

In the winter term 2017/18 Prof. Dr. An Chen and Dr. Peter Hieber are going to offer the following seminar:

Special aspects of insurance economics (master)

Content

This seminar focuses on **life and pension insurance**. We mainly deal with the fair valuation and risk management of equity linked life insurance products. We consider and model the different types of risk inherent in these products with a focus on **financial market risks**. The seminar is based on scientific papers that summarize recent results in this area.

Target group

The seminar is suitable for Master students in *Wirtschaftsmathematik*, *Wirtschaftswissenschaften* or *Finance*. Previous knowledge in *Personenversicherungsmathematik*, *Insurance Economics* and *Finanzmathematik I* are helpful.

Seminar performance

Typically, seminar papers are distributed to a **group of 2 students**.

The seminar performance consists of three parts:

- A **seminar presentation** about a selected topic. The presentation typically includes some **theoretical derivations / model introduction** and some **numerical part** that applies the results in a realistic setup.
Duration of the presentation: 90 minutes (including discussion).
- A **written formulation** of the presentation documents as a support for the participants of a maximum length of **two pages**.
Delivery of the presentation documents: at least one week before the presentation via e-mail to peter.hieber@uni-ulm.de. The creation of the presentation documents is a performance of the whole group.
- **Active participation** in this seminar.

Based on the performance, every participant will be credited with an (internal) grade.

Seminar date

This seminar takes place as a block seminar. **The attendance at all seminar dates is required.**

Seminar papers

1. Miltersen, K.R.; Persson, S.-A.: **Guaranteed Investment Contracts: Distributed and Undistributed Excess Return**, *Scandinavian Actuarial Journal*, Vol. 4, pp. 257-279, 2003.
2. Gatzert, N.; Holzmüller, I.; Schmeiser, H.: **Creating Costumer Value in Participating Life Insurance**, *Journal of Risk and Insurance*, Vol. 79, No. 3, pp. 645-670, 2012.
3. Hansen, M.; Miltersen, K.R.: **Minimum Rate of Return Guarantees: the Danish Case**, *Scandinavian Actuarial Journal*, Vol. 4, pp. 280-318, 2002.
4. Devolder, P.; de Valeriola, S.: **Minimum Protection in DC Funding Pension Plans and Margrabe Options**, *Risks*, Vol. 5, No. 5, pp. 1-14, 2017.
5. Bernard, C.; Le Courtois, B.: **Asset Risk Management of Participating Contracts**, *Asia-Pacific Journal of Risk and Insurance*, Vol. 6, No. 2, pp. 1-23, 2012.
6. Pézier, J.; Scheller, J.: **Optimal investment strategies and performance sharing rules for pension schemes with minimum guarantees**, *Journal of Pension Economics and Finance*, Vol. 10, No. 1, pp. 119-145, 2011.
7. Kassberger, S.; Kiesel, R.: **Fair valuation of insurance contracts under Lévy process specifications**, *Insurance: Mathematics and Economics*, Vol. 42, pp. 419-433, 2008.
8. Bertrand, P., Prigent, J.-L.: **Portfolio insurance strategies: OBPI versus CPPI**, *Finance*, Vol. 26, pp. 5-32.

Registration

If you are interested, use one of the following web-pages:

http://www.econulm.de/semapps/stud_en/ (English version)

http://www.econulm.de/semapps/stud_de/ (German version)

You can submit you preferences from Saturday, **June 24th 2017** until Saturday, **July 1st 2017**.

A **preliminary seminar meeting** will take place on **July, 21, 2017, 9a.m.**, at the **Institute of Insurance Science** (room 1.68, HeHo 20).

Further information

If you have any questions, please contact

- Dr. Peter Hieber (email: peter.hieber@uni-ulm.de)