


Institute  
and Faculty  
of Actuaries

# Actuaries in Microinsurance

Jeff Blacker



25 May 2016

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# Adventures in Microinsurance

Jeff Blacker



1. Is Microinsurance an Actuarial Adventure?
2. My Adventure
3. Exploring the Book
4. Use the Book to Explore the World
  - > Finding Opportunities
  - > Finding Data Sources

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## 2015 MICROINSURANCE COVERAGE RATIO

Source: Microinsurance Network





### AN ACTUARIAL ADVENTURE?

*"Microinsurance provides an opportunity to make a positive impact in people's lives with your actuarial work."*



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## My Own Adventures in Microinsurance

- In 2007 I left my job to become an independent consultant
- Volunteer: *Microinsurance Academy*
  - Spreadsheet analysis
  - Writing content for annual conference

### PREQUEL / BACK STORY

*I went on my first mission trip in 2005, and 3 weeks later I moved to Honduras for a year. When I returned to my prior job I knew something was missing.*

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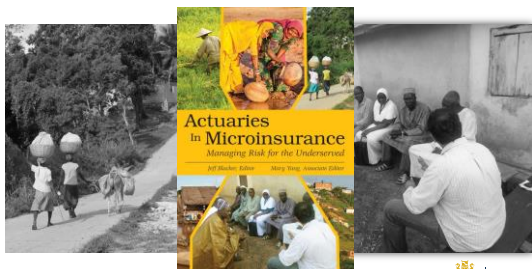
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## My Own Adventures in Microinsurance

- 2008 ILO Microinsurance Fellowship
- Munich Re Foundation
  - Cartagena, 4<sup>th</sup> Annual Conference
- Panama
- **Nicaragua**
- Guatemala
- Kenya
- India

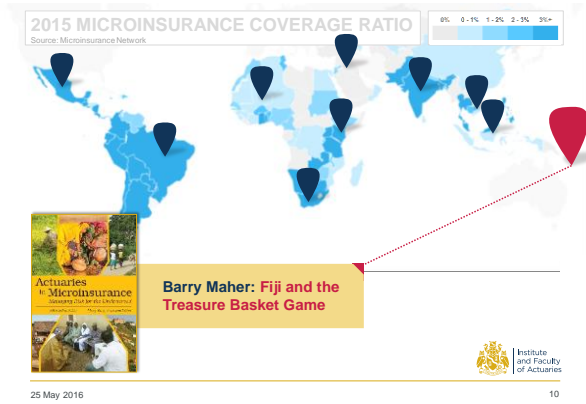


## From the Cubicle to Kenya and Beyond...



## Exploring the Book Actuaries in Microinsurance

- 20 actuaries wrote chapters
- 12 technical chapters + 10 anecdotes
- It is a useful resource to for finding your own adventure in Microinsurance.
- **Lessons learned from the book.**




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## The Basket Treasure Game

- Concept-teaching exercise
  - Explain INSURANCE as a concept
  - Review personal risks / costs
  - Demonstrate pooled risk management
- Building trust and communication
- Understanding local concerns



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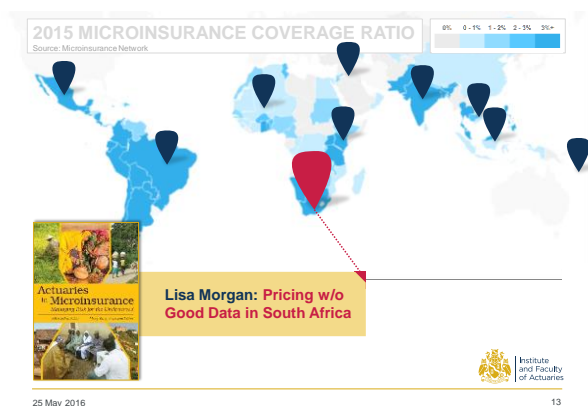
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## Designing and Pricing with Little or No Data

- There are many cases where there is little or no data available for pricing health microinsurance models.
- This is often the case in developing nations.
- Market Research is one solution.
  - How do you do market research in a developing region?
  - What do you do with the results?



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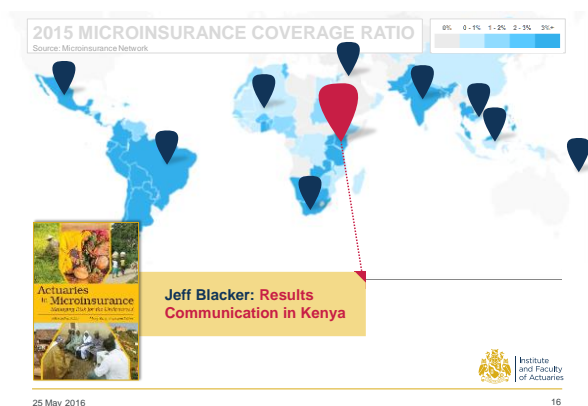
## Milliman in South Africa

- Milliman supported Millward Brown, a local South African market research firm, to perform face-to-face interviews.
- The questionnaire was translated into Zulu and Sesotho.
- Appendix A includes the questionnaire and responses



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## Precaution When Communicating Results

- Evaluating product design and claims experience of a health MI product in Kenya
- I projected that loss ratios would exceed 120% once the business reached maturity.
- All that was left for me to do was email my spreadsheets, right?



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## Precaution When Communicating Results

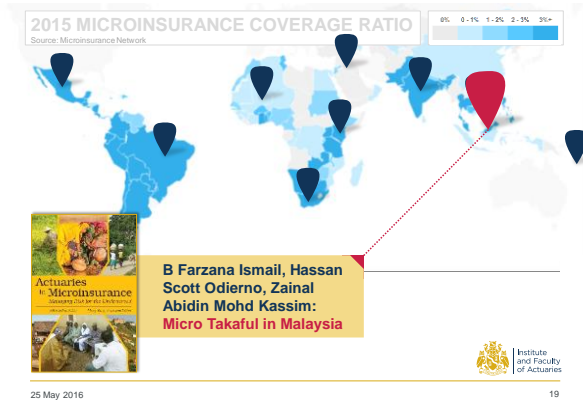
- "Remember your actuarial standards of practice"
- I prepared a report which made the analysis more useful, and reduced the likelihood of somebody being upset with me when future results do not exactly match projections.

*Given the significant assumptions made to overcome data problems, there is a risk of this analysis being misinterpreted by other users. To prevent misinterpretation, this analysis may only be provided to other users either in its entirety or with my consent.*



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## What is Micro Takaful?

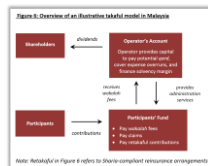
*In many Muslim countries, the take-up of insurance products, traditional or micro products, is extremely low, in part due to concerns over the Islamic acceptability of insurance.*

- Key principles underlying Takaful
  - Sharia-compliant operations
  - Voluntary contributions / donations or *tabarru* in replacement of premium
  - Transparency
  - Ethical requirements, particularly in investments of assets
  - Interest-free financial transactions

## Micro Takaful in Malaysia

The book provides an in-depth primer:

- Where are the emerging opportunities?
- How is it different than traditional insurance products and MI?
- How does Takaful operate?
- Case study in Malaysia






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## Finding Opportunities

- Self-Education
  - Online Resources
  - Foreign Language
- Take a class

### GET INVOLVED

*Go to a conference. Get experience in low-income markets. Research volunteer opportunities. Consider a more traditional actuarial job focused on developing countries.*

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## Full-time Opportunities

- The World Bank (Washington D.C.)
- ILO Impact Insurance Innovation Facility (Switzerland)
- MicroInsurance Centre (Wisconsin, USA)
- MicroEnsure (UK)
- Leapfrog Investments (UK, Asia, Africa)
- MiCRO (Latin America & Caribbean)
- **JOB LISTINGS:** Microfinance Gateway on CGAP

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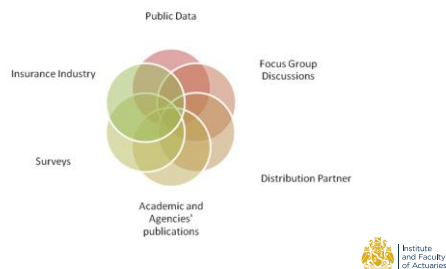
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## Discussion of MI Data Sources



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## Secondary Data Sources

- Access to Insurance Initiative
- District Health Information Software (DHIS)
- Findex
- Gapminder
- ILO Impact Insurance Facility
- Swiss Re Sigma reports
- Microinsurance Network

**FACTOID**  
I've used the book myself.



- **APPENDIX:** Data Checklist and Links



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## Adventures in Microinsurance

**Actuaries in Microinsurance**  
Managing Risk for the Underserved  
Jeff Blacker, Editor Merry Sany, Assistant Editor

This book provides an educational and enjoyable read for actuaries working in traditional markets, young actuaries living in developing regions, and Microinsurance specialists who desire to learn more about the actuarial aspects of this market.

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**Amazon.com**  
**Actexmadriver.com**

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The Experts In Actuarial Career Advancement

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Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.



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