MILK Brief #4: What We Know About the Financial Value of Microinsurance for Poor Clients: A Snapshot [1]

What do we want to know?

MILK's work to understand client value in microinsurance focuses on two questions: 1) Does microinsurance help protect people from **large shocks** (high cost events) in comparison to other alternatives? and 2) To what extent is microinsurance effective in smoothing income or protecting assets of the poor when **smaller shocks** (low cost events) occur.[2] As we have seen from our client value landscape paper, few existing studies have honed in on these two simple, yet nuanced questions.

This brief offers a summary of findings evidenced in the existing research that are relevant to MILK's two main research questions. While the research is suggestive of financial value in microinsurance, we have few concrete answers. There are simply not enough existing studies, particularly of products other than health insurance, and those that are available often overlook considerations that offer a fuller understanding of the value of microinsurance. One of MILK's objectives is to influence and encourage new studies in microinsurance that are targeted toward this broader understanding. This brief aims to provide guidance for researchers, stakeholders and practitioners in framing research questions and to encourage new studies that build a more complete understanding of the added value of microinsurance as a financial risk management tool for the poor.

When Shocks are Large

A small body of existing research suggests that insurance may be a powerful instrument to protect the poor from diverting limited income or eroding their household balance sheet (asset depletion and borrowing) when coping with ***large*** shocks. The coping mechanisms best suited to deal with large and small shocks are often different, as are the consequences of failing to adequately provide for a large versus small shock. There is some evidence that there are benefits to clients in having insurance for covering infrequent but large and/or covariant shocks; largely because other mechanisms such as friends and family are less suited to cover these large shocks (Clarke & Dercon, 2009; Gertler & Gruber, 2002).

We look at the **added value** of insurance in the context of these alternative tools and consider which, if any, insurance may replace. Relatively little work has done on this approach; Portfolios of the Poor (Collins, Morduch, Rutherford, and Ruthven, 2009) is a notable exception, recording the various coping mechanisms households use and analyzing the interplay between them. A number of studies have found that having health insurance leads to a reduction in **out-of-pocket expenditures** in the event of a large health shock (Chankova, Sulzbach, et. al., 2006, 2008; Devadasan et al., 2007; Giné, Townsend, et. al., 2007), but these often do not clearly explain the full cost of the insurance product or fully explore the trade-offs between insurance and subsidized coping mechanisms such as government transfers, public health systems and intra-family transfers such as remittances. A few studies find that microinsurance may help households **avoid borrowing**, especially at disadvantageous terms. This is a critical issue for the poor, whose individual savings rarely cover the cost of large shocks. Kruk, Goldman, and Galea (2009) highlight that the risk of borrowing or selling assets to pay for healthcare in 40 low- and middle-income countries was higher among the poorest households and in countries with less health insurance. Aggarwal (2010) finds, encouragingly, that total borrowings in the event of surgery are 30-36% less for the insured than for the uninsured. The use of **formal savings** as an alternative to insurance is rarely

---

[1] By Barbara Magnoni and Emily Zimmerman of the MILK project.

[2] If it is not an effective tool to manage smaller shocks, MILK also asks whether there demand factors that are worthy of considering that make a case for microinsurance regardless.

explored in academic literature. While there is evidence that the poor may use formal and informal savings for emergencies including health shocks (Dercon 2009), the existing research does not compare this strategy to insurance explicitly.

Evidence also suggests that **relatively better off households may have more financial benefits from** insurance because they have more assets or more income to protect. Aggarwal (2010) shows that in the event of surgery, payments made out of savings, incomes, and other sources are up to 74% less for the insured versus the uninsured. Chantarat, Mude et al. (2010) note that index-based livestock insurance in India is most valuable to vulnerable non-poor groups rather than to the poorest groups. Similarly, Morsink et al. (forthcoming) demonstrate that microinsurance reduces the use of high stress coping strategies in households of medium economic status because they are more likely than poorer households to have access to high-stress strategies (such as selling off key production assets) in the first place.

Does Microinsurance Matter when Shocks are Small?

There is limited concrete evidence of the value of insurance to the poor in the case of small shocks, such as outpatient health care needs, minor accidents, and small property damages. However, products covering these shocks are often cited by practitioners and demand literature as those most demanded by clients (Ahuja and Guha-Khasnobis, 2005; Roth, McCord, and Liber, 2007). Are clients asking for these products because they offer more value? The question is intriguing but largely unanswered.

The existing literature points to two related financial benefits that insurance, primarily health insurance, offers to poor clients when financial shocks are small. It can reduce the cost of the shock by cutting **out-of-pocket spending** and it can **smooth cash flows** by collecting small regular payments to cover irregular needs. It is important to note, however, that many studies of health insurance look at products that cover both small and large shocks and fail to disaggregate the effects.

Evidence from existing research on the effect of microinsurance on **out-of-pocket spending** for small shocks is mixed. While some studies find that insurance **decreases** spending on small shocks or outpatient care (Ekman, 2004), many are inconclusive (Chankova et al., 2008; Wagstaff, 2007). Some studies even find that insurance can **increase** out-of-pocket expenditures because the insured are less likely to forgo care (Wagstaff and Lindelow, 2008). If coverage is not complete, patients who receive care must then pay additional costs of some of treatment, drugs, copays or others to continue their treatment. The “negative” outcome of this additional spending must be viewed in light of the positive effect on health seeking behaviors and health outcomes.

There is limited but positive evidence that insurance helps to **smooth cash flows** and stabilize income for small shocks. One study shows that membership in a community-based health insurance program in Mali is associated with lower financial risk (Franco, Diop et al., 2008). Hamid, Roberts, et al. (2010) illustrate that prepaid health microinsurance cards covering routine care in Bangladesh have a positive effect on stability of household income via food sufficiency. Aggarwal (2010) notes that borrowing and/or asset sales associated with primary healthcare are as much as 61% lower for the insured versus the uninsured.

Moving Forward

Initial evidence of the financial benefits of microinsurance to clients is encouraging but limited largely to a handful of studies and highly skewed toward health insurance. To better understand the value of microinsurance to poor households, more rigorous studies of a broader range of products are needed. These include randomized control trials but can also include more qualitative studies that can paint a clear picture of **how** poor households use microinsurance. Studies should include a broader contextual and nuanced discussion that takes into account the added value of microinsurance, the full cost of a financial shock, and the trade-offs people face when purchasing insurance. There is also a need to place greater emphasis on how, if at all, microinsurance can smooth cash flows in the face of small shocks. Demand literature has pointed to the need to offer “tangible” frequently-used products to create value for clients, but this premise remains largely untested. Moving forward, MILK will engage with the community of microinsurance researchers, practitioners, and donors to fill some of the gaps, will provide new evidence through original studies, and move towards a clearer understanding of microinsurance value.

Bibliography

Aggarwal, A. (2010). Impact evaluation of India's 'Yeshasvini' community-based health insurance programme. *Health Economics, 19,* 5-35.

Ahuja, R., & Guha-Khasnobis, B. (2005). Micro-Insurance in India: Trends and strategies for further extension, Working Paper No. 162. New Delhi, India: Indian Council for Research on International Economic Relations.

Chankova, S., Sulzbach, S., & Diop, F. (2008). Impact of mutual health organizations: Evidence from West Africa. *Health Policy and Planning, 23*, 264-276.

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

Chowdhury, S. (2009). Health shocks and the urban poor: A case study of slums in Delhi. Retrieved from <http://www.isid.ac.in/~pu/conference/dec_09_conf/Papers/SamikChowdhury.pdf>

Clarke, D., & Dercon, S. (2009). Insurance, credit and safety nets for the poor in a world of risk. DESA Working Paper No. 81.

Collins, D., Morduch, J., Rutherford, S., & Ruthven, O. (2009). *Portfolios of the poor: How the world's poor live on two dollars a day*. Princeton, NJ: Princeton University Press.

Dercon, S. (2000). Income risk, coping strategies, and safety nets. Background paper for the World Development Report 2000/01. WPS 2000.26.

Devadasan, N., Manoharan, S., Menon, N., Menon, S., Thekaekara, M., & Thekaekara, S. (2007). Indian community health insurance schemes provide partial protection against catastrophic health expenditure. *BMC Health Services Research, 7,* 43.

Diop, F. P., Sulzbach, S., & Chankova, S. (2006). The impact of mutual health organizations on social inclusion, access to health care and household income protection: Evidence from Ghana, Senegal and Mali. Bethesda, MD: Partners for Health Reform*plus*.

Ekman, B. (2004). Community-based health insurance in low-income countries: a systematic review of the evidence. *Health Policy and Planning, 19,* 249-270.

Franco, L. M., Diop, F. P., Burgert, C. R., Kelley, A. G., Makinen, M., & Simpara, C. H. T. (2008). Effects of mutual health organizations on use of priority health care services in urban and rural Mali: a case-control study. *Bulletin of the World Health Organization, 86,* 830-838.

Gertler, P., & Gruber, J. (2002). Insuring consumption against illness. *American Economic Review, 92,* 51-70.

Giné, X., Townsend, R., & Vickery, J. (2007). Statistical analysis of rainfall insurance payouts in southern India. *American Journal of Agricultural Economics, 89,* 1248-1254.

Hamid, S. A., Roberts, J., & Mosley, P. (2010). Can micro health insurance reduce poverty? Evidence from Bangladesh. Sheffield Economic Research Paper Series No. 2010001.

Kruk, M. E., Goldman, E., & Galea, S. (2009). Borrowing and selling to pay for health care in low- and middle-income countries. *Health Affairs, 28,* 1056–1066.

Magnoni, B., & Zimmerman, E. (2011). Do clients get value from microinsurance? A systematic review of recent and current research. Appleton, WI: The MicroInsurance Centre, LLC.

Roth, J., McCord M. J., & Liber, D. (2007). *The Landscape of microinsurance in the world's 100 poorest countries.* Appleton, WI: The MicroInsurance Centre, LLC.

Wagstaff, A. (2007). Health insurance for the poor: Initial impacts of Vietnam's health care fund for the poor. Policy Research Working Paper # WPS 4134. Washington DC: World Bank.

Wagstaff A., & Lindelow, M. (2008). Can insurance increase financial risk? The curious case of health insurance in China. *Journal of Health Economics, 27,* 990-1005.

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.