



EAA Seminar
Market Consistent Valuation
21st – 23rd October 2010 | Prague / Czech Republic



organised by the European Actuarial Academy GmbH

1. Introduction

The market-consistent embedded value (MCEV) is an approach to the allowance for risk where assets and liabilities are valued in line with the market prices of risks and therefore consistently with each other. It has been developed to address the contentious issues with traditional embedded value reporting how to set the risk discount rate, how to allow for options and guarantees and how to allow for cost of capital. As the concept of MCEV addresses these problems in a robust manner and gives a new perspective on value, these techniques became an integral part of company reporting and internal management.

This has been further pronounced in June 2008 when the CFO Forum published MCEV Principles¹ making the publication of market consistent results compulsory for CFO Forum companies by year-end 2009 – later delayed until year-end 2011. Also, though there are key important differences, the direction of Solvency II and Phase 2 of the IASB/FASB insurance contracts project indicates an approach which will contain many areas of similarity to MCEV. These developments require actuaries to be completely comfortable with both the theory of MCEV and the practical implications for their companies.

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2. Participants and Maximum

Actuaries working in Europe are invited to attend the seminar.

3. Purpose and Nature

The seminar is suited for actuaries or actuarial trainees that are directly or indirectly involved in measuring risk, capital or value within insurance companies. A considerable part of the seminar will be conducted by hands on Excel based exercises performed by each participant. These exercises are first explaining the basic principles of market consistent techniques and then building up to examples explaining principles of economic capital and economic scenario generation. As the seminar will start with the fundamental methodology, it is also suited for participants who are relatively new to this topic. The aim is to transfer knowledge and practice about market consistent valuation techniques and understanding its impact on results. The lecturers have prepared exercises using spreadsheets that are derived from case studies that came across in their daily practice.

The key objectives of the workshop are to develop your understanding of:

- Current environment with IFRS, Solvency II and MCEV,
- The MCEV Principles ,
- The techniques available,
- The practical issues to be addressed, and
- Challenges highlighted by the recent financial crises.

The workshop will develop delegates understanding of the basic principles of market-consistent embedded values, the techniques available, and the practical issues which need to be addressed. The two and a half day will comprise a mix of brief presentations, hand on exercises and group discussions.

The sessions will be interactive and involve some pre-course reading to ensure that participants have a certain minimum level of understanding to gain maximum benefit from the workshop.

Specifically, we will be looking at:

- Different methodologies for non-profit, unit linked and with-profit business
- Valuation of options using closed form solutions and stochastic simulation
- The equivalence of different valuation techniques
- The appropriate allowances for the cost of risk/capital
- Economic scenario generators and different interest rate models
- Use of market consistent valuation within economic capital models and Solvency II

4. Lecturers

Stefan Bause

Stefan Bause is a Senior Consultant of Towers Watson in Cologne, Germany. He has spent more than 10 years with the firm and is now responsible for MCEV related developments within the Cologne office. He has specialises in the following areas:

- Evaluation of life and health insurance companies;
- Review of European embedded values of life and health insurance companies;
- Implementation and review of Asset Liability Management and Economic Capital models;
- Development and distribution of financial modelling; and
- Accomplishment of actuarial due diligence within M&A transactions.

Mr Bause qualified as an actuary (Aktuar DAV) and is a member of the German Association of Actuaries (DAV). He received a Master's degree in mathematics from the University of Cologne.

Marc Schmitz

Marc Schmitz is a Consultant of Towers Watson Cologne, Germany. Since joining Towers Watson in January 2004, Mr Schmitz has been involved in a variety of projects, including:

- Calculation and review of embedded and appraisal values of life and health insurance companies;
- Economic capital and quantitative impact studies (QIS) as a part of the Solvency II project;
- Modelling and development of actuarial ALM models; and
- Review of technical reserves for non-life insurance companies.

Mr Schmitz received a Master's degree in mathematics from the University of Bonn. He is a qualified German Actuary (Aktuar DAV) and a member of the German Association of Actuaries (DAV) and a participant of the DAV working group "MCEV for non-life companies".

Monika Wieneke

Monika Wieneke is a Consultant of Towers Watson Cologne, Germany. Since joining Towers Watson in August 2005, Ms Wieneke has been involved in a variety of projects, including:

- Review of Embedded and European Embedded Values of life insurance companies;
- Modelling and development of actuarial ALM models;
- Evaluation of life insurance companies (Due Diligence and M&A);
- Product development and profit analyses.

Ms Wieneke received a German Master's degree in mathematics from the Heinrich-Heine University of Düsseldorf. She is a qualified German Actuary (Aktuar DAV) and a member of the German Association of Actuaries (DAV).

5. Language

The language of the seminar will be English.

6. Programme

Thursday, 21 October 2010

09.40 – 10.00 Registration

10.00 – 10.05 Welcome and opening of the seminar

10.05 – 11.30 Introduction

- Overview of major European/international initiatives (IFRS, Solvency II, MCEV)
- Common themes and open questions
- How companies can prepare today?
- Concept of market-consistent valuations

11.30 – 12.30 Exercise – Valuation of non-profit business

- Key features of non-profit, non-UL business
- Traditional Embedded Value
- Replication Method
- Certainty Equivalent Method

12.30 – 13.30 Lunch

- 13.30 – 14.15 Exercise – Valuation of unit linked business
- Valuation of cash-flow linked to market performance
 - Multiple Discount Rate Method
 - Equivalence of different valuation approaches
- 14.15 – 15.00 MCEV Principles ©
- MCEV Principles – main issues
 - Valuation of financial options guarantees
 - Definition of required capital and frictional cost of capital
- 15.00 – 15.15 Break
- 15.15 – 16.00 Summary EEV discloser 2009
- Comparison of results and methodology of EEV publications
- 16.00 – 17.15 Exercise – Valuation of unit linked with guarantees
- Risk neutral evaluation approach
 - Stochastic simulations,
 - Closed-form solutions, and
 - Equivalence of different valuation approaches
- approx. 19.00 Formal dinner

Friday, 22 October 2010

- 09.25 – 09.30 Opening of second day
- 09.30 – 11.00 Exercise – With-profit business
- Guaranteed Annuity Option (GAO)
 - Hedging of interest rate guarantee
 - Calculation of burn-through cost
 - Impact of management action and profit sharing
- 11.00 – 11.15 Break
- 11.15 – 12.30 Special Topics and further use of market consistent valuations
- Cost of residual non-hedgeable risks
 - Liquidity premium
 - MCEV Non-life
 - MCV framework as basis for value based management
- 12.30 – 13.30 Lunch
- 13.30 – 15.30 Economic scenario generators
- Equity process simulation
 - Interest rate models
 - Economic scenario generators in practice
- 15.30 – 15.45 Break
- 15.45 – 17.15 Exercise – Economic scenario generators
- Sample equity process simulation
 - Comparison of equity process simulations
 - Sample interest rate model simulation
 - Comparison of different interest rate models
- approx. 19.00 Social event

Saturday, 23 October 2010

- 09.25 – 09.30 Opening of third day by the Chairman
- 09.30 – 11.00 Economic capital
- Relation of value and risk
 - Definition and evaluation of Economic Capital
 - Requirements on value based management and internal models
- 11.00 – 11.15 Break
- 10.00 – 11.15 Exercise - Economic capital calculation / QIS 5
- Basis of economic capital models
 - Economic balance sheet

- Aggregation of risks and impact of diversification
 - Standard approach under QIS 5
- 12.30 – 13.00 Current development IFRS ED 2
- Overview
 - Comparison IFRS / Solvency 2 / MCEV
- 13.00 – 13.30 Summary, concluding remarks and closing of the seminar
- 13.30 – 14.30 Lunch

7. Fees & Registration

Please register for the seminar as soon as possible because of the expected demand. We recommend registration until 21st August 2010. If there are more persons interested in this seminar than places available we will give priority to the registrations having been first to arrive. Please send your registration as soon as possible by using our online registration form at www.actuarial-academy.com.

Your registration is binding. Cancellation free of charge 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 who takes 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 fully by the participant. We will send you an invoice, please allow a few days for handling.

Your early-bird registration fee is € 845.00 until 21st August 2010 the latest. After this date the fee will be €940.00.

8. Accommodation

more information will follow

Please book your accommodation directly with the hotel. Kindly book early, as our allotments include only a limited number of rooms, and note the hotels' cancellation policy.

9. Accreditation for CPD Points

For this seminar, the following CPD points or hours are granted by the individual actuarial associations:

Austria: 16 points

Bulgaria: 12 points

Czechia: 3 points (subject to approval of Accreditation Committee)

Germany: 16 hours

Hungary: 16 hours

Netherlands: approx. 14 PE-points (individual accreditation)

Russia: 40 points

Switzerland: 20 points

No responsibility is taken for the correctness of this information.