Market Valuation methods for life insurance

Context & Goals

• Use of market consistent principles in the context of Solvency and IFRS
• Estimation of the main financial options embedded in a life insurance or pension plan (bonus option, surrender option, switching options,...)
• Organized by Reacfin in Louvain-la-Neuve

Example of training:

Benefits

• Strong methodological background provided
• Practical examples in order to understand the concepts

Deliverables

• On-site Workshop
• Set of slides with the methodology
• Examples in Excel
• Follow-up time for Q&A’s for several weeks after the workshops

Agenda

• Basic tools
  • Classical valuation of Life insurance
  • Financial products
  • Risk neutral valuation and deflators in finance
  • A first optional view of life insurance
• Classical life insurance with participation
  • A first discrete model
  • General valuation of bonus
  • Surrender options
  • Solvency requirements
• Unit-linked insurance products
  • Basic principles of unit linked
  • A first discrete model
  • Maturity options
  • Lookback options
  • Switching options
• Fai value and stochastic interest rate
  • Stochastic models of interest rates
  • Option valuation under stochastic interest rates
  • Valuation of life insurance with participation under stochastic interest rates