

Part I: 28-30 May 2013
Part II: 3-5 September 2013
in Budapest, Hungary

Organised by the EAA - European Actuarial Academy GmbH

## 1. Introduction

In order to become a fully qualified member of your actuarial association, it is required to complete a course of study in line with the association's syllabus and also to meet other conditions (e.g. work experience) required by the association. European actuarial associations which are a member of the Groupe Consultatif Actuariel Européen (GC) have to meet the requirements as laid down in GC Core Syllabus.

The EAA course on Actuarial Enterprise Risk Management consists of the following topics that are based on the new requirements of the Groupe Consultatif Core Syllabus passed in 2011:

## **Actuarial Enterprise Risk Management**

- > The general operating environment of the enterprise
- > Assessment of risks; risk types and risk measures
- > Design and pricing of products and/or services
- > Determination of assumptions and scenario setting
- Reserving and valuation of liabilities
- > Risk mitigation
- > Asset Liability Management
- ➤ Monitoring the experience and exposure to risk
- > Solvency and profitability of the enterprise and the management of capital
- Quantitative Risk Management: risk modelling

The aim is to provide the technical skills to apply the principles and methodologies studied under actuarial technical subjects for the identification, quantification and management of risks.

Most of the subjects of <u>Quantitative Risk Management and Solvency</u> as given in the Core Syllabus will also be covered in this course in order to provide a grounding in the quantitative aspects of risk management.

## 2. Participants

The seminar is open to all persons who are interested in comprehensive skills on Actuarial Enterprise Risk Management, such as actuarial students, actuaries, risk and capital managers, controllers, supervisors and auditors.

## 3. Purpose and Nature

This course provides the possibility to obtain information about Actuarial Enterprise Risk Management in order to remain competent and current in one's knowledge and skills. The participation in the seminar part I is not a prerequisite for the seminar part II: The two seminars can be booked as a whole series or individually.

#### 4. Lecturers

### **Theo Lanser**

Education: Qualified Actuary in the Netherlands (AAG) and a Financial Risk Manager certified by the Global Association of Risk Professionals (FRM). Before 2002 Theo worked as a life and non-life actuary for Achmea. Theo worked from 2002 till 2006 as an actuarial expert for DNB on the supervision of insurance companies. In those years he also worked on the development of the Financial Assessment Framework (FTK), which for pension funds has become part of the Pension Act (January 2007). From 2007 – 2010 Theo was coordinating for AEGON NL the practical implementation of an Economic Framework. Since November 2010 Theo is working for the department Capital Management & Policies and member of the Technical Working Group for Solvency II of AEGON.

## **Tom Veerman**

Tom Veerman AAG RBA, Consulting Actuary, AAA Riskfinance, the NetherlandsU, Education: Qualified Actuary in the Netherlands (AAG) and a Certified European Financial Analyst (CEFA). Tom has worked as a consultant for Tillinghast – Towers Perrin and Mercer in the Netherlands. He also has worked in the Group Actuarial Department of Eureko/Achmea. In 2006, Tom decided to set up (together with partners) Triple A – Risk Finance, where he works as managing consultant for business line insurance with a main focus on issues with regard to Risk-Based Capital Management, Asset-Liability management and Reinsurance.

## 5. Language

The language of the seminar will be English.

## 6. Programme

## PART I: 28-30 May 2013

Tuesday, 28 May 2013: The General Operating Environment of the Enterprise (Veerman)

09.00 Introduction & welcome

09.00-10.30 Enterprise Risk Management

- Background on ERM
- ERM frameworks
- COSO



|   |               | - ERM tools  |  |  |
|---|---------------|--|--|--|
|   |               | - ERM at financial institutions  |  |  |
|   | 10.30-10.45   | Coffee Break   |  |  |
|   | 10.45-12.30   | Governance   |  |  |
|   |               | - Risk management governance   |  |  |
|   |               | - Application at financial institutions                                      |  |  |
|   |               | - Solvency II 'pillar 2'   |  |  |
|   | 12.30-14.00   | Lunch  |  |  |
|   | 14.00-15.15   | Risk appetite  |  |  |
|   |               | - Risk appetite within an ERM framework                                      |  |  |
|   |               | - Risk bearing capacity  |  |  |
|   |               | - Risk tolerance   |  |  |
|   | 45 45 45 00   | - Solvency II 'ORSA'   |  |  |
|   | 15.15-15.30   | Coffee Break   |  |  |
|   | 15.30-17.00   | Risk Management culture  |  |  |
|   |               | - Supervisory approach to risk management                                    |  |  |
|   |               | - Embedding risk management - Pro's and con's                                |  |  |
|   |               | - Risk management culture in practice  |  |  |
|   |               | - Nisk management culture in practice  |  |  |
|   | Wednesday, 29 | May 2013: Assessment of Risks; Risk Types and Risk Measures                  |  |  |
|   | (Veerman)     |  |  |  |
|   | 09.00-10.30   | Definition of risk, Risk distributions and Statistics & Parameter estimation |  |  |
|   | 10.30-10.45   | Coffee Break   |  |  |
|   | 10.45-12.30   | Risk measures and stochastic approaches                                      |  |  |
|   | 12.30-14.00   | Lunch  |  |  |
|   | 14.00-15.15   | Risk identification  |  |  |
|   | 15.15-15.30   | Coffee Break   |  |  |
|   | 15.30-17.00   | Risk aggregation, Dependency and copulas                                     |  |  |
| Thursday, 30 May 2013: Quantitative Risk Management: Risk Modeling (Lanser) |               |  |  |  |
|   | 09.00-10.30   | Extreme Value Theory Modelling   |  |  |
|   |               | - Generalized Extreme Value Distribution                                     |  |  |
|   |               | - Derivation of Hill estimator   |  |  |
|   |               | - Case study on Hill estimator   |  |  |
|   | 10.30-10.45   | Coffee Break   |  |  |
|   |               |  |  |  |

## 10.45-12.30 Extreme Value Theory Modelling - Peaks Over Threshold Method - Generalized Pareto Distribution - Case study on Peaks Over Threshold Method 12.30-14.00 Lunch 14.00-15.15 Credit Risk Modelling - Credit Spreads and Credit Risk - Liquidity Premium - Credit Transition Matrices and Migration Risk Coffee Break 15.15-15.30 15.30-17.00 Credit Risk Modelling - Credit Risk model - CreditMetrics

- KMV



## PART II: 3-5 September 2013

# Tuesday, 3 September 2013: Quantitative Risk Management: Risk Modeling / Capital Requirements (Veerman)

| 09.00       | Introduction & welcome        |
|-------------|-------------------------------|
| 09.00-10.30 | Equity modelling              |
|             | Interest rate models          |
| 10.30-10.45 | Coffee Break                  |
| 10.45-12.30 | TVOG case study               |
|             | Exotic derivates              |
| 12.30-14.00 | Lunch                         |
| 14.00-15.15 | Economic capital and workshop |
| 15.15-15.30 | Coffee Break                  |
| 15.30-17.00 | Capital allocation methods    |

# Wednesday, 4 September 2013: Profitability and market consistent pricing / Risk Mitigation and ALM (Veerman)

| 09.00-10.30 | Risk reduction and Risk transfer Introduction in ALM                       |
|-------------|--|
| 10.30-10.45 | Coffee Break   |
|             |  |
| 10.45-12.30 | ALM for life and non-life insurances                                       |
| 12.30-14.00 | Lunch  |
| 14.00-15.15 | Solvency and profitability of the enterprise and the management of capital |
| 15.15-15.30 | Coffee Break   |
| 15.30-17.00 | Design and pricing of products and/or services                             |

## Thursday, 5 September 2013: Reserving and valuation (Lanser)

| 09.00-10.30 | Non-economic assumption setting (Lanser)   |
|-------------|--|
| 10.30-10.45 | Coffee Break                               |
| 10.45-12.30 | Mortality/ Longevity models (Lanser)       |
| 12.30-14.00 | Lunch                                      |
| 14.00-15.15 | Valuation of life liabilities (Lanser)     |
| 15.15-15.30 | Coffee Break                               |
| 15.30-17.00 | Valuation of non-life liabilities (Lanser) |
|             |  |

Recommended Literature: McNeil, Frey, Embrechts (2005), Princeton University Press, Quantitative Risk Management

## 7. Fees & Registration

Please register as soon as possible because of the expected demand. If there are more persons interested than places available we will give priority to the registrations received first. Please send your registration as soon as possible by using our online registration form at <a href="https://www.actuarial-academy.com">www.actuarial-academy.com</a>.

Your registration is binding. Cancellation is only possible up to 4 weeks before the first day of seminar. If you cancel at a later date, the full seminar fee is due. You may appoint someone to take your place, but must notify us in advance. EAA has the right to cancel the event if the minimum number of participants is not reached.

Please always give your invoice number when you effect payment. Bank charges are to be borne by the participant. We will send you an invoice, please allow a few days for handling.

Seminar part I: early-bird ends on 28 March 2013 Seminar part II: early-bird ends on 3 July 2013

Early-bird fee for seminar part I: € 540.00 plus 27% VAT Regular fee for seminar part I: € 640.00 plus 27% VAT

Early-bird fee for seminar part II: €540.00 plus 27% VAT Regular fee for seminar part II: €640.00 plus 27% VAT

The seminar fee includes participation, seminar material, coffee breaks and lunches. Accommodation, breakfast and further catering are not included.

## 8. Venue

The seminars and exam will take place at the Corvinus University of Budapest (Budapesti Corvinus Egyetem), Fovam ter 8, 1093 Budapest, Hungary.

For accommodation, we recommend the following hotels in walking distance:

Hotel Gellert (on the Buda side, just cross the bridge)
Hotel Korona (Pest side)
Bohem Art Hotel (Pest side)
Ibis Budapest Centrum (Pest side)
Estilo Fashion Hotel (Pest side)

## 9. CPD

For each seminar, the following CPD points are available under the CPD scheme of the relevant national actuarial association:

Austria: 18 points Belgium: 18 points Bulgaria: 12 points

Czechia: 2-3 points (individual accreditation)

Estonia: 18 hours Germany: 18 hours

Italy: approx. 4 credits (GdLA individual accreditation)
Netherlands: approx. 12 PE-points (individual accreditation)

Russia: 40 points Slovakia: 8 points Slovenia: 50 points Switzerland: 15 points

No responsibility is taken for the accuracy of this information.