Protecting those Left Behind

An Experimental Study of Life Microinsurance Purchase Decisions of Compartamos Banco's Borrowers in Mexico[1]

"[Microinsurance] is a provision for the future… we do not know what will happen. I pay knowing that [it] is for those left behind, so that they do not suffer apart from the emotional suffering." – Compartamos borrower

Written by Jonathan Bauchet, Emily Zimmerman, Barbara Magnoni and Derek Poulton for MILK[2]

[1] This paper provides an overview of the study and findings, which will be discussed in more detail in a forthcoming academic paper.

[2] MILK is the MicroInsurance Centre's Microinsurance Learning and Knowledge project.

I. Introduction

The loss of a loved one can lead to enormous stress, both emotional and financial. Low-income families are particularly vulnerable to the financial stress caused by funeral costs and the loss of a breadwinner's income. Life microinsurance has great potential to be a valuable tool for poor families to manage this risk. It can offer value to these families both by reducing the financial burden if a death occurs and by conveying peace of mind as soon as the purchase is made. Despite this great potential, take-up of life microinsurance products, as that of other types of microinsurance, remains low overall.

One of the MicroInsurance Centre's Microinsurance Learning and Knowledge (MILK) project's main questions focuses on whether there is value for clients in microinsurance. We define value in three ways (see box): *expected value*, *financial value* and *service quality value*. Presumably, if a product offers enough of any of these components and a client is well informed, the value of a product will drive demand. While many studies have explored the demand for microinsurance products,[3] the factors that influence the decision to purchase *life* microinsurance remain largely unknown, as do those influencing retention.

MILK's definition of Client Value

Expected value, such as peace of mind or increased incentives to invest

Financial value, such as lower out-of-pocket spending when a shock occurs

Service quality value, such as access to better quality healthcare services or better information to make informed choices

With the aim of better understanding the client's *expected* value of life microinsurance, the MILK project studied the demand for a life microinsurance product offered to over 1.8 million borrowers of Compartamos Banco ("Compartamos") in Mexico with a randomized control trial (RCT). Compartamos sells life insurance in modules of MXN 15,000 (about USD 1,160 at the time of the experiment) of coverage, and subsidizes coverage by providing one module to all of its village bank borrowers at no cost to them.[4] Borrowers have the option to purchase up to 7 additional modules. This study measures the impact of eliminating the offer of the free module of coverage and of two different marketing approaches on demand, shedding light on the links between client value, pricing, information and demand. We asked the following general questions:

- How does subsidizing a small amount of insurance coverage (in the form of offering a free module of insurance) influence decisions to purchase additional microinsurance coverage? Do borrowers continue to purchase insurance voluntarily if the subsidy is removed, and in what amounts? What is the impact of eliminating the subsidy on total insurance coverage?
- Is demand for life insurance influenced by differences in the information provided to potential clients? Specifically, is an emotional marketing approach differently effective than a factual approach at increasing take-up and coverage?

We find that borrowers perceive value in the product: on average, those who were not offered the free module were more likely to purchase additional modules in order to recover some of the lost coverage. But despite this willingness to pay, borrowers who were not provided with the subsidy did not purchase

[3] Most of these focus on health and agricultural products (Magnoni & Zimmerman, 2011).

[4] Ruchismita & Churchill (2012) discuss a "cautious allocation of subsidy" noting that "Premium subsidies can be a way to incentivize markets to provide relevant protection for the poor." They also note that "subsidy can be used to make products affordable as long as it is permanent or designed in such a way that it does not undermine the long-term viability of a specific product." In the case of Compartamos Banco, we consider a case where a private, non-governmental entity offering a subsidy as a commercially-driven strategy to benefit their loan clients as well as to strengthen their voluntary insurance business. In this case, the strategy has a similar end than that of a governmental or donor organization in it aims to offer value to clients while increasing and diversifying a risk pool. While not necessarily permanent, it may, ultimately have a similar effect as a public subsidy.

enough insurance to maintain their pre-experiment level of coverage. Although borrowers bought more insurance when they no longer received a free module, they were still left with less *total* coverage. Finally, we do not find any conclusive impact of the two different marketing messages (emotional and factual) on insurance purchases and average coverage, but the evidence suggests that providing clear and standardized information was highly effective at increasing take-up.

II. Client Demand Relates to Client Value

Demand can signal the **perceived value** of a product among target clients, or the value clients **expect** from the product according to MILK's definition of client value above. Measuring **demand** can help to understand perceived value, but alone, demand cannot be viewed as a proxy for value as it may also reflect other influences (summarized in the box below and discussed in more detail in MILK Brief #7). Perceived value refers to a client's assessment of the value an insurance product has to them, in the context of all the other tools available to them to cope with the risk in question. The accuracy of this perception depends on the context, the complexity of the product and the covered risks, the ability of the provider to honor its commitment, and the client's understanding of the issues at stake. Perceived value is an imperfect reflection of actual value, and is also an imperfect predictor of demand and willingness to pay, which can be influenced by a number of psychological barriers (McCord et al., 2012; Dalal & Morduch, 2010).

Factors Influencing Demand

Greater…	causes demand to
awareness	↑
cost of insurance	↓
ability to pay	↑
likelihood of shock	↑
size of the benefit	↑
trust in the insurer	↑
service quality	↑
peace of mind	↑
value of alternatives	↓
group influence *(tendency to follow decisions of peers)*	?
status quo bias *(tendency to maintain prior status)*	↓
up-front hurdles *(trivial hurdles can greatly affect take-up)*	↓

Understanding demand for microinsurance offers a crucial link between MILK's **client value** and **business case** work. By understanding the drivers behind demand, we can develop a clearer understanding of when and how a microinsurance product can reach the scale required to be commercially sustainable. This understanding also affords an opportunity to make changes to product design, pricing, marketing, and other aspects to increase demand for valuable products by improving their actual and perceived value and by taking advantage of psychological influences to remove barriers to demand.

III. Background

The product and context

With 1.8 million borrowers, all of whom are also microinsurance clients, Compartamos (see box) operates the largest life microinsurance program in Mexico. The life microinsurance product offered is not a credit-life product but a term-life insurance product (loans are automatically forgiven when a borrower passes away). The policy covers its clients for 19 weeks, three weeks past the duration of a loan cycle. The product is designed to be simple and straightforward for borrowers to understand and use. Coverage begins from the first loan cycle. No medical exam is required, and there are no exclusions for pre-existing conditions.[5] The documents needed to process a claim are few and simple, and payment to the beneficiary is quick: an average of eight days after Compartamos is notified of the death, and two days after all documents are submitted.

[5] The only exclusions the product holds are for suicide or in the case the beneficiary is responsible for the client's death.

The insurance is sold in modules: each module costs MXN 57 (about USD 4.40 at the time of the experiment) and pays out MXN 15,000 (about USD 1,160 at the time of the experiment) in cash to a beneficiary in the event the borrower dies. The payout amount was designed to cover the approximate cost of a basic funeral when the product was launched in 2005. All clients of Crédito Mujer, Compartamos' village bank lending program, are given a free module of basic life insurance coverage (*Seguro de Vida Basico*, or the "free module") at no cost to them; Compartamos pays the premium for this module directly to its insurer. This subsidized insurance coverage serves to ensure that all Crédito Mujer borrowers enjoy a basic level of protection from the costs of a funeral. From a business perspective, it also allows Compartamos Banco to negotiate attractive premiums with its insurer by including a larger and broader risk pool. In addition to the Seguro de Vida Basico, borrowers can purchase optional *Seguro de Vida* "top-ups". Most borrowers are eligible to purchase up to 7 additional modules, each at the same price and with the same coverage; new borrowers and borrowers over the age of 70 can only purchase one additional module. In practice, 99% of the borrowers who choose to purchase additional insurance only purchase one module.

About Compartamos and the Life Microinsurance Product

- Compartamos began operations in 1990 as an NGO; transformed into a commercial bank in 2006.
- It is one of the largest microfinance institutions in Mexico, with over 2 million active borrowers, 98% of whom are women
- Crédito Mujer is Compartamos' flagship loan product. It is offered to women in groups of 10-50 members with a solidarity guarantee.
- Loan amounts at Compartamos range from 1,500 to 27,000 pesos (USD 116 to 2,085).
- Compartamos offers a term life insurance product to all its borrowers. The product is sold in modules, each module providing a fixed amount of coverage at a fixed price.
- All Crédito Mujer borrowers receive one free module of life insurance coverage; if the borrower dies, the entire amount is paid in cash to the beneficiary. Borrowers may purchase additional modules of insurance. Separately, the borrower's outstanding loan amount is forgiven if she dies during the loan cycle.

Sources: www.compartamos.com; www.mixmarket.org

Even before the intervention, **insurance take-up rates among Compartamos borrowers were very high**: 52% of all Crédito Mujer borrowers purchased at least one additional module. This take-up rate is exceptional among microinsurance programs worldwide, many of which struggle to achieve even much lower take-up. It is not uncommon in Mexico, however, where take-up of life insurance in microfinance programs is typically high. Anecdotally, some microfinance institutions have reported life microinsurance take-up rates between 80 and 95%. While the cause of this high take-up is uncertain, several influences may be at play. Because of the relatively well-developed insurance market in Mexico, many borrowers are likely to have had some prior exposure to insurance, even if they have not purchased it themselves. Other factors may be the highly commercial sales strategy and incentive schemes used by Compartamos and other MFIs in Mexico, where loan officers are well compensated with bonuses or in-kind rewards for selling insurance. Compartamos noted that cultural characteristics may also cause borrowers to be more receptive to the recommendation of their loan officer that they buy insurance than potential microinsurance clients in other countries. Social dynamics also likely play a role. Compartamos sells the insurance during its loan repayment meetings, and the decision of some prominent members of the group may influence other members to purchase when they would not have otherwise (or vice-versa). Finally, the fact that the *Seguro de Vida Basico* provides coverage automatically is likely to be responsible for some of the high take-up of additional modules: it gives borrowers a first experience with the product and provides them with an opportunity to see claims being honored promptly. Enrollment in the free module is automatic and occurs as part of the loan transaction, making this first experience with insurance particularly easy for borrowers as they do not even need to actively opt in to the program. Further, enrollment in the free module of insurance simplifies the process of enrollment into additional modules, since borrowers have already chosen a beneficiary and provided all paperwork.

Generating demand: Compartamos Banco's microinsurance sales approach

To better understand Compartamos' microinsurance sales strategy before our study, our research team visited the institution and observed the sales process as implemented by loan officers during group meetings, interviewed loan officers and a branch manager, and met with senior management. Loan officers are instructed to advertise the insurance product during the last three weekly group meetings of a

Researchers discussing sales techniques for microinsurance with Compartamos management and field staff in Mexico

loan cycle. Financial incentives are provided to loan officers who sell a minimum number of policies each month. In practice, we observed that the last few group meetings of a cycle were very busy, and little time was devoted to promoting insurance. In addition, all loan officers were not marketing the insurance consistently and identically. No standardized script or materials were provided to loan officers, and our observations revealed large differences in the approach taken by different loan officers and the time dedicated to talking about insurance. Some loan officers indulged in lengthy explanations, based mainly on the example of how having insurance helped the families of other borrowers who passed away, but most appeared far less comfortable explaining and selling insurance. Most loan officers interviewed noted that they spent little or no time promoting the product. Purchase decisions were observed mostly as the result of a simple question by loan officers: "*who will be buying insurance this [loan] cycle*?"

Offering a free life insurance module is a unique sales approach used by Compartamos. This free module is a particular form of subsidy; it gives borrowers a first experience with the product without requiring them to pay out-of-pocket, which may help overcome borrowers' mistrust. Lack of trust can be a significant barrier to take-up (Cai et al., 2010; Cole et al., 2012; Giné et al., 2010), and lack of experience with insurance is an important cause of mistrust. As borrowers see and hear of others benefiting from the product, they may become more willing to purchase an additional module of coverage. As one Crédito Mujer borrower observed: *"It happened once; in another group a lady died. We never know how or when we will die, and after that experience we understood that it's necessary to be insured, to be prepared."*

IV. What do we know about what drives insurance purchases?

Review of literature on subsidy and insurance take up

Price plays an extremely important role in the decision of whether to purchase microinsurance. Practitioners refer to the crucial point of **affordability** (e.g., ERGO, 2012; Leftley, 2005), while academic studies have repeatedly found a high level of **price-sensitivity** among potential microinsurance clients (Cole et al. 2012; Thornton et al., 2010; Chantarat et al., 2010).[6] For these reasons, subsidized premiums are typically understood to significantly boost uptake.

Views on the role of **temporary price subsidies** and the effect of removing those subsidies are more mixed. In addition to lowering the price, subsidy may be valuable in overcoming issues of trust in the insurance provider by building experience with products and helping to establish a culture of insurance among the newly insured. Temporary subsidies could also be used to exploit the "endowment effect": people are often willing to pay more to keep something that they already have than they would be to pay to get it initially. This suggests that giving a free module of insurance temporarily may lead to higher coverage in the long run, when the free module is eliminated. If borrowers become accustomed to having insurance, they may be more likely to pay to retain coverage than they would have been to get it in the first place. Despite these potential positive influences, others find that temporary premium subsidies fail to lead to lasting effects. Fitzpatrick et al. (2011) find that retention after expiration of a premium subsidy for

[6] High price sensitivity extends also to the context of traditional insurance. Heim & Lurie (2009) find that a tax change in the United States that increased the deductibility of health insurance premiums for self-employed individuals (thus decreasing the price of insurance) had moderate effects of both increasing the number of self-employed taxpayers purchasing health insurance and increasing the amount of insurance purchased.

health insurance is very low (only 6.5% remained covered 18 months after the subsidy expired). The study also finds that those who were induced to enroll with larger subsidies may be those who place the lowest value on the insurance product and might be less likely to continue payments.

The unique structure of the product offered by Compartamos (*Seguro de Vida Basico* and *Seguro de Vida*) provides an opportunity to test the role of a coverage subsidy and the effect of removing that subsidy. In effect, the module of insurance that Compartamos provides to its borrowers at no cost to them subsidizes insurance coverage. Eliminating this free module for a randomly selected group of borrowers allowed us to test the impact of removing a subsidy on purchases of additional modules and on total coverage. These relationships are especially interesting in the context of a product with relatively high demand such as this one, where over half of borrowers were willing to purchase insurance before the experiment was implemented. It sheds light on the value clients place on the product, reflected in their willingness to pay, and on the relationship of the subsidy to that perception of value.

Review of literature and practice in marketing to low-income households

There is a longstanding debate over how best to sell products, particularly complex financial products such as insurance, to low-income people. Some focus on careful explanation of the product and how it works, perhaps even including a general financial literacy component in outreach efforts (e.g., ILO, 2011). Others favor a more "emotional" approach. The soap operas created by Women's World Banking aim to illustrate for potential clients, in a compelling and entertaining manner, the importance of savings and other financial products, rather than explaining the details of how those products work (Women's World Banking, 2011). Even within traditional insurance markets, tapping into the emotions of target clients is viewed as a crucial marketing strategy. A report by McKinsey & Company (Cordina et al., 2009) finds that emotions drive health insurance purchase decisions of individuals in the United States as well as those individuals' satisfaction with insurance: "what they are really seeking is peace of mind." The report goes on to suggest that a successful marketing approach will combine an emotional appeal with client education about the risks and costs at stake. In life insurance marketing throughout the world, appeals to potential clients' emotions and sense of responsibility, particularly concerning their children, are very common.[7]

Both approaches are supported by academic literature.[8] **Economics** provides a wealth of evidence that individuals, at least to some extent, seek information about choices presented to them (such as whether to purchase an insurance product), weigh costs and benefits, follow incentives, and make decisions based on **rational calculations**. Many of the existing studies of demand for microinsurance focus on ways in which characteristics of the insurance product, provider, and prospective client influence rational purchase decisions. Product characteristics such as flexibility of payment terms (Atokey et al., 2011) and quality of covered services (Kamuzora & Gilson, 2007) can influence the perceived value of the product. Characteristics of the prospective clients such as wealth (Cole et al., 2012; Giné et al., 2008), education level (Giesbert et al., 2011), and vulnerability to the covered shock (Ito et al., 2009) can influence ability and willingness to pay as well as the value the insurance is expected to provide. Provider characteristics such as convenience or familiarity (Giesbert et al., 2011) can influence the attractiveness of an insurance product by enhancing accessibility or instilling trust. These studies find that low income people use the information they have about the product and about themselves to inform a rational decision, given their available resources, of whether to purchase it. They imply as a result that if a product is valuable, providing more and better information to prospective clients can lead to substantial increases in uptake.

However, the dynamics of rational decision-making fail to fully explain the microinsurance purchase decisions of low income people. Rational decision-making *should* lead households to purchase insurance at an actuarially fair price, which is the price that matches the cost of managing the policy plus the

[7] See, for example, advertisements by Allstate (United States): http://www.youtube.com/watch?v=Hgtlro1O9y4, Thai Life Insurance Company: http://www.youtube.com/watch?v=79Ssht4ri8o, and MetLife Mexico: http://www.youtube.com/watch?v=lfJ3HIOWKt8.

[8] MILK Brief #7 provides an overview of research on the demand for microinsurance.

expected payout, but many households fail to do so. Cole et al. (2012), for instance, found that take-up of an actuarially-fair rainfall insurance product ranged between zero and 29 percent, and the latter was obtained with several incentives. Wang and Rosenman (2007) find a gap between perceived need for health insurance and actual purchase decisions among households in rural China: households in the study bought less insurance than they perceived a need for, and lack of ability to pay the premium does not appear to explain the full gap.

Psychology highlights ways in which emotions drive decision-making, and could contribute to explaining apparently less-than-optimal behaviors like those described in Cole et al. (2012). For example, the "risk-as-feeling" hypothesis developed by Loewenstein and his co-authors (2001) explicitly posits that emotions can lead individuals to making choices under conditions of risk and uncertainty that are contradictory to those that a purely rational actor would make. A person's automatic emotional response to an event and the ease with which an example can be brought to mind can influence her perception of an event's likelihood.[9] Keller et al. (2006) finds evidence of both influences in an experimental study of people's perceptions of the riskiness of a house in a flood-prone area.[10] These psychological influences suggest that a marketing technique that taps into the emotions of prospective clients, providing them with a vivid example of the covered risk, may have a strong influence on uptake.

Against the backdrop of no standard marketing message with little time and attention devoted to selling insurance at group meetings, we designed two marketing interventions to test the effectiveness of different marketing messages: one factual, intended to improve borrowers' ability to make rational calculations, and the other emotional, intended to give a powerful example of the risk of death and of the role insurance could play. Both interventions used posters (pictured in Appendices I and II), which were presented by loan officers in group meetings using a standardized message related to the relevant poster.

V. Methodology

The research intervention

The experiment was implemented with 8,763 borrowers and consisted of two components: a **subsidy intervention** and a **marketing intervention**, both of which were implemented in 5 branches in the state of Sonora in February and March 2012.[11] The two interventions combine to create 4 groups of borrowers (see Table 1). Because borrowers were randomly assigned (by village bank) to one of the four interventions, we know that the outcomes we measure were *caused* by each treatment.[12]

Table 1: Sample size per treatment

		Subsidy		*Total*
		Free module	No free module	
Marketing	Factual	2,216	2,288	*4,504*
	Emotional	2,276	1,983	*4,259*
	Total	*4,492*	*4,271*	*8,763*

[9] Slovic et al. (2004) explain the affect heuristic as a mental shortcut that leads one's emotional response to a possible event to influence one's perception of its likelihood: "worse" events are viewed as more likely than events that elicit a weaker emotional reaction. The availability heuristic leads people to judge an event as more likely if they can easily recall a specific instance of its occurrence (Tversky & Kahneman, 1974).
[10] First, a past personal experience with a flood led participants in the study to perceive the risk of flood as greater, even though they were given the same information as other participations. The study also found that viewing photographs depicting houses with flood damage led participants to perceive the risk of a flood as greater compared to participants who viewed neutral photographs.
[11] The state of Sonora was selected because of the relative safety of travel in the area and because no other pilots or critical activities were taking place in those branches at the time of the study that would have distracted the branches from implementing this study.
[12] For more information on the randomized control trial methodology and its application to microfinance, see Bauchet and Morduch (2010).

The experiment was implemented with existing borrowers only. The interventions themselves took place during village bank meetings, immediately before borrowers indicated their decision whether to purchase insurance and how many modules to purchase. Data were obtained from Compartamos' administrative records, focus group discussions with borrowers and loan officers, and the records of a team of auditors who observed about 25% of the group meetings in which the interventions were implemented. Our analysis of findings focuses on the percentage of borrowers who purchased one or more modules of insurance, the number of modules purchased, and the total number of modules of coverage from which insurance clients benefit (including the free module for clients who received it).

Doing "Client Math" with Compartamos

We studied the value of the life insurance product offered by Compartamos at the time claims are made using MILK's "Client Math" methodology. Client Math uses interviews to document the full cost of a shock (here, a family member's death), and how that cost was covered by insured and uninsured families. It provides insight into the role insurance played in helping families cope with the financial consequences of the death, in comparison to and in the context of other tools used to cover these costs.

The Compartamos Client Math study illustrates that funeral costs among insured and uninsured households were similar (about USD 1,500), but were financed quite differently. Most families pieced together loans, household income, savings, and community donations (friends, family, and neighbors in Mexico often contribute food, drinks or cash) to finance the funeral. Yet families without insurance (who were slightly poorer on average) also had to take out formal loans (USD 460 on average) and in many cases liquidate savings or assets (USD 267 on average)--in one case, a plot of land--adding financial hardship to the already difficult loss of a relative. By contrast, insured families relied mostly on informal loans from family or friends (USD 579 on average), an easy source since they knew they could pay back quickly with the insurance. The remaining portion of the insurance benefit not used for the funeral (USD 851 out of USD 1,991 on average) likely served to replace the income of the deceased client. This evidence suggests that the life insurance played a valuable role in helping families adapt to both the immediate and the ongoing financial consequences of a client's death.

See MILK Brief # 9: What is Client Math? *for a more detailed description of the methodology and* MILK Brief #16 *for full findings of the Compartamos Client Math study.*

The **subsidy intervention** tested the impact of eliminating the coverage subsidy. Borrowers in roughly half of the village banks involved in the experiment were told that they would no longer be covered by a free module of insurance, due to changes in Compartamos' policy. All of the groups were offered the opportunity to purchase insurance voluntarily, and no other characteristic of the product was altered (e.g. price of each module, payout, eligibility, etc.). It is important to note that borrowers were told as part of the project that the free module had been permanently eliminated, but Compartamos did in fact contract *Seguro de Vida Basico* policies for all clients during the experiment.[13] Borrowers were also informed after the experiment was completed (i.e. before the end of the next loan cycle) that the free coverage had been reinstated.

The **marketing intervention** standardized the information provided to borrowers with the use of colorful posters that loan officers brought to group meetings and a detailed script accompanying each poster. The top half of both posters provided exactly the same 5 points of information about the product.[14] The bottom half of the poster emphasized either the financial toll that a funeral takes on a family and how the insurance payout helps face it (the "factual" poster), or the emotional toll of a funeral on the surviving members of the family (the "emotional" poster). Half of the borrowers were presented with the factual poster, the other half were presented with the emotional poster. The information provided in the **factual** poster reflects actual data, obtained from interviews with the families of Compartamos' borrowers who received a payout from Compartamos' life insurance product (see "Client Math" box; the findings of this

[13] A group of 5 Compartamos senior managers, Compartamos' legal counsel and 4 MILK team members were the only ones aware of the backup coverage instated to protect any clients who passed away during the short (7-week) life of the experiment to ensure that the results of the experiment would not be biased by this coverage. No client passed away during the study.

[14] Coverage, eligibility, premium, payment of the benefit, and the voluntary nature of the purchase. See Appendices I and II.

Client Math study are detailed in MILK Brief #16). The factual poster summarized visually the costs associated with a typical funeral among the target population, adding the costs up and comparing them to how a typical family finances these costs, with and without insurance. Particular emphasis was placed on how uninsured families often resort to difficult strategies to fund funeral costs, such as borrowing from moneylenders, selling assets, or tightening their belts, and how insurance helped the families of Compartamos borrowers who passed away to avoid using some of these difficult mechanisms. The factual approach provided a calculation of costs and financing with the aim of providing the information needed for borrowers to make a reasoned decision about whether to purchase insurance and how much they need. The **emotional** approach instead used a series of pictures to tell a story of loss and coping in a family affected by the death of a breadwinner, showing how insurance helps the family take care of some of the needs following the tragic event and brings stability to the surviving members of the family (a grandmother with her two grandchildren). It is intended to tap into emotions surrounding responsibility, caregiving, and a sense of security.

VI. Findings: Results of the two interventions

This section provides an overview of the impact the two interventions on the purchase of (additional modules of) life insurance as well as the impact on total coverage. For more detailed results on the impact of the two interventions, including a detailed discussion of the impact on total insurance coverage, see Bauchet (forthcoming).

Eliminating the subsidy

Borrowers' purchasing behavior partially compensated the loss of the subsidy: those who lost the free module were more likely to purchase insurance, and purchased more modules, than those who retained the free module. Borrowers who did not receive the free module were 5.3 percentage points more likely to purchase modules of coverage than those who retained the subsidy (see Table 2). Borrowers in groups without the subsidy also purchased more modules: on average, 0.14 more modules than borrowers in groups that kept the subsidy (see Table 2).

Table 2: Impact of subsidy intervention on insurance purchase

	Free Module (Retain Subsidy)	No Free Module (Eliminate Subsidy)	Statistically significant?[15]
Panel A. Percentage of borrowers who purchase any module			
Last cycle before intervention	70.0	67.9	
Cycle after eliminating free module in some groups	83.3	86.5	
Change (percentage points)	+13.3	+18.6	Yes
Panel B. Number of modules purchased			
Last cycle before project	0.74	0.74	
Cycle after eliminating free module in some groups	1.04	1.18	
Change (# of modules)	+0.30	+0.44	Yes

Table 3: Impact of subsidy intervention on total insurance coverage

	Free Module (Retain Subsidy)	No Free Module (Eliminate Subsidy)	Statistically significant?
Last cycle before intervention	1.74	1.74	
Cycle after eliminating free module in some groups	2.04	1.18	
Change (# of modules)	+0.29	-0.56	Yes

Note: Total insurance coverage = number of modules purchased + number of free modules (i.e. +1 in groups where free module is offered).

Despite the partial compensation, eliminating the subsidy resulted in a **lower level of total life insurance coverage** among borrowers, on average. Those in groups in which the free module was eliminated were covered by 0.86 fewer

[15] Noting whether the difference between the two groups is statistically significant at the 5% level.

modules on average than those who received the free module (see Table 3). This resulted in an average total coverage worth USD 2,362 (2.04 modules) among those who retained the subsidy, and only USD 1,366 (1.18 modules) among those who lost it. Borrowers who lost the free module were also less likely to have any coverage at all than those in groups receiving the free module (86.5% vs. 100%), because their total coverage was determined solely by purchased insurance.

Marketing the Insurance

We find **suggestive evidence that the standardized marketing approach implemented in the project increased sales of insurance**: the percentage of borrowers who purchased any insurance increased by about 15 percentage points (an increase representing more than 20 percent of the baseline take-up) after the new approach was adopted. While we cannot say with certainty that the marketing interventions *caused* this increase, because we do not have a randomly assigned control group that received no marketing intervention, this large increase in uptake suggests that the standardized, poster-based marketing approach was effective in increasing sales.

Overall, however, we find **no conclusive difference between the emotional and factual messages** in terms of rate of purchase, number of modules purchased, or total coverage. Although practitioner literature sometimes suggests otherwise, in our experiment the emotional approach was not *more* effective on average. In fact, Table 4 shows that borrowers receiving the factual marketing message were slightly more likely to purchase insurance than those receiving the emotional message (85.2% vs. 84.6%) on average, though this difference is not statistically significant. The change in likelihood of purchasing any additional module, is also similar but slightly greater for borrowers who received the factual marketing message (+17 percentage points) than for borrowers who received the emotional message (+15 percentage points), though again this difference is not statistically significant. In addition, we find no difference in impact of the two marketing approaches on take-up of insurance by demographic characteristics, including age, marital status, number of children, home ownership, education level, number of previous loan cycles, number of group cycles, loan size, or branch.

Table 4: Impact of marketing intervention on insurance purchase

	Factual Poster	Emotional Poster	Statistically significant?
Panel A. Percentage of borrowers who purchase any module			
Last cycle before intervention	68.3	69.8	
Cycle after presenting the posters	85.2	84.6	
Change (percentage points)	+16.9	+14.8	No
Panel B. Number of modules purchased			
Last cycle before intervention	0.74	0.75	
Cycle after presenting the posters	1.11	1.11	
Change (# modules)	+0.37	+0.36	No

Further, there was no statistically significant difference in *total* insurance coverage between borrowers who were exposed to the factual poster and those exposed to the emotional poster. The average decline in total insurance coverage, driven by the elimination of the free module for some borrowers, was not different for borrowers receiving the factual vs. emotional marketing message.

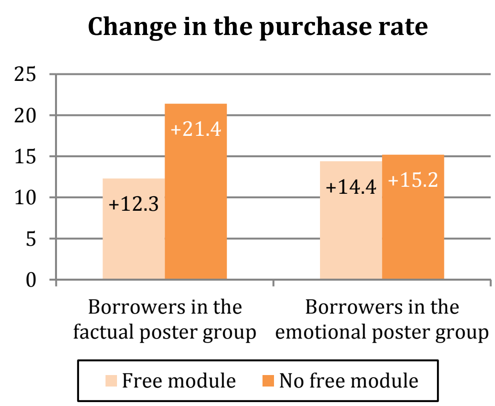
The lack of average impact of the marketing message, however, hides an important heterogeneity: the factual marketing message interacted with the elimination of the subsidy, but the emotional message did not. Even though neither specific marketing message was more effective than the other at increasing sales overall, **only borrowers who received the factual message were influenced by the elimination of the subsidy to increase their rate of insurance purchases** (Table 5). Recall that all borrowers were more likely to purchase additional insurance, credibly (at least in part) due to the new standardized marketing approach. The impact of each intervention is indicated by whether one group of borrowers increased its rate of purchase *more than* another group. Table 2 showed that the increase in the percentage of borrowers who purchased additional insurance was larger for borrowers who did not benefit from the subsidy than borrowers who kept the subsidy: the rate of purchase increased by 18.6 percentage points versus 13.3 percentage points, respectively, for a net impact of eliminating the subsidy of about 5 percentage points.

Table 5 shows that this increase was entirely driven by those who were exposed to the factual marketing message. Among borrowers exposed to the emotional message, the increase in purchase rate for borrowers with and without subsidy was similar: +14.4 percentage points and +15.2 percentage points, respectively, and the difference was not statistically significant. This indicates that, among borrowers who were exposed to the emotional poster, eliminating the subsidy did not impact insurance purchases.

On the other hand, among borrowers who received the factual marketing message, the increase in purchase rate for borrowers with and without subsidy was different. Borrowers who received the factual message and retained the subsidy increased their purchase rate by 12.3 percentage points. Borrowers who received the factual message and did not benefit from the subsidy increased their purchase rate by 21.4 percentage points. Eliminating the subsidy caused purchase rates to increase only among borrowers exposed to the factual marketing message. The factual message provided critical information at a time when borrowers had to decide whether to purchase some coverage, and this information led more of them to choose to purchase some insurance.

Table 5: Percentage of borrowers who purchased insurance, by intervention type

	Free Module (Retain Subsidy)	**No Free Module** (Eliminate Subsidy)	Statistically significant?
Borrowers in the factual poster group			
Last cycle before intervention	70.4	66.2	
Cycle after eliminating free module in some groups	82.7	87.6	
Change (percentage points)	+12.3	+21.4	Yes
Borrowers in the emotional poster group			
Last cycle before intervention	69.6	70.0	
Cycle after eliminating free module in some groups	84.0	85.2	
Change (percentage points)	+14.4	+15.2	No



VII. What Does this Mean?

When the subsidy is removed, borrowers buy more insurance, suggesting they perceive value…

Borrowers perceive value in the product and are willing to pay for it. This perception of value (***expected value***) is suggested by the high take-up of additional modules beyond the free coverage before the intervention, and is validated by borrowers' reaction to losing the subsidized coverage. On average, borrowers are willing to pay to get back some of the coverage that was taken away when the subsidy was removed. Those who lost the free module purchased insurance in greater numbers and purchased more insurance in an effort to retain the level of coverage they had with the subsidy.

When discussing the value of the life insurance offered to them by Compartamos, **borrowers point to the peace of mind insurance brings.** *"If you have life insurance, it is not so much a concern. At least you no longer feel the stress of 'what would I do?'"* They mention the security of knowing that their families would be better able to recover from the financial consequences of an unexpected death. As one borrower mentioned, *“what if something happens to me? That is the concern of parents…that you will leave your children on the street.”* This willingness to pay for a life insurance product that in all likelihood will never be “used” (in the sense that a claim is made) shows that borrowers are keenly aware of the potentially devastating financial consequences of their death and see insurance as an effective tool for preparing for those costs in case they ever arise.

An important consideration is that the insurance product is not only valuable in terms of expectations, but offers actual ***financial value*** in the infrequent event that a claim is made. MILK’s BRIEF #16 (Poulton and Magnoni) examines the value of life insurance to Compartamos Banco’s clients and finds that the insurance offered financial value to insurance beneficiaries who resorted to less difficult mechanisms than they may otherwise have used to finance a funeral and ongoing costs from the passing of a loved one. The study analyzes a small sample of claims noting that these were paid within a reasonable time frame to beneficiaries, allowing these beneficiaries to access low-cost loans from friends and family rather than having to turn to costly formal loans. ***This intersection of financial and expected value between the two studies is especially powerful as it suggests that the demand for the product reflects not only marketing messages but actual value offered by Compartamos.***

Compartamos loan officer sells life insurance to a group of clients using a poster developed as part of our marketing intervention.

…But eliminating the subsidy is detrimental to clients

Compartamos borrowers who lost the free module of coverage did not, however, purchase enough insurance to retain the same level of total coverage they had with the subsidy. While the increased take-up brought about by the elimination of the subsidy is good news for insurers and institutions that sell insurance, the reduction in total coverage can be harmful to clients, especially the most vulnerable who have lower capacity to pay. We return to this dichotomy in Section VIII below.

Standardizing a marketing message can be effective in increasing uptake overall…

It appears that simply having a standard marketing approach greatly influenced take-up, but our evidence is not conclusive because this study did not include a control group of borrowers who remained exposed to the previous (inconsistent) marketing approach. Though take-up was high even before the intervention, loan officers were not given a standard marketing message or any materials related to insurance, and rarely devoted much time to explaining, selling, or discussing insurance at group meetings. The new, standardized approach, including the posters and their corresponding script, seems to have helped loan officers focus more attention on insurance sales and helped some explain the product with greater confidence, and as a result increased the number of borrowers who purchased insurance and the amount of coverage clients purchased. It also seems to have spurred discussion and encouraged questions from borrowers about how the insurance works and what it covers.[16]

…Yet there is no evidence that a more “emotional” approach is more effective in selling insurance to the poor…

We find no difference between the purchase decisions of borrowers exposed to the factual and emotional marketing messages. The factual approach may have spurred slightly higher sales on average, but the difference in sales from the emotional approach is not statistically different from zero. It is also possible

[16] Based on observations of auditors who attended meetings of groups in which the interventions were implemented.

that different borrowers responded differently to the two approaches, although we did not observe any borrower characteristics in our data that led to a preference for one approach over the other.

In focus group discussions, borrowers highlighted the relative strengths of the two different approaches (see box). Those who preferred the emotional poster emphasized that it tangibly illustrated the importance of being able to cope with these costs, while those who preferred the factual approach found it useful to have an idea of how much a funeral would cost and how they might cover the cost. These differences in client perceptions and in the strengths of each approach suggest that a combined emotional and factual approach might be the most effective. For example, a loan officer might introduce the insurance product with a story or emotional "hook," and follow with a factual explanation of how it works. Another possibility might be to allow loan officers to use either approach at their discretion, depending on their feel for what will be most effective with a particular client group.

Borrower Perceptions of the Posters

Insights from focus group discussions

Emotional	Factual
"It's a bit harsh, but that's reality. It helps to open our eyes to the possibility."	*"Now we know more or less how much."*
"It makes it real."	*"The factual poster is good because it tells us how much… it is good to know where the money is available, to be more prepared."*
"Now we can visualize it."	

…And in some situations a factual marketing message may work better

Although neither marketing message was more effective than the other at increasing take-up on average, clients responded to the elimination of the subsidy differently depending on which marketing message they received. Borrowers shown the factual poster responded in their purchase decisions to the elimination of the subsidy: a higher percentage of them purchased some modules of insurance when the subsidy was eliminated than when it was maintained. Borrowers shown the emotional poster, on the other hand, were equally likely to purchase any module of insurance whether or not they received the subsidy. In effect, the average increase in take-up without the subsidy was entirely driven by borrowers who were exposed to the factual message.

The marketing message mattered greatly in a specific situation: when borrowers had to decide whether to pay to have any coverage. Showing borrowers facts about the potential financial consequences of a risk they face was effective in convincing them to protect themselves by purchasing insurance when none was provided for free. On the contrary, appealing to emotions may have been less effective in inspiring borrowers who lost the free module to maintain coverage through a purchase of insurance, because the emotional approach did not give those borrowers the tangible facts they needed to make an informed, confident decision.

VIII. Business Implications

Using subsidy to drive take-up

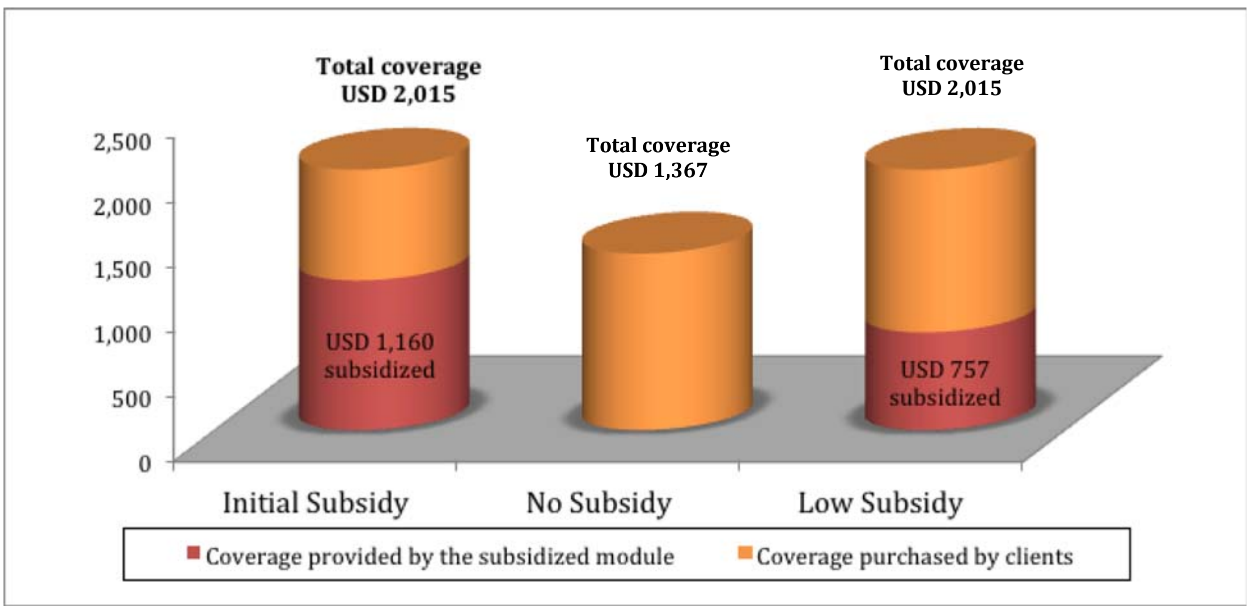
The demand for microinsurance has important value implications, but it also offers insights for understanding the business case for microinsurance and the links between value and commercial viability.

One insight relates to the use of subsidies in microinsurance. Stakeholders in the microfinance industry as a whole, and microinsurance actors in particular, are often wary of subsidies. Yet the evidence from this project indicates that a temporary subsidy of the kind that Compartamos implemented might be a powerful tool to increase participation in a microinsurance scheme. Offering a limited amount of insurance coverage at no cost to borrowers appears to be a good way to overcome issues of trust and lack of familiarity with insurance and probably explains part of the high purchase rate before the experiment. While some subsidies fail to generate lasting demand for a microinsurance product (see, e.g., Thornton et al., 2010), this study provides a **compelling example of a temporary subsidy that is effective**. When it was eliminated, borrowers actually increased their purchases of additional modules of insurance on average. Such a subsidy might, for example, be offered to new clients for a limited period of time, to help them to gain experience with the product and appreciate its value.

This experiment also indicates that eliminating a subsidy, even though it may not decrease take-up, impacts the level of coverage borrowers ultimately enjoy. Even though, in this setting, borrowers were willing to pay for the product, the subsidy led to a higher level of total coverage than did offering the product for voluntary purchase alone. This **tension between the product's business and client value propositions** is perhaps unsurprising. While the business case may be best supported by minimizing costs (i.e., reducing or eliminating the free coverage), client value is best served by maintaining adequate coverage at an accessible price. The fact that borrowers exhibit some willingness to pay, combined with the fact that they generally view the product as affordable, suggests that a middle ground balancing the business and value cases can be achieved.

This balance is illustrated in Figure 1. Before the experiment, when all borrowers received the subsidized module, the average total amount of coverage was USD 2,015. After the experiment, borrowers who did not enjoy the subsidy purchased an average of USD 1,367 of coverage (1.18 modules of insurance). Given this ratio of total coverage to subsidized coverage, offering a subsidized module with a payout of about USD 757 could lead borrowers to purchase an additional USD 1,259 in coverage, and benefit from a total coverage identical to the average coverage with the higher subsidy.[17] By decreasing the amount of coverage provided by the subsidy rather than eliminating the subsidy altogether, an MFI such as Compartamos might be able to provide borrowers with the same level of protection but also reduce its costs.

Figure 1: Insurance coverage under various subsidy scenarios.



[17] This calculation has two important limitations. First, it is based on a linear projection of the relationship between the coverage provided for free by Compartamos and the coverage purchased by borrowers. In fact, decreasing the amount of coverage provided by Compartamos may have a larger-than-proportional impact on the amount that borrowers purchase on average. Second, it is important to keep in mind another potential source of tension in the business case: that reducing the amount of free coverage might affect Compartamos' ability to negotiate a favorable price from the insurer. This, in turn, would affect the premium that the MFI would charge its borrowers and the amount of insurance that borrowers purchase.

Standardizing the marketing approach and including financial information, not just stories

Simply implementing a **standardized and vivid marketing approach** appears to have caused more borrowers to buy insurance and to buy it in larger amounts, regardless of whether the specific message conveyed was primarily emotional or factual. This standardized marketing approach gave loan officers greater support in explaining and selling a complex financial product, and the posters provided a tangible message in a memorable way to borrowers about the value of insurance.

Compartamos clients share their insights in a focus group discussion.

Borrowers used the information they gained from the factual approach to decide how to respond to an increase in the effective price of insurance coverage. Providing clear, accurate and factual information helped borrowers make an informed decision, which turned out to be rewarding for Compartamos from a business perspective. This shows that **providing prospective clients with information does not only make sense from a consumer protection and education perspective, it also makes business sense**. The specific costs of the intervention were not measured for this study, however. The marketing of the insurance took place during scheduled group meetings and did not require any additional transportation costs for loan officers or clients. The principal cost of the intervention was the physical printing of the posters (which were made of a weather-proof, re-usable fabric that might last for a few years) as well as the loan officer's time. In some cases, loan officers might have spent more time marketing the insurance than prior to the intervention. In other cases, perhaps their existing "sales pitch" was made more efficient. Based on the observations of the study team prior to the intervention, some additional time may have been involved on an aggregate level by loan officers. However, this was likely marginal since the scripts were timed to take no longer than 4 minutes (with total time dedicated to the discussion at no more than 10 minutes for a group of 10-50 clients).

IX. Policy Implications

MILK's Client Math study of the *Seguro de Vida* product suggests that, when a borrower who is covered by the product passes away, her family is able avoid turning to more difficult coping mechanisms such as borrowing from high-interest lenders, selling assets, or reducing consumption. As such, the product appears to offer value when a claim is made. The results of this study suggest that there is also *ex ante* value in having coverage before a claim is made, and even if a claim is never made. **Borrowers spoke with their purses when free coverage was taken away, demonstrating that they perceived value in the product** through the peace of mind they gain from knowing that they can protect their families from the devastating financial consequences of an unexpected and highly unlikely death.

Our study also suggests that offering clear, concise and useful information can be a powerful tool to influence decision-making about the purchase of life microinsurance. Emotional messages are often used to sell insurance, but may, under certain circumstances, be less effective than simply providing information that allows borrowers to make decisions for themselves. MILK's Client Math Study offered a way to quantify relevant information about the costs of a funeral and typical financing tools to which borrowers' families turn. This information proved useful in the decision making process when considering purchasing life microinsurance.

No stranger to the development community involved in financial access to the poor, Compartamos Banco has a strong vision to extend financial services to the poor throughout Mexico and beyond through a commercial, profitable model. Its mission also explicitly mentions its social goals. However, its experience offering microinsurance products suggests that using commercial insurance models, combined with some level of subsidy, can help the organization achieve both its commercial and social goals. The experience of Compartamos has important implications for donors, policymakers and private initiatives aiming to support microinsurance for the poor. Temporary subsidies can be a powerful tool to promote insurance and can lead to higher participation in microinsurance even after the subsidy is eliminated. In particular, subsidizing a base amount of coverage rather than subsidizing insurance premiums across levels of coverage has potential to overcome prospective insurance clients' mistrust of insurers and unfamiliarity with insurance. When this strategy is supported by a product that is honored in a timely fashion, it can have a potentially lasting effect. This approach could also be especially effective for complex or highly innovative microinsurance products, such as index insurance, which are mostly unfamiliar to the population they target. When used in this way, subsidies could ultimately help clients sense the peace of mind that comes with being insured and contribute to creating culture of insurance.

Microinsurance Learning and Knowledge (MILK) is a project of the MicroInsurance Centre that is working collaboratively to understand client value and business case in microinsurance. Barbara Magnoni leads the client value effort and Rick Koven leads the effort on the business case. Contact Michael J. McCord (mjmccord@microinsurancecentre.org), who directs the project, for more information.

References

Atokey, O. J., Osei, K. A., & Gemegah, A. (2011). The demand for micro insurance in Ghana. *The Journal of Risk and Finance, 12,* 182-194.

Bauchet, J. (forthcoming). Price and Information in Life Microinsurance Demand: Experimental Evidence from Mexico.

Cai, H., Chen, Y., Fang, H., & Zhou, L.-A. (2010). Microinsurance, trust, and economic development: Evidence from a randomized natural field experiment.

Chantarat, S., Mude, A. G., Barrett, C. B., & Turvey, C. G. (2010). The performance of index based livestock insurance: Ex ante assessment in the presence of a poverty trap.

Cole, S., Giné, X., Tobacman, J., Topalova, P., Townsend, R. & Vickery, J. (2012). Barriers to household risk management: Evidence from India. *American Economic Journal: Applied Economics* (forthcoming).

Cordina, J. A., Pellathy, T., & Singhal, S. (2009). The role of emotions in buying health insurance. McKinsey Quarterly. Retrieved from <https://www.mckinseyquarterly.com/The_role_of_emotions_in_buying_health_insurance_2352>.

Dalal, A., & Morduch, J. (2010). The psychology of microinsurance: Small changes can make a surprising difference. International Labour Organization.

ERGO. (2012). Microinsurance: Affordable protection for people's livelihoods in India. Retrieved from <http://www.ergo.com/en/Verantwortung/NachhaltigWirtschaften/Produkte/Mikroversicherungen>

Fitzpatrick, A., Magnoni, B., Thornton, R. L. (2011). Micro-insurance utilization in Nicaragua: A report on effects on children, retention, and health claims. Microinsurance Innovation Facility Research Paper No. 5. Geneva: International Labour Organization.

Giesbert, L., Steiner, S., & Bendig, M. (2011). Participation in micro life insurance and the use of other financial services in Ghana. *The Journal of Risk and Insurance, 78,* 7-35. doi:10.1111/j.1539-6975.2010.01405.x

Giné, X., Menand, L., Townsend, R., & Vickery, J. (2010). Microinsurance: A case study of the Indian rainfall index insurance market. World Bank Policy Research Working Paper No. 5459. Washington, DC: World Bank.

Giné, X., Townsend, R., & Vickery, J. (2008). Patterns of rainfall insurance participation in rural India. *World Bank Economic Review, 22,* 539-566. doi:10.1093/wber/lhn015.

ILO (2011). Emerging product lessons: On the relation between education and insurance culture. International Labour Organization. Retrieved from <http://www.microinsurancefacility.org/learning-journey/red-solidaria-de-microseguros-rurales-redsol/project-lessons/relation-between-educa>

Ito, S., & Kono, H. (2009). Why Is the take-up of microinsurance so low? Evidence from a health insurance scheme in India. Institute of Developing Economies.

Kamuzora, P., & Gilson, L. (2007). Factors influencing implementation of the Community Health Fund in Tanzania. Health Policy and Planning, 22, 95–102. doi:10.1093/hdoi:10.1093/heapol/czm001.

Keller, C., Siegrist, M., & Gutscher, H. (2006). The role of affect and availability heuristics in risk communication. *Risk Analysis, 26,* 631-639. doi: 10.1111/j.1539-6924.2006.00773.x

Leftley, R. (2005). Technical assistance for the promotion of microinsurance: The experience of Opportunity International. CGAP Working Group on Microinsurance Good and Bad Practices Case Study No. 11.

Loewenstein, G., Weber, E. Hsee, C., & Welch, N. (2001). Risk as Feelings. *Psychological Bulletin*, 127(2), 267-286.

Magnoni, B., McCord, M. J., & Zimmerman, E. (2012). MILK Brief #9: What is "Client Math"? Appleton, WI: The Microinsurance Centre.

McCord, M. J., Magnoni, B., & Zimmerman, E. (2012). MILK Brief #7: A microinsurance puzzle: How do demand factors link to client value? Appleton, WI: The Microinsurance Centre.

Poulton, D. & Magnoni, B. (2012). MILK Brief #16: "Doing the Math" with Life Microinsurance in Mexico. Appleton, WI: The Microinsurance Centre.

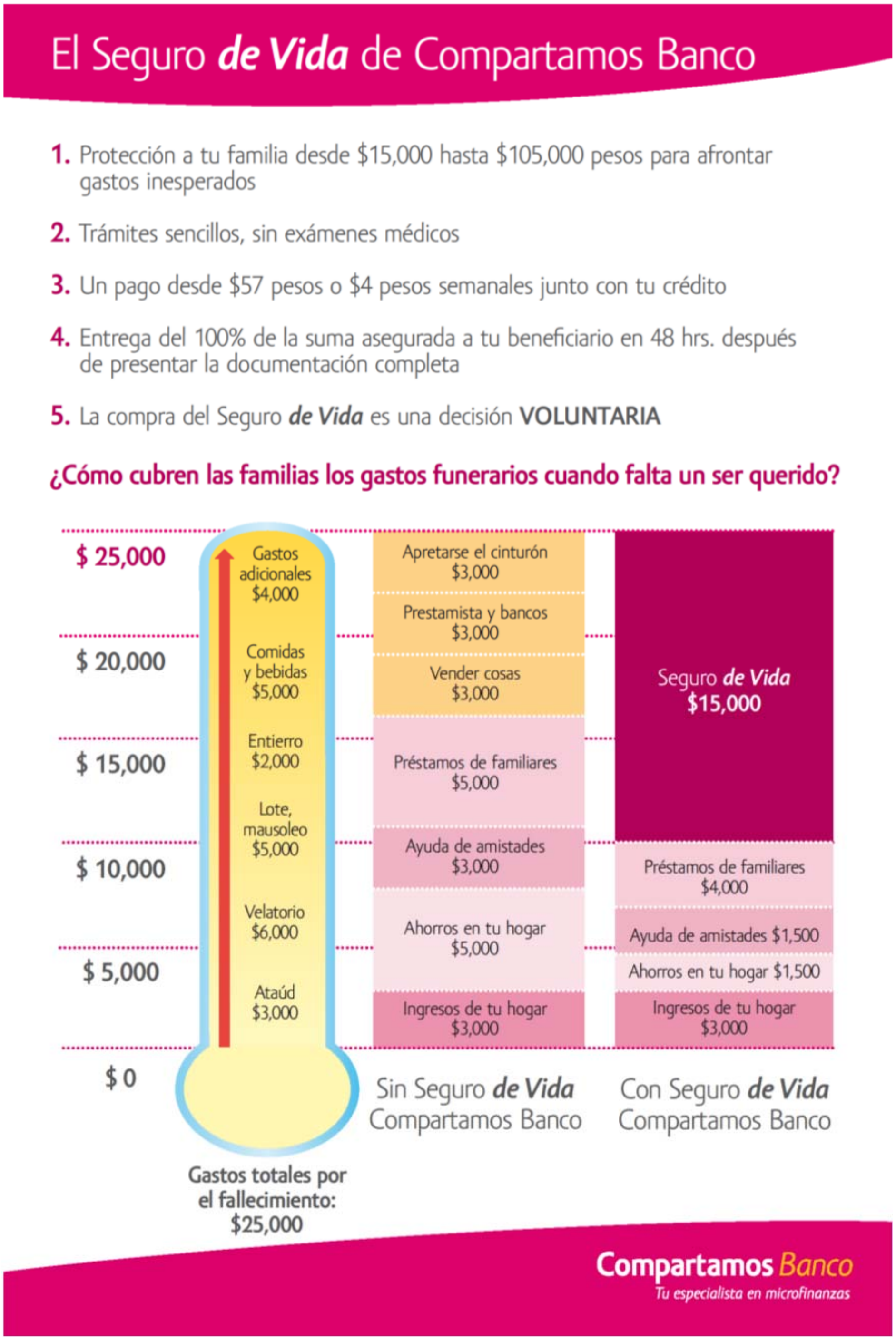
Ruchismita, R. & Churchill, C. (2012). "Protecting the poor: A microinsurance compendium. Volume II. State and market synergies: Insights from India's microinsurance success. International Labour Organization. Geneva, Switzerland.

Thornton, R., Field, E., Hatt, L., Islam, M., & Solís, F. (2010). Social security health insurance for the informal sector in Nicaragua: A randomized evaluation. *Health Affairs*, 19, 181-206.

Wang, H. H. & Rosenman, R. (2007). Perceived need and actual demand for health insurance among rural Chinese residents. *China Economic Review, 18,* 373-388.

Women's World Banking. (2011). Can a soap opera change a woman's life? Retrieved from <http://www.swwb.org/content/can-soap-opera-change-womans-life>

Appendix 1: Factual poster used for the marketing intervention



Appendix 2: Emotional poster used for the marketing intervention