



Course and Examination Fact Sheet: Spring Semester 2018

8,178: Asset Liability Management for Insurance Companies

ECTS credits: 4

Overview examination/s

(binding regulations see below)

Decentral - Written examination (100%, 90 mins.)

Attached courses

Timetable -- Language -- Lecturer

[8,178,1.00 Asset Liability Management for Insurance Companies](#) -- Englisch -- [Schmeiser Hato](#)

Course information

Course prerequisites

Bachelor Degree or equivalent.

Course content

The course Asset Liability Management describes and profoundly discusses concepts for the management of assets and liabilities in insurance companies. Initially, asset and liability management are considered separately. Finally, asset and liability side are combined with the purpose of developing integrated management approaches for life and non-life insurance companies.

Course structure

Asset management of insurance companies (basic considerations; Insurance Capital Asset Pricing Model; legal requirements of asset allocation policy; strategic aspects of asset allocation policy; performance measurement of capital allocation policy in insurance companies)

Liability management of insurance companies (group-balance concept; forms of risk diversification; reinsurance policy; Alternative Risk Transfer (ART); Solvency I, Solvency II, and Swiss Solvency Test (SST))

Asset liability management of insurance companies (overview and motivation; forms of asset liability management; asset liability management based on Markowitz approach: simultaneous vs. classical modeling; theoretical approaches for profit and solvency control based on integrated models)

Course literature



Albrecht, P. (1982): Gesetze der großen Zahlen und Ausgleich im Kollektiv - Bemerkungen zu Grundlagen der Versicherungsproduktion, *Zeitschrift für die gesamte Versicherungswissenschaft* (71), 501-538

Cummins J. D. (1991): Statistical and Financial Models of Insurance Pricing and the Insurance Firm, *The Journal of Risk and Insurance* (58), 261-302

Doherty, N. (2000): *Integrated Risk Management - Techniques and Strategies for Reducing Corporate Risk*, New York.

Farny, D. (2000): *Versicherungsbetriebslehre*, 3. Auflage, Karlsruhe.

Gründl, H./Schmeiser, H. (2002): Pricing Double-Trigger Re-insurance Contracts: Financial Versus Actuarial Approach, *Journal of Risk and Insurance* (69), 449-468

Liebwein, P. (2000): *Klassische und moderne Formen der Rückversicherung*, Karlsruhe

Lowe, St. P. and Stanard, J. N. (1997): An Integrated Dynamic Financial Analysis and Decision Support System for a Property Catastrophe Reinsurer, *ASTIN Bulletin* (27), 339-371.

Markowitz, H. (1952): Portfolio Selection, *Journal of Finance* (7), 77-91.

Schmeiser, H. (2004): New Risk-Based Capital Standards in the European Union: A Proposal Based on Empirical Data, *Risk Management & Insurance Review* (7), 41-51

Gatzert, N./Schmeiser, H.: The Merits of Pooling Claims Revisited, *The Journal of Risk Finance*, Vol. 13 (2012), No. 3, S. 184-198

Braun, A./Schmeiser, H./Rymasewski, P. (2014): Stock vs. Mutual Insurers: Who Does and Who Should Charge More?, erscheint in: *European Journal of Operational Research*

Braun, A./Schreiber, F./Schmeiser, H.: Solvency II's Market Risk Standard Formula: How Credible is the Proclaimed Ruin Probability? erscheint in: *Journal of Insurance Issues*

Additional course information

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Examination information

Examination sub part/s

1. Examination sub part (1/1)

Examination time and form

Decentral - Written examination (100%, 90 mins.)

Remark

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Examination-aid rule

Extended Closed Book

The use of aids is limited; any additional aids permitted are exhaustively listed under "Supplementary aids". Basically, the following is applicable:

- At such examinations, all the pocket calculators of the Texas Instruments TI-30 series and mono- or bilingual dictionaries (no subject-specific dictionaries) without hand-written notes are admissible. Any other pocket calculator models and any



electronic dictionaries are inadmissible.

- In addition, any type of communication, as well as any electronic devices that can be programmed and are capable of communication such as notebooks, tablets, PDAs, mobile telephones and others, are inadmissible.
- Students are themselves responsible for the procurement of examination aids.

Supplementary aids

Pocket calculator TI-30 series

Examination languages

Question language: English

Answer language: English

Examination content

All course contents / topics as defined above and treated in class.

Examination relevant literature

See course references.

Please note

We would like to point out to you that this fact sheet has absolute priority over other information such as StudyNet, faculty members' personal databases, information provided in lectures, etc.

When will the fact sheets become binding?

- Information about courses and examination time (central/decentral and grading form): from the start of the bidding process on 25 January 2018
- Information about decentral examinations (examination-aid rule, examination content, examination relevant literature): after the 4th semester week on 19 March 2018
- Information about central examinations (examination-aid rule, examination content, examination relevant literature): from the start of the enrolment period for the examinations on 09 April 2018

Please look at the fact sheet once more after these deadlines have expired.