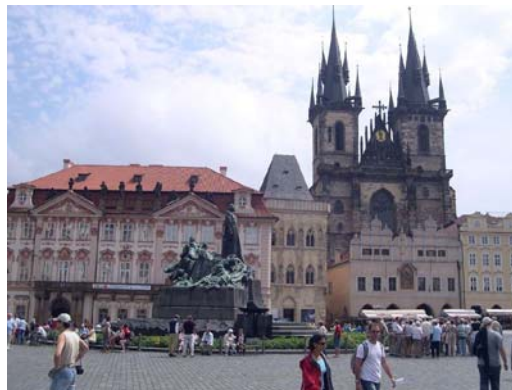




EAA Seminar  
**“Risk Aggregation in the  
Context of Solvency II”**  
14<sup>th</sup>/15<sup>th</sup> June 2012 | Prague / Czech Republic



Organised by the EAA - European Actuarial Academy GmbH

## 1. Introduction

Under the Solvency II framework, the insurers should calculate the 99.5<sup>th</sup> percentile of the distribution of their PVFP (Present Value of Future Profits) after 1 projection year. In an Internal Model, the insurers are also required to calculate the full probability distribution forecast.

In any case, practical management decisions should not depend on just one point of the distribution. To the contrary, the management decisions should take all the relevant chances and risks into account. This signifies that a reliable and robust calculation of the probability distribution forecast is very valuable for value- and risk-based management.

In the seminar, a range of risk aggregation methods such as Replicating Portfolios, Risk Geographies, Curve Fitting and Least Squares Monte Carlo will be introduced and discussed. These concepts will be treated in a practical way including case studies and discussions of the strengths and weaknesses of the methods considered.

## 2. Participants

The seminar is open to all interested practitioners, such as actuaries, risk and capital managers, supervisors and auditors, dealing with various aspects of Solvency II.

### 3. Purpose and Nature

The seminar is suited for actuaries or actuarial trainees who are directly or indirectly involved in Solvency II work. The applications discussed in this seminar are mainly from life insurance. However, the methods presented are applicable to other insurance sectors as well. Participants are advised to bring a laptop with Microsoft Excel installed.

### 4. Lecturers

#### **Dr. Michael Leitschkis**

Michael has been leading Milliman's Financial Risk Modelling practice in Dusseldorf since January 2012. His areas of expertise include interest rate risk modelling, credit risk modelling and risk aggregation techniques such as Least Squares Monte Carlo. Michael advises his Clients on development of Internal Models for Solvency II as well as other stochastic model applications such as ALM or MCEV. Prior to Milliman Michael spent five years at Generali Germany, where he built and developed the modelling team in charge of deterministic and stochastic models for Life & Health. Michael led a number of development projects in Prophet ALS in the areas of asset modelling, liability modelling, modelling of management rules etc. He introduced modelling standards and oversaw the development of model documentation in line with the corresponding Solvency II requirements. Michael had begun his professional career at B&W Deloitte, where he gathered extensive experience in implementation of Prophet models, calculation and review of MCEV and Economic Capital.

#### **Gary Finkelstein**

Gary has been leading Milliman's European Financial Risk Management practice for 7 years. A key service offering has been new product and hedge implementations, for a number of multi-nationals within the UK and Europe. Specifically, Gary has been involved in some very high-profile and highly successful launches of products with guarantees across Europe – supported by hedging techniques. Prior to Milliman Gary spent five years within Ernst & Young's Life practice, where he headed the ALM service line. He has assisted a diverse range of companies with risk and economic capital management, and he has extensive experience in financial reporting. As well as MCEV reporting and US GAAP experience, he is currently significantly involved in some of the largest Solvency-2 implementations in the UK. In particular, he has been very active in applying replicating portfolios and other techniques from his hedging experience to develop daily asset, liability and solvency monitoring and risk mitigation tools as part of the Solvency-2 Internal Model and Use Test implementation, and it is on this topic that Gary will be speaking on.

#### **Adam Koursaris**

Adam Koursaris is Senior Consultant at Barrie+Hibbert. Adam consults to insurance companies across Europe, helping them implement economic models for valuation, capital, hedging and risk management. He is currently leading Barrie & Hibberts research on implementation methodologies for Solvency II capital calculation. Adam graduated with a BSc in statistics and actuarial science from the University of the Witwatersrand in South Africa and qualified as a Fellow of the Faculty of Actuaries in 2007. Prior to joining Barrie & Hibbert, Adam worked at m Cubed Life in South Africa in their actuarial team covering valuations, reporting and product design.

#### **Andrew Smith**

Andrew D Smith leads the capital markets group at Deloitte. He has twenty five years of insurance experience in insurance, specialising in stochastic modelling, building and applying scenario generators, option pricing models, value-at-risk calculations and risk segmentation tools. He has written many influential papers in statistics and actuarial science.

## 5. Language

The language of the seminar will be English.

## 6. Preliminary Programme

### Thursday, 14<sup>th</sup> June 2012

08.45-09.00 Registration  
09.00 Introduction & welcome and opening of day 1  
09.00-10.30 Standard Formula and its Drawbacks  
10.30-10.45 Coffee Break  
10.45-12.30 Introduction to Modern Risk Aggregation Techniques  
12.30-13.30 Lunch  
13.30-15.00 Risk Geographies  
15.00-15.15 Coffee Break  
15.15-17.00 Curve Fitting  
approx. 19.00 Dinner

### Friday, 15<sup>th</sup> June 2012

09.00 Opening of day 2  
09.00-10.30 Replicating Portfolios  
10.30-10.45 Coffee Break  
10.45-12.30 Least Squares Monte Carlo, Part I  
12.30-13.30 Lunch  
13.30-15.00 Least Squares Monte Carlo, Part II  
15.00 concluding remarks, closing of seminar

## 7. Fees & Registration

Please register for the seminar as soon as possible because of the expected demand. If there are more persons interested in this seminar 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 [www.actuarial-academy.com](http://www.actuarial-academy.com).

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.

**Your early-bird registration fee is € 710 plus 20 % VAT until 25<sup>th</sup> April 2012. After this date, the fee will be € 790 plus 20 % VAT.**

## 8. Accommodation

The seminar will take place at the Hotel Park Inn Prague, Svobodova 1, 12000 Prague 2, Czech Republic.

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We have arranged special prices for accommodation: A single room costs € 105 per night. This price is valid for bookings out of our allotment until 17<sup>th</sup> May 2012. Please book your accommodation directly with the hotel using the Housing Form. Kindly book early, as our allotment includes a limited number of rooms, and note the hotels' cancellation policy.

## 9. CPD

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

Austria: 11 points

Bulgaria: 12 points

Czechia: 2-3 points (individual accreditation)

Estonia: 11 hours

Germany: 11 hours

Italy: approx. 4 credits (GdLA individual accreditation)

Netherlands: approx. 12 PE-points (individual accreditation)

Russia: 40 points

Slovakia: 8 CPD points

Slovenia: 50 CPD points

Switzerland: 15 points

No responsibility is taken for the accuracy of this information.