



Finance and Insurance

# Insurance Economics

Summer Semester

Institute:	INRIVER
Lecturer:	Dr. Johannes Maier
Assistant:	
Weekly hours:	4
Credits	6
Examination:	Final Exam
Prerequisites:	
Course Material:	Lecture Slides, Problem Sets

## Course Description & Main Objectives

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This course deals with core concepts of the theory of insurance demand. After a review of essentials of decision theory, the optimal design of insurance products is addressed from an information economics point of view. Optimal risk sharing in a complete information setting is discussed as the benchmark case. The main emphasis is placed on principal agent problems due to superior knowledge of the insured. In particular, the class covers adverse selection and moral hazard, which heavily affect almost any real-life insurance market. Implications for product design as well as the interaction between insurance and other markets are analyzed.

## Lectures Overview/ Course Outline

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Module I: Selected Concepts of Decision Theory

Module II: Optimal Insurance Contracts under Complete Information

Module III: Adverse Selection in Insurance Markets

Module IV: Moral Hazard in Insurance Markets



# Literature

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Akerlof, George A. (1970): The Market for Lemons: Quality Uncertainty and the Market Mechanism, *Quarterly Journal of Economics*, 84, 488–500.

Arrow, Kenneth J. (1963): Uncertainty and the Welfare Economics of Medical Care, *American Economic Review*, 53, 941–973.

Gollier, C. (2001). *The Economics of Risk and Time*, MIT Press. Cambridge, Massachusetts, USA.

Holmström, Bengt (1979): Moral Hazard and Observability, *Bell Journal of Economics*, 10, 74– 90.

Raviv, Artur (1979): The Design of an Optimal Insurance Policy, *American Economic Review*, 69, 84–96.

Richter, Andreas, Jochen Russ, and Stefan Schelling (2019): Insurance customer behavior: Lessons from behavioral economics, *Risk Management and Insurance Review* 22, 183– 205.

Rothschild, Michael D. and Joseph E. Stiglitz (1976): Equilibrium in Competitive Insurance Markets: An Essay in the Economics of Imperfect Information, *Quarterly Journal of Economics*, 90, 629–649.

Shavell, Steven (1979): On Moral Hazard and Insurance, *Quarterly Journal of Economics*, 4, 541–562.

Wilson, Charles (1977): A Model of Insurance Markets with Incomplete Information, *Journal of Economic Theory*, 16, 167–207.