

# NON-LIFE CONCEPTS

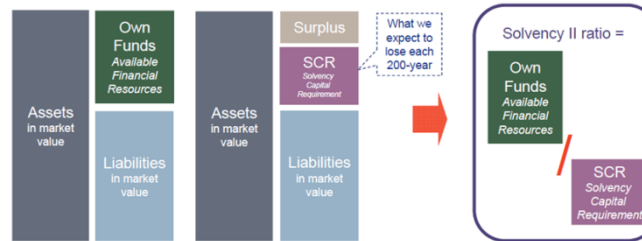
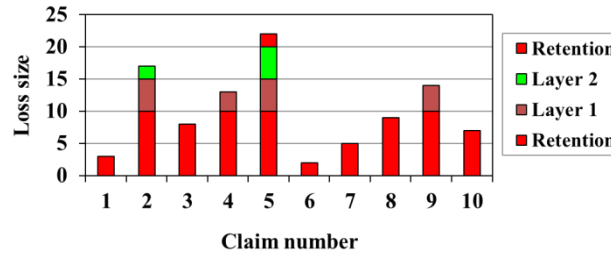
## Context & Goals

- Risk management of a life and non life insurance company
- Introduction to the main non life concepts (in the fields of reserving, reinsurance, solvency, pricing) for persons not initiated to non life
- Presentation of the main indicators for a follow up of non life activity
- Focus on the meaning and (dis)advantages of different actuarial techniques
- Links with current practice at client

## Benefits

- Broad view of main non life concepts
- Numerical examples and illustrations
- Discussion /exchange between trainees and trainers
- Help acquiring a feeling of non life figures: how to compare methods, interpret a result ?

$$E[C_{i,j}^{Pa} | C_{i,1}^{Pa}, \dots, C_{i,j-1}^{Pa}, C_{i,1}^{In}, \dots, C_{i,j-1}^{In}] = \lambda_{j-1}^{Pa} C_{i,j-1}^{Pa} + \delta^{Pa} \sqrt{\text{Var}[C_{i,j}^{Pa} | C_{i,1}^{Pa}, \dots, C_{i,j-1}^{Pa}]^2 \times \frac{C_{i,j-1}^{In} - E[C_{i,j-1}^{In} | C_{i,1}^{Pa}, \dots, C_{i,j-1}^{Pa}]}{\text{Var}[C_{i,j-1}^{In} | C_{i,1}^{Pa}, \dots, C_{i,j-1}^{Pa}]^2}}$$



## Deliverables

- Set of slides
- List of interesting references to read

## Agenda

- Introduction to pricing
  - Technical and commercial tariff
  - A priori and a posteriori pricing
- Reserving
  - Reserving methods: chain ladder, Mack, Merz Wutrich, Bootstrap
  - Attention points (tail factor, inflation, very large claims ...)
  - Individual claim modeling
- Reinsurance
  - Types of treaties: quota share, surplus, excess of loss, stop loss
  - Choice of a reinsurance treaty
- Solvency
  - Best estimate : claim and premium provision, impact of reinsurance and reinsurer default risk
  - Solvency Capital Requirements: non life underwriting, counterparty risk
- Indicators
  - Main accountancy ratios and expected evolution with Solvency II