

Economics of Information and Uncertainty

Course Outline

Sommersemester 2005

Professor Ray Rees / Dr. Florian Englmaier

Seminar für Versicherungswissenschaft
Department of Economics
Ludwigstr. 28 III VG
D - 80539 Munich

Lecture: Monday 5-8 pm
Room 129 HG
Class: Wednesday 5-7 pm
Room 129 HG

1. **Introduction**

Describing the realm of this course – Risk vs. Uncertainty – Primer in Probabilities

2. **Expected Utility Theory**

Axiomatic Foundation of EUT – Some Special Cases – Alternative Decision Criteria

3. **Measures of Risk Aversion**

What does “More Risk Averse” mean? – Absolute and Relative Risk Aversion

4. **Measures of Risk**

How to compare Distributions? – First and Second Order Stochastic Dominance

5. **Applications**

Optimal Portfolio Choice – Insurance Demand – Firms under Uncertainty

6. **Pareto Efficient Allocation of State Dependent Income**

Borch Condition – Markets for State Dependent Income – Implications of Market Incompleteness

7. **The Value of Information**

Baye’s Rule – Search – Experimentation – Herding & Anti-Herding

8. **Non Expected Utility Theory**

Choice Paradoxes – Experimental Evidence – New Theoretical Approaches

Reading:

1. Banerjee, A. V. [1992] *A Simple Model of Herd Behavior*, The Quarterly Journal of Economics, pp. 797-817
2. Bewley, T. F. [1986] *Knightian Decision Theory: Part I*. Yale University, Cowles Foundation Discussion Paper No. 807
3. Bewley, T. F. [1987] *Knightian Decision Theory: Part II*. Yale University, Cowles Foundation Discussion Paper No. 868
4. Camerer, C. [1998] *Individual Decision Making* in Kagel, J. and A. E. Roth, 'The Handbook of Experimental Economics,' Princeton, pp. 587-704
5. Diamond, P and M Rothschild (eds) [1989] *Uncertainty in Economics. Readings and Exercises*, Academic Press
6. Diamond, P. A. and J. E. Stiglitz [1974] *Increasing in Risk and in Risk Aversion*, J. of Economic Theory, pp. 337-360
7. Dixit, A K and R S Pindyck [1994] *Investment under Uncertainty*, Princeton University Press
8. Eeckhoudt, E. and C. Gollier [1995] *Risk: evaluation, management and sharing*. Harvester/Wheatsheaf
9. Effinger, M. R. and M. K. Polborn [2001] *Herding and anti-herding: A model of reputational differentiation*, European Economic Review, Elsevier, pp. 385-403
10. Ellsberg, D. [1961] *Risk, Ambiguity, and the Savage Axioms*, Quarterly Journal of Economics, pp. 643-669
11. Gilboa, I. and D. Schmeidler [1989] *Maxmin Expected Utility with a Non-Unique Prior*, Journal of Mathematical Economics, pp. 141-153.
12. Gollier, C. [2004] *The Economics of Risk and Time* MIT Press
13. Gravelle, H.S.E. and R. Rees [2004] *Microeconomics*, Prentice Hall
14. Hirshleifer, J. and J.G. Riley, [1992] *The Analytics of Uncertainty and Information*, Cambridge University Press
15. Kahneman, D. and A. Tversky [1979] *Prospect Theory: An analysis of decision under risk*, Econometrica, pp. 263-291

16. Knight, F. H. [1921] *Risk, Uncertainty and Profit*
17. Laffont, J-J [1989] *The Economics of Uncertainty and Information*, MIT Press
18. Machina, M. [1987] *Choice Under Uncertainty: Problems Solved and Unsolved*, J. of Economic Perspectives, pp. 121-154
19. Pratt, J. M. [1964] *Risk Aversion in the Small and in the Large*, Econometrica, pp. 122-136
20. Rothschild, M. and J. E. Stiglitz [1970] *Increasing Risk I: A Definition*, J. of Economic Theory , pp. 225-243
21. Savage, L. J. [1954] *The Foundations of Statistics*, New York, Wiley
22. Sinn, H.-W. [1989] *Economic Decisions under Uncertainty*, Physica-Verlag, Heidelberg
23. Tversky, A. and D. Kahneman [1974] *Judgment under uncertainty: Heuristics and biases*, Science, pp. 1124-1131
24. Van Zandt, T. [2004] *Introduction to the Economics of Uncertainty and Information*, unpublished Manuscript
25. Von Neumann, J. and O. Morgenstern [1953] *Theory of Games and Economic Behavior*, Princeton University Press.