

MILK Brief #25: Keep Your Insurance Close, and Your Friends and Family Closer¹

Studying the relationship between microinsurance and social network support

What you'll find inside:

- Throughout our Client Math studies, we find that microinsurance and social network support are generally *complementary, and not competing,* forms of protection for low-income individuals
- Clients can often *leverage* microinsurance to *crowd in* additional support from friends and family. For instance, a one dollar increase in cash insurance was associated with an additional 13 cents in loans from family and friends.
- Social support networks function differently depending on the place, type of shock, and other factors; *urban clients may benefit more from funeral insurance* than more traditional, rural clients, for example. *Frequent shocks may rely less on social support* than infrequent ones.
- Microinsurance providers can use knowledge of social networks to design more relevant, targeted products for their clients or even different client segments as a strategy to increase client value vis-à-vis informal networks.
- Microinsurance providers can consider enhancing elements—such as *claims times, cashless services, or catastrophic coverage, among others*—to improve client value.

Introduction

When death, disaster or disease strike, low-income individuals must gather funds to pay for what are often large and unexpected costs. Traditionally, informal social networks have played a major role in helping the poor cope with risk (Fafchamps & Lund, 2003). The MicroInsurance Centre's MILK Project studies, however, suggest that social networks often fall short of covering the total cost of shocks. Microinsurance seeks to ease the financial burden of unexpected situations by covering all or part of the major costs stemming from those events. Such products aim to eliminate or reduce the need to tap other sources of funds-such as selling assets, depleting savings or reducing consumption of basic goods-that are detrimental to livelihoods. Its purpose, therefore, lies in providing "added value" to existing coping mechanisms, including ubiquitous social support networks. This paper explores the interplay of social network support and microinsurance in diverse country contexts. We conclude that microinsurance and social network support are generally complementary, and not competing, forms of protection for low-income individuals, each with its relative strengths and weaknesses in different situations. Like Dercon and Clarke (2009), we find that microinsurance is best used to cover high cost risks, as well as in other situations where informal networks fall short. Furthermore, we find that cashless insurance can significantly reduce the need to "bridge" financing through the social network, while slightly delayed cash payments are useful to replace income. With this in mind, microinsurance providers and promoters can increase the value of their

¹ This brief was written by Derek Poulton in collaboration with Barbara Magnoni and Emily Zimmerman (August 2013).



microinsurance products and services by enhancing elements such as claims times, cashless services, or catastrophic coverage, among others.

Client Math's contribution

Client Math is MILK's survey methodology for measuring client value of microinsurance products. First, we ask people who have insurance and have suffered a recent illness, family member's death, property damage, or other "shock" for a detailed break-down of direct and indirect costs incurred in connection with that shock, and then how they financed their recovery (for example with loans, savings or cutting household spending). We also ask them general questions about their insurance experience and how they used the benefit. We ask for the same cost and financing breakdown of people with a similar profile in the same communities who experienced the same shock but without insurance. By analyzing the differences and similarities in costs and financing, we can gain insight into the role insurance played in helping clients recover, what aspects offered the most value, and how insurance might have further benefited clients.

MILK's Client Math studies can shed light on the relationship between friends and family (FF) support² and formal microinsurance after a risk materializes. The studies describe the various contexts, shocks and frequencies with which insured and uninsured respondents use FF gifts or loans, as well as the amounts received and their proportion of total funds raised. This brief considers the existing literature on the role of insurance, friends, family and community in coping with shocks and then draws from ten different Client Math studies to expand our understanding. The studies explore financial shocks related to death, floods and hospitalization in seven countries and are comprised of in-depth interviews with a total 331 insured and 322³ uninsured respondents.⁴ The breadth of cases helps to understand the nuanced relationship between social networks and microinsurance in different contexts.

Theorizing linkages

Microinsurance literature has theorized various positive and negative relationships between informal social support networks and formal insurance. Informal risk sharing, in the form of gifts and loans, is one of the most common risk coping mechanisms for low-income people, especially within families, whether nuclear or extended (Microinsurance Learning and Knowledge Project, 2011). From abuloys⁵ in the Philippines and African burial societies to groups of Mexican immigrants in New York, friends and family are usually the first line of support after an unforeseen calamity (Magnoni, Poulton, Zimmerman, & Schubert, 2012) (Magnoni, Lovoi, Brown, & Thornton, 2010). The literature theorizes various positive and negative relationships between informal social support networks and formal insurance. Figure 1 summarizes the arguments for negative and positive relationships between social networks and insurance discussed in detail below.

Figure 1: Main theories on the relationship between formal insurance and social network support



"Insurance crowds out social support and undermines social cohesion." This perspective values social arrangements as important to creating solidarity within a community and offering ongoing support to smooth consumption. Thus when formal alternatives such as insurance or government transfers become

² In this brief we consider friends and family support to be from people within the community and exclude remittances from migrant friends and family from the definition. Forthcoming reports will address the issue of the role of migrants, highlighting a relatively limited role in dealing with shocks throughout our studies.

³ Unless otherwise specified, the 15 insured individuals whose claims were rejected or unpaid are counted as uninsured cases.

⁴ See table in Appendix 1.

⁵ Abuloy refers to offerings or financial contributions to bereaved families and is an important tradition in the Philippines.



available, they may "reduce welfare because they destroy the social fabric of private insurance arrangements" even when the two schemes cover different risks (Attanasio & Rios-Rull, 2000). This is not necessarily an argument against formal insurance, as we have seen that FF support is rarely sufficient to cover the full cost of a shock. Instead, it encourages the careful design of insurance to avoid duplicating (and potentially diminishing the effectiveness of) existing informal arrangements. Dercon and Clarke offer several recommendations for designing such complementary formal insurance, including selling coverage for catastrophic or covariate risks through the same informal insurance schemes that normally cover only idiosyncratic risks such as funerals (Dercon & Clarke, 2009). While care should be taken when designing microinsurance products to avoid diminishing the effectiveness of social networks, "crowding out" can only happen to the extent that social networks are effective in covering a shock. Typically, they do not respond adequately, particularly to severe covariate risks like natural disasters, and even less so as those risks increase in frequency due to climate change (Magnoni & Poulton, 2013) (Magnoni & Budzyna, 2013). The gaps in social networks' effectiveness leave a space that formal microinsurance might fill while retaining the important functions of those networks.

"Insurance is expensive and unnecessary." Proponents of this view assert that, under some circumstances, the poor should not use limited disposable income to pay insurance premiums covering risks that other tools (such as informal networks) can cover adequately. Fafchamps and Lund (2003) find that in the rural Philippines considerable consumption smoothing is achieved through flexible, zero-interest loans as well as pure transfers. This informal support is found to apply mostly to idiosyncratic, low-severity and/or low-frequency shocks such as illness, death, or income fluctuations (Dercon & Clarke, 2009). In our Client Math studies, we find that FF in some cases provide sufficient support to cover the financial burden of a wake and funeral after the death of a family member (Magnoni, Poulton, Zimmerman, & Schubert, 2012). However, we find that in other cases, such as in urban Colombia, this resource falls short (Magnoni & Poulton, 2012). Additionally, for frequent events such as illness or frequent weather damage or for covariate risks like natural disasters, FF support is typically constrained, as we discuss further below.

"Insurance crowding out social support hurts the poorest most." According to this view, formal insurance crowds out social support networks and weakens them by shifting the most stable and wealthy members from the informal to the formal sphere. That is, individuals and families who can afford insurance premiums no longer need the social network for protection, and thus cease to participate. This leaves behind only the poorer community members, who are not only more exposed to risk but less capable of covering high unforeseen costs (Dercon & Clarke, 2009). This view is undermined, somewhat, by the observation that "intra-village mutual insurance links are largely determined by social and geographic proximity and are only weakly the result of purposeful diversification of income risk," (Fafchamps & Gubert, 2006) since members of the same kinship group or village are more likely to have similar, and not disparate, levels of income and assets (Dercon & Clarke, 2009). In other words, social support networks are likely to make the transition from informal to formal protection together. However, our Client Math studies do find that insured respondents often tend to have higher (in some cases substantially higher) income levels than the uninsured members of the community who are otherwise similar. In part, this may be a result of the fact that access to microinsurance is often tied to another financial service such as a loan, reflecting a greater level of financial inclusion among the insured.

"Insurance is necessary to replace weakening social networks." This theory flips the previous two upside down. This view suggests that insurance may be a solution to, rather than the cause of, weakening social networks. Broad trends such as globalization, urbanization, migration and general economic growth have led societies to become less integrated and more individualistic, weakening the cohesiveness of local communities that traditionally provided support and protection from risk. This manifests in declining fertility rates, increases in single-parent child rearing, and increasing divorce rates, all of which may reduce the support available to individuals from their family (Microinsurance Learning and Knowledge Project, 2011). One study in Mexico showed that while members of an extended family share risk with each other, households with no relatives in the same village (due to having migrated recently) are excluded (Angelucci, Giorgi, Rangel, & Rasul, 2009). Another study of Mexican immigrants in New York City found that the use of FF support was lower among immigrants who had resided in New York City for longer periods of time than it was among recent arrivals (Magnoni, Lovoi, Brown, & Thornton, 2010). Fafchamps and Lund postulate that social support only thrives among closely connected individuals, either because altruism is



nurtured by intimate contact or because repeated interaction is necessary to make the promise of reciprocity credible (Fafchamps & Lund, 2003). Where such conditions are not present, social support is weak. Public alternatives to coping with risk have not always kept pace with the decline of informal risk sharing arrangements, leaving many risks uncovered and many individuals increasingly vulnerable. Formal microinsurance can provide a solution to this protection gap, complementing savings, loans and other tools to cope with both medium-size shocks and large covariate shocks (Microinsurance Learning and Knowledge Project, 2011).

"Insurance aligns with client preferences." By this view, low-income individuals may sometimes prefer using formal insurance over social networks for a variety of reasons. Some reasons for this preference include shame, the desire to minimize irritation of FF, or the perception that FF would be unable or unwilling to help them. Additionally, informal social support and risk sharing arrangements may be fragile and unpredictable because commitment among participants cannot be perfectly enforced (Ligon, Thomas, & Worral, 2002). Individuals preferring not to use FF support were a minority, but appeared in most Client Math samples, especially India and Mexico. When insurance benefits are cashless, such as in the case of health care, funeral packages or loan forgiveness, individuals may prefer them to informal support for their speed and convenience. We discuss below the influence of preferences in accessing FF support in our Client Math studies.

"Insurance is useful to increase protection when social networks are insufficient." According to this theory, social networks often provide insufficient protection. This is especially true for high cost, covariate shocks such as natural disasters. When all or most members of a community are affected by an event, the funds available through the social network are severely diminished. Furthermore, informal mechanisms tend to experience enforcement problems that diminish their credibility in the case of large shocks and limit them to smaller sub-groups within a larger community (Dercon & Clarke, 2009) (Fafchamps & Lund, 2003). Thus microinsurance can play a useful role in replacing the social network for events that those networks cannot cover. In other cases, the members of the social network may simply be too poor to provide sufficient support for even a "moderate" shock such as a funeral. In those cases, microinsurance could replace or supplement the social network. Informal networks should also be viewed generally as a limited resource (not one that is available every time a shock occurs), and one that generally implies reciprocal obligations that low-income people may not always be able to meet (Cohen and Sebstad, 2003). Furthermore, households with imperfect coping strategies tend to reduce their exposure to risk through diversification or shifting to low-risk activities (Morduch, 1995). In this sense, insurance can also improve risk management strategies, allowing the insured to assume more risk and increase income.

Friends and family are an important but insufficient resource for both insured and

uninsured...

We consolidate our findings on the role of friends and family in coping with shocks in the figure below. Figure 2 shows the average total costs and financing (disaggregated between "Friends and Family" and "Other Financing"⁶) by type of event, comparing insured and uninsured. The graph demonstrates two major findings. First, that FF offer a greater proportion of support when a large and infrequent shock, such as a death, occurs. Second, that on average FF support does not cover nearly the entire cost of the shock.

For all three types of events, financing (including insurance) exceeded the cost of the shock. For life insurance, MILK studies have suggested that this trend is often driven by the need to replace some lost income of the deceased, particularly of a breadwinner, which does not appear in the cost columns. In the case of flood and hospitalization insurance, where the total cost of the shock is more discrete and as a result can be quantified more accurately, inefficient financing mechanisms likely lead to some churning of resources (using savings or new loans to pay off loans acquired to cover expenses of the event, for example) or over-financing through loans or sale of assets (where a large or high-value good may be sold to cover a need of lower value, for example). Finally, when insurance payouts are delayed a week or more,

⁶ Appendix 2 contains a more detailed breakdown of the financing sources.



respondents often had to access "bridge" financing in excess of their needs, and pay it down with the eventual insurance benefit. Individual Client Math briefs analyze these factors in greater detail.



Figure 2: Average costs and financing by event and insurance cover (USD)⁸

The columns showing uninsured costs and financing hold some additional findings. These figures suggest that insurance is not crowding out support from friends and family but complementing this support, as shown by the roughly equal amounts provided by FF between insured and uninsured. The average contribution from FF was only slightly higher for the uninsured than the insured after a death (USD 700 vs. USD 657) and lower after flood damage (USD 69 vs. USD 119) and hospitalization (USD 0 vs. USD 28). It appears that microinsurance did not seriously affect the community contribution after a death (possibly due to social values dictating who contributes and how much) but did ease the burden on communities for flood and health shocks. Socioeconomic differences between our insured and uninsured group (usually the insured group is slightly more affluent), however, may also be influencing these patterns. Below we disaggregate some of these results by country and product and analyze some of the potential causes of these differences. We find from our ten studies little evidence of crowding out, and even some evidence of "crowding in"—insurance inviting more informal financing instead of repelling it.

The overall contribution of FF networks after tragedy strikes depends on the type, cost and frequency of shock as well as the cultural and economic context of the community. Fafchamps and Lund (2003) hypothesize that, when imperfect commitment to the social network exists and assets are scarce, community-based insurance is best achieved through a combination of informal loans and gifts. The total value and relative proportions of gifts and loans, however, varies widely. A regression analysis of our data shows that **each one-dollar increase in direct shock cost is associated with 27 cents in additional financing from friends and family.**⁹ Below, we break down the contribution of FF for three distinct shocks: death, flood and hospitalization.

⁸ In the charts and numbers used herein, direct costs include the value reported by the insurer of cashless services provided (i.e. funeral or hospitalization expenses) but exclude the cost of outstanding loans. Cashless funeral or hospitalization benefits provided also appear under financing as "Cashless Insurance" along with the value of loan forgiveness if the product covered outstanding loans. For floods, direct costs represent repair or replacement expenses incurred and not the estimated value of damages suffered.

⁹ A series of regression analyses supports these observations (Appendix 3 offers statistical details of the models). After controlling for country, event and gross household income, we tested the effects of direct shock costs, indirect shock costs, lost income, cash



...But with variations by event, community and culture

Figure 3 summarizes by country for both insured and uninsured groups the average total costs and financing of a funeral. The average costs are shown both as numbers and as proportionately sized blue bars. The percentage of total costs financed by friends and family are given both as numbers and as proportionately sized bars separating loans (first green bar) from cash or in-kind gifts (second green bar). All bars within Figure 3 are drawn on the same scale.

death shock					
Death	Costs Direct + Indirect Combined in USD		FF Financing Combined % of Costs (number) Loans vs. Contributions in USD (bars)		
COUNTRY	INSURED	UNINSURED	INSURED	UNINSURED	
Philippines	1,860	1,409	61%	86%	
Cambodia	1,709	1,735	38%	42%	
Mexico	1,850	1,804	29%	27%	
Colombia	1,129	2,434	8%	12%	

Figure 3: Average total costs and percentage of friends and family (FF) financing of a death shock

The critical role of friends and family in financing the costs of death varies greatly by case, depending on factors such as social cohesion, community traditions, and rurality. In the rural Philippines, strong traditions led to very substantial FF support for funeral costs, which led many respondents, especially the uninsured, to finance the cost of funerals with community gifts and to use any excess financing from this source to pay off short-term debts incurred or replace lost income from the deceased. In the Philippines, while the percentage of support from FF differed, the nominal amounts were similar, thus insurance did not crowd out social support. Our analysis in rural Cambodia demonstrated the same pattern as the Philippines but with a lower level of social support. In Mexico, where we studied semiurban areas, we found that FF contributions were important (albeit lower than in the Philippines or Cambodia) as an overall percentage of financing, and loans covered slightly more than gifts, unlike in the Philippines or Cambodia where gifts predominated. In urban Colombia, by contrast, lending was nonexistent and gifts were modest; insured families used a cashless funeral benefit while uninsured families tended to cover costs through household income and savings. In general, we found that rural communities with stronger traditions and ties offered greater social support, especially in the form of gifts. Meanwhile urban respondents often have difficulty raising informal financing for a funeral and must significantly deplete income or savings to pay for it. Thus life microinsurance is arguably most useful to urban clients with fewer social ties in their community and for families that lose significant income (either their own or the deceased's) after the death, as such indirect costs are rarely covered by social support.

Figure 4 below presents the same information on costs and financing for hospitalization events in India. Note that the scale of bars differs from Figure 3.

Insurance payouts and cashless insurance value on friends and family financing. Most control variables were highly significant, aligning the models with price levels and other country- and event-related factors, while showing that context is key.



Figure 4: Average total costs and percentage of friends and family (FF) financing of a health shock in India

Hospital	Costs Direct + Indirect Combined in USD		FF Financing Combined % of Costs (number) Loans vs. Contributions in USD (bars)	
PROVIDER	INSURED	UNINSURED	INSURED	UNINSURED
Grameen Koota	95	170	14%	36%
MicroEnsure	373	184	12%	

Friends and family cover much less of the costs of hospitalization than of death. The relatively low costs make social support less necessary, while the relatively high frequency may make it less feasible (at least in India). Hospitalization costs paled in comparison to those after a death or flood, so hospitalized respondents generally covered most costs from household income. It is interesting to note that in both India samples, one rural and one urban, FF financed less than 20% of total costs. The relatively high expected frequency of illness and the relatively low cost (we studied common yet severe communicable diseases-malaria and gastrointestinal infections) may also have inhibited respondents from asking for FF support, preferring to call in favors for a more severe, uncommon problem. It may also have discouraged relatives from offering help, out of fear of being asked again. When social support was used, loans rather than gifts were the more common choice in both studies. One explanation is that, since illness is a relatively high-frequency idiosyncratic event, FF preferred to lend rather than provide gift support to limit their own risk. Another reason for the limited assistance of friends and family in the case of illness is that a large portion of the costs incurred were indirect, in the form of lost income, rather than out-ofpocket expenses. When we quantified these indirect costs in our study in Karnakata, India, we found that 60% of insured and 23% of uninsured respondents' total costs were related to travel and lost income due to themselves or a family member missing work (Magnoni, Zimmerman, & Chandani, 2012). It is very plausibly much more difficult to ask a family member to cover these indirect costs, which are hard to anticipate and to quantify, and harder still to document.

Finally, Figure 5 presents costs and FF financing after a flood event. Again, the scale of the bars differs from Figures 3 and 4.

Flood	Costs Direct + Indirect Combined in USD		FF Financing Combined % of Costs (number) Loans vs. Contributions in USD (bars)	
COUNTRY	INSURED	UNINSURED	INSURED	UNINSURED
Philippines	601	321	11%	15%
Colombia	1,775	1,456	5%	3%
Ghana	894	971	35%	13%
Haiti	838	404	5%	15%

Figure 5: Average costs and percentage of friends and family (FF) financing of a flood-related shock



Friends and family support after a flood varies widely according to the relative poverty levels of respondent groups as well as perceived frequency and geographic reach of damage. Where disaster strikes hard and/or frequently, community resources are depleted and support is scarce. In Ghana, the event was a relatively rare incident, unlike the repeated bouts of flooding experienced in Haiti, Colombia and the Philippines. Additionally, our sampled respondents in Ghana belonged to a relatively well-off set of independent workers in a bustling urban market. Finally, they suffered damage to their businesses, not their homes. These three factors likely influenced the ability of FF to help out. They were better off, they did not expect frequent recurrence of the event, and they were likely not affected themselves since they lived far from the area of damage. In contrast, FF gifts were rare in Haiti, and insured and uninsured families accessed roughly the same amount of personal loans. The fact that both insured and uninsured families received loans and not gifts, unlike in Ghana, may reflect a relatively severe impact of the floods on respondents' communities that prohibited the luxury of gifting money since all were affected (Magnoni & Budzyna, 2013). In the Philippines, friends and family played an equal or lesser role to other mechanisms in financing flood damage. This is in sharp contrast to the pattern of strong community and family support for funeral financing in the same country, again possibly due to the event affecting the community as a whole and depleting resources. In Colombia, the entire coastal community was devastated by two consecutive years of torrential rains, leaving little social capital to go around. Instead, respondents mostly borrowed from the MFI to finance their recovery.

"Crowding in": Insurance leverages more friends and family lending

Throughout our Client Math studies, particularly those analyzing weather-related shocks, our findings suggest that some insured respondents were able to leverage loans from their family, friends and community as a result of their expected insurance payment (see Figure 6). Our regression analysis of the combined Client Math data shows that a one dollar increase in cash insurance was associated with an additional 13 cents in loans from family and friends. In the case of floods, this was especially important since cash payouts were small in all of the cases we studied and often took many days or even months to

pay out (65 days on average), leaving the insured with limited ability to bounce back in the short term. The promise of an upcoming payment seemed to help leverage lending either because the insured felt more comfortable committing to pay back the loan or because the lender was aware of the upcoming payment and considered it a type of "collateral". This finding complements those of other studies that reveal the reciprocal nature of informal lending. Most informal loans observed in these studies are interest free, with flexible repayment, undefined tenors and the implicit understanding that a portion of debt may be forgiven due to negative circumstances. Furthermore, lenders sometimes lend when times are good, hoping to demand payment when times turn bad (Ligon, Thomas, & Worral, 2002) (Fafchamps & Lund,



Insured -

Cashless benefits

Insured -

Cash benefits

Figure 6: Friends and family loans as a percent of total

financing

2003). In this sense, expected cash insurance payouts act as a guarantee of fulfilling that reciprocity.

Uninsured

Friends and family: preference or necessity?

The most common reason cited for turning to friends and family was its ease. Friends and family often live nearby and may even come to a person and proactively offer to help in a time of difficulty. Thus, their help can be immediate with few requirements (such as applications or conditions). Through our studies, we have seen few microinsurance programs able to replicate the speed and ease of friends and family support when a shock occurs. However, while friends and family are often an easy resource to turn to at such times, they are rarely sufficient and sometimes are not available at all. The most common reason cited in our studies for not turning to family and friends was that this "source of funds" was not



available. In poor communities, friends and family are also poor and may not have enough to offer to cover the cost of the shock. Additionally, turning to them might carry the expectation of future reciprocity that a low-income person could not fulfill or that might be uncomfortable.

We look at social network loans reported in ten Client Math studies, disaggregated between family and friends,¹⁰ and consider qualitative reasons for turning to one group or another based on the surveys and qualitative discussions (Appendix 4 offers a table disaggregating family vs. friends support). In most cases, family provided a greater source of loans than friends overall, for both insured and uninsured respondents. Notable exceptions in Karnataka, Ghana, and Haiti show that friends can and do often step in with support when covariant risks affect an entire family, when cultural issues of family shame come into play, or where non-family relationships are actually strong, such as in Ghanaian markets. Such exceptions contradict some academic findings that members of an extended family share risk with each other but not with households that have no relatives in the village (Angelucci, Giorgi, Rangel, & Rasul, 2009). For hospitalization costs in India, for example, several respondents who did not access family support said that they asked for help, but nobody offered support, while others never asked out of shame or not wanting to trouble them (Magnoni & Chandani, 2012) (Magnoni, Zimmerman, & Chandani, 2012), Another exception was in Mexico. where some respondents reported that they preferred borrowing from friends or from formal sources to avoid embarrassment within their family. In some cases, they felt more confidence requesting money from friends than family members, revealing a weakening of family ties, especially in urban communities (Poulton & Magnoni, 2013). In general, these observations show that FF support can fail for various reasons and that insurance can in fact play a role in places or situations where social support networks are temporarily or permanently weakened.

Conclusions

MILK's Client Math study findings suggest a nuanced and complex interplay between social network support and insurance beyond simple substitution or competition. In fact, insurance and social networks can complement one another and compensate their respective weaknesses. Insurance can typically cover a higher portion of total shock costs, but payouts are often delayed past the moment of immediate need. Friend and family support, on the other hand, is usually quickly and easily available, and while it leaves a significant portion of shock costs uncovered, it is often sufficient to cover immediate needs or direct costs. Social support is most available after deaths and less so for illness or natural disasters, which are more frequent and in the case of disasters, more costly at the community level. Social support can provide a buffer and a bridge while insured individuals await payouts, but it is usually insufficient on its own, and reliance on gifts or informal loans can strain relationships. Cashless funeral or hospitalization insurance (as in Colombia or Karnakata, India, respectively) can reduce the need for friends and family lending to almost nothing. Providing such mechanisms would leave limited network resources free to cover risks that are less easily insured, such as damage from natural disasters or lost income, whether due to death, illness or weather.

MILK defines the "client value" of microinsurance as "the added value, in comparison to other available risk coping mechanisms, of having insurance either when claims are made or as a result of the changed behavior caused by owning a policy and trusting that it will be honored." This means that *the value of microinsurance explicitly depends on its relationship to the role of existing social support networks*, which as we saw above, function differently depending on the place, type of shock and other factors. By taking those factors into account, microinsurance providers can *prioritize levels and types of coverage, and design much more relevant, targeted products for their clients or even different client segments as a strategy to increase client value.* For example:

¹⁰ Gifts and contributions from friends and family were lumped together in one category in the studies.



- In tight-knit rural communities like lloilo, Philippines, a cashless funeral insurance policy would likely be redundant, given the high social support traditionally provided. While fast claims payments are generally viewed as ideal, a cash payout a few weeks or even months after the death may help more to smooth income and consumption after the loss of a breadwinner. On the other hand, the urban working poor in cities such as Bogota have limited time and social employment networks but more opportunities. and mav appreciate a cashless funeral benefit much more than a cash pavout.
- In the case of natural hazard insurance, insurers should take into account the covariance of an event with target market characteristics to define benefit types, levels, and target claims processing times to deliver optimal support when it is most needed. For example, in communities that are very poor (e.g. Haiti) or experience highly covariant risk (e.g. coastal Colombia), needs are likely great and social support scarce. Thus claims "workarounds," such as a small automatic "bridge" payout or short-term loans from the distribution channel could help clients finance immediate recovery needs while a larger payment for damage repair or lost income replacement is on its way.

Figure 8: Client Math and its responses to some key theories on friends and family support



• For health microinsurance, cashless service can be a preferable alternative in that it offers a fast response to a shock and may help avoid the need to turn to friends and family for "bridging" short-term needs while claims are being processed. In addition, complementary insurance coverage for lost income may also be particularly valuable in this case, as it can comprise a very large portion of the cost of the illness, yet is unlikely to be covered by FF support.

While social support networks may be highly varied, they are ever present and often changing. To provide value to low-income customers, microinsurance must complement the weaknesses and build on the strengths of the informal ties between friends and family. Achieving this balance will ultimately create a better social safety net for the poor.

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



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MILK Client Math Studies Considered

MILK Brief #	Country (Locale)	Product	Partners (Insurer + Channel)	Sample Size
8	Colombia (Bogota)	Life (Cashless Funeral)	Mapfre + Codensa	Insured=41 Uninsured=30
10	Ghana (Accra)	Calamity (Property + Loan)	Star Assurance + MicroEnsure	Insured=24 Uninsured=28
11	India (Maharashtra)	Health (Cash or Cashless Hospital)	MicroEnsure + SDCCB	Insured=25 Non-paid ¹¹ = 5 Uninsured=30
12	India (Karnataka)	Health (Cashless Hospital)	SAS + Grameen Koota	Insured=27 Uninsured=28
13	Philippines (Iloilo)	Life (Life, Funeral Cash)	MicroEnsure + TSKI	Insured=57 Uninsured=37
15	Haiti (Les Cayes)	Calamity (Property + Loan)	MiCRO + Fonkoze	Insured=35 Non-paid=10 Uninsured=26
16	Mexico (Various)	Life (Cash)	Mapfre + Compartamos	Insured=32 Uninsured=36
17	Philippines (Mindanao, Panay)	Flood (Property)	MicroEnsure + TSKI	Insured=30 Uninsured=30
18	Colombia (Magdalena)	Flood (Property + Loan)	Mapfre + Fundacion delamujer	Insured=30 Uninsured=33
20	Cambodia (Kampot, Kep)	Life (Life + Loan)	MEADA + SAMIC	Insured=30 Uninsured=29
10 studies	7 countries	3 product types	14 distinct partners	Insured = 331 Non-paid = 15 Uninsured = 307

¹¹ "Non-paid" refers to insured clients who did not receive a benefit due to exclusions, time limits or other factors. Their behavior may differ from purely uninsured clients since they expected to receive a payout but did not.



Appendix 2

Detailed version of Figure 2 with a breakdown of costs and financing in USD. Friends and family loans and contributions appear in yellow and gold, respectively.





Appendix 3

Regression indicators for three distinct models.

Regression Model Details

	Model 1	Model 2	Model 3
Dependent variable	F&F Financing (USD)	F&F Loans (USD)	F&F Contributions (USD)
R-squared	0.440	0.179	0.483
Adjusted R-squared	0.428	0.162	0.473
Independent variables			
(Constant)	627.468**	22.970	608.349**
Colombia dummy	-605.766**	-181.885**	-420.554**
Mexico dummy	-564.320**	118.604*	-683.612**
Cambodia dummy	-199.671*	28.299	-222.472**
Ghana dummy	-22.890	83.286	-104.268
Haiti dummy ¹²	-181.821*	-32.999	-147.714*
Flood dummy	-460.616**	13.563	-478.716**
Hospitalization dummy	-624.174**	-4.986	-622.709**
Gross Household Income (USD)	-0.011	-0.007	-0.005
Direct Shock Cost (USD)	0.276**	0.089**	0.176**
Indirect Shock Cost (USD)	-0.045	0.001	-0.044
Lost Income from Shock (USD)	0.000	0.000	-0.001
Cash Insurance (USD)	0.038	0.132**	-0.093**
Service Insurance (USD)	0.055	0.113**	-0.061

An * indicates statistical significance of 1-5%. An ** indicates significance within 1%.

¹² The India dummy was excluded due to perfect correlation with the Hospitalization dummy.



Appendix 4

Absolute and relative values of family and friends loans for insured and uninsured, by country and type of shock.

Event	Country	INSURED (USD)		UNINSURED (USD)	
		Family	Friends	Family	Friends
Death	Cambodia	167 <i>(10%)</i>	14 (1%)	91 <i>(5%)</i>	60 <i>(3%)</i>
	Colombia	0 <i>(0%)</i>	0 <i>(0%)</i>	0 <i>(0%)</i>	0 <i>(0%)</i>
	Mexico	168 <i>(9%)</i>	250 (14%)	145 <i>(8%)</i>	214 <i>(12%)</i>
	Philippines	213 (11%)	70 (4%)	183 <i>(13%)</i>	58 (4%)
Illness	India (GK)	8 (8%)	5 (6%)	34 (20%)	28 (16%)
	India (ME)	18 <i>(5%)</i>	26 (7%)	0 <i>(0%)</i>	27 (15%)
Flood	Colombia	48 (3%)	5 (<1%)	14 (1%)	10 <i>(1%)</i>
	Ghana	57 (6%)	248 (28%)	37 (4%)	13 (1%)
	Haiti	3 (<0%)	27 (3%)	35 (8%)	27 (6%)
	Philippines	16 <i>(3%)</i>	12 <i>(</i> 2%)	9 (3%)	5 (1%)

Loans from Family and Friends, in USD and as a Percent of Total Shock Cost¹³

¹³ The total shock cost includes direct costs (funeral, damage repairs, or hospital treatment costs), indirect costs (transportation, documentation, or miscellaneous costs.), and lost wages (of the respondent and household members, plus one month of deceased's lost income in case of deaths).