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# Microinsurance: Applying Actuarial Skills to Help Low Income Communities

Q&A with Jeff Blacker and Mary Yang  
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Actuaries are at the core of any conventional insurance company. However, little is known about actuaries who work specifically to provide financial stability to low income groups. Jeff Blacker and Mary Yang, both microinsurance specialists, share their views on the actuary's role in the microinsurance space, its challenges, and product issues specific to this market segment around the world.

## WHAT IS MICROINSURANCE?

**Q: How is microinsurance defined? Is the definition global, or does it vary by country or region? Are there any other terms used?**

**Mary:** "Microinsurance" is often defined as insurance products that are accessible and used by low-income people. Opinions differ as to whether microinsurance should embody elements of low coverage and low premium. When one delves into the minute details, the target market for microinsurance may differ. Some argue that microinsurance is for the poor. Others believe that it is for anyone with limited access to financial services. Still, there are those who view microinsurance as an alternative to social security while others argue that the ability of the market to pay premiums must be present. Alternative terms include "mass insurance" and "affordable insurance" among others; the nuances are often driven by how different parties want microinsurance to be perceived by target markets.

**Q: Could you please describe the global landscape of microinsurance in terms of geographical areas and risks covered?**

**Jeff:** According to the World Map of Microinsurance (<http://worldmapofmicroinsurance.org/>), microinsurance reaches nearly 265 million people. The breakdown by region is: Latin America and Caribbean (49 million covered lives and \$830 million (U.S.) premium), Asia (170M covered lives and \$829M (U.S.) premium), and Africa (44M covered lives and \$475M (U.S.) premium). You can select a region on the map, such as "Asia and Oceania," and drill down to countries in the region such as India. India has 111 million lives insured and \$545 million (U.S.) in annual premiums. Keep drilling to see a breakdown by product, and you find that life and accident coverages are the most common microinsurance



products in India. Results are also available for agriculture, health, and property microinsurance.

**Q: Why is microinsurance important?**

**Jeff:** Low-income people are less likely to have access to savings and mainstream insurance. They rely on family, friends, community and sometimes lenders to offset financial loss in the event of an adversity, and they may need to sell assets that are their source of income. They may also have greater exposure to ill health, accidents due to their types of work, and crop damage caused by droughts or hurricanes. Microinsurance is one tool that helps reduce their vulnerability.

**Q: What are ideal markets for microinsurance?**

**Mary:** Like mainstream insurance, microinsurance can only be provided on a sustainable basis in an environment that meets these certain pre conditions including:

- Sound and sustainable macroeconomic and financial sector policies that inspire confidence;
- A well developed public infrastructure to allow sustainable and efficient delivery;
- Effective market discipline in financial markets that offers sufficient consumer protection;
- Mechanisms for providing an appropriate level of protection (or public safety net); and
- Efficient financial markets.

Absent the above, a microinsurance product is often a short lived project or one that needs to perpetually depend on donor resources.

**Q: How popular is microinsurance among providers? Are providers willing to enter this space? Are there any concerns regarding profitability? Are there specialized microinsurance providers?**

**Mary:** While microfinance institutions were one of the first providers of microinsurance, more not for profit institutions, banking institutions and commercial providers have entered into this space. Some specialized microinsurance providers such as ParaLife were launched to serve the low income market. Lack of industry data and sustainability challenges remain major concerns. Over time, research, governmental support and access to insurance expertise would be able to address these concerns.

#### WORK OF THE ACTUARY IN MICROINSURANCE

**Q: What skills are required in an actuary working in microinsurance?**

**Mary:** In addition to technical skills, the ability to understand the mind set and behavior of the target market as well as experience with the range of other insurance functions are valuable.



**Jeff:** Creative problem solving skills and empathy are needed when meeting microinsurance constraints. One constraint is the need for small policy sizes and low administration costs. This constraint makes underwriting at the time of sale too expensive. Another constraint is the need for products with little or no policy exclusions, which can make the product more difficult to understand and reduce the trust you are attempting to build with the client. Yet another obstacle is the demand for quick claims settlement. Microinsurance actuaries can use policy design features to meet these demands while limiting the provider's exposure to anti selection and fraud.

**Q: What are the gaps in demand and supply of actuarial skills in microinsurance?**

**Mary:** Providers that are not commercial insurance companies are sometimes not aware or have difficulties accessing insurance expertise that include actuarial skills. This is sometimes true of commercial insurance companies in developing countries as well. Difficulties accessing the necessary expertise often come in the form of high fees, distance, language barriers and/or lack of understanding of the target markets.

**Q: What are the recent developments in expanding actuarial knowledge and skills in parts of the world where microinsurance is most prevalent or needed?**

**Jeff:** Several examples come to mind. "Actuaries for Africa" provides a professional actuarial education program for West Africa in Benin. The U.K.'s IFoA is considering a microinsurance training curriculum as well. The IAA's Actuaries Without Borders provides assistance to actuarial profession in developing regions by developing volunteer opportunities, meetings, and online exchanges. One final example is the health microinsurance pricing toolkit developed by Milliman. The toolkit's spreadsheet and documentation help users understand how to price health microinsurance products.

**Q: Are regulations applicable to microinsurance different from the regulatory environment for conventional insurance?**

**Jeff:** Some countries, such as the Philippines, have regulations that are specific to microinsurance. Other countries, such as Jamaica, regulate microinsurance under the same framework as all other insurance products while being mindful of the special circumstances of microinsurance during the review and approval process. One challenge for microinsurance regulation is minimum capital, which could limit the establishment of small microinsurance providers. Another challenge is legislation requiring distributors to meet licensing requirements, which could prevent the sale of microinsurance through alternative distribution channels.

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**Q: What role do non insurance organizations play in developing risk management tools for the microinsurance target customer segment? Are there any examples of programs developed and managed by non insurance organizations?**

**Mary:** Non insurance organization such as microfinance institutions and cooperatives often may be effective distribution channels. Non-insurance organizations such as SEWA have developed microinsurance programs for its members.

#### PRODUCT SPECIFIC ISSUES

**Q: What are the most common distribution channels in microinsurance?**

**Mary:** Microfinance institutions, cooperatives and other social service not-for-profits are common distribution channels. To reach low income markets, providers continue to seek out potentially effective and low cost distribution channels including the use of technology.

**Jeff:** One distribution channel built around technology is mobile insurance. Clients may receive free insurance for a few months after the purchase of a mobile phone or other service, after which they have the option to continue the coverage for a premium. Transaction costs are low, because premiums are paid through small reductions in the client's mobile account or phone minutes. The small monthly premiums of many clients are aggregated by the mobile provider before transferring the premium to the insurer.

**Q: What are some key challenges in developing and marketing microinsurance products?**

**Mary:** There are numerous challenges with providing microinsurance. These include a lack of the target market's familiarity with insurance, ability to pay, low-cost distribution combined with the need to provide sufficient customer education/care and coverage.

**Jeff:** One of the first challenges actuaries face is a shortage of reliable data for pricing. Our book offers a table of online data sources, which can be helpful for initial pricing. Two other challenges we have already discussed are regulatory frameworks and sustainability/profitability for providers.

**Q: Can a microinsurance provider reinsure some of their exposure? Are there reinsurers specializing in microinsurance?**

**Jeff:** Similar to traditional insurance, microinsurance providers access reinsurance for various reasons. I priced microinsurance in Guatemala that included reinsurance of life and cancer benefits, but not other benefits built into the product that had higher frequency and lower payouts. It is common to see reinsurance of microinsurance that covers natural disasters such as hurricanes or drought. MiCRO is a reinsurer, specializing in microinsurance, for these risks in Haiti and Central America. ■



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