Fachbereich Rechts- und Wirtschaftswissenschaften

JOHANNES GUTENBERG UNIVERSITÄT MAINZ

Mainz School of Management and Economics

Lehrstuhl für Volkswirtschaftslehre, insbesondere Makroökonomik

Seminar
Alternatives to Expected Utility Theory
(Summer Term 2013)

Organizers

Christopher Kops and Prof. Dr. Klaus Wälde

Important Dates

Introductory Session: Wednesday, May 8th, 2013

Deadline for turning in the exposé (by email and in written form): Wednesday, June 5th, 2013

Presentation: Monday, June 10th, 2013

Start of bachelor thesis: Monday, June 10th, 2013

Deadline for turning in the bachelor thesis: Monday, August 5th, 2013

Target Audience

The seminar is targeted at bachelor students in the 3rd year. Analytical skills and a desire to work with the formal approaches of decision theory are required. It is further useful to exhibit a certain familiarity with dynamic optimization methods or axiomatic systems. Students are expected to present the relevant aspects of the corresponding papers.

Content

The seminar serves as a preparation for the bachelor thesis. The thesis has to be written directly after the end of the seminar. For the seminar, the students have to write an Exposé of their bachelor thesis. Furthermore, the students have to present their Exposé. The presentation and the Exposé can be in English or in German. The bachelor thesis can be written in German.

Contact

For further information please contact Christopher Kops (kopsc@uni-mainz.de)

Topics

1 Alternatives to EUT

In current economic research on decision theory, there are several variants of Expected Utility Theory that relax some of the von Neumann Morgenstern axioms or switch to a different axiomatization system in general. Some approaches incorporate emotions like regret or disappointment into the axiomatic foundation of a decision theory. This type of decision theories try to answer the following question: What is the role of emotions on economic decisions? In this section, we present some papers which discuss the effect of emotional-based decision on economic behavior.

Topic 1 (Expected Utility Theory) Firstly, we discuss the classical approach without emotions. In this framework, economic behavior is rational. Rationality is described by an axiomatic system. A good description of this axiomatic system and its implications is given in Mas-Colell, Whinston, Green, et al. (1995). It is expected that the student presents this axiomatic system. Furthermore, the student has to present recent axiomatic approaches related to the topic of emotions.

Topic 2 (Disappointment Aversion) Gul (1991) provides an axiomatic system for a decision theory that considers feelings of disappointment. This is done by dividing lotteries into their elation and disappointment prices. The resulting model can predict the Allais Paradox and generalizes Expected Utility Theory. It is expected that the student provides a detailed explanation of the underlying axioms and their implications for choice behavior.

Topic 3 (Anticipating Regret) Sarver (2008) incorporates the anticipation of regret into a decision theory. With the decision maker being initially unaware of her exact preferences, choosing from menus of alternatives anticipated regret cause the decision maker to limit his options. It is expected that the student provides a detailed explanation of the underlying axioms and their implications for choice behavior.

2 Modeling Emotions

In this section, we discuss the impact of different types of emotions on economic behavior. There are different approaches of how to model emotions in economic research. Here, we present classical as well as very recent theoretical frameworks in this regard.

Topic 4 (Emotions in Expectations) If we consider emotions we can distinguish three different types of emotional processes: ex-ante, ex-post and ex-nunc emotions.

1. Ex-ante Emotions: Caplin and Leahy (2001) have presented an axiomatic approach for modeling ex-ante emotions. It is expected that the student presents this paper and provides a discussion of other approaches which try to model ex-post emotions.

2. Ex-post Emotions: As one of the first, Loomes and Sugden (1982) have introduced ex-post emotions in economic research. It is expected that the student presents this paper and current research in this area.

3. Ex-nunc Emotions: One approach in modeling ex-nunc emotions is presented in the paper of Laibson (2001). A thesis on this topic should present the theoretical framework of Laibson (2001) and compare his results to other approaches of ex-nunc emotions.

Topic 5 (Reference-Dependent Preferences) Reference-dependent utility is based on the Nobel-prize winning work of Kahneman and Tversky (1979). Recent papers by Botond Koszegi, Paul Heidhues and others extend this work and provide further theoretical foundations. The objective of this thesis consists in understanding saving behaviour of individuals who are described by these empirically more relevant approaches.

Topic 6 (Overconfidence) In psychology, it is a well-established fact that humans exhibit biased perceptions and systematically evaluate themselves more highly than others do. Compte and Postlewaite (2004) incorporate overconfidence into a standard decision theoretic model and show that biased perception can enhance performance. The student is expected to present this paper and relate it to the literature on overconfidence.

2.1 Dual-Self Models

Dual-Self Models are based on the general idea of Dual Process Theories. The diversity of human behavior and ambitions is often modeled using principal-agent or game theory frameworks.

Topic 7 (Dual-Self Models) Dual-Self Models try to translate the idea behind Dual Process Theories to economics. To this end, Brocas and Carrillo (2008) use a principal-agent which the student is expected to analyze in his or her thesis.

Topic 8 (Self-Control) Although individuals often want to take ideal actions, they fall victim to their temptations. A recent empirical paper referring to many theoretical studies is that of Ameriks, Caplin, Leahy, and Tyler (2007). The student should present the empirical results of this paper and discuss theoretical approaches related to this empirical study.

2.2 Bayesian Learning

In this section, we present papers that deal with the issue of Bayesian learning. Briefly, Bayesian learning assumes probabilistically sophisticated agents who update their beliefs using Bayes' Theorem in sight of new information.

Topic 9 (Bayesian learning) Ghirardato (2002) provides an axiomatization of subjective expected utility theory and Bayesian learning. It is expected that the student provides a detailed explanation of the underlying axioms and their implications for updating behavior.

Topic 10 (Hypothesis tsesting model) Ortoleva (2012) provides a generalization of Bayesian learning by replacing the axiom of dynamic consistency with that of dynamic coherence. It is expected that the student provides a detailed explanation of the underlying axioms and their implications for updating behavior.

References

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