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Designing Financial Services to Respond to Household Shocks

A Case Study of RCPB's Health Savings and Loan Product

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Introduction

Poor health and the inability to access health care are both key factors leading to and resulting from poverty (Narayan and Patesch 2002). For financial service providers (FSPs), poor health and health shocks are very common reasons for clients to default or drop out of their programs (Reinsch and F Ruaz 2010; Bardsley, Gray, and Gash 2015). These realities drove the launch of Freedom from Hunger's Microfinance and Health Protection (MAHP) pilot initiative that ran from 2006 to 2009 and continues today. The goal of MAHP was to demonstrate the capacity of FSPs to design and deliver health products and services and remain financially viable. Reseau des Caisses Populaires du Burkina Faso (RCPB), a credit union network based in Ouagadougou, Burkina Faso, was one of the original MAHP partners. Through this project, RCPB developed three products to address the health needs of its clients: a health savings product, health loan (which could be accessed only when a health savings account was in use and depleted of funds), and a health solidarity fund managed by RCPB to invest in health protection services in the communities it serves. The health savings account was designed as a commitment savings product: *(a)* clients must save a minimum US$20 up-front or wait a minimum of six months before making a withdrawal and *(b)* clients must provide health expense receipts before withdrawing their funds. See Box 1 for a full description of the original product design.

Box 1. Health Saving and Loan Product Description

RCPB offers a voluntary health savings product whereby clients agree to deposit a set minimum amount of US$1 per month into a special account designated only for health expenses. During the first six months after opening the account (or until a minimum of $20 is accumulated, whichever comes first), the client may not access these funds. After the six-month capitalization period, clients may withdraw health savings only upon presentation of proof of health expenses (such as a receipt or a doctor's order specifying cost of treatment).

The health savings do not earn interest, but possession of an active account that has exceeded the capitalization period entitles clients to apply for a health loan in the case of a verifiable, major health cost for the client or any family member. Health loans are offered at lower interest than RCPB's microenterprise loans and carry more flexible repayment terms. With this package, RCPB clients are better positioned to have the small funds needed to address everyday health expenses before they become more serious, and to access affordable credit to pay for treatment when their health savings do not suffice.

In 2014, Freedom from Hunger, with support from the Consultative Group to Assist the Poor (CGAP), designed a study to gather information on household resilience. A key question of the resilience research related to the financial product features that help people anticipate and respond to shocks. Given that RCPB had a health financial product on the market designed to help people anticipate and respond to health expenses, the resilience research tools and the sampling methodology included questions related to the use of RCPB's health savings and loan product. A diary approach was used with 46 women over a seven-month period to understand how they anticipated and coped with shocks. In addition, an economic game, engaging 395 women, was facilitated by researchers from the University of California, Davis.[1] The economic game also set out to observe the household decision-making process regarding the choices they make about allocating resources in hypothetical scenarios, including the use of financial instruments designed to help people manage the risk of costly negative health shocks (see Box 2 for more information).

1. Researchers included Michael Carter, Ghada Elabed, and Laura Paul of the Agricultural and Resource Economics Department.

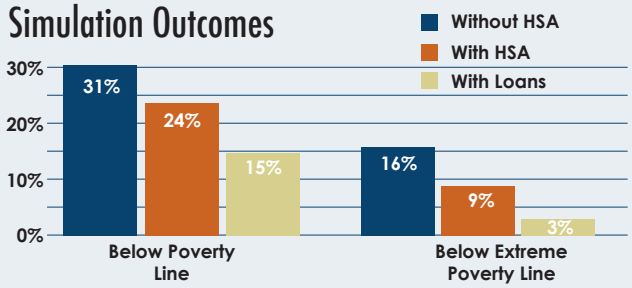
Box 2. Economic Game Description*

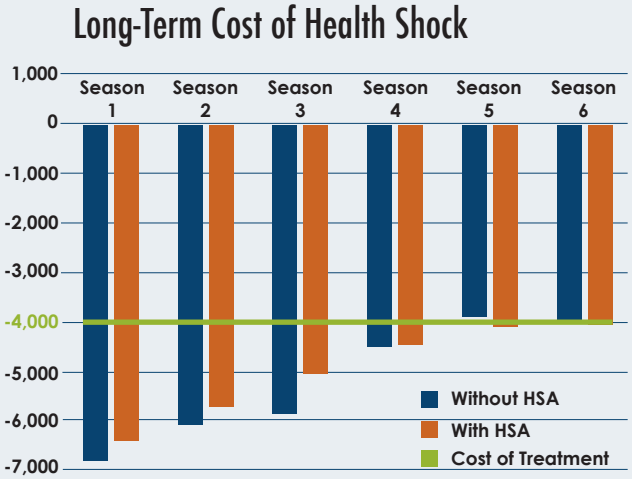
In September 2014, researchers from University of California, Davis, conducted an economic game as well as short surveys with 395 women in rural Burkina Faso to understand how households save and develop resilience to health and other negative shocks. Survey results showed that 72 percent of the women reported a serious health shock in the past two years. While almost all used their personal income or their spouse's income to cover costs of these shocks, many also relied on informal and formal loans and the sale of household capital such as livestock.

The women played six rounds of the game. In each round, the women received a set amount of agricultural income to cover expenses, such as food and shocks, and received additional income based on the number of their productive livestock (chickens). The households gradually faced more and more hypothetical shocks during the game, including a livestock mortality shock (10 percent chance of each chicken dying), a health shock (framed as malaria occurrence), and a social shock that was framed as a family member or neighbor asking to borrow cash. In addition to being able to use informal savings and livestock to cover costs of shocks, there were two financial instruments—a health savings account and a health loan—introduced over the course of the rounds. The idea was for participants to always invest in the productive livestock, and save the remainder of income in the health savings account, if they opened an account. The account also protected funds from going toward the social shock.

A computer simulation, using survey data, showed that when the return on chickens (representing income) was low, having access to the health savings and loan products resulted in better household outcomes based on their poverty levels, as shown below. Fewer households fell below the national or extreme poverty lines when they used health savings or loans. Overall, households with either high or low income were better off with the health savings accounts.

When statistical analyses on the economic games (a different analysis from the simulation described above) were examined, the outcomes from use of loans did not prove to be protective, but the outcomes from the health savings did—over the long run. Additionally, households were able to build up resilience to the health shocks over time. The health shock in the game required a payment of 4,000 FCFA, framed as malaria treatment. The long-term cost of the health shock was often much more because of losses in potential livestock earnings generated over time. The figure below shows that when households had access to health savings accounts, the long-term cost was less than when households lacked the health savings account, particularly at the early rounds of the games before households had the opportunity to build up much resilience.





*Source: Paul (2015).

By December 2009, at the conclusion of the MAHP initiative, 12,539 RCPB clients had health savings accounts, amounting to approximately $55,000 in current deposits. By year-end 2011, there were 17,499 savings accounts, amounting to $389,984 in deposits (Juillet 2012). By June 2013,[2] there were 19,500 health savings accounts (amount in deposits not reported), representing a growth in health savings accounts of 55 percent since the end of the project in 2009.

Initial MAHP research showed that clients were making active deposits and withdrawals in the first year of having their account (Gray and McCord 2010). The research also suggested that clients were overwhelmingly pleased with their health savings accounts, even when they had regular savings accounts with RCPB, because the health savings account allowed them to build savings specifically for health and created a level of discipline for saving for costs they knew they would eventually incur. They could also keep their health problems more private by not having to borrow from family members or neighbors. Clients consequently felt more secure about unpredictable illnesses they might face in the future (Gray and McCord 2010).

This case study highlights key findings from the CGAP resilience research that can help guide further thinking about how to best design financial products for anticipating and covering health shock expenses.

Key Findings

The first two findings were known prior to the resilience diary research. They were leveraged throughout the resilience research to further highlight features necessary to make a financial product designed to improve household resilience more successful in helping people anticipate and respond to shocks.

1. **Health savings accounts were not successfully reaching RCPB's poorest clients.** By the end of the MAHP initiative in 2009, it was acknowledged that few village bank clients had health savings accounts. Although RCPB had made efforts at marketing this product via sales agents, this did not result in active account openings among village bank clients. In March 2012, Abt Associates,[3] with the support of Freedom from Hunger, conducted a field assessment of the health savings and loan product to understand the outreach, use, and overall success of the product and found that few of RCPB's poorest clients were accessing and using the accounts. One notable challenge was poor promotion of the product. Additionally, although a client could earmark her savings account for health, the management information system (MIS) was not set up to track the number of these "specialized" or commitment health savings accounts. In April 2015, RCPB found these challenges continued. In addition, RCPB felt that the requirement to submit health receipts was a barrier to use of the account since many clients still preferred traditional medicine over formal medical services.

2. **Adapting/offering a health savings account to a group of clients proved to be challenging.** Many women within village banks lacked identification cards that make it possible to have an individual account with RCPB, including an individual health savings account. However, RCPB worked to accommodate the groups by making it possible groups to save in group accounts, but the physical

2. As reported by RCPB to Freedom from Hunger for its performance management report (unpublished).
3. See Juillet (2012).

presence of the group management committee—made up of three elected group members—was required to make the deposits and withdrawals at the branch on behalf of group members. This requirement made it difficult to access the account in a timely manner. Health expense requirements do not always occur on business days or early enough in the day for the management committee to travel to the branch. As a result, women resorted to traditional means to cover health costs, including using savings held at home, reducing food consumption, and selling livestock or grain. Therefore, accounts were being closed or not actively used since the product was not helping cover health expenses in a timely manner.

At the time of the resilience research, no active interventions were being applied to improve the village bank health savings account experience since the accounts appeared relatively successful with urban or employed members. However, the opportunity provided by the resilience research allowed probing into other reasons that might influence lower-than-expected uptake and use of the health savings accounts by rural clients in general. The following findings suggest other areas of improvement for making this product, and others like it, more successful in helping rural clients anticipate and respond to financial shocks.

3. **Health expenses are not the same as health shocks when designing for improving resilience.** While the intent was there in the early stages of this design to help families anticipate and cover *health expenses*, the market research was not designed to elicit an understanding of how households typically respond financially to a *health shock*. While health expenses can include health shocks, the original product design relied more on acknowledging that people will have anticipated health expenses that can be estimated and a health financial product could be useful to help them manage these expenses. The resilience research highlighted the importance of several design features that were also important in helping people anticipate and financially respond to health shocks:

   a. **Timeliness.** Products must make it possible for people to respond quickly. If households cannot access these funds in a timely manner, they will be forced to resort to other coping strategies, such as selling their livestock or grain, or reducing food consumption, which can have negative development consequences. In RCPB's case, and specifically for the village banks, the fact that a group of women had to organize and travel on behalf of a member possibly made it difficult to withdraw the money in a timely manner.

   b. **Availability.** The money must be available when it is needed and in sufficient amounts to cover a shock. Much like timeliness, this speaks to a person's ability to access this money so that she can respond in a timely manner. Shocks do not occur only during business hours; health expenses occurring after hours or on the weekends make it impossible for a household to access the funds when they are needed. In Burkina Faso, out-of-pocket expenses can be relatively low for low-level health needs such as seeking treatment for diarrhea or fever in the first few days of onset. This likely explains why the clients preferred selling a chicken to cover health costs because while they were still required to find buyers for their chickens, the amount of money they needed could be covered fairly quickly by the sale.

   c. **Gender considerations.** Restrictions on mobility likely make it challenging for a group of rural women to travel on behalf of another member in a timely manner. The resilience research revealed that most (84 percent) of the women could not leave their homes without their

husbands' permission. The follow-up qualitative research suggests that to leave the house for reasons other than those already approved (going to a scheduled village bank group meeting is likely an approved meeting), the women indicated they must wait for the right time to ask their husband, basically when he is in a good mood, to leave the home. If three women must travel on another woman's behalf to make a withdrawal, three women could be waiting to ask permission to leave as well.

d. **Lack of privacy.** People desire the ability to keep health and other financial decisions as private as they can. One of the original, most attractive design features of the health savings account noted by the clients is the feature that allows them to keep their health matters private; the account helps them avoid having to ask friends and family for financial help. For the village bank members, for a member to withdraw her savings, she must inform the management committee members of her group, who likely must ask their husbands for permission to leave and must explain and justify the reason for traveling—not really allowing a rural woman to keep her health matters private. For individual account holders, privacy of their health matters is likely maintained; for village bank members, they are likely exposing their private lives even more just to withdraw their money from an account.

4. **The health savings accounts can provide a protective measure against health shocks and build resilience over the long term.** Getting the design and delivery of a health savings account (with the added benefit of a loan) right is worth it. Research from this project (see Box 2) showed that when women were taken through a decision-making game in which they chose to take a health savings account, they were shown to be more resilient. They were better off financially after putting money aside for expected shocks, particularly in the long term. This research is aligned with other research conducted in Kenya that showed access to various health savings mechanisms led to improved investments in preventive health and reduced a household's vulnerabilities to health shocks (Dupas and Robinson 2013). The Kenya research showed that simply providing a safe place to keep money for health increased savings for health by 66 percent and that group-based savings and credit schemes were very effective in helping people save for health.

Conclusion

Designing financial products to help people anticipate and cope with shocks in a way that does not result in negative development consequences in the long run is important and necessary for building resilient poor households. This case study shows it is important to understand the attributes of the mechanisms people typically use to respond to shocks to design financial services that help households reduce use of negative coping mechanisms and help them respond to shocks positively.

Timeliness is extremely important. Many shocks present themselves as an immediate crisis; there is no perceived time to jump through hoops to access funds they have put aside specifically for emergencies. To avoid mixing positive and negative coping mechanisms (e.g., using savings and reducing food consumption), financial services must be available in sufficient amounts and easily accessible, so people are not required to use multiple financial means to cover a cost of a shock. Just because one hurdle of providing financial services to a woman has been overcome (e.g., using a village banking methodology to engage women in their own communities during meeting times that work with their

schedules), does not mean the introduction of new financial services will not face additional gender challenges. The design of each new product must be based on new sets of understanding of how women can and cannot benefit from a financial service. In Burkina Faso, preservation of household honor and privacy are paramount to how households respond to shocks. Helping households maintain their dignity in the manner in which they can respond to shocks is an important consideration.

Upon final reflection of the resilience research, RCPB was most impressed by the findings showing that its existing village banks did not appear as resilient as it had expected; it particularly noted the intense food insecurity and coping mechanisms used by its clients of not consuming food to cover other financial costs. These results provided a deeper understanding of who its clients were as well as the challenges they face in becoming resilient in the face of continual shocks.

RCPB also acknowledged some continued challenges to making the health savings accounts more attractive for village banking clients; however, this research highlighted some additional product design opportunities to be considered going forward for product improvement.

- **Use of mobile technology.** One such improvement under consideration is how to use mobile technology as a means of linking groups to formal savings accounts whereby mobile agents help groups make deposits and withdrawals. This could overcome the mobility barriers faced by the management committee members to travel. Although research by Dupas also suggests that group-managed lock boxes with savings earmarked for health are as effective in helping groups of women save for health, more informal savings mechanisms managed at the group level are being considered.

- **Strengthen product management.** The outstanding challenges caused by the inflexibility of the MIS were being addressed at the time of writing this report; RCPB was transitioning to an updated MIS, which was expected to provide better data on the health savings accounts such that it would be easier to understand the actual outreach numbers of the health savings accounts and which clients were accessing them. In addition, headquarters staff has been tasked with improving each of the individual affiliated credit union's marketing and sales capabilities such that their clients fully understand the products that are being offered to them.

- **Better tailor their financial products to women and rural areas.** RCPB is considering how it can better facilitate the access to financial services while minimizing the significant obstacles for women, including identity cards, funds withdrawal mechanisms, days and hours of operations and availability, etc. In addition, RCPB recognized the need to deeply consider the aspirations of women and other factors noted to improve product characteristics (availability, timeliness, and confidentiality within the group). It foresees designing a suite of products, taking into account the specific savings products, insurance, credit, and nonfinancial services that help women cope with specific shocks while preserving their dignity.

Designing financial services that can help households anticipate and respond to shocks is a worthy endeavor, and they are important to building household resilience. While not the silver bullet for improving household resilience, most of life's crises have financial implications; therefore, financial services must be designed correctly and be made available so households are capable of anticipating shocks, coping with them when they occur, and rebounding from them so they can move forward.

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