



# Institute of Actuaries of India

## Pricing of Term Insurance for Low Income / Microfinance groups

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# Agenda

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Introduction to Microfinance Groups

Micro-Insurance

Micro-Finance process

Pricing

Communication

Questions / Observations

# Introduction -Microfinance groups(Low Income)

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**Microfinance (MF)** is a source of financial services for entrepreneurs and small businesses lacking access to banking and related services

– Wikipedia

**Microcredit, or microfinance**, is banking the unbankables, bringing credit, savings and other essential financial services within the reach of millions of people who are too poor to be served by regular banks, in most cases because they are unable to offer sufficient collateral.

[www.microfinanceinfo.com](http://www.microfinanceinfo.com)

Ultimately, the **goal of microfinance** is to give low income people an opportunity to become self-sufficient by providing a means of saving money, borrowing money and insurance.

– [www.investopedia.com](http://www.investopedia.com)

Analogous to the terms microfinance and microcredit, **Micro-insurance** refers to insurance products specifically targeting low income markets

## **International Association of Insurance Supervisors (IAIS):**

Micro-insurance is insurance that is accessed by low-income population, provided by a variety of different entities, but run in accordance with generally accepted insurance practices (which should include the Insurance Core Principles). Importantly this means that selection and management of the risk insured under a micro-insurance policy is based on insurance principles and funded by premiums. The micro-insurance activity itself should therefore fall within the purview of the relevant domestic insurance regulator/supervisor or any other competent body under the national laws of any jurisdiction.

- Excludes government social welfare scheme since these are not funded by premiums commensurate to risk
- Micro-insurance is contributory (premium fully paid) and hence differentiated from social insurance (subsidized)

# Process of Microfinance

- Village Surveys
- Village meetings
- Group formation
- Group training
- Group recognition test
- Documentation
- Disbursement
- Loan utilization check
- Weekly/fortnightly collections

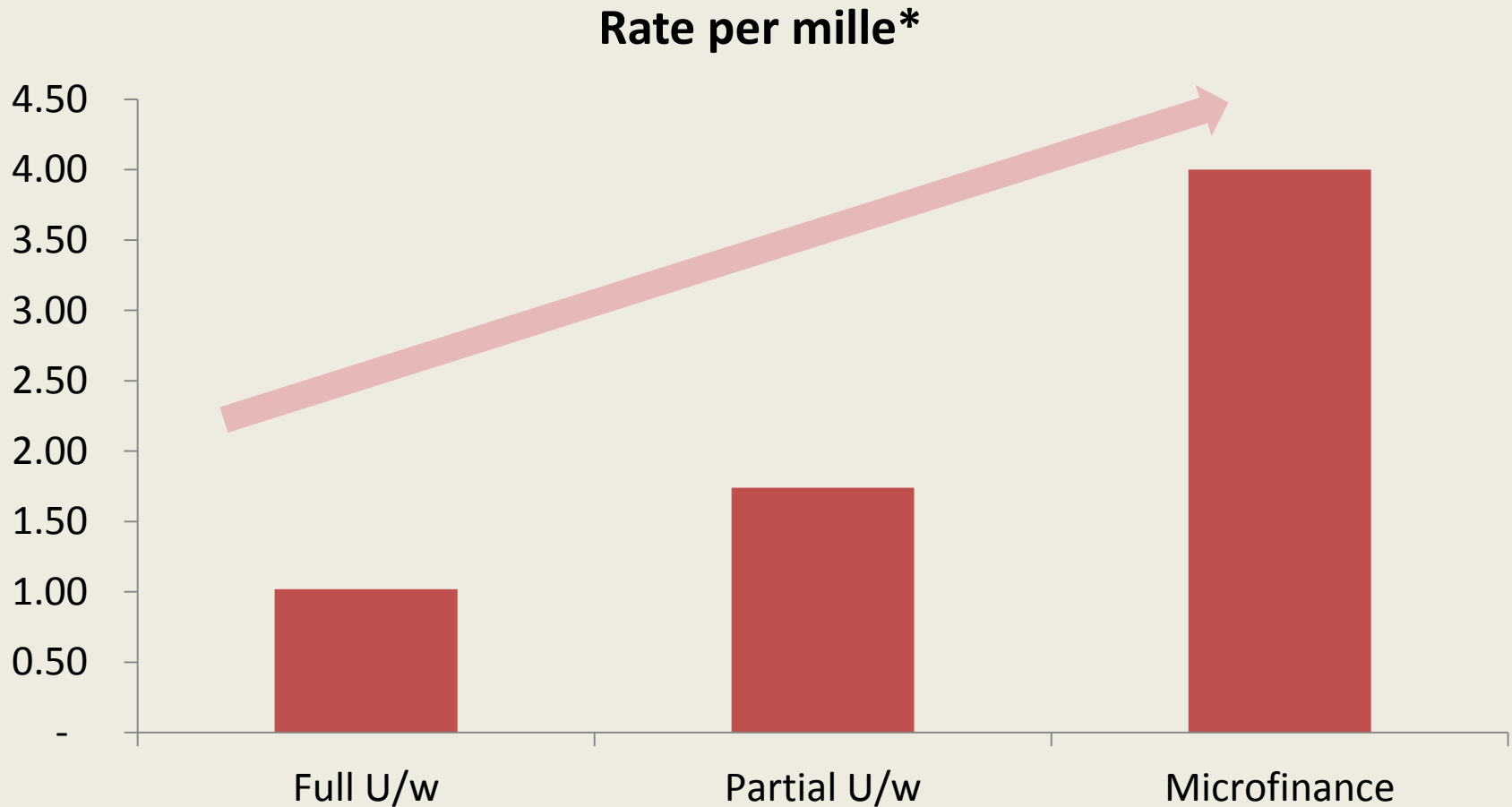


# Objective of Pricing

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- Derive rates that will sufficiently cover all costs and generate a fair return for all partners involved
- Premium rates should be set so that the actuarial present value of all premium collected over the duration of coverage will be sufficient to fund the expected present value of future claims and expenses incurred on the same block of business and still generate a “modest” surplus  
i.e. (very simplistically)  
$$PV(\text{Premium}) = PV(\text{Claims} + \text{Expenses}) + \text{Surplus}$$

# Term Insurance – Indicative rates



\*Indicative Gross premium rates for 35 year old male

# Why pricing micro-Insurance is different?

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Scarce Data

Need for an Affordable Premium

Evolving Pricing Model

Importance of Processes

Innovative Distribution Model



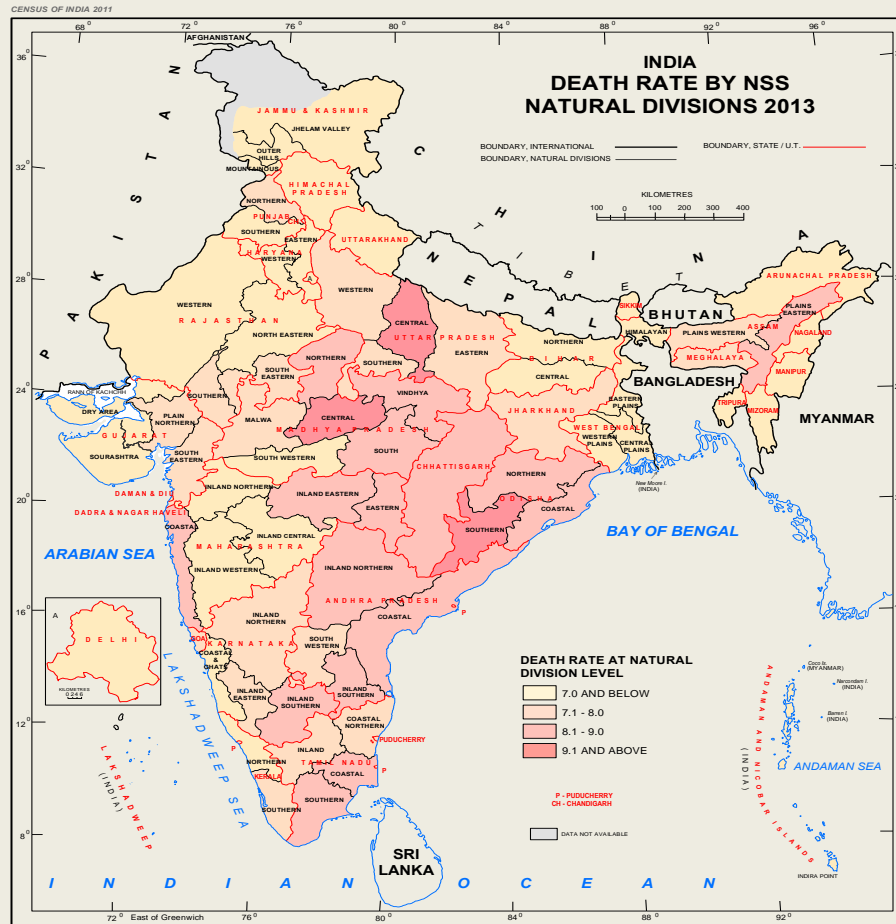
# Pricing of insurance for MF groups

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## Rating Factors

- Area of Operation
- Past experience, if any
- Process of MF institution
- Age distribution
- Gender mix
- Target profile
- Duration of covers
- Average cover
- Claims process
- Use of technology

# Geographical distribution of Mortality



# Area of Operations

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The mortality statistic varies very widely by the region in which the microfinance institution (MFI) is operating in

Some examples

- Lower mortality in southern states of Kerala and Tamilnadu
- Higher mortality in West Bengal, Bihar, interiors of Maharashtra

There are a few exceptions bucking the trend by having better processes

# Past Experience

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- Past data not always available
- If available, not always reliable
- Since the data is large (more than 100 claims), the experience is generally statistically credible
- Exposure and claims to be considered carefully
  - # of members enrolled for finance & covers may be different
  - # of claims – By claim reporting dates or claim event dates (?)
  - Claim intimation delays to be considered for Incurred But Not Reported (IBNR) claims

# Process of MF Institution

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Adherence to the Processes



Process Improvements



Sharing of Best Practices among regions

# Age Distribution & Gender Mix

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- Age specific / Various Age-bands / Unit Rate (Single Age Band)
- Mortality varies drastically by gender for this socio-economic class
- Proportions may vary & need to be priced for
- Experience rating should be done gender-wise, if data is available

# Target profile

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First Time Loan Borrowers



Roll over Customers



Already involved in income generating activities

# Duration of Covers



- Generally – One year
  - Weekly cycle
- Can be longer – 2 years to 3 years
  - Fortnightly or longer cycles
  - Appropriate margins for longer guarantees
- Recent RBI circular limits the loan amount to Rs.30,000 for tenures less than 24 months



# Average Cover

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- Bands
  - First time borrowers
    - 5,000
    - 10,000
  - Second / third cycle
    - 18,000
    - 35,000
    - 50,000
  - Second business - 1,00,000 (rare)

In general - Higher the cover, better the mortality



Intimation Delay

Documentation

Exclusions and Waiting periods



Investigate

Sudden spike in number of claims from a region

Causes (snake bites?)



Cost benefit analysis for claims investigation (?)

# Use of technology

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- Technology can help reduce
  - Transaction costs
  - Errors
  - Claim frauds
- Smart Cards – Loan passbook
- Biometrics – For uniqueness
- Mobile Devices – Collection of data / premium (?)
- Claims paid directly to bank accounts (?)
  - Cash Cards

# Other considerations

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Reinsurance (?)

Expenses



**Constrained by the product filing**

- Cost of issuing Certificate of Insurance
- Claim settlement/investigation costs
- Transaction/data handling costs
- Cost of Capital



Stamp duty = 0.02% of Sum Assured



Explicit profit loading, if any

# Feedback loop

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Pricing is a cyclical process



Continuous review is the Key

# Communication of the feedback

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- **Premium**

Less

- Claims (Paid + Pending)
- IBNR adjustment
- Expenses
- **Change in Reserves**

Add

- Investment Income (not significant)

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Non-negative residue (?)

# Communication...Level 2

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- **Earned Premium**
  - Less
    - Claims (Paid + Pending)
    - **IBNR adjustment**
    - Expenses

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Non-negative residue (?)

# Communication...Level 3

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- **Earned Premium - Period ending 6 months prior**
  - Less
    - Claims (Paid + Pending)
    - Expenses

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Non-negative residue (?)



# Summary



Introduction to Microfinance Groups

Micro-Insurance

Micro-Finance process

Pricing

Communication

Questions? / Observations



Pricing for microinsurance a technical guide by Peter Wrede and Caroline Phily

An Overview for Incorporating Client Protection Practices into Group Lending by Microfinance Institutions in India by [smartcampaign.org](http://smartcampaign.org)

