Costs and benefits of microfinance institutions offering health protection services to clients

MYKA REINSCH, CHRISTOPHER DUNFORD and MARCIA METCALFE

Five microfinance institutions (MFIs) in Bénin, Bolivia, Burkina Faso, India and the Philippines developed and offered health protection services to microfinance clients: health education, health loans, health savings, health micro-insurance, linkages to health providers and distribution of health products. After about two years, the services were collectively reaching over 300,000 clients and are continuing to scale up. The cost to the MFI was generally low for each service (average annual net marginal cost of US$0.29 per client and average total annual cost, including allocated expenses, of $1.59 per client). Some were expected to become profitable in the near term. In addition to the financial cost of offering such services and who bears the cost, we discuss the broader benefits both to clients and to the MFIs themselves and suggest that more MFIs around the world could find similar cost-effective ways to deliver health protection services to their clients.

Keywords: health insurance, micro-insurance, health protection, health products

The most cited reason for default is illness

Although default rates are famously low in microfinance, and there are many reasons for client default and dropout, the most cited reason for default is illness of a microfinance institution (MFI) client or family member. Clients' health problems mean 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 larger and more profitable loans. Very often the local health service infrastructure in the poor communities served by MFIs is inadequate to meet the health protection needs of clients, so MFIs feel compelled to respond directly to health problems of clients and their families.

For the past two decades, health interventions have been offered with microfinance services, most notably by South Asian MFIs such as BRAC, Latin American affiliates of Pro Mujer International, and the Credit with Education programmes of the partners of Freedom from Hunger in Africa, Latin America and the Philippines. The experience and related research have been reviewed by Dunford (2002) and

Myka Reinsch led Freedom from Hunger's Microfinance and Health Protection initiative from 2006 to 2010, Christopher Dunford is President of Freedom from Hunger, and Marcia Metcalfe is Freedom from Hunger's Director, Microfinance and Health Protection.

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Most health interventions by MFIs have focused on health and nutrition education

by Leatherman and Dunford (2010). Most health interventions by MFIs have focused on health and nutrition education. The marginal costs to provide education were estimated to be between 5 and 10 per cent for four microfinance providers in Bolivia, Burkina Faso, Mali and Togo (Vor der Bruegge et al., 1999). Clinical services have been offered to MFI clients, but with the notable exception of Pro Mujer Bolivia, these have been provided by medical staff of separate organizations with little or no involvement of the MFI staff. While microfinance loans and savings services have been used by clients to pay for health-related expenses, there has been little experimentation with loan and saving products specifically targeted to health expenses. Health insurance and health products (e.g. mosquito nets, family planning supplies and medications) have rarely been offered. Despite the well-recognized and compelling health problems of MFI clients, the risks these pose to the financial viability of MFIs, and the inadequacy of local health infrastructure to meet the needs of MFI clients, the dominant attitude of MFI leaders has been that offering preventive and/or curative health services (even through linked and partner-agent models) costs too much and is outside their business and professional scope.

In contrast, as microfinance has increasingly proven itself to be a financially sustainable mechanism for reaching millions of poor people, the international health sector has begun to take notice and consider more formal collaboration with microfinance providers. Many MFI leaders, for their part, perceive the competitive advantage they could gain by offering health services. Yet they remain concerned about their ability to stretch beyond their core business while maintaining financial self-sufficiency.

Freedom from Hunger collaborated with five MFIs, to develop a range of health protection services

To more fully test the potential and constraints for MFIs to offer health protection services to clients, Freedom from Hunger collaborated with five MFIs, representing a range of geographic, regulatory and social contexts around the world, to develop a range of health protection services that would be practical, financially sustainable, scalable, high impact for clients and replicable by other MFIs. The four-year pilot project (2006 to 2010) was funded by the Bill & Melinda Gates Foundation. Services tested included microfinance combined with health education, health loans, health savings, health micro-insurance, linkages to health providers and/or distribution of health products such as anti-malarial nets.

Quantitative and qualitative research, including one randomized controlled trial in Bénin, indicates that these health protection packages have positive impacts on clients' health and financial status (Metcalfe et al., 2010). This article describes the microfinance and health protection services that were tested, analyses the net financial cost of offering such services and how they are borne, presents the

indirect financial impact that enhanced competitive advantage may have for MFIs that offer such services, and suggests that more MFIs around the world could find similar cost-effective ways to deliver value-added health protection services to their clients. Whereas other papers associated with this project cover details of client demand and provide convincing evidence of beneficial client-level outcomes (see Metcalfe et al., 2008, 2010), the current article concentrates on MFI-level impacts.

Description of integrated microfinance and health protection services examined

The five participating MFIs are Bandhan (India), CARD (Philippines), CRECER (Bolivia), PADME (Bénin) and RCPB (Burkina Faso). Three of these five MFIs were already offering informal education to clients using Freedom from Hunger's Credit with Education strategy including education on health topics. As of December 2009, these five MFIs were collectively reaching more than 2 million clients. Table 1 provides summary information on these MFIs.

Leaders of all five MFIs viewed client illness as a persistent contributor to poverty

Leaders of all five MFIs viewed client illness 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. Based on market research findings and with technical assistance from Freedom from Hunger, each MFI crafted a package of two to four interrelated 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 partner-agent health micro-insurance) and from linkages with health providers to the distribution of health products. The microfinance and health protection (MAHP) packages were introduced between February and November 2007, with small-scale pilot tests in limited areas (generally three branches) and rapidly scaled up thereafter.

Table 1. General data on the five MFIs

Indicator	*Bandhan*	*CARD*	*CRECER*	*PADME*	*RCPB*
Year MFI established	2002	1986	1990	1993	1992
Number of active borrowers	1,924,016	967,963	102,212	48,962	111,005
Outstanding loan portfolio ($)	234,768,206	81,539,597	46,067,523	35,465,271	110,794,596
Portfolio-at-risk (30 days)	0.16%	1.00%	0.90%	4.00%	8.55%
Number of active savers	–	991,474	102,212	–	671,909
Total savings deposits ($)	–	50,889,954	4,606,752	–	117,758,839
Operational self-sufficiency	Not available	117%	111%	130%	144%

Table 2. Microfinance and health protection packages of the five MAHP MFIs: Components for which cost–benefit analyses were performed

MFI	*MAHP package and outreach as of December 2009*	*Description*	*Value proposition*
Bandhan	Health product sales and health education 51,900 clients	Bandhan provides practical health education to its clients and other community members through optional monthly hour-long sessions held in communities. The informal 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 at market prices, and encourage people to use local health services when appropriate	Bandhan earns a margin on the health products sold to SS, 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. Opening the forums to the entire community helps to promote Bandhan financial services and may play a role in client attraction, satisfaction and retention
CARD	Health micro-insurance premium loan and insurance education 13,651 clients	CARD promotes and facilitates optional, group enrolment for its clients in the national health micro-insurance programme, PhilHealth, and provides a loan to cover the US$26 annual premium so that clients may pay for their coverage in small, weekly instalments and thereby be assured of continuing coverage. Premium cost and benefits are determined by PhilHealth, not by CARD	CARD charges 24 per cent interest (flat, annual rate) on the PhilHealth premium loan, plus a 1.5 per cent loan redemption fund (LRF) fee; the resulting payment of about $0.60 per week is added to the member's regular business loan and savings deposit payment, which is made to the same CARD Account Officer who visits the client meetings on a weekly basis. After reaching certain enrolment thresholds, CARD receives a 9.7 per cent discount from PhilHealth on the premiums
CARD	Preferred health provider discount programme 138,774 clients	CARD provides clients within designated areas with a complementary 'Healthy Pinoy' card that entitles them to discounts of 10 to 40 per cent on primary and diagnostic healthcare services offered by local, private physicians; dentists; 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

MFI	*MAHP package and outreach as of December 2009*	*Description*	*Value proposition*
CRECER	Health Days with mobile health providers 23,900 clients	At Health Days, CRECER clients may access diagnostic and primary healthcare and – for a fee 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 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) 11,290 clients	PADME offers Credit with Education, village-banking-style solidarity loans along with 30-minute informal 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 informal 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 and introduce and habituate uninitiated people to formal financial services, thereby both attracting and cultivating new clients
RCPB	Health savings and loans 12,099 clients	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 upon 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 per cent annual flat interest rate regardless of term. The health loan helps RCPB deter use of micro-enterprise loans, business assets or expensive moneylenders for unproductive use to address health issues, thereby protecting their repayment capacity for existing RCPB loans

Table 2 summarizes the specific components that were examined in the costing exercises from which this paper draws. CARD developed two parallel, though potentially complementary, MAHP packages and tested them in two distinct locations. They were the subjects of two separate cost studies and are treated separately here.

Methods

Client- and MFI-level research

Outcomes research at both the client and MFI levels took place from 2007 (baselines) into 2010 (endlines). The client-level research studies were diverse and employed a variety of methods to examine client-level family health and economic outcomes (Metcalfe et al., 2010). On one end of the spectrum, at PADME, an extensive randomized controlled trial was implemented in partnership with Innovations in Poverty Action. On the other end, a set of qualitative and quantitative endline interviews was 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; and client-level health and financial outcome interviews.

An extensive randomized controlled trial was implemented in partnership with Innovations in Poverty Action

In addition to these elements, Freedom from Hunger examined the costs and benefits (both financial and non-financial) of each MAHP package – or a subset of package components – with respect to the MFIs. Freedom from Hunger employed a combination of activity-based and allocation costing to obtain the per-client costs shown beginning in Table 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).

This article emphasizes the cost of running the services, rather than the cost of start-up

This article and the underlying analyses (www.ffhtechnical.org/resources/microfinance-health) emphasize the cost of running the services, rather than the cost of start-up. Upfront 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 upfront 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. Note that one aim of the MAHP

initiative was to invest in significant technical assistance for the development and testing of innovations, as well as for documenting and sharing results, in an effort to lower the cost of replication and related innovation for other MFIs in the future.

Direct and total costs

In conducting the costing exercises, two different levels of profitability were considered: one applying only direct costs, the other also taking into account the cost of allocated staff time and overhead. The 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 more conventional full-cost measure attributes a portion of 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.

It is an MFI's array of products and services that keep it in business

Caveats on data interpretation

While these data offer some ballpark figures for how much the provision of health protection services by MFIs can cost, the cost of providing precisely the same service in South Asia and in Latin America is likely to be very different owing to differences in cost components such as labour and transportation. 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 micro-insurance loans, health savings and loans). Therefore, the reader should use these data with care. Note that the individual cost–benefit analysis of each package provides 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 (see http://www.ffhtechnical.org/resources/microfinance-health).

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 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 micro-insurance 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 quite comparable to CARD's micro-insurance premium loan in terms of profitability.

MFIs favoured lower costs to clients in exchange for lower revenues or manageable net financial losses

Another reason for such contrasts is individual MFI decisions about product features – such as interest rates to charge on health loans or the level of fees 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 overall, the MFIs favoured lower costs to clients in exchange for lower revenues or manageable net financial losses.

Results

The cost of adding health to microfinance

In terms of financial viability, the MAHP products fell into 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 micro-insurance premium loan and insurance education (CARD);
- health savings and loans (RCPB);
- Credit with Education (PADME).

Non-revenue-generating products tested through MAHP include the following:

- preferred health-provider discount programme (CARD);
- Health Days with mobile health providers (CRECER);
- health product sales and health education (Bandhan).

Note: 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 to break even. As such, in our analyses we group it with the non-revenue-generating packages.

As of the end of 2009, only the micro-insurance premium loan package (CARD) had broken even on a direct-cost basis

As of the end of 2009, only the micro-insurance premium loan package (CARD) had broken even on a direct-cost basis and none of the products had yet broken even on a full-cost basis. Both the health savings and loan package (RCPB) and the micro-insurance 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.

Net cost of health protection products

In Table 3, we begin by listing the annual net profit (or loss) of the six unique MAHP packages. Column A shows the average annual per-client profit (loss) on the MAHP package in direct-cost terms, and column B adds indirect staff and overhead costs. These costs are based on 2008–2009 data and do not account for expected economies of scale and 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 2 to 24 months.

Note also that we consider the performance of PADME's Credit with Education programme to be an outlier. At the beginning of 2008, the only year for which full financial data were available, PADME's Credit with Education programme had only been operating for two months. And over the course of that year, PADME faced numerous institutional challenges unrelated to Credit with Education. Not only was its Credit with Education programme unprofitable (profitability would not be expected before the third full year of operation, in any case), but the MFI's overall profit margin in 2008 was negative (-5 per cent). Given this context and the numerous examples of MFIs that do successfully offer Credit with Education on a self-sustaining or profitable basis (e.g. Dunford, 2009), we have supplied PADME's data in Table 2, but hereafter set PADME aside in the financial analysis.

The MFIs spent an average of $1.59 per client per year to offer these services

Excluding PADME, then, the range of net loss on a total-cost basis (including direct and allocated costs) was $0.17 (CARD's preferred health provider discount programme) 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.

Table 3. Net cost of health protection products

		A	B	C	D	E	F	G
MFI	*Health protection products analysed*	*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	Micro-insurance premium loans	0.19	(0.57)	11.97%	43.00	5.14	4.57	10.63%
RCPB	Health savings and loans	(0.03)	(4.57)	28.05%	236.51	66.34	61.77	26.12%
CARD	Preferred-provider programme	(0.10)	(0.17)	11.97%	43.00	5.14	4.97	11.56%
CRECER	Health Days	(0.52)	(0.88)	25.47%	162.00	41.26	40.38	24.93%
Bandhan	Health product sales	(1.00)	(1.73)	40.47%	32.42	13.12	11.39	35.13%
PADME	Credit with Education	(7.41)	(9.49)	(5.03%)	173.76	(8.74)	(18.23)	(10.49%)
Average		(1.48)	(2.90)	18.82%	115.12	20.38	17.47	16.31%
Average without PADME		(0.29)	(1.59)	23.58%	103.39	26.20	24.62	21.67%

Overall MFI profitability

Next, we look at how these costs compare with the MFIs' average per-client earnings across all of their 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 per cent (range was 12 per cent [CARD] to 40 per cent [Bandhan]). Profit margin is defined as net profit/total revenues. In other words, in 2008, these four MFIs retained an average of $0.24 for every $1 of revenue (which mostly comprises interest and fee earnings from loans). 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, counting CARD only once, was 26 per cent (compared with 24 per cent). In the following step we count CARD twice again in order to take into account the different impact of CARD's two different services.

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 (column C) 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, we next subtracted the average amount that each MFI spent per client to provide health protection products in 2009 (column E minus column B) to show the estimated net profit per client who received health services (column F). Then we divided column F by column D to calculate the revised profit margin (column G). The health protection products resulted in a drop in MFI profit margin from 23.58 to 21.67 per cent on average. 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.

The health protection products resulted in a drop in MFI profit margin from 23.58 to 21.67 per cent on average

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 (Table 4). The average per-client cost was $5.42. Although a $23-per-client 'face-to-face' nutrition campaign in the Dominican Republic appeared to be similar to Credit with Education and Bandhan's health product distribution and education package, we examined the average cost without this apparent outlier; the revised average was $2.49. Similarly, in a study of health-related interventions also coupled with microfinance, Pro Mujer recently estimated that its programmes 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 per cent of those (Junkin et al., 2006). Of course, this comparison is imprecise. But at an average net total cost of $1.59 per client per year, the MAHP packages compare favourably. This may suggest that microfinance – with its self-sustaining delivery of financial services to an extensive network of loyal and engaged clients – does show promise as a cost-effective platform for the delivery of complementary services.

Offering relevant, value-added products and services can make a big difference to market share

Competitive advantage

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

Table 4. 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	Experience LINKAGES (2005)
Mass-media nutrition campaigns (multiple countries)	3.00	Horton (1992)
Face-to-face nutrition campaign in the Dominican Republic	23.00	Horton (1992)
Child nutrition programme in Tamil Nadu State, India	9.50	World Bank (2001)
Private-sector delivery of primary healthcare in Bangladesh	0.64	Loevinsohn (2002)
Child health days in Ethiopia	0.56	Fiedler and Chuko (2008)
Distribution of vitamin A capsules (average costs in seven countries in Africa, Asia and Latin America)	1.00	Neidecker-Gonzales et al. (2007)
Average annual cost per client	5.42	
Revised average without Dominican Republic project outlier	2.49	

data on the health status and spending of poor people in developing countries, corroborated with extensive market research in the MAHP 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 to help 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.

Clients interviewed at all five MFIs reported a high level of satisfaction with all of the products

Clients interviewed at all five MFIs reported a high level of satisfaction with all of the products. 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). Staff of all five of the MFIs participating in the MAHP initiative also 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.

In two of the MFIs (CRECER and RCPB), there is some statistical evidence to suggest that these anecdotal assertions about retention and growth may be true. At CRECER, client retention from 2006 to 2008 appeared to be 3.49 per cent better in branches that offered MAHP services than in otherwise comparable branches that did not. At RCPB, it appeared that about 5 per cent 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, the 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 likely. 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 per cent client retention rate and go on to estimate the financial impact this would have on the MFI, based on what we know about the costs of these products. Table 5 builds on the analysis presented in Table 3.

For reference, we list here the number of clients receiving the MAHP packages at the end of 2009. We also re-state column F of Table 3, the overall estimated annual profit per client that the MFI realizes, net of any health protection product loss. This was just under $25 on average.

Next, working from the assumption that 1 per cent 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 per cent of clients in the MAHP pilot areas (column H). This comes to an average of $4,135 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.

This was $0.25 per client per year on average that the MFI would not have earned without the MAHP services

Taking that total amount of profit accruing from the 1 per cent 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 $0.25 per client per year on average that the MFI would not have earned without the MAHP services. This amount can be considered a form of MAHP-related revenue, essentially offsetting some of the MAHP operational costs.

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 $0.05 (direct costs only) and $1.34 (including allocated) for the MAHP products.

Considering that two of the MAHP products are revenue-generating and expected to break even and even earn profits in the coming years, we judged that they skew the data. Thus for comparison we also provide revised net-profit (loss) calculations with these two products excluded. The average net cost of non-income-generating MAHP products (CARD's preferred provider programme, CRECER's Health Days and Bandhan's health product sales) per client per year comes to $0.35 (direct cost only) and $0.74 (including allocated).

This analysis of the impact of 1 per cent 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 non-financial health protection products in particular. If client retention were actually impacted by as much as 5 per cent – that is, if 5 per cent 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 $0.41 per client per year when looking only at marginal direct costs, and just breaking even with an average of $0.02 per client per year, including allocated costs – see Table 6).

Enhanced client retention can lower the net cost of providing non-financial health protection

Table 5. Financial impact of 1 per cent client growth attributable to health protection (all figures in US$ unless otherwise noted)

			F	H	I	J	K
MFI	*Health protection products analysed*	*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 costs only*	*Revised annual per client, MAHP profit (loss) including allocated costs*
CARD	Micro-insurance premium loans	13,651	4.57	624	0.05	0.23	(0.53)
RCPB	Health savings and loans	12,099	61.77	7,473	0.62	0.59	(3.96)
CARD	Preferred provider programme	138,774	4.97	676	0.05	(0.05)	(0.12)
CRECER	Health Days	23,900	40.38	5,991	0.40	(0.11)	(0.48)
Bandhan	Health product sales	51,900	11.39	5,912	0.11	(0.89)	(1.62)
Average		48,065	24.62	4,135	0.25	(0.05)	(1.34)
Average of non-revenue generating products						(0.35)	(0.74)

Table 6. MAHP profits with 5 per cent retention (all figures in US$)

	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

Discussion

Net financial costs

Their average marginal cost to the MFI was $0.29 per client per year

One of the criteria for the MAHP product innovations was that they were sustainable – the components would either pay for themselves or could otherwise be financially sustained by the MFIs on an ongoing basis. In some cases, these products can become profitable, actually generating net income for 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 $0.29 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, the MAHP MFIs' estimated 'loss' in profit margin ranged from 0 to 5 per cent with an average drop of 2 per cent, from 23.58 to 21.67 per cent. All of the MFIs had assumed full ownership of the new services and were bearing their cost by 2010. Furthermore, the cost of these product innovations was analysed within only a couple of years from their launch. As outreach grows, we expect to see increasing economies of scale, resulting in lower per-client costs and in some cases higher profits.

Competitive advantage and other benefits

Microfinance and health protection products and services may potentially be even more affordable for MFIs when taking into account their impact on client growth and retention. Anecdotal evidence, cost data and preliminary cost/revenue modelling presented here begin to fill in the picture of the tangible financial difference that health protection products can make via their indirect impacts on client growth and retention. We saw that by applying the resulting profits generated for the MFI overall, a 1 per cent improvement in

client growth or retention would reduce the average annual per-client cost for MAHP products and services from $0.29 to $0.05 (in terms of average marginal cost) and from $1.59 to $1.34 (in total costs, including allocated overhead). If as much as 5 per cent client growth or retention were attributable to these products, then they would become marginally profitable, on average. Further implementation experience and research are needed to more confidently estimate the percentage of client growth and retention that can be expected from offering such services. But quantitative and qualitative research so far suggests that this may be a relevant and realistic contribution to MAHP product 'earnings'.

Implementation experience and research are needed to more confidently estimate the percentage of client growth and retention

Through the MAHP initiative, Freedom from Hunger and five MFIs endeavoured 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. 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.

Moreover, while additional research is needed, the impacts from potentially larger loan sizes due to better client health and financial position following use of the MFIs' 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, described in more depth in *The Business Case for Adding Health Protection to Microfinance* (www.ffhtechnical.org/resources/microfinance-health), may further diminish the net cost to the MFI from offering health products and services.

As we showed, Bandhan, CARD, CRECER, PADME and RCPB have been satisfied with their health protection products and are assuming the net costs associated with continuing them and even scaling up. Other MFIs may well be interested, too, because:

- 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.
- 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.

Health protection products can differentiate an MFI in a crowded market

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 as a major factor in the lives of their clients and an important reason for loan default. 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 offering health protection products.

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