

EAA Webinar

“Interest Rate Modelling in Times of Low and Negative Interest Rates – Best Practices and Recent Developments”

21 November 2018 | 10:00 - 12:00 CET

Organised by the EAA - European Actuarial Academy GmbH.

Introduction

The present low and negative interest rate environment has introduced a variety of challenges for what has been the status-quo in interest rate modelling for a long time. State-of-the-art interest rate models need to be able to reflect the probability for negative interest rates to occur in a proper way; at the same time, long-standing paradigms for the calibration of interest rate models have lost their fundament.

The webinar covers how the various challenges of low and negative interest rate can be tackled when it comes to modelling topics insurance companies are facing, for both, risk-neutral valuations as well as real-world forecasting applications.

Dr. Mario Hoerig will introduce state-of-the art approaches for interest rate models with a focus on recent trends and solutions with respect to low and negative interest rates. Among others he will deal with the question whether interest rate models should display a lower bound for interest rates, discuss arguments for and against this, introduce models and tools how to enforce a lower bound for interest rates and discuss key requirements for such models when it comes to regulatory questions such as the absence of arbitrage opportunities.

The webinar will contain detailed case studies for risk-neutral and real world applications of interest rate models.

This webinar is for practitioners who want to gain a deeper understanding of state of the art techniques for interest modelling in times of low and negative interest rates.

Participants

The webinar is open to all interested persons.

Technical requirements and test session

Please check with your IT department if your firewall and computer settings support webinar participations (the programme GoToTraining is used for the webinar). Please also make sure that you are joining the webinar with a stable internet connection.

On 15 November 10:00 – 10:30 CET there will be a test session offered to all registered participants to test the software.

Purpose and Nature

The aim of this webinar is to provide an overview on interest rate modelling in times of low and negative interest rates, including state of the art approaches, industry best practices and a detailed case study applying these models. The webinar covers both, risk-neutral valuations as well as real-world forecasting applications. A particular focus will be put on recent developments triggered by the low and negative interest rate environment.

Lecturers

Dr Mario Hoerig, Partner, Oliver Wyman Actuarial

Mario Hoerig is a Partner with Oliver Wyman, co-leading the actuarial services offering in the German speaking markets. Mario focuses on quantitative modelling under Solvency II (economic scenario generators for risk-neutral and real-world purposes, ALM studies, risk factor modelling for Solvency II, risk aggregation, economic capital and capital management) and advises some of the largest insurance companies in Europe on these topics. He has extensive experience with the implementation and validation of interest rate models.

Within the webinar, Mario will provide an overview on market best practices on interest rate modeling for Solvency II (for both, risk-neutral valuations as well as real-world forecasting applications) with a particular focus on introducing and discussing recent developments triggered by the low and negative interest rate environment.

Language

The language of the webinar will be English.

Programme

Wednesday, 21 November 2018,

10:00 – 12:00 CET

Topics:

- Overview on state-of-the art interest rate models for both, risk-neutral valuations as well as real-world forecasting applications including a discussion of their key features
- Challenges introduced by the present low and negative interest rate environment and discussion of the resulting requirements for interest rate

- Calibration paradigms for interest rate models and the need for their adjustment in the presence of low and negative interest rates
- Lower bounds for interest rate models:
 - Pros and cons for the presence of a lower bound for interest rates
 - How to set the lower bound appropriately?
 - How can a lower bound be technically introduced into interest rate models?
 - Regulatory requirements on such models (in particular the absence of arbitrage opportunities) and practical ways to validate whether an interest rate model complies with these requirements.
- Case Study 1: Impact of different interest rate models on the valuation of liabilities with embedded options and guarantees
- Case study 2: A state-of-the-art real-world model for interest rates including a lower bound; simulation results and comparison to the Solvency II standard formula

Fees & Registration

Please register for the webinar by using our online registration form at www.actuarial-academy.com 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. After your registration, you will receive further log-in details to join the webinar. There will be a test session before the webinar.

Your registration is binding. Cancellation is only possible up to 2 weeks before the first day of the event. If you cancel at a later date, the full participation 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.

The registration fee is € 100.00 plus 19 % VAT.

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

CPD

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

Belgium:	individual accreditation
Bulgaria:	individual accreditation
Croatia:	individual accreditation
Czechia:	individual accreditation
Estonia:	2 hours
Germany:	2 hours
Hungary:	2 hours
Italy:	GdLA individual accreditation
Netherlands:	individual accreditation

Russia: individual accreditation
Slovakia: individual accreditation
Slovenia: individual accreditation
Switzerland: individual accreditation

No responsibility is taken for the accuracy of this information.