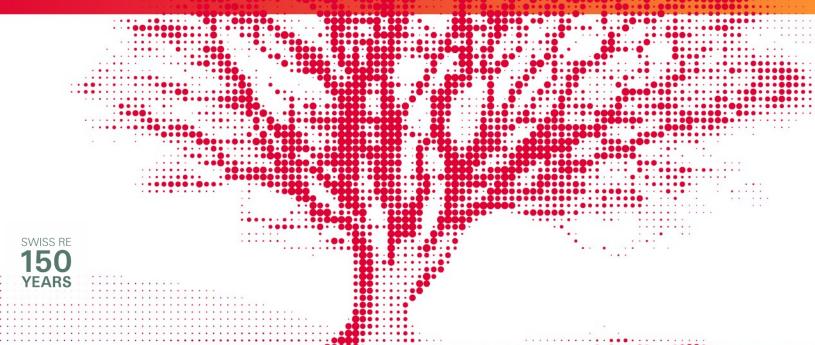


# Reinsurance

Jyoti Majumdar, 15 May 2014, Swiss Reinsuarnce Company



## Flavour only

Reinsurance

Cat models

4 Box principle

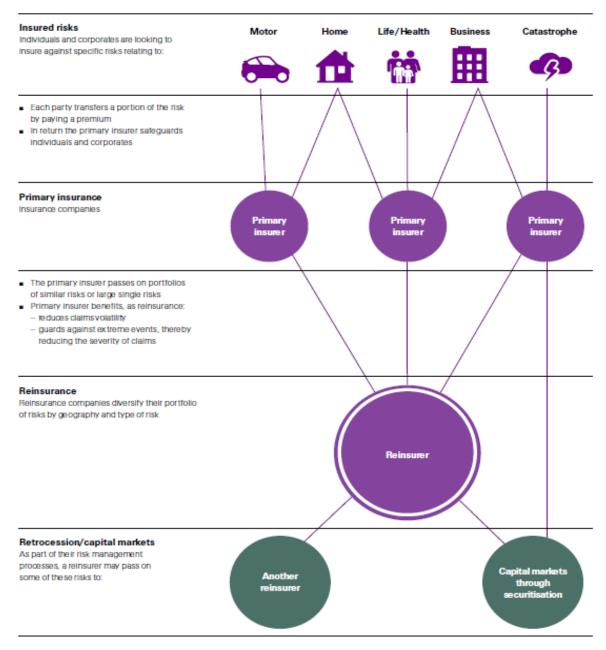
Climate change

Swiss Re, ECA, Sigma

What's on your mind?

#### Reinsurance

#### How risks are transferred in insurance and reinsurance



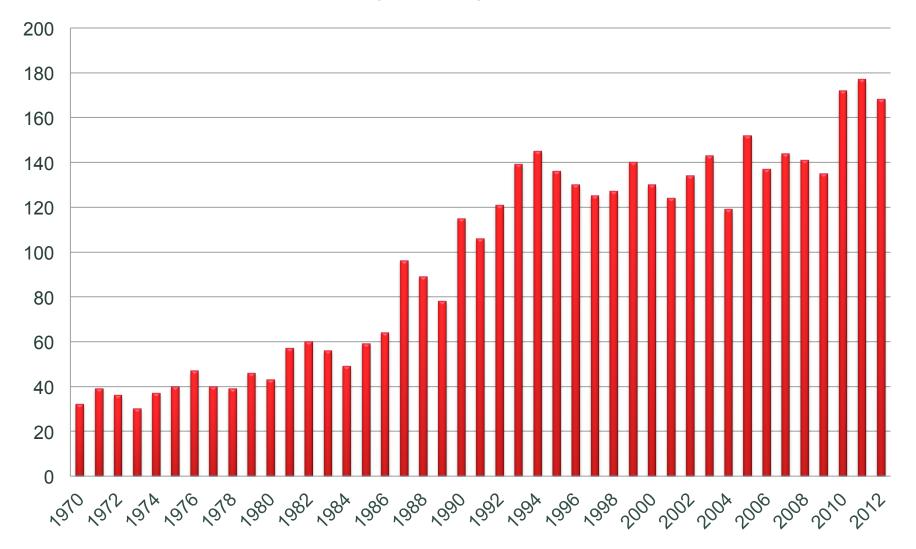


#### Reinsurance

- Helps insurers to manage their risks
  - Absorbing some of the their losses
- Stabilises insurance company's results
  - Enables growth and innovation to continue
- Invest large sum of money in financial markets
  - Contributes significantly to the real economy

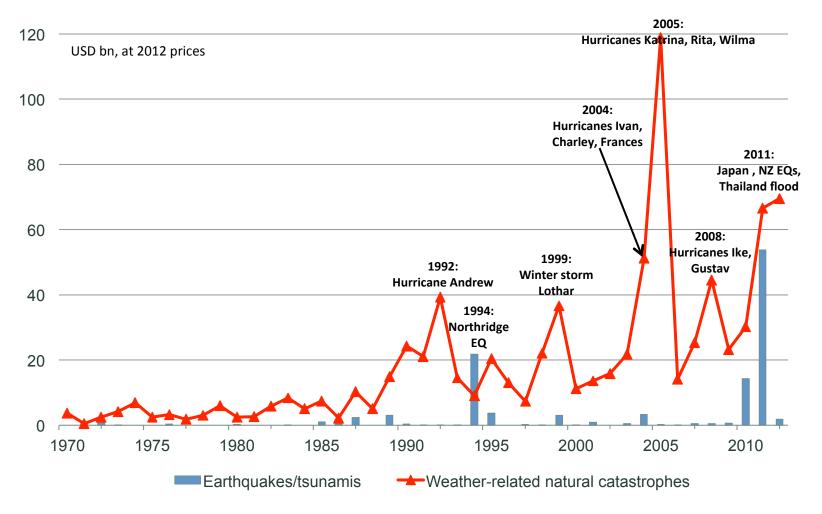


# Natural catastrophes (events)1970–2012





# Insured catastrophe losses 1970–2012

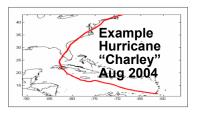






# Cat Modelling: 4 Box Principle

Natural Hazard



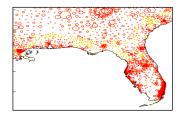
What can happen?

Vulnerability



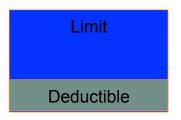
How do the exposed values react?

Distribution of property values



What is affected?

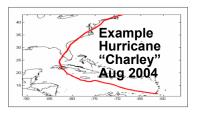
Insurance conditions



How is the exposure covered?

### Cat Modelling: 4 Box Principle

Natural Hazard



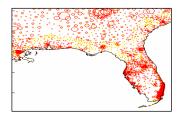
EQ, wind engineering, hydrologist

Vulnerability



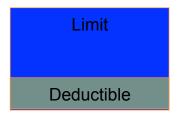
Civil, structural engineering

Distribution of property values



Geoinformatics, cartography

Insurance conditions



Mathematics, statistics, actuarial science

### Catastrophe models

- Catastrophe covers are large and complex
- Data is the key
- Multidisciplinary approach is required
- All models are wrong, some of them are useful

### **Economics of Climate Adaptation**

#### **Objectives:**

Provide decision makers with methodology to develop an adaptation strategy

Unlock global risk transfer markets

#### **Key features:**

- Total climate risk approach:
  - today's climate risk,
  - economic development paths
  - climate change trend

#### Swiss Re's role:

Lead contributor to the research



Please find the full study at www.swissre.com/climatechange

#### **Contact Information**



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