Insurance Economics

Code 8807970218

ECTS credits 6

Attendance time 4

Language of instruction English

Duration 1

Cycle irregular

Coordinator Prof. Dr. An Chen

Instructor(s) Prof. Dr. An Chen

Allocation of study programmes Econo-Mathematics, BSc, Advanced Module, 5./6. Semester recommended, Economics and Management, BSc., Major Module, 4., 5., or 6. Semester recommended Economics and Management, MSc., Major/Mandatory Module

Recommended prerequisites Modules: Introduction to Business Administration; Introduction to Economics; Introduction into Probability and Statistics and Economics

Learning objectives The student should
• Understand the function and purpose of insurance companies (What is insurance? How can risk be measured? What kind of insurance types, products and markets exist?)
• Comprehend the functionality of selected insurance types (non-life insurance, life insurance, private health insurance, reinsurance)
• Understand insurance supply and demand using decision theory under uncertainty.
• Be able to justify the existence of social insurance systems and give reasons for government interference
• Know the concepts of management and controlling in insurance companies
Syllabus

Choice under uncertainty (Origins of expected utility theory, expected utility theory and rational decision under risk, measures for risk aversion, stochastic dominance, mean variance preferences)

Insurance demand by households (Base model, irreplaceable assets, insurance demand without fair premium, pareto-optimal insurance contract)

Insurance demand by firms (Risk management and diversification, risk diversification through the capital market, Capital Asset Pricing Model (CAPM), Arbitrage Pricing Theory (APT), risk management with forwards, futures and options, corporate demand for insurance)

Insurance supply (Traditional premium calculation, financial premium calculation, financial modelling of insurance pricing, economies of scope, economies of scale)

Moral hazard and adverse selection

Literature


• Zweifel, P. und R. Eisen (2003), Versicherungswirtschaft, 2. u. verbesserte Auflage - Berlin et al: Springer

Teaching and learning methods

Insurance Economics (Lecture), 3 hours per week

Insurance Economics (Exercises), 1 hour per week

Workload

In class: 80 h
Private study: 100 h
Total: 180 h

Assessment

The credit points will be awarded once the written or oral exam has been passed (depending on the number of participants). The type of examination will be announced in time - at least 4 weeks prior to the date of the exam. No prerequisites are necessary for exam registration.

Grading procedure

The grade of the module will be the grade of the exam.

Basis for

Major in Finance and Insurance;
Mandatory course: Business Administration