



Institute  
and Faculty  
of Actuaries

# Actuarial capacity in microinsurance

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The views expressed in this presentation are those of the presenter and not IFoA.

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# Actuarial control cycle



# When do you not need an actuary?

- If actuaries are not present, markets adapt
- Non-actuaries can do pricing, eg credit life products
- Some providers simply follow the leader
- The sum insured may not be material, even for aggregate risks, so simplified approach is possible
- Loss ratio may be small compared to distribution and admin costs so a simple loading can be used
- Reinsurers can provide pricing and underwriting expertise
- Regulator can define products that do not need actuarial certification



# When do you need an actuary?

- Regulation requires it
- Sum insured is high
- Product complexity is high eg health, index insurance
- High long term reserving is needed eg annuities, disability, catastrophe
- Risks are not predictable
- Operational risk is high, eg fraud, lack of experience, high insolvency risk
  
- Lack of data doesn't necessarily mean you need an actuary



# When might you need an actuary?

		Product complexity		
		Low	Medium	High
Business complexity	Low			
	Medium			
	High			



Don't need an actuary



Might need an actuary



Need an actuary

*Under discussion by  
IAIS-IAA Working  
Group*



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# International actuarial developments

## 2013 Paper Role of the Actuary

- Generic document that can be adapted by member associations
- Role of a professional actuarial association and role of IAA

## 2014 Issues Paper Addressing the Gap in Actuarial Services in MI

- Issues regarding actuarial functions in MI markets
- Challenges re actuarial resources in MI and recommendations

## Actuarial toolkits

- Credit life toolkit
- Health insurance toolkit by Milliman

## [2017 Paper] Actuarial Approaches to MI

- Framework for determining role of the actuary in MI
- Proportionate actuarial approaches to MI
- Further guidance material

- IAA = International Actuarial Association
- IAA Microinsurance Working Group
- IAIS-IAA Working Group
- IAA Actuaries Without Borders



# Certified Actuarial Analyst

## Outline of proposed microinsurance course

### Context

- Microinsurance products, features and stakeholders
- Role of the actuary in microinsurance, role of regulation and consumer protection
- Product development process
- Application of actuarial control cycle

### Pricing

- Steps for pricing a MI product
- Pricing issues - data, exclusions, moral hazard, adverse selection and fraud
- Pricing applications and toolkits

### Implementation

- Introducing a MI product to market
- Monitoring experience; product and process changes
- Intro to financial management – planning, reserving, profitability, solvency

