowded market, help attract new clients and enhance loyalty, leading to increased competitive advantage that has an indirect but quantifiable impact on MFI net earnings.
3. Health protection products can carry a value for clients that exceeds the MFI's cost of providing them, making for impressive net social value creation and contribution to social mission. This can be funded by the MFI itself, indirectly through better access to international investor funds at favorable rates, or via third-party philanthropic monies.

The leaders of the five MAHP MFIs each have their own specific reasons for continuing to pursue and scale up their health protection products. All of them view ill health has a major factor in the lives of their

clients and an important reason for loan default, and three of them offered quotes that support each of the three points put forward in this paper. While all five leaders entered into the MAHP initiative with a strong orientation toward social mission, they now also perceive a solid business value in health protection products.

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This initiative has resulted in significant learning for Freedom from Hunger, the MAHP MFIs and—we hope—the broader microfinance and health sectors, yet further experimentation and research are still needed. For instance, we would like to see additional exploration of the impact that health protection products have on client growth and retention. Although our studies enabled some preliminary observations in this area, a methodical research project to examine the trends over a longer period and on a more substantial scale would be valuable. Follow-up work to analyze and explain the finding that average loan sizes were larger among *Credit with Education* groups receiving the education component and to examine this in other contexts would be equally edifying. Also useful would be a more direct and focused look at the impact of staff morale on MFI profitability and success, incorporating a broader look at how much MFIs spend on average to recruit and train their staff (compared to the cost of offering products that boost morale). All of these indirect benefits could be more confidently quantified if further research on a broader swath of MFIs and contexts were available.

Freedom from Hunger is committed to continuing to explore the true costs and benefits of health protection products and other value-added microfinance services and sharing the results widely in an effort to contribute to ongoing innovation and enhancement of microfinance's impact around the world. We strongly encourage other MFIs and organizations that are working in the budding area of combining microfinance and health to document and publish their learning as well, and to communicate with Freedom from Hunger about their innovations, experiences and results, so that we may include your examples and data in future documentation and research.

Freedom from Hunger believes that microfinance is a viable and valuable platform for the coordination and extension of other key products that can have substantial positive impacts on the lives of very poor people around the world. Based on our experience, we contend that such client-level impact can be motivated not just by social mission, but in fact by MFIs' business and financial goals. As a results-based organization, we continue to pursue and document solid evidence that certain development interventions, such as microfinance and health, can feasibly come together to provide a more coordinated set of products and services that put meaningful tools in the hands of poor people—and enable them to more successfully and readily improve their lives.

Appendix 1: Brief MFI Profiles

The following brief profiles provide some background on the four MFIs referenced in this guide. As participants in Freedom from Hunger's Microfinance and Health Protection initiative, Bandhan, CARD, CRECER and RCPB all developed and tested health loans as one component of their health protection service packages.

Bandhan (India)

Bandhan began operations in July 2002 in the Howrah district of West Bengal. By 2007, Bandhan had received numerous industry awards and was ranked second in Forbes magazine's list of the "World's Top 50 Microfinance Institutions." Bandhan provides microenterprise loans, microenterprise development, education, health and disaster management services for "socioeconomically disadvantaged" people, focusing especially on urban and rural women who are poor, landless and lacking in assets. Bandhan started with the aim of impacting women's empowerment, believing that enhancing the status of the woman in the family and society, through her ability to generate income, would reduce poverty. Recognizing that financial services alone cannot alleviate poverty, Bandhan developed health protection services beginning in 2006 to better accomplish its mission of improving the living conditions of clients and their communities, while also protecting the MFI's own financial sustainability.

BANDHAN INSTITUTIONAL DATA AS OF DECEMBER 2009

MFI-wide	
Year MFI established	2002
Number of active borrowers	1,924,016
Outstanding gross portfolio	234,768,206
Portfolio-at-risk (30 days)	0.16%
Operational self-sufficiency	NA
Health Protection Products	
Year started Credit *with Education*	2007
Number of members in credit group program receiving *Credit with Education*	51,900
Clients with access to health product distribution	51,900

Data provided by Bandhan

CARD (Philippines)

CARD Mutually Reinforcing Institutions (CARD MRI or "CARD") is a conglomerate of institutions in the Philippines that includes a large NGO offering microfinance services, two regulated microfinance banks, a training and development institute, a business development services arm, and an insurance company offering life, accident, disability and property insurance. CARD also operates directly and through partnerships with other MFIs in several other Southeast Asian countries. CARD offers a range of credit and savings products to its all-female membership, including Credit with Education for clients who take out individual loans in a group setting as inspired by the ASA model (Bangladesh), and who receive brief, interactive "education sessions" at their weekly repayment meetings. The organization has been an active partner of Freedom from Hunger since 2000.

CARD INSTITUTIONAL DATA AS OF DECEMBER 2009

MFI-wide	
Year MFI established	1986
Number of active borrowers	967,963
Outstanding loan portfolio (US$)	81,539,597
Portfolio-at-risk (30 days)	1%
Number of active savers	991,474
Total savings deposits ($)	50,889,954
Operational self-sufficiency	117%
Health Protection Products	
Year started *Credit with Education*	2000
Number of *Credit with Education* clients	882,673
Number of clients with health micro-insurance premium loan	13,651
Number of clients with access to the Preferred Provider Program	138,774

Data provided by CARD

CRECER (Bolivia)

Created by Freedom from Hunger in 1990, CRECER became an independent Bolivian microfinance institution in 1999. It has grown to become the largest village banking institution in South America and serves poor, primarily rural, women clients. CRECER's flagship product is Credit with Education—group-based microfinance and nonformal education delivered by the same field agent at regular meetings in clients' communities. CRECER has achieved high levels of efficiency (each field officer reaches 466 clients) and financial self-sufficiency, while maintaining a high portfolio quality (consistently one of the lowest PAR rates in the crowded Bolivian microfinance market). Although CRECER is prohibited by law from collecting savings, each credit group does so using a group account at a regulated financial institution. With a strong social mission and a business need to differentiate itself from competitors, beginning in 2006 CRECER sought to expand its health-related offerings by developing a cohesive package of health protection products that would have significant impact on clients while being provided in an efficient, systematized and cost-effective manner.

CRECER INSTITUTIONAL DATA AS OF DECEMBER 2009

MFI-wide	
Year MFI established	1990
Number of active borrowers	102,212 (95% women)
Outstanding loan portfolio (US$)	46,067,523
Portfolio-at-risk (30 days)	0.9%
Number of active savers	102,212
Operational self-sufficiency	111%

Health Protection Products	
Year started *Credit with Education*	1990
Number of *Credit with Education* clients	102,212
Number of Health Days (cumulative)	1,237
Number of Health Day participants (cumulative)	23,900
Number of health loans (cumulative)	256
Outstanding health loan portfolio ($)	25,161

Data provided by CRECER

PADME (Bénin)

Projet d'Appui au Développement des Microentreprises, known as PADME, is among the most prominent MFIs in the crowded and competitive Béninois microfinance market. In 2008, PADME boasted the largest number of microfinance clients in the country and a loan portfolio almost equivalent to that of its closest rival, FECECAM. PADME's gross loan portfolio is primarily comprised of individual loans, and the MFI is not authorized to take savings deposits. Having experienced unsuccessful results with group loans in rural areas (high PAR and write-offs), in 2006 PADME sought to implement Credit with Education, with the goal of combining a more systematic group loan and meeting methodology (to reinforce discipline and solidarity as well as improve repayment) with value-added education (to enable greater outreach to the poor, enhance PADME's image and contribute to the social mission). Based on market research and management conviction, PADME opted to focus its education almost exclusively on health (especially malaria, HIV/AIDS and childhood illness). And, recognizing that information and training on these diseases would not necessarily be enough to engender change, PADME also decided to test out the sale of complementary health products, such as insecticide-treated mosquito nets and condoms. Through these health protection products, PADME hoped to better accomplish its mission of providing as many microentrepreneurs as possible with access to credit, while enhancing its own competitive position and protecting its financial sustainability as an MFI.

PADME INSTITUTIONAL DATA AS OF DECEMBER 2009

MFI-wide	
Year MFI established	1993
Number of active borrowers	48,962 (64% women)
Outstanding loan portfolio (US$)	35,465,271
Portfolio-at-risk (30 days)	4%
Operational self-sufficiency	130%
Health Protection Products	
Year started Credit with Education	2007
Number of *Credit with Education* clients	11,290
Credit with Education outstanding loan portfolio ($)	314,255
Number of insecticide-treated mosquito nets sold	1,200

Data provided by PADME

RCPB (Burkina Faso)

The Réseau des Caisses Populaires du Burkina (RCPB), a federation of credit union networks, is the largest MFI in Burkina Faso. RCPB's mission is to improve the living conditions of its members and the greater community by applying principles of solidarity and individual and collective responsibility. RCPB mobilizes savings, offers a range of profitable credit products, promotes appropriate and accessible financial services for all, and is committed to democratic administration and management. RCPB was Freedom from Hunger's first Credit with Education partner in West Africa, and RCPB's Credit with Education portfolio continues to be the largest and strongest in the region. RCPB leadership maintains a serious commitment to product innovation, resulting in ongoing market research, experimentation and product development, and a growing range of products and services. RCPB recognizes that financial services alone cannot alleviate poverty. By participating in the MAHP initiative, RCPB sought to better accomplish its mission of improving the living conditions of clients and their communities, while protecting its own financial sustainability and longevity as an MFI.

RCPB INSTITUTIONAL DATA AS OF DECEMBER 2009

MFI-wide	
Year MFI established	1992
Number of active borrowers	111,005 (25% women)
Outstanding loan portfolio (US$)	110,794,596
Portfolio-at-risk (30 days)	8.55%
Number of active savers	671,909
Total savings deposits ($)	117,758,839
Operational self-sufficiency	144%
Health Protection Products	
Year started *Credit with Education*	1993
Number of *Credit with Education* clients	96,415
Health savings deposits ($)	54,593
Number of outstanding health loans	23
Outstanding health loan portfolio ($)	25,161

Data provided by RCPB

Appendix 2. Health Protection Service Packages

Freedom from Hunger emphasizes holistic, cohesive and sustainable approaches to tackling the pressing needs of the chronically hungry poor. With technical support from Freedom from Hunger's MAHP initiative, each MFI has developed a unique package of health protection services based on market research and institutional capacity. These packages are currently reaching more than 80,000 microfinance clients combined.

Bandhan: Health Education, Access to Health Products, Health Loans and Linkages with Health Providers

Bandhan is providing its clients in India with health education on preventing common illnesses, prenatal and neonatal care, family planning, care of sick children, referrals for medical care, and planning ahead to face health expenses. This education is accompanied by access to affordable, high-quality health products such as oral rehydration solution, paracetamol, water disinfectant tablets, oral contraceptives, de-worming medications, antiseptic solution and bandages, and sanitary napkins. Both the education and health products are delivered by health community organizers and village-level volunteers selected and trained by Bandhan. Bandan also provides health loans to cover major medical expenses.

CARD: Health Education, Health Microinsurance, Health Loans and Linkages with Health Providers

CARD is offering two health protection service packages in the Philippines. In more urban areas, CARD offers health loans to pay the premium for PhilHealth, a national health insurance program that provides hospital coverage to CARD clients through a partner-agent model. In a rural area, CARD has created linkages with health providers who offer discounts to CARD clients for primary care. CARD is also exploring a franchise network for distribution of affordable essential drugs. Health education on health microinsurance, financial planning for health, rational use of available health services, and preventing and treating dengue fever complement the other services offered.

CRECER: Health Education, Health Loans and Linkages with Health Providers

CRECER is providing its clients in rural Bolivia with linkages to health providers who regularly visit communities to conduct "health days," providing primary care and basic diagnostic services to clients and community members. Individual health loans are available to cover referrals for emergencies or major health needs, such as surgery and extensive dental work. Health education sessions focus on prevention and treatment of common infectious and chronic illnesses, effective health seeking behavior and managing health related financial risks.

PADME: Health Education and Access to Health Products

PADME provides behavior-change education in rural Benin on malaria (a high economic burden in the area), common but deadly childhood illnesses and HIV/AIDS. To complement the health education, PADME is providing access to health products, such as insecticide-treated mosquito nets.

RCPB: Health Education, Health Savings and Health Loans

RCPB's innovation package in Burkina Faso includes three complementary financial products: health savings to cover the cost of primary care and medicine for common illnesses; health loans to cover the cost of treatment that exceeds clients' health savings. RCPB is also offering health education on planning ahead to pay for health expenses and advocating for better health services.Appendix 3: References for Sample Per-Client Costs of Comparable Health Interventions Not Linked with Microfinance

Appendix 3: References for Sample Per-Client Costs of Comparable Health Interventions Not Linked with Microfinance

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Appendix 4: Malaria Savings Analysis

Assumptions	Measures	References/Notes
Background Data		
People in theoretical community	40,000	Approximate population of areas receiving PADME's *Credit with Education*
Families in theoretical community	8,000	Assumes five individuals per family
Malaria prevalence (likelihood of contracting)	75%	Gemperli et al., and local estimates (see footnote 20)
Theoretical cases per year in community	30,000	Calculation: 75% of 40,000
Percentage of malaria cases that are "serious"	20%	Based on local clinic data
Estimated number of "simple" cases per year	24,000	Calculation: 80% of 30,000 cases
Estimated number of "serious" cases per year	6,000	Calculation: 20% of 30,000 cases
Cost of Malaria Without Education/Net		
Estimated cost of treating "simple" case	$ 6	Based on local cost of recommended treatment
Estimated cost of treating "serious" case	$ 32	Based on local averages and estimates by regional medical doctor
Days lost per "simple" case	3	Estimate by regional medical doctor
Days lost per "serious" case	9	Estimate by regional medical doctor
Average daily income	$ 1.44	Based on 40,500 FCFA per month per household poverty line income; we know that in this area, 50% of people live below the poverty line, and probably among *Credit with Education* clients this proportion is higher. Assumes two people work 30 days per month to bring in this income.
Community cost of malaria per year	$ 557,553	Calculation: Estimated number of simple and serious cases * cost of treatment + days of income lost
Cost per family of malaria per year	$ 70	Calculation: community cost divided by number of families
Percentage of average family income spent on malaria	13%	Calculation: per- family cost as proportion of average income
Expected cost of malaria for every two people w/o net	$ 23	Calculation using probability, cost of treatment and days lost
Cost of Malaria With Education/Net		
Increase in net use following education	23%	Based on Freedom from Hunger/IPA/IREEP research findings
Average number of people under one net	2	Local estimate (often mother and several children sleep together under one net, but sometimes the male head of household sleeps alone under one net)
Likelihood that net impedes transmission	50%	Lengeler C. "Insecticide-treated bed nets and curtains for preventing malaria." The Cochrane Database of Systematic Reviews 2004, Issue 2
Savings for family with one net	$ 11.54	Calculation based on two people under net

Appendix 4: Malaria Savings Analysis *(continued)*

Assumptions	Measures	References/Notes
Background Data		
Savings as a percentage of family income	2%	Calculation: original % spending less new % spending
Community cost of malaria with increased net use	$ 493,435	Calculation: Estimated number of simple and serious cases * cost of treatment + days of income lost with increased net use applied
Cost per family of malaria per year	$ 62	Calculation: community spending divided by number of families
Community savings from fewer cases	$ 64,119	Calculation: original community spending less new community spending
Savings per family overall (whether had net or not)	$ 8	Calculation: new community spending spread across all families
Savings per person in community overall	$ 1.60	Calculation: new community spending spread across all individuals
Savings per *Credit with Education* client		
Percentage of community who are *Credit with Education* clients	28%	Based on randomly samples interviewees in the area
Number of *Credit with Education* clients in community	11,200	Calculation: 28% of 40,000 community members; also corresponds to total *Credit with Education* clients at PADME as of December 2009
Value created per *Credit with Education* client	$ 5.72	Calculation: community savings from fewer cases ($64,000) divided by number of *Credit with Education* clients