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Responsible Bundling of Microfinance Services

A Mixed Method Evaluation of the Impact of Timing, Pressure, and Information

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CGAP

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crezcamos

Executive Summary

Financial institutions serving the poor can offer a range of savings, insurance, and even nonfinancial products in addition to their core credit products. Bundling these products into one packaged sale can be a cost-effective distribution strategy and a means to differentiate the provider's offering by its added value to clients. However, it may also raise the risk of confusing clients who receive too much information at once and do not fully understand the secondary products they are offered or the risk that clients feel pressure (whether direct or indirect) to purchase those ancillary products.

We partnered with Crezcamos, a microfinance institution in rural Colombia, to explore the influence of a joint sales strategy on the uptake, understanding, and recall of crop insurance products. Our mixed-methods research design combined qualitative interviews with end clients, loan officers, and other Crezcamos staff with a randomized intervention testing the impact of "unbundling," or separating the insurance offer from the loan application process on take-up and understanding of the insurance. We worked with Crezcamos to develop a standardized approach to offering the insurance product, which relied on an explanatory video and other tools and emphasized crucial information about the product while underscoring the voluntary nature of the client's decision.

Findings

Overall take-up of the crop insurance was 23 percent for our full sample over the study period, which compares favorably to take-up of similar products in other countries. However, clients purchased relatively small amounts of coverage when compared to the maximum amounts they could have purchased. **Price** was an extremely relevant consideration in purchase decisions, and our findings suggest a high degree of price sensitivity, which may have been exacerbated by the fact that premiums (while highly subsidized and quite low for the coverage offered) were much higher than those charged for insurance products with which clients were more familiar. The novelty of the insurance product seems also to have contributed to clients' decisions to purchase low amounts of coverage. Perceptions of the **product and coverage** were generally positive, even among nonpurchasers, although a small minority of clients did not find the product useful. Relevance of the coverage seems to have been the single most important determinant of purchase decisions.

Although most clients **understood** at the time of the offer the product features they needed to make an informed purchase decision, later survey data reveal **low recall** of product information that is suggestive of a possible gap in clients' ability to maintain and use their policies effectively without additional support from Crezcamos.

Direct **pressure** from loan officers or Crezcamos to purchase the product was almost completely absent. Most clients did not perceive indirect pressure to purchase the insurance, although we found some suggestion that some borrowers who were less empowered, more vulnerable, or more worried about the loan approval may have felt indirect pressure.

Contrary to our hypothesis, offering insurance separately from the loan application process did not increase take-up of the product, nor did it improve clients' understanding or recall of purchase decisions or product details. Distraction was not a relevant influence for Crezcamos clients during either the joint or separate insurance offer.

Implications

Our findings suggest that the opportunities associated with bundling crop insurance or other financial services with loans can far outweigh the drawbacks. From the supply side, bundling reduces the cost of delivery, particularly in rural areas where loan officers travel long distances to visit clients. From the demand side, our findings suggest that a bundled offer does not negatively impact clients' purchase decisions or understanding. In fact, we find some indication that selling insurance at a time when farmers are thinking about their investments in their crops (during the loan application) may help increase the perceived relevance of the product and lead to greater understanding and recall.

Our research suggests that a bundled crop insurance product for low-income farmers can have relatively high overall take-up (compared to similar products) if it is voluntary, affordable, relevant to clients' needs, and well-understood at the time of the offer. However, even this comparatively high take-up left the majority of Crezcamos clients with no coverage at all, and low purchase rates suggest that some insurance purchasers may remain insufficiently protected.

The low recall of product details suggests that ongoing post-sales support is needed and that reminders of coverage may be useful, though they should be carefully designed to be useful and appreciated. The case of Crezcamos suggests that the responsibility to protect consumers in low-income settings might fall disproportionally on the distribution channel.

1. Introduction

Many financial institutions serving the poor have, in recent years, expanded the breadth of services they offer beyond their core credit offerings to include a wider range of savings, insurance, and other products. Bundling products (delivering multiple products at once) can be a cost-effective distribution strategy as well as a way to differentiate the provider's offering.[1] However, it must be done carefully, as it has potential to raise a number of challenges. If too much information about too many different products is given at once, some consumers may not understand or use all of that information to make decisions that best address their financial needs. Clients may be denied the opportunity to make a truly free choice about which products to buy. This is true of mandatory bundled products, but can also occur when the additional bundled products are ostensibly voluntary, if clients feel direct or indirect pressure. In particular, some clients may worry that turning down the offer of a bundled product may reduce their chance of receiving a loan. Others may purchase a product despite (or perhaps because of) their failure to fully understand it. When the loan application involves extensive paperwork and questions, unfamiliar processes, or stress about the loan outcome, distraction and information overload may contribute to poor understanding and decision-making. When the secondary bundled product is complex or unfamiliar, these problems may compound.

Bundling has implications for consumer protection, to the extent that clients are not afforded the opportunity to make truly free and adequately informed choices. If they do purchase a product, poor understanding can hinder a client's ability to use the product effectively. From a commercial perspective, selling products that clients do not fully understand, value, or wish to purchase can negatively impact client loyalty, especially in competitive credit market. Conversely, when products are bundled responsibly, they may serve as a powerful differentiator and build client loyalty. They can offer clients tools to address a broader array of their needs in a convenient "one stop" manner.

1. We use the term "bundling" to refer to the joint offer of multiple financial products at once, whether the client is required to purchase all bundled products together or not. Both scenarios raise similar opportunities and the concerns.

These issues are particularly striking in the rural context, although they are certainly not unique to rural areas. Education levels are lower and experience with financial services is often more limited than in many urban settings, leaving clients more vulnerable to misunderstanding or manipulation. However, the high cost of distributing financial products in these areas makes the potential gains (to both clients and providers) from bundling products even greater.

Our study sought to gain insight into the experience of rural clients when they are offered bundled financial services, including a relatively complex agricultural insurance product. We aimed to better understand how to offer such products responsibly, generating take-up as well as supporting clients' understanding and memory of product details. We hypothesize that bundling the insurance offer with the loan application may influence a client's ability and interest in retaining information about additional products during the loan application and his or her perception of any direct or indirect pressure to purchase the insurance. Specifically, our research seeks to answer the following:

- Does unbundling or separating the marketing of an insurance product from the loan application impact clients' understanding and uptake of insurance?
- How does the cost-effective process of bundling products and delivering information about new products in conjunction with the loan application influence clients' ability to process and retain this information, as well as their purchase decisions?
- To what extent does a standardized marketing tool support responsible sales, client understanding, and retention of pertinent information?

To address these questions, we conducted a mixed methods evaluation of the delivery of a crop insurance product by a microfinance institution in rural Colombia. The study combines a randomized control trial with extensive qualitative research, exploring the purchase decisions, understanding, and perceptions of loan applicants who have been offered the product and collecting extensive qualitative feedback from the microfinance staff who offer it. The remainder of this paper is organized as follows: Section 2 summarizes the relevant literature; Section 3 offers an overview of the context, the insurance product, and how it is sold; Section 4 describes our study methodology; Section 5 describes our findings; and Section 6 concludes.

2. A Review of Literature Relevant to Bundling Crop Insurance

2.1. Potential value but low demand for agricultural insurance

Farmers around the world face enormous and varied risks, and there is strong evidence that this uninsured risk has immense welfare effects and also constrains the investment that farmers make in their farms, suggesting great potential value for agricultural insurance products (see Hill, Zimmerman, and Magnoni [2014] for a review of the literature). However, demand for these products remains almost universally low. Hill and Robles (2010) found that on average about 10 percent of potential clients of index insurance products buy them. Even where extensive subsidies and other costly efforts are made to increase demand, take-up typically remains well below 50 percent. Cole et al. (2013) studied take-up of a weather index insurance product in India, and found that even with high subsidies and extensive educational and marketing interventions, take-up was around 28 percent.[2] Households that were not exposed to these interventions designed to increase demand had take-up near zero. Kalavakonda and Mahul (2005) found that take-up of the government-

2. The authors find evidence that lack of trust, price, liquidity constraints, and limited salience are all significant constraints to demand.

sponsored agricultural (area yield) insurance in India was only 11.6 percent among small and marginal farmers, who were eligible for a 40 percent premium subsidy.[3]

2.2. Drivers of demand for insurance

The drivers of demand for agricultural and other insurance among low-income households are complex and varied. McCord, Magnoni, and Zimmerman (2012) and Eling, Pradhan, and Schmit (2014) reviewed the literature on demand factors. Some of the most relevant determinants of demand relate to characteristics of the product, cost, and information, specifically the following:

- Salience of the covered risk
- Appropriate product features
- Adequate coverage
- Price
- Liquidity constraints
- Experience with insurance
- Financial literacy
- Understanding of the product offered
- Decisions and recommendations of peers
- Trust in the insurer and/or distributor

Dalal and Morduch (2010) discussed the psychological factors that can limit demand for microinsurance, drawing from behavioral economics to suggest (among others) the following strategies to increase take-up:

- Avoid overwhelming customers with too many choices.
- Appeal to individuals' fear of loss, rather than advertising the benefits of insurance.
- Make the risk and the insurance product salient.
- Undermine potential customers' overconfidence regarding the covered events.
- Eliminate obstacles to purchase.

2.3. Costs and benefits of bundling financial products

Wuebker, Baumgarten, Schmidt-Gallas, and Koderisch (2008) noted that effective bundling can offer convenient, "one-stop-shop" options at a reduced cost due to savings in delivery. Yet bundling alone may not solve difficulties in selling products with low demand. The authors also cautioned that while effective bundling strategies in financial services can lead to increased sales in both lead and additional products, including too many "filler products" in a bundle with a "lead" product might backfire, causing clients to abandon the package and move to a "lead-only" solution. In the case of microfinance, this would represent a loss, as a client's unbundled alternative would likely be taking a loan from a competing institution or avoiding borrowing altogether. Banerjee, Duflo, and Hornbeck (2014) found that a large fraction of borrowers (16 percentage points) were willing to give up a microfinance loan to avoid purchasing a mandatory bundled health insurance product, and the majority of those clients lost access to microfinance altogether. Similarly, Giné and Yang (2009) found in a study of a mandatory bundled index-based weather insurance policy, priced at actuarially fair rates, that take-up of the loan was lower by 13 percentage points among farmers offered insurance with the loan. The insurance product forgave the loan in the event of poor rainfall, and the authors suggest that farmers are already implicitly insured due to the limited liability inherent in the loan contract, and as a result did not see value in the insurance product. By contrast, a bank

3. The authors suggest that low demand is due to limitations in product design and liquidity constraints.

in Ghana experienced increases in demand through a bundled savings-linked insurance product. Clients who maintained a savings balance of US$60 were eligible for free life insurance coverage. During the five months after the insurance product was launched, all deposits increased by 19 percent, and deposits by clients under US$60 increased by 207 percent, as clients saved more to access the insurance (Matul, Dalal, De Bock, and Gelade 2013).

Bundling financial services has important consumer protection implications as well. Clients may be pressured into buying something that they do not need or want, or may not be aware of the details of their coverage. These concerns are particularly relevant when the bundled product is mandatory (e.g., the credit-life insurance that accompanies many microfinance loans), but can also arise in the case of voluntary products. Offering low-value products, mis-selling, failing to provide relevant information, or failing to provide the support that clients need to use products effectively and make claims are consumer protection problems that commonly arise in microinsurance sales (Zimmerman, Magnoni, and Camargo [2014] created a framework of four main categories of consumer protection in microinsurance, including these and other issues). When the individuals selling insurance are, like many microfinance loan officers, not well trained in all aspects of the products they sell, the potential for misinformation or mis-selling may be greater.

Despite the potential drawbacks to bundling financial products, this strategy presents clear advantages in terms of reducing delivery costs and increasing outreach. Cull, Demirguc-Kunt, and Mordoch (2009) documented the high operating costs borne by microfinance lenders, driven by the difficulty of reaching and serving microfinance borrowers and by their low average loan sizes. Among a sample of 346 lenders, the study found median operating costs of 26 percent and 17 percent of the cost of loans for nongovernmental organizations and nonbank financial institutions, respectively. These high operating costs may be seen as a justification for the cost-effective strategy of delivering multiple products at once, particularly in rural areas where large distances and difficult road access add to the cost of delivering services. As such, strategies to bundle financial services must be considered in efforts to reach excluded populations with financial services. However, the perspective and understanding of the client must be carefully considered to ensure that they are offered appropriate services that they understand and value.

In our setting, Crezcamos loan officers travel hours from their branch office to meet with clients on their farms.

2.4. Link among information, education, and purchase decisions

Of particular relevance from the consumer perspective is their understanding of the products offered and how that understanding influences purchase decisions. Lack of sufficient understanding is sometimes cited by potential clients as a reason for not buying insurance (Giné et al. 2008; Takahashi, Ikegami, Sheahan, and Barrett 2016). Understanding of a product may also lead to higher renewal rates, as it helps to avoid disappointment with the product (Platteau and Ontiveros 2013).

Financial education has been tested as an intervention that might significantly improve understanding of insurance. However, the impact of financial education and financial literacy on insurance purchase decisions has also been shown to be mixed. Several studies conclude that providing more information about microinsurance products does not directly increase take-up. Cole et al. (2013) found that while general financial literacy is positively correlated with demand for a rainfall insurance product in India, a

short insurance education module had no significant effect on demand. The authors suggest that this inefficacy was due to its short length. Takahashi, Ikegami, Sheahan, and Barrett (2016) found that learning kits (including comics, skit tapes, and other tools) contributed to better knowledge of livestock insurance, but this did not significantly increase uptake. Similarly, Schultz, Metcalfe, and Gray (2013) found that financial literacy programs and reminders were effective at raising knowledge of health insurance, but not take-up. The authors posited that lack of understanding was not a barrier to enrollment, because baseline rates of insurance understanding were already high. In a study of a financial education radio program in Colombia, Sanchez, Rodriquez, and Zamora (2014) found a significant impact on listeners' knowledge of risks they are exposed to and the types of insurance available (the primary focus of most program sessions). Listeners' perceived capacity regarding their own knowledge of risk and insurance also increased. However, this knowledge did not translate into changes in attitudes or behaviors toward insurance: no impact was found on knowledge of insurance concepts, attitudes toward insurance, or insurance purchase.

However, some studies show that financial education can be effective in stimulating demand. Cai, de Janvry, and Sadoulet (2013) found that participation in a financial education session (rather than receiving a basic explanation of the product) increased take-up of a weather insurance product. Gaurav, Cole, and Tabacman (2011) found that a short insurance education module did not increase take-up, but a two-day educational program, involving games that simulate rainfall insurance, increased insurance demand by five percentage points. The mixed results point to the possibility that the content, timing, and delivery of financial education in a market where valuable microinsurance products are accessible, may play a role in its effectiveness in influencing client purchasing decisions.

2.5. Information overload, stress, and the purchase decision

More information can help individuals to make better purchase decisions, but only up to a certain point. When individuals receive too much information, their ability to process and use the information declines, they can become overwhelmed and confused, and the quality of their decisions suffers. Eppler and Mengis (2004) reviewed the literature on information overload. Diversity, novelty, and complexity of information can all contribute to information overload. Its effects include stress and cognitive strain, loss of control over information, lower decision quality, and lower satisfaction with the decision made. These factors may lead some consumers to (rationally) avoid making financial decisions. Reis (2004) modeled consumers' expectations formation and predicts that, due to the cost of acquiring, absorbing, and processing information, consumers rationally choose to only sporadically recompute their consumption plans.

The effects of inattention and information overload may be particularly large in the context of financial decisions by low-income people. Mullainathan and Shafir (2014) discussed the specific context of poverty and how scarcity of resources can reduce a person's mental bandwidth and force her to focus on the present, leaving little space for long-term planning and decision-making. Karlan, McConnell, Mullainathan, and Zinman (2010) found that limited attention leads to low household savings levels, and that reminders increased savings and were most effective when they mentioned an individual's specific savings goal. Banerjee and Mullainathan (2008) developed a theoretical model positing that the nonpoor, by virtue of owning distraction-saving goods and services at home, are able to focus more on their work (i.e., the effects of distraction are greater for the poor).

Psychological stressors, such as fear or anxiety, can lead consumers to process and assimilate information poorly, to fail to fully consider alternatives, and to postpone or avoid making purchase decisions at all. Stress may also decrease consumers' willingness to pay by shifting their attention away from more abstract features of the product (Maier and Wilken 2014). Although we are not aware of any literature on stress associated specifically with the microfinance loan application process, several studies have demonstrated that having a microfinance loan can lead to higher levels of general stress and anxiety (e.g., Fernald et al. 2008; Karlan and Zinman 2011).

2.6. Understanding and recalling information

From a consumer protection perspective, information about a financial product is relevant both at the time consumers make a purchase decision and later, as they maintain and use the product. In the context of insurance, a consumer should at the time of the offer understand the basic features of the product to make an informed purchase decision; these vary by product but generally include the price, covered events, term, amount of coverage, property or individuals covered, and any major limitations or exclusions (Zimmerman, Magnoni, and Camargo 2014). This is consistent with the Smart Campaign's draft standards regarding the information about insurance that should be shared with microfinance clients at the time of enrollment (Smart Campaign 2015). After the purchase, a client must remember (or be reminded of) some minimum amount of information to make a claim when a covered event strikes (i.e., existence of the coverage, covered events, and how to initiate a claim) (Zimmerman, Magnoni, and Camargo 2014).

It is reasonable to expect that much of the information conveyed to a consumer at the time an insurance product is offered may not (even if it is initially well-understood) be retained over time. Studies in such diverse contexts as television advertising (Singh, Mishra, Bendapudi, and Linville 1994), pairs of words (Runquist 1983), and medical advice (Kessels 2003) have demonstrated that people forget a widely varying, but often large proportion of information in the days and weeks after they receive it, even after demonstrating that they initially understood the information. Reviewing literature on consumers' recall of prices paid for consumer goods, Monroe and Lee (1999) found that in nearly all studies, less than half of consumers could recall the exact price paid soon after their purchase (recall ranged from 8 percent to 61 percent of consumers). We are not aware of any studies of retention of information about financial products. However, the very limited success of financial literacy programs in promoting knowledge gains suggests that financial information may be particularly difficult to remember. A meta-analysis of studies of financial education programs found that the interventions explained only 0.44 percent of the variance in financial knowledge, while meta-analyses in other types of education show effects that are five to 13 times larger (Fernandes, Lynch, and Netemeyer 2014).

2.7. Implications for the research

The literature shows that there is great potential value to smallholder farmers in agricultural insurance, but quite low demand even where high subsidies and extensive educational and marketing interventions are in place. Demand for insurance is driven by a wide variety of factors, including features of the product and coverage, pricing, financial literacy, understanding of the product, experience, recommendations, trust, and psychological factors. Bundling insurance with a microfinance loan can lead to significant efficiencies for microfinance lenders, particularly given their high operating costs. This can lead to cost savings for clients and/or make available to them low-margin products (such as some insurance) that would not be cost-effective to distribute individually. However, it raises other concerns: some consumers may be pressured into buying something they do not want or fully understand, while others may opt out of the lead loan product to avoid an unwanted bundled product. Our study hypothesized that product information and understanding may be particularly relevant to the purchase decision. While product understanding and general financial literacy are sometimes linked to purchase decisions, the literature shows mixed evidence on the effect of financial education on insurance demand (with more intensive programs and those that refer to a specific product most likely to increase demand). We also hypothesized that stress or information overload might influence purchase decisions during a bundled offer. The literature shows that receiving too much information at once or experiencing fear or anxiety at the time of a decision can lead an individual to make poorer decisions or avoid decision-making entirely, and these effects may be particularly large for low-income people. The literature also suggests that, even if an individual can understand and process information about a financial product in the moment he or she receives it, later recall of that information is likely to be low.

3. Selecting a Financial Service Partner in Rural Colombia

3.1. Crezcamos

To better understand some of the influences and perceptions behind the purchase decision of bundled products, specifically crop insurance bundled with a microfinance loan, we partnered with Crezcamos, a microfinance institution based in Bucaramanga, Colombia. Crezcamos serves over 70,000 clients with individual small business and agricultural loans. Sixty-two percent of its clients live in rural areas, and 13 percent have an agricultural activity financed by Crezcamos (2014). Agricultural loans are offered for investment or consumption, with terms beginning at three months, but more typically with terms between 12 and 24 months.

A Crezcamos borrower walks from the main road to his coffee farm. Rural Santander offers a variety of microclimates and weather risks that place farmers at risk of drought, floods, freezes, avalanches and strong winds.

The loan approval process includes a visit to the applicant's farm, during which the loan officer completes an extensive loan application (including a risk assessment) and offers additional insurance products to the applicant. All Crezcamos borrowers purchase a compulsory credit life insurance policy that covers their loan balance. In addition, Crezcamos offers a number of voluntary insurance products to its clients, including life insurance (with benefits going to a named beneficiary, not Crezcamos), property insurance covering the home or business, and vehicle insurance. Crezcamos recently began offering a crop insurance product. This product is uniquely complex and is also new to both clients and most loan officers, making it well-suited to test the concepts of information overload, purchase decisions, and retention of information from a bundled credit plus insurance offer.

Our study took place in the departments of Santander, North Santander, and Cesar, a geographically diverse and agriculturally productive region. A wide range of crops are grown in the region, including permanent crops such as coffee, cacao, citrus, and guanabana (soursop), as well as transitory crops such as potato, rice, and corn. Climate change has created increasingly prevalent weather risk in the region, with potentially devastating effects for the smallholder farmers that Crezcamos lends to (World Bank 2009). The region is also characterized by its highly competitive credit market; the small towns in which Crezcamos branches are located are typically home to 10 or more lenders, with clients frequently borrowing from multiple lenders.

Promotional materials for the insurance caution customers that "anything could happen to your crop."

3.2. Crop insurance

In 2014, Crezcamos began to roll out a new crop insurance product, which is underwritten by the insurer Mapfre and designed to be appropriate for the small farmers who comprise Crezcamos's client base. The insurance covers natural disaster risk for a variety of crops that are common in the region (though several common crops are excluded); all loan applicants who have an insurable crop are eligible to enroll. Nonborrowers, including applicants whose loans are denied, are also eligible. Clients may purchase coverage for multiple crops, although most typically insure only one principal crop.

The premium is calculated based on the crop and the insured amount; the Colombian government subsidizes premiums by 60–80 percent.[4] Policyholders are covered in the event of damage to their covered crop from any of the following events: deficiency of rain, excess of rain, freezing, flood, hail, wind, avalanche, and landslide. Policyholders receive a benefit in the case of death of the plants (for permanent crops, such as coffee) or loss of expected yield (for transitory crops, such as potato). The coverage is not intended to recover the full loss, but to cover "production costs": the cost of buying new plants (for permanent crops) or replanting in the next season (for transitory crops). However, policyholders may choose the amount to insure (subject to a maximum amount corresponding to the crop and field size), and many choose to insure a smaller amount than their actual production costs. For Crezcamos borrowers who have an outstanding loan, any insurance payment first covers the balance of their loan, and the remainder is paid to the insured in cash. Crezcamos loan officers receive a small commission based on the premium amount for sales. Box 1 summarizes the main product terms for two common crops in the region.

Box 1. Terms of the crop insurance

Table B1-1 summarizes the main terms of the crop insurance for permanent and transitory crops. Exact terms vary by the crop, crop size, and the amount the client chooses to insure. In general, insurance for transitory crops is more expensive in relation to the benefit amount, but also more likely to pay a benefit as it covers less severe events.

Table B1-1. Summary of Main Terms of Crop Insurance

Permanent Crops | Coverage for Plants		Transitory Crops | Coverage for Yield
365 days	*Term of coverage*	130–300 days (linked to the length of the growing season)
$2,500–6,275 per hectare	*Maximum insured value (USD)*	$315–2,200 per hectare
3% of the insured value for most crops (plus tax)	*Total premium*	4%–9% of the insured value (plus tax)
80% for most crops	*Premium subsidy*	60% for most crops
90% of insured value	*Benefit in case of a total loss*	90% of insured value

The following are examples of coverage and price for two common crops, for a one-hectare farm:

Cocoa (Permanent Crop)		Potato (Transitory Crop)
365 days	*Term of coverage*	210 days
$3,587	*Maximum insured value (USD)*	$2,092
Total: $113 Subsidy: $86 Paid by Client: $27	*Premium (USD)*	Total: $198 Subsidy: $113 Paid by Client: $85
$3,228	*Benefit in case of a total loss (USD)*	$1,883

4. Total premiums are based on a rate of 3–8 percent of the insured amount, plus tax. The government subsidy rate depends on the crop covered and whether the farmer meets the requirements to qualify as a "small producer" (nearly all Crezcamos clients do).

3.3. Sales protocol for crop insurance

In collaboration with Crezcamos, our research team developed a standardized sales protocol for the insurance, which served two purposes. First, the protocol and associated tools support loan officers in selling a complex new product both effectively and responsibly on a voluntary basis. Second, standardization helped to ensure loan officers took a consistent approach to each sale, allowing us to isolate the effect of the timing intervention described in Section 4. This protocol consisted of the following five steps:

1. Introduce the insurance by **sensitizing clients** to the risk, with reference to past experience with weather-related damage to the farmer's or his neighbor's crops and stating **four introductory points about the product**.[5]
2. Show a **video** that explains the product features and offers a brief testimonial from a claimant (see 3.3.1).
3. **Calculate** the exact premium and benefit amount for the client's situation using a worksheet. The objective of the worksheet was to both streamline the calculations for the loan officer and to demonstrate to the client both how the product is priced and how claims are calculated.
3. Manage **questions and concerns** from the client.
4. Complete **enrollment forms** if the client chooses to purchase the insurance.

Loan officers were trained on the product details and the protocol for the offer. They received a script to follow in their explanation of the product, as well as a guide of answers to "frequently asked questions" from clients. While some loan officers failed to follow this protocol exactly (in particular, those who had experience selling the crop insurance prior to the study), loan officers generally appreciated, remembered, and used the tools and protocol (see Section 3.3.2).

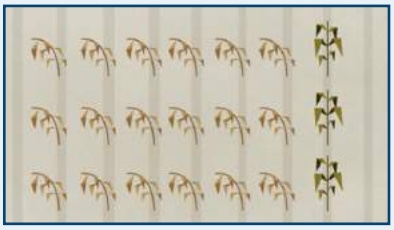
5. The crop insurance (1) is offered by Crezcamos, (2) protects the majority of the investment in a crop, (3) has low cost, and (4) is designed for small farmers.

Crezcamos staff practice the standardized offer protocol.

Box 2. Content of the video

Product is introduced with reference to the objective of protecting one's investment.

Narrator lists the main covered events (including landslides), with accompanying visual depictions.



Basic terms of the insurance (including the premium, subsidy, and coverage amount) are explained.

A claimant describes how the insurance helped him when he lost his potato harvest.

3.3.1. A video tool to standardize sales and support loan officers

A brief video on the crop insurance was developed through a collaboration among Crezcamos, Mapfre, and our research team. This video was installed on loan officers' company-provided smartphones. It was shown to clients as part of the insurance offer with the aim of standardizing the way the product was offered and aiding loan officers in explaining a complex new product to their clients. This video of approximately three minutes explains the terms of the insurance product in a simple and highly visual manner and includes a brief testimonial from a claimant (see Box 2 for an overview of the video content).

The video was designed to serve both consumer protection and marketing functions: to *inform* clients of how the insurance product works (explaining the price, coverage, government subsidy, and benefit amount) and to *convince* them of the product's value by showing how it helped a claimant recover from damage to his crop. While the video's content addressed both of these functions, it placed more emphasis on informing than on marketing. This choice was made on the assumption that loan officers are adept at finding creative ways to sell products, appealing to their clients at an individual level. However, because they are not insurance experts and because their primary focus is often on sales, they may not always be adept at explaining the details of a relatively complex insurance product.

Top: *Crezcamos loan officer watches a video explaining the crop insurance with a client and her family.*

Bottom: *Crezcamos loan officers practice calculating the insurance premium and benefit during a training session.*

3.3.2. Feedback on the sales protocol and tools

The **sales guide** (including the four key points about the insurance product) was remembered and used by loan officers. In particular, loan officers who felt nervous about explaining a complicated product appreciated the support this guide offered them to focus on the most important details of the product.

The **video** was very well received by both clients and loan officers. Crezcamos has updated and is continuing to use the video after completed the fieldwork and is considering creating similar tools for other products. Our qualitative interviews suggest that product details explained in the video were more likely to be understood and remembered by clients than those with whom information that was left to the loan officer to explain (see Section 5).

Although some loan officers preferred not to use the video for all clients, there was general agreement that it offered a clear explanation of the product, which was useful to support an informed purchase decision. Some Crezcamos staff felt that the video would be more effective if it conveyed a more powerful emotional message about the consequences of not having insurance protection. Others, however, appreciated that the video did not make a "hard" sell. Several noted that it was a good way to introduce prospective clients to Crezcamos, by showing them a new and unexpected product and explaining it clearly.

"He showed me the video, and then I saw that, yes, I could really benefit from this insurance."

—Client, describing his reaction to seeing the video when the insurance was offered

"The video is very didactic, and it gives clients more confidence about the product."

—Loan officer, reflecting on how the video supports sales

"Clients like the video and it helps them understand the product, but they don't really pay attention to the calculations."

—Loan officer, explaining how the video supports client understanding (vs. other tools)

The **calculation worksheets** were seen by most loan officers and by other Crezcamos staff as a useful tool to explain the coverage and price to clients, although some loan officers found them cumbersome and some preferred not to use them. As a part of the study, our research team developed a prototype for a phone application that could automate the calculations to make the process easier for loan officers while conveying this information to the client. While this application has not yet been rolled out due to logistical complications, Crezcamos is continuing to explore this possibility.

Crezcamos developed the management of questions and concerns, with some input from the research team. Crezcamos' insurance team used this to refresh loan officers' training, though little feedback was conveyed about its value in the sales process. Similarly, **enrollment forms** were provided by the insurer and were not subject to review for this study.

4. Study Methodology

Our research design combines a randomized control trial with qualitative research to study various elements of the crop insurance offer. Specifically, we test the impact of unbundling the insurance offer from the loan application process on purchase decisions and recall of product information. We also explore clients' and loan officers' perceptions of the insurance product, as well as aspects of the client relationship and insurance offer that may influence purchase decisions, understanding, and recall of product details.

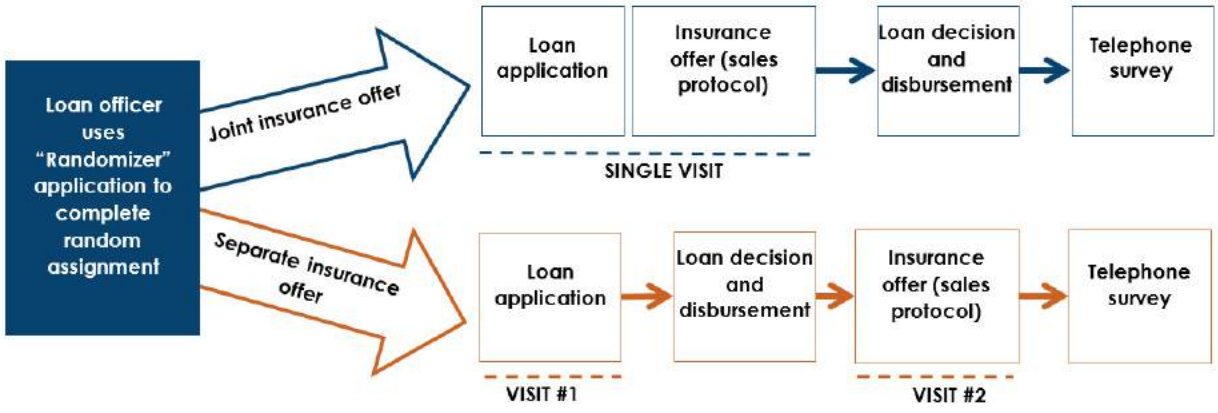
4.1. Sample selection

The quantitative sample included individual loan applicants of nine Crezcamos branch offices who had at least one insurable crop and applied for a loan between 11 March and 31 October 2015. The sample included first-time and repeat borrowers of Crezcamos, and applicants whose loans were approved and denied. It was determined that these clients would likely not be familiar with the crop insurance product as it was a new product in the region. They also share similar demographic characteristics as loan-eligible farmers.

4.2. The sales intervention

To unbundle the insurance offer from the loan application process, we randomly assigned individuals who were in the process of applying for a loan to be offered the crop insurance product at one of two distinct times: during the visit to the client's farm, or several weeks later after the loan had been processed. The protocol for this intervention is summarized in Figure 1.

Figure 1. Protocol for the Sales Intervention



Loan officers used a "randomizer" smartphone application to assign loan applicants who had an insurable crop into one of two groups.[6] The "joint insurance offer" group—the control group—was offered the crop insurance product during the same visit as the loan application—a time when other insurance products are also offered. The "separate insurance offer" group was offered the insurance during a later visit after the loan was either approved and disbursed or denied. Loan decisions and, when relevant, disbursements generally occur within one week of the loan application.[7] The second visit required to complete the separate insurance offer occurred after this time, but not on the same day as the loan disbursement. This second visit generally occurred on the client's farm, although it could also occur in another convenient location. Because the second visit needed to complete the separate offer entailed a substantial added burden for loan officers, they were offered incentives to increase compliance in this study.[8] For loan applicants in the separate offer group, loan officers did not mention the crop insurance product before the second visit.[9] At least three weeks after the insurance offer, loan applicants were contacted by telephone to complete a short survey.

4.3. Sources of quantitative data

The total quantitative sample includes 368 individuals; it comprises all valid uses of the randomizer application for a Crezcamos loan applicant who grew an insurable crop.[10] The main sources of data used in our quantitative analysis are as follows:

1. Administrative data from Crezcamos on loan applicants offered the insurance product, including demographics, loan data, and information about the farm.
2. Administrative data from the insurance company that underwrites the insurance product for individuals who purchased insurance, including the amount of coverage purchased, the crop(s) covered, and the area covered.
3. A brief telephone survey administered to individuals who were offered the insurance product, to confirm that the insurance was offered, test clients' understanding and memory of product details, and understand some basic client perceptions of the product and the offer.

In total, 154 loan applicants responded to the survey, representing a response rate of 42 percent.[11] The relatively low response rate can be explained by the difficulty of reaching farmers who work long hours and live in remote rural areas where phone signals are weak or nonexistent, despite their having access to their own or shared mobile phone. It may also reflect clients' mistrust and hesitance to share personal

6. The randomization results synced automatically to a database in the Crezcamos system, allowing the research team to track and monitor compliance.
7. At times these can be delayed for several weeks (e.g., if additional documentation or a co-signor is required).
8. Loan officers received a small cash prize for each separate offer completed. In addition, for each insurance offer (joint or separate) completed, the loan officer received an entry in a lottery to win an iPad.
9. Loan officers were instructed that if any loan applicant in the separate offer group asked them about the crop insurance before the second visit, they should proceed with the offer at that time, but we are not aware of any such instances.
10. Loan applicants assigned to the separate offer group for whom the insurance offer could not be completed (because, for example, they sold their farm or no longer grew an insurable crop at the time of the second visit) were not included in the sample (six loan applicants). When the insurance offer could have been made but was not (because, for example, the loan officer did not complete the second visit in time or the loan applicant refused the second visit), the individual was kept in the sample, consistent with an intent-to-treat analysis (13 loan applicants).
11. We attempted to contact all members of the sample for surveys—of those who could not be surveyed, about 60 percent could not be reached by telephone due to low connectivity and inconsistent access to telephones, and 40 percent refused to complete the survey.

information over the phone. Survey respondents were not significantly different from nonrespondents in their demographic or socioeconomic characteristics.[12] Respondents were, however, more likely to have purchased insurance[13] and bought larger amounts of coverage than nonrespondents.[14] To the extent that these differences bias our findings, they are biased in a way that reinforces rather than contradicts the conclusions of our study.

4.4. Descriptive statistics of the quantitative sample

Table 1 summarizes basic descriptive statistics of the quantitative sample, including demographic, socioeconomic, and loan data. Most of the loan applicants in the sample were married men who had some formal education, although few attended school beyond the primary level. They had an average of 2.9 children but only 1.1 dependents living with them at the time. The average loan size of US$1,268 represents over four months of the average income for a rural household in Colombia, according to 2014 census data (DANE 2015). This loan size reflects the relatively high investment needs in agriculture, which are difficult to finance with household income.

All individuals in the sample had some agricultural activity as their primary economic activity, and all grow at least one insurable crop (which may be a primary or secondary source of their income). Ninety percent grew an insurable crop as their primary economic activity (see Figure 2). Permanent crops (coffee and cocoa, in particular) are by far the most common primary crops (see Figure 3).

Table 1. Descriptive statistics of the quantitative sample

Sample size	368
Female	25%
Average age	44.6
Married	68%
Average number of children	2.9
Average number of economic dependents	1.1
Any formal education	93%
Average number of economic activities	2.4
Own home	70%
Loan denied	11%
Average loan amount (US$)	$1,268
Average loan term (months)	20.1
Assigned to separate offer	47%
Purchased crop insurance	23%

12. Including age, gender, marital status, number of children, number of economic dependents, home ownership, education, loan term and amount, and number of economic activities.
13. Twenty-eight percent of survey respondents and 19 percent of nonrespondents purchased insurance (p=0.048 from a t-test of the difference in take-up between survey respondents and nonrespondents; a p-value of less than 0.05 indicates a statistically significant result, while p-values between 0.05 and 0.10 are marginally significant).
14. Survey respondents who bought insurance purchased an average of US$1,567 of coverage and nonrespondents purchased an average of US$932 (p=0.039 from a t-test of the difference in coverage amount between survey respondents and nonrespondents).
15. For a family of four in rural Colombia, average household income in 2014 was approximately US$300; the national poverty line is set at US$170 for a rural household of four. Income and expenditure data collected by Crezcamos are not reliable for the purpose of this study, so we do not report them in this paper.

Figure 2. Primary economic activities, by category

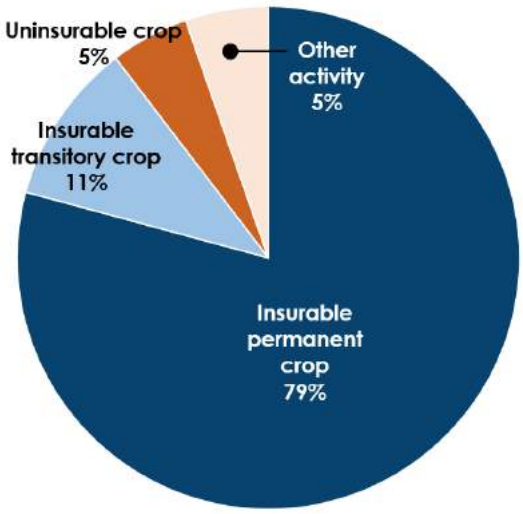
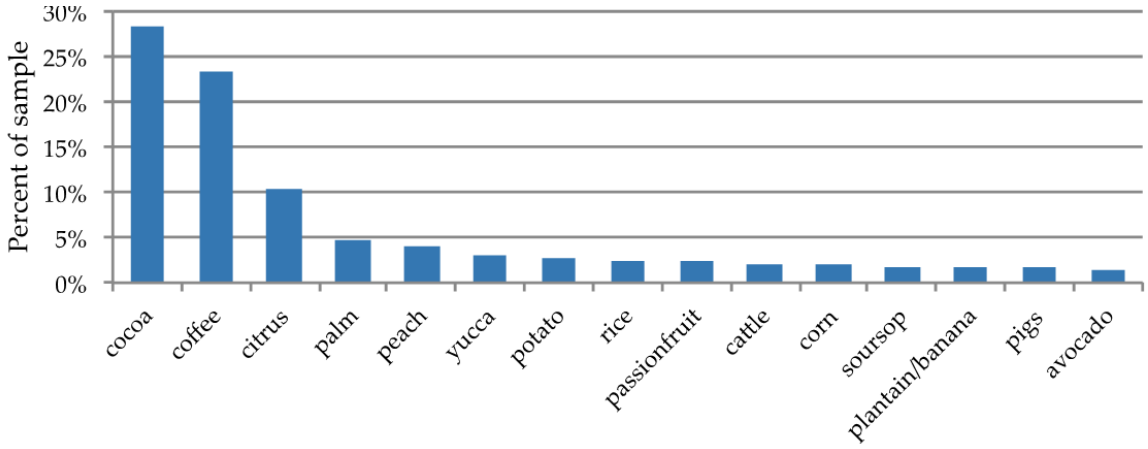


Figure 3. Most common primary economic activities



4.5. Qualitative data

Our main source of qualitative data was a series of 30[16] in-person qualitative interviews with current Crezcamos borrowers. These were identified through the three branch offices with the largest number of loan applicants included in the study (Rionegro, Lebrija, and Socorro). Clients were selected primarily based on their location vis-à-vis main roads and branches to facilitate access. They typically lived and worked on remote farms with limited road access but within 45–60 minutes of a small-town branch. Table 2 provides summary information on the qualitative sample. Most of the individuals interviewed also form part of the quantitative sample. Qualitative interviews probed the issues of trust, pressure, distraction, understanding, recall, and empowerment related to the borrowing process and the insurance offer.

Most qualitative interviews took place in borrowers' homes; others were conducted in conveniently located restaurants or, in a few cases, in Crezcamos branches. Nine qualitative interviews were held over the phone with Crezcamos clients to review and probe more deeply some of their responses from the quantitative phone survey (these are not included in Table 2).

Table 2. Descriptive statistics of the qualitative sample

Sample size	30
Female	32%
Married	64%
Permanent crop(s)	100%
Transitory crop(s)	24%
Assigned to separate offer	44%
Offered crop insurance before interview	68%
Purchased crop insurance	50%

Qualitative client interviews were complemented by insights shared by Crezcamos loan officers and their supervisors on the insurance product, the sales process, and their clients' reactions. Our research team maintained close contact with them throughout the study preparation and implementation period, and recorded the feedback they shared. During field visits, seven loan officers were interviewed individually about their sales process and their impressions of the study.[17] Focus groups were also held with loan officers from the three branches with the highest sales over the course of the study. The first took place mid-study to understand some of the hesitation loan officers showed to selling insurance and the final two at the end of the study to gain loan officer impressions of client understanding, recall, and purchase decisions.

16. Twenty-four individuals were interviewed in May 2015 and six in December 2015. In addition, nine qualitative interviews were conducted by telephone.

17. Of the 39 loan officers who participated in the study, these loan officers were selected because they had a large number of insurance offers within the study period.

5. Findings

This section explores our study's findings on clients' insurance purchase decisions, perceptions, and understanding. Although overall take-up of the Crezcamos crop insurance compared favorably to take-up of similar insurance products in other countries, we found no statistically significant impact on take-up from separating the insurance offer from the loan application process. Overall, clients purchased relatively small amounts of coverage when compared to the maximum amounts they could have purchased. Recall of the details of the product and purchase decisions after the offer was quite low, in both the bundled and separate offer groups. In addition, we find that the influences of pressure and distraction, two pathways by which bundling the products could influence understanding and purchases, are less significant than hypothesized. Clients perceived the purchase decision as truly voluntary, and the product's coverage, relevance, and price all greatly influenced purchase decisions. We describe below general findings related to purchase decisions and product perceptions (Sections 5.1–5.3), recall of information (Section 5.4), and pressure (Sections 5.5–5.6), before delving in more details into the impact of the unbundling intervention (Section 5.7).

5.1. Take-up rate was comparatively high, but average coverage was low

Take-up of the crop insurance was 23 percent across the full sample, a take-up rate higher than many recorded for agricultural microinsurance products (see Section 2.1). Table 3 summarizes clients' purchase decisions. There were stark differences in take-up between crop types, with much higher take-up among farmers whose primary crop is permanent, and lower take-up among farmers with transitory crops.[18] This difference likely reflects differences in the product structure and pricing: the insurance for transitory crops is, on average, more expensive than coverage for permanents as a percentage of the insured amount. [19] In addition, the product is perceived by many clients to be more relevant for permanent crops for several reasons (see Section 5.3).

Most policyholders purchased relatively small amounts of coverage, on average US$1,257 (about the size of the average loan amount), although coverage amounts varied substantially, ranging from US$167 to US$8,333. On average, 69 percent of the premium amount was subsidized, and policyholders paid US$13.51 out of pocket. Policyholders purchased, on average, only a quarter of the maximum coverage allowed by the insurer for their crops. Median coverage is even lower, at 17 percent of the amount allowed. We discuss some possible reasons for these purchase decisions (including price, quality perceptions, understanding, and pressure) in Sections 5.2–5.6. Take-up between the joint sale and separate sale groups did not differ, which we discuss in greater detail in Section 5.7.

Table 3. Insurance purchase decisions

Purchased insurance (% of full sample)	22.8
Permanent crop owners who purchased (% of permanent crop owners)	25.2
Transitory crop owners who purchased (% of transitory crop owners)	7.8
Average premium paid (US$)	$13.51
Average subsidy amount (US$)	$30.14
Average coverage amount (US$)	$1,257
Coverage as a percentage of maximum allowed coverage	25.1

18. Differences between the two groups in amount of coverage and premium paid could not be analyzed due to the small number of purchasers for transitory crops.

19. Presubsidy premiums are 6–9 percent of the insured amount for transitory crops and are 3–4 percent of the insured amount for permanent crops; most transitory crops also have a lower premium subsidy than permanent.

5.2. Price was highly relevant to the purchase decision

About a quarter of the survey respondents who did not purchase the insurance cited price and liquidity constraints as the reason for this decision.[20] Among those who purchased the insurance, the level of coverage also suggests a high degree of price sensitivity. Despite the high subsidies, purchasers generally bought only small amounts of coverage. This is consistent with prior studies (e.g., Cole et al. 2011; Giné, Menand, Townsend, and Vickery 2010), which find demand for microinsurance products to be extremely price sensitive. Price was particularly relevant to clients with smaller farms and loan sizes, who bought smaller amounts of coverage (both in absolute size and in relation to the maximum amount they could have purchased) than borrowers with larger loans.[21]

"When we know the client's cash flow, we sometimes begin from the bottom [of the range of premiums]."

—Crezcamos loan officer with high average premium and below-average take-up

Qualitative interviews also suggest that the relatively low amount of coverage purchased in part reflects the impact of "sticker shock" among the target clientele who had never been offered insurance products with premiums of this size and for whom crop insurance was a new and unfamiliar product. Most clients' prior experience with insurance was limited to the life and accident coverage offered by Crezcamos and other lenders, which has much lower premiums. Starting premiums for the life and temporary disability insurance offered by Crezcamos were approximately US$1.70, while the crop insurance, even at the relatively small amounts purchased, had an average premium of nearly eight times that amount. In qualitative interviews, many farmers reported purchasing insurance as a function of the premium cost rather than the amount of coverage that this premium corresponded to. Rather than taking into account their needs in case of a weather event (i.e., the amount of their original investment), these clients considered their liquidity at the time of purchase. In some cases, the inability to finance a purchase may have either reduced the willingness to pay higher premiums or delayed the purchase decision.

"I start to quote insurance from the amount needed to cover the client's investment in his crop."

—Crezcamos loan officer with lowest average premium and highest take-up

While liquidity was broadly relevant to decision-making for many clients, a minority of clients were constrained by their income. For these clients, low income and an overall limited capacity to pay (regardless of the availability of financing for the premium) also influenced their decision. Crezcamos loan officers noted that a small number of their agricultural clients (estimated at 15–25 percent) are subsistence farmers who have limited or no spare cash at the end of the month after paying their bills.

Qualitative interview responses suggest that other considerations beyond liquidity and income constraints may have also influenced their willingness to pay. Some clients said they began at a low premium amount to "try the insurance out" because it was their first crop insurance purchase. Others suggested they may have bought a low amount as a way to avoid rejecting the offer altogether, though they were not convinced of the product. Several loan officers understood their clients' financial constraints and behaviors and refrained from offering larger amounts of coverage from the onset, claiming that they would "lose the client" or "scare the client" if they introduced the product with a large coverage amount. Instead, they began the sale by immediately offering small coverage amounts to some of their clients rather than guiding them to

20. Other common reasons given for nonpurchase included concerns about the product's relevance or quality (together, accounting for approximately 40 percent of the reasons for nonpurchase and discussed in Section 5.3) and delays or other logistical problems (14 percent of nonpurchasers).

21. Insurance purchasers with a loan size below the median amount bought on average US$988 of coverage, or 22 percent of the maximum coverage they could have purchased. Those with a loan size above the median bought on average US$1,514 of coverage, or 28 percent of the maximum coverage they could have purchased.

think in terms of the amount invested and the cost of replacing their plants. In the case of loan officers who felt their clients were able to pay for more coverage, some noted that they instead offered to cover the full amount of the investment from the onset, and would reduce this amount only at the insistence of the client. In many cases, according to loan officers, this latter strategy would lead clients to reject the offer altogether.

5.2. Perceptions of the product's quality and relevance varied but were generally positive

Perceptions of the product shared during qualitative interviews were generally positive, even among nonpurchasers, who often thought that the product could help some people or that they might purchase it in the future. A small minority did not find the product useful at all. Table 4 summarizes the positive and negative attributes of the product reported by clients in qualitative interviews. The main explanations respondents gave for the product's value were its accessible price and the importance of the covered risk. Complaints about the product centered on the risks and events it does not cover and/or the respondent's other means of dealing with climate risks.

Table 4. Client perceptions of the crop insurance (qualitative interviews)

Positive attributes of the product		Negative attributes or reasons the product is not relevant	
The risks it covers are important.	*"The world has changed… and you can never know when that type of weather damage will come here."*	**It doesn't cover my most important risks**	*"My greatest risk is related to market price, especially with the pigs—the costs are consistent and very high, but the price in the market varies a lot."*
	"I think a lot about the risks of my crop."	**I'm very unlikely to get anything from it**	*"Last year I lost half of my guanabana crop, but the trees didn't die."*
Price is accessible and/or subsidy is helpful.	*"Last year, there was a bad drought in the summer."*	**I don't face very much risk, or I cope with my risk in other ways**	*"We chose to plant the crops we have because they're less risky"*
	"The price is economical for what it covers."		*"The farm is secure. Yes, there are risks, but we won't lose all of the crop."*
It protects my investment.	*"It wasn't expensive… that's why we bought it."*	**I can't afford it**	
	"It's a manner of protecting our work."		

Relevance of the coverage seems to have been the single most important determinant of purchase decisions. Among nonpurchasers who responded to our survey, the most common reason given for failing to purchase the product was that it was not relevant to their needs (cited by 39 percent of self-reported nonpurchasers). Of these people, about half referred to the limited climate risk their crop faces or the steps they have already taken to mitigate that risk.

22. About a quarter of respondents mentioned the product's price and/or liquidity constraints as a reason for not purchasing. A smaller number of respondents did not buy because they did not trust or know enough about the product (11 percent), because their loan was delayed or not approved, or other logistical problems (14 percent).

In qualitative interviews, nonpurchasers universally described the product as covering only a small portion (one-third or less) of the total risks their crop faces. However, even among purchasers, who saw the product as valuable, some reported that it covered only a small portion of their risks. While they understood that the product plays a limited role and were aware of the important risks that it does not cover, they still viewed it as valuable.

Loan officers' perceptions of the product were also generally positive. The importance of the covered risks resonated with them, in particular as a failed crop can impact a borrower's ability to repay the loan. Loan officers also recognized the potential of the product to differentiate them from other lenders who do not offer anything similar.

A clue about the importance of product relevance in determining take-up emerges when we analyze insurance offers for permanent and transitory crops separately (see Table 5). For permanent crops there is no difference in uptake between the joint and separate groups. However, among insurance offers for transitory crops, no borrower in the separate offer group purchased the insurance.

The preference among farmers for covering permanent crops can also be partially explained by the product losing relevance when the offer happens too late in the growing cycle. This may have been particularly relevant for separate insurance offers, which were made several weeks after the loan application. A similar delay would not have impacted the product's relevance to a permanent crop, as that coverage is not linked to a growing season. This nuance suggests that the product was understood and valued for its relevance by clients at the time of the offer. We expand on the understanding of the product by clients in the next section.

Many Crezcamos borrowers have diversified income streams, including various crops, livestock, and nonfarm income.

"Because of that weather event, my client defaulted... she lost her crops, and had no means to pay the loan."

"It's another product we have to offer clients. Other lenders don't have this insurance."

"My client came into the office the other day to claim 7 million pesos. When she bought the insurance, her husband was very angry that she wasted her money. Now they both came in and told me I was their good friend."

—Crezcamos loan officers, reflecting on the benefits the products may have to them

Table 5. Take-up among transitory and permanent crop holders

	All crops (n=366)	Permanent (n=315)	Transitory (n=51)
All offers	22.8%	25.2%	7.8%
Joint offers	24.5%	26.5%	13.3%
Separate offers	20.9%	23.8%	0.0%

Although some transitory crop holders in the joint offer group purchased the insurance, take-up in this group is still far lower than it is for permanent crop holders. This may also be driven by the product's perceived relevance for different crops. The term of coverage is shorter for transitory crops than for permanents.[23] When coupled with higher premiums, this led some clients to perceive coverage for transitory crops as offering lower value-for-money, though it is also more likely to result in a benefit. Further, about half of our sample grew either coffee or cocoa as a primary crop. These are permanent crops that are in general more vulnerable to climate risks than other permanent crops in the region. They are also among the most profitable crops in the region, and require substantial investment and care, suggesting a high return on investment but also high risk.

5.4. Product understanding was relatively high, but recall was low

Qualitative interviews with both clients and loan officers suggest that the sales protocol used in this study succeeded in conveying to most clients the information they needed to make an informed purchase decision. However, despite this good initial understanding, survey responses reveal low recall of product information, reflecting a possible gap in clients' ability to maintain and use their policies effectively without additional support from Crezcamos. The low recall we find is consistent with the literature (see Section 2.6).

Qualitative interviews revealed that at the moment the crop insurance is explained to them, clients generally understand the pertinent details quite well. To test this hypothesis, we interviewed clients about the loan officers' (earlier) insurance offer but also asked loan officers to repeat sections of the sales protocol during visits and asked clients for feedback immediately after. This approach enabled us to better understand how clients understood and perceived the product at the time it was explained to them.

Clients felt that their loan officers were able to explain the product clearly and answer any questions they had. Most felt that they understood the product well enough to make a decision, although a few described the explanation as rushed. Immediately after viewing the video and hearing the loan officer's explanation of the product, clients could explain the basic features of coverage, including the events covered, the damage their crop must suffer to be eligible for a claim, the approximate price, and the coverage amount. Some were able to point to more detailed features of the

"[My loan officer] is very helpful; if I have a question or need anything, he explains it to me."

"I didn't have any doubts after the explanation."

"[The loan officer] didn't really spend much time explaining the insurance. He said an estimate of the price, but I don't remember. It was very fast—I think he was in a hurry, and I also had to get back to work."

"We were working on the farm when our loan officer arrived but we still took the time to listen to him for a long time so that he could explain [the product]."

—Crezcamos clients, expressing different views on the amount of information they were given

Crezcamos loan officer and client watch the crop insurance video together.

23. Coverage for permanent crops is annual, while the length of coverage for transitory crops is linked to the crop cycle (150–300 days).

product, such as the government subsidy, which is featured prominently in the video. Many also understood there was a small deductible portion that would not be covered. It was also clear that photos of their crops would be taken prior to enrolling, and that an assessment would take place in the case of a climate event to evaluate their eligibility for a claim payment. There is suggestive evidence from both loan officer and client interviews that information on topics not included in the video was less consistently communicated and less clearly understood. For example, one client we interviewed one day after the insurance offer noted that he was never told an exact coverage amount (this information is not included in the video because it is based on an amount ostensibly chosen by the client). Some loan officers also noted that instead of using worksheets to calculate premium and benefit amounts for clients, they sometimes estimated these numbers.

We measured recall of product details at a time three or more weeks after the insurance offer through telephone surveys. Despite understanding product details well initially, both qualitative interviews and survey responses suggest that clients struggled later to recall this information. In qualitative interviews, clients who had been offered the product more than a few weeks earlier generally needed to be reminded of the details of the product. Many survey respondents failed to remember even the most basic information about the product and their purchase choices. We believe that the survey responses may underestimate respondents' recall,[24] but in any case they reflect substantial gaps in memory. Thirty percent of survey respondents answered incorrectly whether or not they purchased the insurance—nearly all of these were individuals who reported purchasing the insurance but for whom a policy was not issued.[25]

Table 6 summarizes the recall of product and purchase decisions among purchasers.

Table 6. Recall of product and purchase decision (among purchasers)[a]

	% of purchasers
Incorrectly reported that they did not purchase insurance	4.65
Incorrect or do not remember the premium paid[b]	58.54
Incorrect or do not remember crop covered	29.27
Incorrect or do not remember covered events[c]	58.54
Incorrect or do not remember benefit amount[d]	96.96

a. Responses from telephone survey (n=41)

b. Responses within 10 percent of the actual premium paid were considered correct. Eighty-one percent of nonpurchasers did not remember the amount they would have paid if they had bought, but where non-purchasers mentioned a price they would have paid, their response could not be verified.

c. Gave one or more incorrect response to the question "what risks or events does the insurance cover?"

d. Responses within 10 percent of actual benefit amount were considered correct.

24. Audits of survey results suggest that some respondents may have misunderstood some of questions they were asked about product details.

25. Audits of survey results suggest that some respondents may have misunderstood this question (perhaps thinking that it referred to other insurance purchased through Crezcamos); it is also possible that some of these respondents thought they enrolled in the crop insurance but there was some problem in the enrollment process, although we did not investigate this directly.

While nearly all purchasers correctly remembered having purchased insurance, recall of other relevant information was far lower. Fifty-eight percent of purchasers showed some confusion about the covered events, giving at least one incorrect answer when asked what events are covered. Nonpurchasers were even more likely to answer this question incorrectly.

One of the main risks of poor recall is that clients may forget to renew policies. In the case of Crezcamos, this risk is particularly relevant due to the mismatch between loan and insurance terms: insurance policy terms vary between 3 and 12 months, while loan terms vary between 3 and 36 months. A branch manager noted that recently, a client arrived at the branch infuriated that he was not reminded to renew his policy. His mango crop had suffered a loss only a few weeks after the policy lapsed and he had no way of making a claim. Another risk is that policyholders who suffer from weather-related events might not make a claim at all because they don't recall owning insurance or how the claims process works. Some policyholders may have unrealistic expectations about the size of a payout because they do not remember the coverage amount. A loan officer shared the story of a client who received a small payout when he made a claim, and was surprised and disappointed by how little he received. However, the loan officer recounted that the client was ultimately happy because "at least he received something."

Failure to recall certain details of the insurance product, however, should not always be considered a problem for the policyholder. Few individuals, in developed and developing countries alike and regardless of their education level or socioeconomic status remember detailed features of their insurance contracts. However, low recall points to a need for additional support (by reminding clients of pertinent information at times it is needed or helping them make claims, renew coverage, or take other steps needed to use the product effectively). Here, both information and support are available at the Crezcamos branches, where loan clients make monthly loan payments in person or through family members. Indeed, when asked during qualitative interviews what they would do if they experienced an insured loss, most clients responded that they would call a loan officer or visit a Crezcamos branch. One client instead referred to contact information of the insurance company on his policy certificate. Reminder systems might also be established, though they must be tailored to the needs and habits of the clients. We discuss the relevance and use of reminders further in our conclusions below.

5.5. Direct pressure to purchase the product was almost completely absent

The study design required Crezcamos to shift its approach to selling the crop insurance. Prior to the study, the insurance team trained loan officers that when a loan applicant had an insurable crop, the loan should always come with insurance. While it was not technically mandatory, loan officers' performance was measured against their ability to sell a policy with every agricultural loan. Our study design relied on a transparent and voluntary process, with little or no direct pressure to purchase. This was necessary for purchase decisions to reflect only the (standardized) sales process and the impact of the timing intervention.

Loan officers, using the sales protocol described in Section 3.3, were successful in conveying the voluntary nature of the product. Very few of the loan applicants surveyed (3.8 percent) reported feeling pressure from Crezcamos or from their loan officer to purchase the product. Additionally, had clients perceived a link between insurance purchase and loan approval, we would expect to have detected a higher take-up rate among the joint offer group, which was not the case.

Qualitative interviews also underscored that clients truly perceived the product as a voluntary offering. No clients who were offered the crop insurance since the study began (and since the standardized offer protocol was implemented) mentioned in qualitative interviews feeling pressured to buy the product, and all understood that they were free to turn it down. This approach also stands in contrast to the way other insurance products are sold by Crezcamos staff. In particular, the sale of voluntary life insurance is integrated

"I knew it was voluntary, but my loan officer said I had to buy it to get the loan.... It would be best if, when we said no, they would just accept the 'no.'"

—Borrower who, before the study began, had been pressured to purchase the insurance

"It's not obligatory... you feel free to make a choice."

"It was just an offer, not a requirement."

"I knew my decision wouldn't influence my loan approval."

"[My loan officer] explained all the benefits, but I decided I don't want it. He said 'OK, that's fine.'"

—Crezcamos borrowers who were offered the crop insurance during the study, reflecting on the offer

"People assimilate the information we are explaining better [when it is a voluntary sale]. Even if they don't buy the insurance right away, they will ask for it later."

"Before, we had to insist and pressure clients, because we had the obligation to sell. Now, our role is to convince them."

—Crezcamos loan officers, reflecting on the shift to voluntary offers

into the loan application so seamlessly that it can be overlooked by the client or perceived as an automatic part of the loan process, rather than a distinct choice. When asked in qualitative interviews about any other insurance coverage, respondents were more likely to mention the insurance they have through other lenders than the products Crezcamos offers. However, nearly three-quarters of Crezcamos borrowers are covered by the voluntary life insurance and all are covered by the mandatory credit-life product, which suggests that some people who purchase the Crezcamos life insurance products are not fully aware of their coverage.

5.6. Some clients may feel indirect pressure to purchase insurance, linked to low levels of empowerment

Even in the absence of direct pressure or obligation to purchase a product, it may be possible for a client to feel compelled to buy it. This more indirect pressure could be a result of the power dynamics between the loan officer and applicant or the stress of applying for a loan. Our qualitative interviews explored these issues and found that different clients experience the relationship with the loan officer in very different ways.

When we asked to reflect on the relationship of borrowing and the loan application to empowerment, clients gave a wide variety of responses. About two-thirds felt empowered during the loan process, because they were confident they would get the loan and/or because they knew that if denied, they could get a loan elsewhere. The other third felt disempowered, generally because they thought there was a chance of being rejected, because they needed the money urgently, and/or because they felt uncomfortable that their ability to pay was being examined. Additional reasons cited for feeling less empowered included having less understanding of financial issues than the loan officer or lower levels of education.

Crezcamos loan officers generally expressed the view that their clients dominated the relationship during the loan application. Loan officers were keenly aware of the choices their clients have as a result of highly competitive credit markets in the region. Some loan officers expressed reluctance to offer a product if they are expected to obligate clients to buy it. Some mentioned feeling nervous when offering the product because it was complicated and unfamiliar to them: "In the beginning, we felt less empowered, we didn't know how to sell. Now we do." Others, however, recognized that some of their clients are more amenable

"I feel in control when I'm applying for a loan; I don't have any doubt that I'll receive it."

"It makes me feel good when the loan officer visits my farm. They recognize that, yes, we're working hard."

"I knew I would get the loan; I have good credit."

—Crezcamos borrowers who feel empowered during the loan process

"When I'm applying for a loan I feel nervous... I'm thinking about the possibility that it won't be approved."

"I worry that I won't be approved, that I don't have the right papers, that they'll ask for a guarantor (which I don't have)."

"One feels she has less power because they know more than I do [about insurance], they have studies."

—Crezcamos borrowers who feel disempowered during the loan or insurance sales process

"I get nervous that they [clients] will ask a lot of questions."

"We are afraid that clients will see the insurance as an obligation; we've lost loan clients because of this."

—Crezcamos loan officers, reflecting on their insecurities early in the study when offering the product

to follow their advice, particularly those with low levels of education or who were nervous about having their loan approved. They understood that there are clients who feel less empowered than others. Specifically, they referred to some clients with low levels of education or clients who were nervous about having their loan approved as more willing to agree to their loan officer's suggestions.

In sum, although clients did not feel direct coercion or obligation to purchase the insurance, some may have felt some indirect pressure. This pressure may be felt particularly strongly by more vulnerable clients, who are more likely to feel overwhelmed or intimidated by the loan process or by their lack of familiarity with insurance.

Crezcamos loan officers in Socorro, Santander

5.7. The unbundling intervention did not influence clients

Separating the insurance offer from the loan application through the unbundling intervention did not impact take-up. The take-up rate was higher in the bundled offer group (24.5 percent) than in the separate offer group (20.9 percent), but the difference is not statistically significant (see Table 7). We analyzed the data using simple t-tests as well as more robust regression models; all suggest that the difference is not statistically significantly different from zero. We also estimated heterogeneous impacts by loan applicant's gender, age, education level, loan size, and crop type.[26] None of the regression coefficients was statistically significant, and the coefficients themselves vary little from subgroup to subgroup.

26. Although we find a statistically significant difference in take-up between the joint and separate offer group among transitory crop holders, this difference seems to be driven by lower perceived relevance at the later time, rather than from unbundling the offer from the loan application (see Section 5.3).

Table 7. Take-up in joint and separate offer groups

	All offers	Joint offers	Separate offers	p-value[27]
All crops (n=368)	22.8%	24.5%	20.9%	0.418
Permanent (n=317)	25.2%	26.5%	23.8%	0.587
Transitory (n=51)	7.8%	0.3%	0.0%	0.084

We hypothesized that separating the offer of insurance from the loan application process might affect take-up rates and understanding: (i) borrowers offered the insurance after their loan had been processed might be less stressed and worried about their loan application, less likely to be cognitively overloaded, and more likely to be receptive to information about a new and complex financial product, and (ii) lower stress and cognitive load would translate into a higher understanding of the product. We now turn to estimating the importance of each of these factors.

"I had been working in the field, but I came to my house to speak to the loan officer. I stopped working."

—Loan applicant who was not distracted by work at the time of the loan application

First, distraction caused by the work or household responsibilities interrupted during a loan officer visit, the multiple questions required for the loan application, the need to find documents and bills to show loan officers, and the stress of understanding and applying for a loan could create distraction which might lead an individual to put off the purchase of another product, or to understand or remember less about a product he purchased.

"It was at the same visit, but I didn't feel distracted by the loan. "[When we talked about the insurance], we'd finished talking about the loan. It was a separate moment."

—Loan applicant who perceived the insurance offer as distinct from the loan process

However, respondents in qualitative interviews who had received the insurance offer during the same visit as the loan application did not directly report being distracted by the loan application process when their loan officer explained the insurance, nor did their responses indirectly suggest that they might have been distracted at that time. Clients generally perceived the insurance offer as distinct from the loan process, which ended before the insurance was brought up. They felt that they were sufficiently able to focus on the insurance offer and to make a sound decision at that time.

"It makes sense to buy crop insurance from Crezcamos, because they are lending me money for the crops."

—Crezcamos client, reflecting the salience of the insurance offer during the loan application

Loan officers also perceived the joint offer as more effective, in large part because the risk is most salient at the time of the loan application, given the large investment clients are planning to make in their crops. They reported that loan applicants are thinking about the productivity of their crop and their capacity to repay the loan, and are more receptive to an insurance product that protects their investment at this time.

27. P-value from a t-test of the difference in mean take-up between the joint offers and separate offers groups.

Table 8. Recall of product information in the joint and separate offer groups

	All offers	Joint offers	Separate offers	p-value
Responded incorrectly to survey question "did you buy the crop insurance?"	29.9%	24.7%	36.2%	0.122
Don't remember premium charged	70.1%	64.7%	76.8%	0.104
Incorrect about covered events	68.8%	69.4%	68.1%	0.864

Loan applicants receiving both the joint and separate offers showed limited recall of the details when surveyed over the phone. Table 8 summarizes the accuracy of respondents' survey responses on product information in the joint and separate offer groups.

Overall, nearly 70 percent of clients did not recall the premium charged for the insurance[28] and a similar proportion made errors in describing the covered events. The differences in recall of product information between the two groups are not statistically significant, either when analyzed with t-test (as shown in Table 5.5) or in a regression framework.[29] The averages, however, suggest that people who were assigned to the separate offer group may have recalled less than those receiving the joint offer. Because clients were randomly assigned into the two groups, any differences in recall at the time of the survey should reflect differences in initial understanding (rather than differences in the amount of information forgotten between the offer and the survey). This runs contrary to our hypothesis that the joint offer, through distraction and "information overload" associated with the loan process, might result in clients understanding and retaining less information, and suggests that bundling the offer of several financial products may exploit a moment of attention to a specific activity, in this case, their crop investment.[30]

Crezcamos borrower shows his coffee seedlings to researchers.

28. It is likely that many of the remaining 30 percent of respondents, who gave some cost in response to this question, did not recall the exact price (though the price offered could not be verified for those who chose not to purchase).
29. Including standard errors clustered at the branch level.
30. Clients who received insurance in a joint offer may also have been more likely to be reminded of the insurance by promotional materials at the Crezcamos branch when they visited for loan disbursement shortly after the loan application. Separate offer clients also would have been exposed to the same materials, but before their insurance offer when it was likely less salient to them. Those clients may or may not have revisited the branch between the insurance offer and the survey.

6. Conclusion

Sales of agricultural insurance to low-income farmers are constrained by low consumer demand, partly influenced by products that were poorly designed, unaffordable, or sold ineffectively. Our study reveals some of the factors influencing consumer choice and behavior to better understand the opportunities and constraints to purchases of crop insurance, particularly as they relate to the loan application process. In contrast with our initial hypothesis, we do not find any overall impact on take-up or understanding from unbundling the insurance offer from the loan process; Section 6.1 reviews the possible limitations and implications of this finding. While many agricultural insurance programs struggle to reach even middling levels of take-up, our research suggests that a bundled crop insurance product for low-income farmers can have comparatively high overall take up if it is voluntary, affordable, perceived by farmers to be relevant to their needs, and well-understood. In Section 6.2, we discuss the implications of each of these features in light of our study findings. Regardless of how the product is delivered and explained, recall is likely to be low after only a short time; this suggests an important role for reminders and other ongoing support, which we discuss in Section 6.3. Finally, we identify in Section 6.4 implications from this study for programs considering the bundling of other types of financial products and services.

6.1. Distraction and cognitive load did not affect take-up, understanding, or recall

We tested whether distraction and cognitive load during the loan process played a role in decreasing take-up or understanding of the crop insurance product by randomly assigning some clients to receive an unbundled offer at a separate time after their loan was approved or denied. Contrary to our hypothesis, however, separating the insurance offer from the loan application process did not increase take-up of the product, nor did it improve clients' understanding or recall of purchase decisions. Our qualitative research suggests that distraction was not a relevant influence for Crezcamos clients during either the joint or separate offer. Even when the insurance was offered during the same visit as the loan, it was perceived as a distinct stage, after the loan paperwork had been completed. The unique context in which this product was offered (i.e., in a quiet spot at the client's home, with limited time pressure) may have contributed to the limited importance of distraction. In another context, such as a crowded marketplace, distraction may play a far greater role; adding a new product offer in that context could lead to information overload and different take-up and understanding results than a separated offer in the same context.

We also hypothesized that some clients (particularly those receiving the joint offer) might feel some pressure to purchase insurance even if it was explained to them as voluntary, for example, if they thought the insurance purchase might influence their loan approval. Overall, we do not find strong evidence of any such pressure, although there is some suggestion that more vulnerable clients or those who were more worried about their loan being denied might have felt some pressure. In another context, with loan applicants who have less experience borrowing and/or fewer available lenders to choose from, the influence of pressure during a bundled offer might be much greater.

6.2. Drivers of client purchases

Voluntary

The approach to offering crop insurance adopted in this study was successful in making clients' purchase decisions truly voluntary. This may have reduced overall take-up but contributed to clients' good initial understanding of the product. This approach required a shift in thinking for loan officers and other staff. It relies on informing and convincing clients of the insurance product's value, rather than pressuring or insisting. From a consumer's perspective, a truly voluntary offer, combined with sufficient information, grants them autonomy to make choices about the financial services they use. This autonomy can empower customers

in relation to their financial service providers by conveying the message that they can be trusted to make good decisions on their own behalf. Whether or not they purchased the crop insurance product, Crezcamos clients who had been offered it appreciated the offer and the loan officer's respect for their decision.

While the shift to voluntary sales is likely to decrease sales (and commissions) in the short term, it may lead to medium-term commercial gains for the financial service provider. Crezcamos loan officers perceived this shift positively. Making a new product, which other lenders do not have, available to customers has created an opportunity for Crezcamos to differentiate its product offering in a competitive market. Offering that product voluntarily rather than obligating or pressuring clients has created a new opportunity to build and strengthen customer relationships and differentiate its customer service from that of other lenders. It also protected the competitive terms of their loan product, which was not automatically burdened with additional costs of the insurance for those who did not want it. Finally, when loan officers offer voluntary products they must convince clients of their value, rather than relying on obligation on pressure to make the sale; this may ultimately increase clients' satisfaction with the bundled product.

Relevant

Perceptions of the product shared during qualitative interviews were generally positive, even among nonpurchasers, who often thought that the product could help some people or that they might purchase it in the future. Respondents with favorable opinions cited its accessible price and the importance of the covered risk. Complaints about the product centered on the risks and events it does not cover, including price (market) risk, plagues, low yields, and the risk of illness or disability that might restrict farmers from work. They also considered that respondents had access to and used other tools to mitigate climate risks. The broad range of risks, and of available tools to mitigate risk, speak to the importance of offering coverage that is relevant to insured populations.

At 23 percent, take-up of the crop insurance compares favorably to similar products in other contexts but leaves many Crezcamos clients with no insurance coverage. Among those who bought the product, the levels bought were quite low—on average a quarter of the coverage allowed. Price sensitivity, perceived limitations of the product, and the novelty of the insurance product may all have contributed to these low levels of coverage. While Crezcamos borrowers have experience with other types of insurance, crop insurance is a new and complex concept for them. Experience with the product and hearing about claims that are paid may build trust, leading to greater take-up rates and higher levels of coverage over time.

Crezcamos staff view the low level of coverage that clients purchased as inadequate to meet their needs. However, some clients may disagree. Insurance is only one tool of many that these farmers can use to manage the risks they face. It covers important (and growing) weather risks, but does not address their other risks. Moreover, especially in the case of permanent crops, the crop insurance covers only extreme events. To cope with the remaining risk, farmers turn to income diversification, commonly growing a range of transitory and permanent crops, raising livestock, and/or working outside the farm. The region of Colombia in which our study took place is uniquely well-suited to support this type of diversification. Farmers also choose crops, inputs, and technical strategies to mitigate risk. Given their keen awareness of the risks they face, as well as the many tools they already use to mitigate that risk, it may not be surprising that some farmers, even while viewing insurance as useful, choose to purchase only a small amount of coverage. The truly voluntary insurance offer leaves farmers free to make this purchase decision in light of their own understanding of their risks and the tools available to mitigate them.

Affordable

Cost was an important factor in customers' purchase decisions, which suggest a high degree of price sensitivity that is consistent with prior studies of insurance demand. Lower take-up of the (more expensive) insurance for transitory crops is one reflection of this, as are the low levels of coverage that most clients purchased. Cost was particularly relevant for those with smaller farms and loan sizes, who bought smaller amounts of coverage (both in absolute size and in relation to the maximum amount they could have purchased) than other borrowers. As smaller, lower-income farmers may be more price sensitive than others, it may be useful to engage in a segmentation strategy that targets the smallest farms and/or loan sizes with a particularly small and affordable crop insurance option. Anecdotally, both clients and loan officers pointed to the importance of the government subsidy in making the product affordable. This is consistent with prior studies of agricultural insurance, which find higher take-up in programs with subsidies (Hill and Robles 2010; Cole et al. 2013).

Understood

By using both quantitative surveys and qualitative interviews, our study was able to gain insight into both clients' initial understanding of the product and their later recall of product details. Overall, the information delivered to clients through the standardized sales protocol (particularly the video) was considered useful by both loan officers and clients in delivering information about a highly complex product effectively. These tools conveyed some of the most critical elements of the product that enabled clients to make a voluntary and informed purchase decision. Our qualitative interviews revealed that when the protocol was applied, clients understood the basic features of the crop insurance quite well: the events covered, the deductible portion that would not be covered, the government subsidy, the process for enrolling, and that an assessment would take place in the case of an insured event. Our study suggests that understanding can be tackled with appropriate and informative sales tools, and that even farmers with low levels of education and knowledge of insurance can understand the main features of a relatively complex product. These informational tools (video, worksheet, "key points," and guided answers to common client questions), coupled with a strong awareness that a product is voluntary, appeared to effectively motivate farmers to make an informed choice as to whether to purchase crop insurance. Our study also points to important issues around the protection of low-income consumers. Specifically, when farmers felt less empowered, either because of their lack of certainty about the outcome of their loan process, or because of other dynamics, they may have felt subtle pressure to purchase the insurance. In such cases, having appropriate training, policies, and controls in place at the institutional level can help to reinforce the emphasis on voluntary sales by frontline staff.

6.3. Low recall suggests a need for ongoing support

While clients understood the product's main features in the moment it was explained to them, this understanding did not translate into lasting recall, even among those who purchased the product. Some customers failed even to remember whether they purchased the product, and a majority failed to recall the amount and events covered correctly. This information is essential to use the insurance effectively. When clients do not remember having a policy, they will not make a claim unless reminded. When clients are not familiar with the claims process, they may not know how to initiate a claim or may have unrealistic expectations about a payout that is due. When clients have incorrect expectations of a payout, they may be disappointed to later receive a much lower amount. And when clients do not remember the insurance policy's term or know how to renew, they may unintentionally experience a lapse in coverage.

Lack of recall may also diminish the product's value in another way: one of the main sources of value that agricultural insurance is intended to promote comes through incentivizing farmers to make more profitable investments in their crops. When farmers do not remember the insurance coverage they have purchased, it is unlikely to translate to these positive incentives.

The slightly better recall by clients who were offered the insurance jointly with their loan suggests that efforts to make the product more relevant, for example, by selling it at a time when clients are focused on their crop investment plans, may help clients to retain more information. However, even in this group recall of necessary information was very low, suggesting that ongoing post-sales support is needed and that reminders of coverage may be useful. Understanding the most appropriate content and channel for reminders is critical. They should be designed carefully and implemented judiciously. Too frequent or indiscriminate SMS or phone reminders may not be appreciated or may confuse clients. Rural clients are often not near their phones, and often don't have cell phone signals for hours at a time. Reminders that are both contextually appropriate and delivered at appropriate times are most likely to be appreciated and useful. Feedback from Crezcamos staff suggests that reminders will be well-received only if they are targeted, individualized, and extremely salient (e.g., if combined with the forecast for an upcoming weather event or news about a recent payout on the insurance policy). Loan officers and branch staff may also play a role in reminding clients of coverage when they may be eligible to make a claim or to renew before their policy expires.

6.4. Implications for financial service providers bundling other products and services

Our study hypothesized that there might be important pitfalls and constraints associated with bundling crop insurance, in terms of client understanding and/or purchase decisions. By contrast, our findings suggest that bundling may, in some contexts, create valuable opportunities rather than constraints. From the supply side, it reduces the cost of delivery, which is particularly important in rural areas where loan officers travel large distances to visit clients. From the demand side, rather than impeding comprehension, our study supports a cautious suggestion that selling insurance at a time when farmers are thinking about their investments in their crops (during the loan application) may help increase the perceived relevance of the product and lead to greater understanding and recall.

We consider the insights from this study into the opportunities and pitfalls of bundling financial products and services for low-income clients beyond the specific context of Crezcamos and its crop insurance. Many financial service providers in developing countries have developed cross-selling and bundling strategies aimed at offering clients a more diverse and relevant set of services, and increasing the marginal gain from costly service delivery. Credit clients might be offered savings accounts, debit cards, or insurance services. Remittance clients are offered deposit accounts or insurance. Borrowers are often provided with nonfinancial services such as health education and business services. Our study shows that bundling does not necessarily reduce the relevance or understanding of "secondary" services, nor must it place excessive pressure on clients' cognitive load. We find that clients can pay attention and understand their options even in a bundled offer, making informed choices. Standardizing the tools available to loan officers to explain and sell products can help ensure that the information offered is complete and consistent, particularly when loan officers themselves may feel pressure to explain a service that they are not yet confident about.

The greatest pitfall to the sale of a relevant and affordable secondary product, whether offered jointly with a "lead" product or separately, appears to be low recall of product details (assuming the product is otherwise relevant, affordable, and understood). Crop insurance, in particular, is a complex product with multiple salient characteristics: the covered event, damage required, covered crops, deductible, premium, benefit amount, claims process, etc. Clients are unlikely to remember all of these details for very long. This is not necessarily a problem, because they are not called on to do so in their daily life. However, there will be moments where remembering the salient characteristics of a secondary product is crucial. For crop insurance, damage from weather events will trigger this need. Greater simplicity in product design can help

to ensure that clients remember the pertinent details. This would involve trade-offs, however, given that the product's complexity is closely tied to its attempt to cover a broad range of products with large differences in probability of damage due to weather events. A narrower product for the three main permanent crops (coffee, cocoa, and citrus), might be simpler but could also exclude some farmers who do not grow these crops.

However, even with simpler products, recall should not be assumed to follow from initial understanding, but rather encouraged throughout the lifetime of a customer's engagement with the provider. In the case of Crezcamos, the microfinance institution offering the insurance is the party best-suited to provide these reminders. It is a trusted institution that has an ongoing relationship with the client in connection with the "lead" credit product. Clients are aware of the physical location of branches and have regular contact with their loan officers, as well as the ability to contact them when a need arises. The delivery channel is thus well-positioned to be a resource for clients who need reminders of the crop insurance.

The case of Crezcamos suggests that the responsibility to protect consumers in low-income settings might fall disproportionally on the distribution channel. In an ideal setting, consumers, distribution channels, insurers, and regulators would all share the responsibility of ensuring that consumers have the information and support they need. However, in practice, the allocation of responsibility may not be equal.[31] In rural Colombia, our study found that consumers generally understood but did not remember important details of crop insurance they purchased. The insurance company is located in the capital, far (in both distance and culture) from the farms of its end clients, and is not prepared or well-suited to communicate directly with them. At the same time, regulation generally emphasizes the disclosure of information at the time of sale, rather than post-sales support. This ecosystem leaves the distribution channel with the burden of providing ongoing support, which is not mandated but needed in practice to protect the consumer. Microfinance institutions and other distribution channels close to clients may be well-suited to bear this responsibility, but may not always have the tools. In the case of Crezcamos, shifting into a voluntary insurance offer may have been a first step in ensuring client understanding and awareness of their purchase decision. However, the lack of recall found in our study suggests that this may not be sufficient to ensure that consumers are fully protected. In the immediate term, the delivery channel is likely best suited to provide the support necessary to fill this gap through post-sale support. Over time, efforts to further empower clients both to make sound decisions and to seek information when needed would benefit clients and the institutions serving them.

31. Zimmerman et al. (2014) discusses the allocation of responsibilities for consumer protection in microinsurance among consumers, insurers, delivery channels, and other stakeholders. The authors suggest that responsibilities be allocated in accordance with stakeholders' capacities, with a view to increasing the capacity of all stakeholders (and in particular of consumers themselves) to improve consumer protection outcomes over time.

References

Banerjee, A., E. Duflo, and R. Hornbeck. 2014. "Bundling Health Insurance and Microfinance in India: There Cannot Be Adverse Selection If There Is No Demand." American Economic Review, 104, 291–7.

Banerjee, A. V., and S. Mullainathan. 2008. "Limited Attention and Income Distribution." The American Economic Review, 98, 489–93.

Cai, J., A. de Janvry, and E. Sadoulet. 2013. "Social Networks and the Decision to Insure." Mimeo. Retrieved from <https://bepp.wharton.upenn.edu/bepp/assets/File/AE-S13-Cai.pdf>

Cole, S., X. Giné, J. Tobacman, R. Townsend, P. Topalova, and J. Vickery. 2013. "Barriers to Household Risk Management: Evidence from India." American Journal of Applied Economics, 5, 104–35.

Cole, S., T. Sampson, and B. Zia. 2011. "Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets?" The Journal of Finance 66, 1933–67.

Crezcamos. 2014. Memoria de sostenibilidad 2014 [annual report]. http://crezcamos.com/media/06c70a66f50da2c7ecc69ce0f5477f5f.pdf

Cull, R., A. Demirguc-Kunt, and J. Morduch. 2009. "Microfinance Meets the Market." Journal of Economic Perspectives, 23, 167–92.

Dalal, A., and J. Morduch. 2010. The Psychology of Microinsurance: Small Changes Can Make a Surprising Difference. Geneva: International Labour Organization.

DANE (Departamento Administrativo Nacional de Estadística). 2015. Boletín tecnico: Pobreza monetaria: Año móvil julio de 2014–junio de 2015. http://www.dane.gov.co/files/investigaciones/condiciones_vida/pobreza/bol_pobreza_mon_jul14_jun15.pdf

Eling, M., S. Pradhan, and J. T. Schmit. 2014. "The Determinants of Microinsurance Demand." The Geneva Papers, 39, 224–63.

Eppler, M. J., and J. Mengis. 2004. "The Concept of Information Overload: A Review of Literature from Organization Science, Accounting, Marketing, MIS, and Related Disciplines." The Information Society, 20 (5), 325–44.

Fernald, L. C. H., R. Hamad, D. Karlan, E. J. Ozer, and J. Zinman. 2008. "Small Individual Loans and Mental Health: A Randomized Controlled Trial among South African Adults." BMC Public Health, 8, 409.

Fernandes, D., J. G. Lynch Jr., and R. G. Netemeyer. 2014. "Financial Literacy, Financial Education, And Downstream Financial Behaviors." Management Science, 60, 1861–83.

Gaurav, S., S. Cole, and J. Tobacman. 2011. "Marketing Complex Financial Products in Emerging Markets: Evidence from Rainfall Insurance in India." Journal of Marketing Research 48, S150–62.

Giné, X., L. Menand, R. M. Townsend, and J. I. Vickery. 2010. "Microinsurance: A Case Study of the Indian Rainfall Index Insurance Market." World Bank Policy Research Working Paper Series. Washington, D.C.: World Bank.

Giné, X., and D. Yang. 2009. "Insurance, Credit, and Technology Adoption: Field Experimental Evidence from Malawi." Journal of Development Economics, 89, 1–11.

Giné, X., Townsend, R. and Vickery, J. 2008. "Patterns of Rainfall Insurance Participation in Rural India" The World Bank Economic Review Vol.22, Nr. 3, pp. 539–566: Advance Access Publication.

Hill, R. V., E. Zimmerman, and B. Magnoni. 2014. Agricultural Insurance: High Potential but low Demand. MILK Brief 34. Appleton, Wis.: The Microinsurance Centre.

Hill, R. V., and M. Robles. 2010. Flexible Insurance for Heterogeneous Farmers: Results from a Small Scale Pilot in Ethiopia. Washington, D.C.: International Food Policy Research Institute.

Kalavakonda, V., and O. Mahul. 2005. "Crop Insurance in Karnataka." World Bank Policy Research Working Paper, (3654). Washington, D.C.: World Bank.

Karlan, D., M. McConnell, S. Mullainathan, and J. Zinman. 2010. Getting to the Top of the Mind: How Reminders Increase Saving. NBER Working Paper No. 16205.

Kessels, R. P. 2003. "Patients' Memory for Medical Information." Journal of the Royal Society of Medicine, 96, 219–22.

Lepisto, L. R., J. K. Stuenkel, and L. K. Anglin. 1991. Stress: An Ignored Situational Influence. In R. H. Holman and M. R. Solomon, M. R., eds. Advances in Consumer Research, Volume 18. Provo, Utah: Association for Consumer Research.

Maier, E., and R. Wilken. 2014. "The Impact of Stress on Consumers' Willingness to Pay." Psychology & Marketing, 31, 774–85.

Matul, M., A. Dalal, O. De Bock, and W. Gelade. 2013. "Why People Do Not Buy Microinsurance and What We Can Do about It." Geneva: International Labour Organization.

McCord, M. J., B. Magnoni, and E. Zimmerman. 2012. "A Microinsurance Puzzle: How Do Demand Factors Link to Client Value?" MILK Brief #7. Appleton, Wis: The MicroInsurance Centre.

Monroe, K. B., and A. Y. Lee. 1999. "Remembering versus Knowing: Issues in Buyers' Processing of Price Information." Journal of the Academy of Marketing Science, 27, 207–25.

Mullainathan, S., and E. Shafir. 2014. Scarcity: The New Science of Having Less and How It Defines Our Lives. New York: Picador.

Platteau, J. P., and D. G. Ontiveros. 2013. "Understanding and Information Failures: Lessons from a Health Microinsurance Program in India." ILO Research Paper No. 29. Geneva: International Labour Organization.

Reis, R. 2004. "Inattentive Consumers." NBER Working Paper 10883.

Runquist, W. N. 1983. "Some Effects of Remembering on Forgetting." Memory & Cognition, 11, 641–50.

Sanchez, F., C. Rodriguez, and S. Zamora. 2014. "Impact Evaluation of the Viva Seguro Financial Education Program: Executive Summary." Fasecolda. http://www.vivasegurofasecolda.com/wp-content/uploads/2015/10/Universidad-de-los-Andes-Executive-Summary-Impact-Evaluation-of-Radio-and-Workshops-Viva-Seguro-Program-2014.pdf

Schultz, E., M. Metcalfe, and B. Gray. 2013. "The Impact of Health Insurance Education on Enrollment of Microfinance Institution Clients in the Ghana National Health Insurance Scheme, Northern Region of Ghana." ILO Microinsurance Innovation Facility Research Paper No. 33. Geneva: International Labour Organization.

Singh, S. N., S. Mishra, N. Bendapudi, and D. Linville. 1994. "Enhancing Memory of Television Commercials Through Message Spacing." Journal of Marketing Research, 31, 384–92.

Smart Campaign. 2015. Draft Client Protection Standards and Indicators 2.0. http://smartcampaign.org/storage/documents/Draft_Client_Protection_Standards___Public_Comment_clean.pdf

Takahashi, K., M. Ikegami, M. Sheahan, and C. B. Barrett. 2016. "Experimental Evidence on the Drivers of Index-Based Livestock Insurance Demand in Southern Ethiopia." World Development, 78, 324–40.

World Bank. 2009. "Colombia: Country Note on Climate Change Aspects in Agriculture." http://siteresources.worldbank.org/INTLAC/Resources/Climate_ColombiaWeb.pdf

Wuebker, G., J. Baumgarten, D. Schmidt-Gallas, and M. Koderisch. 2008. "Price Management in Financial Services." Smart Strategies for Growth. Surrey, U.K.: Gower.

Zimmerman, E., B. Magnoni, B., and A. Camargo. 2014. "'Pure' Intentions and Practice: Challenges and Good Practices in Consumer Protection in Microinsurance." Luxembourg: The Microinsurance Network.

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