

Topics in Behavioral and Experimental Economics

Instructors: Astrid Gamba, Marco Mantovani

Syllabus

Overview – The course will cover selected topics in behavioral economics, together with an overview of the field and of experimental methodologies.

Neoclassical microeconomic models are based on two core assumptions: selfishness and rationality. These assumptions are useful in theoretical modelling. Yet, they fail at describing human behavior in many economic scenarios, as observed in economic experiments or in the field. In this course we present a selection of behavioural models that replace restrictive assumptions of the neoclassical framework by alternatives that have a better empirical foundation. The first part of the course is devoted to behavioral models of other-regarding preferences and belief-dependent preferences. The second part of the course deals with cognitive limitations in strategic reasoning.

For each topic, a three-fold perspective is adopted: *i*) presentation of the theoretical model(s); *ii*) study of their impact on relevant economic phenomena; *iii*) methodological analysis of the experimental strategy adopted to investigate the problem.

Prerequisites: Graduate Microeconomics I and II and Game Theory

L1: Introduction to behavioral and experimental economics

Preferences

L2: Other-regarding preferences

- Fehr, Ernst and Klaus Schmidt, "A theory of fairness, competition and cooperation," *Quarterly Journal of Economics* 114 (1999): 817-868.
- Rabin, Matthew, "Incorporating fairness into game theory and economics," *American Economic Review* 83(5) (1993): 1281-302.
- Bolton, Gary E. and Axel Ockenfels, "ERC: A Theory of Equity, Reciprocity, and Competition," *American Economic Review* 90(1) (2000): 166-193.
- Fehr, Ernst, and Klaus Schimdt. "Fairness and contract design" *Econometrica* 75(1) (2007): 121-54.
- Benabou, Roland and Jean Tirole. "Incentives and prosocial behaviour" *American Economic Review* 96(5) (2006): 1652-78.
- Bowles, Samuel, and Sandra Polania-Reyes. "Economic Incentives and Social Preferences: Substitutes or Complements?" *Journal of Economic Literature*, 50(2) (2002): 368-425.

L3: Belief-dependent preferences and psychological games

- Geanakoplos, John, David Pearce, and Ennio Stacchetti. "Psychological games and sequential rationality." *Games and economic Behavior* 1(1) (1989): 60-79.
- Battigalli, Pierpaolo, and Martin Dufwenberg. "Guilt in games." *The American economic review* 97(2) (2007): 170-176.
- Charness, Gary, and Martin Dufwenberg. "Promises and partnership." *Econometrica* 74(6) (2006): 1579-1601.

- Dufwenberg, Martin, and Georg Kirchsteiger. "A theory of sequential reciprocity." *Games and economic behavior* 47(2) (2004): 268-298.

Strategic reasoning

L5: Quantal Response Equilibrium, level-k

- McKelvey, Richard D., and Thomas R. Palfrey. "Quantal response equilibria for normal form games." *Games and economic behavior* 10.1 (1995): 6-38.
- Camerer, Colin F., Teck-Hua Ho, and Juin-Kuan Chong. "A cognitive hierarchy model of games." *The Quarterly Journal of Economics* 119.3 (2004): 861-898.
- Costa-Gomes, Miguel, Vincent P. Crawford, and Bruno Broseta. "Cognition and behavior in normal-form games: An experimental study." *Econometrica* 69.5 (2001): 1193-1235.
- Crawford, Vincent, Miguel A. Costa-Gomes, and Nagore Iriberry. "Structural Models of Nonequilibrium Strategic Thinking: Theory, Evidence, and Applications." *Journal of Economic Literature* 51.1 (2013): 5-62.

L6: Applications: voting & matching

- Levine, David K., and Thomas R. Palfrey. "The paradox of voter participation? A laboratory study." *American political science Review* 101.1 (2007): 143-158.
- Battaglini, Marco, Rebecca B. Morton, and Thomas R. Palfrey. "The swing voter's curse in the laboratory." *The Review of Economic Studies* 77.1 (2010): 61-89.
- Guarnaschelli, Serena, Richard D. McKelvey, and Thomas R. Palfrey. "An experimental study of jury decision rules." *American Political Science Review* 94.2 (2000): 407-423.
- Pathak, Parag A., and Tayfun Sönmez. "Leveling the playing field: Sincere and sophisticated players in the Boston mechanism." *The American Economic Review* 98.4 (2008): 1636-1652.

L7: Experimental methodology

- Samuelson, Larry. "Economic theory and experimental economics." *Journal of Economic Literature* 43.1 (2005): 65-107.
- Schram, Arthur. "Artificiality: The tension between internal and external validity in economic experiments." *Journal of Economic Methodology* 12.2 (2005): 225-237.
- Sugden, Robert. "Experiments as exhibits and experiments as tests." *Journal of Economic Methodology* 12.2 (2005): 291-302.
- Smith, Vernon L. "Method in experiment: Rhetoric and reality." *Experimental economics* 5.2 (2002): 91-110.
- Smith, Vernon L. "Economics in the Laboratory." *The Journal of Economic Perspectives* 8.1 (1994): 113-131.
- Roth, A.E. (1995). Introduction to Experimental Economics. In Kagel, J.H. and Roth, A.E. (eds.) *Handbook of Experimental Economics*. Princeton University Press, Princeton. Chapter 1.

Textbook (not compulsory)

Dhami, Sanjit. *The Foundations of Behavioral Economic Analysis*. Oxford University Press, 2016.

Evaluation: written exam. Students will be provided with data and design details from an experimental research paper. They will be asked to: (i) identify the most appropriate model(s) among the ones covered in the course and apply it to interpret the results; (ii) comment on the experimental design.