

Academy of Sciences of the Czech Republic

Economics Institute

Politických vězňů 7, CZ 110 00 Prague 1 Phone: (+420) 224 005 201, 224 005 133, FAX: (+420) 224 005 225 upces@cerge-ei.cz, http://upces.cerge-ei.cz

# **BEHAVIORAL ECONOMICS**

Lecturer: René Levínský
Email: rene.levinsky@cerge-ei.cz

# **Course Description**

The lecture is divided into four main sections:

- 1. Behavioral decision making (intertemporal decision making, decision making under uncertainty, so called "paradoxes" of decision making like "preference reversal" and "conjunction effect");
- 2. Elementary Methods of Experimental Economics (principles of experimentation, hypothesis testing, methods of non-parametric statistics;
- 3. Behavioral game theory (fairness and reciprocity, bounded rationality);
- 4. Recent developments in Behavioral Economics (Neuro-Economics, mental modeling)

# **Course Prerequisites:**

One intermediate-level economics course (Micro or Macro)

### **Objectives**

Graduates of the module describe behavioral principles of strategic and non-strategic decision making in an economic environment. This enables them to evaluate purely theoretical problems more adequately and to design an appropriate economic environment for applied decision problems as well. Moreover, graduates conduct simple economic experiments in order to test how suitable selected economic and institutional designs are to deal with economic problems.

### Grading

Grades are based on the following components:

- 1. Presentation during the course 50%
- 2. Final exam 50%

At the end of the term, cumulative points will be converted into grades by the following scheme:

Letter Grade	Percentage	Description
A+	97-100	Excellent Work
Α	93-97	Outstanding Work
A-	90-92	
B+	87-89	
В	83-86	Good work
B-	80-82	
C+	77-79	
С	73-76	Acceptable Work
C-	70-72	
D+	67-69	Work that is significantly below average
D	63-66	
D-	60-62	
F	0-59	Work that does not meet the minimum standards for passing the course

### **UPCES Academic Integrity Policy**

Plagiarism and other forms of academic dishonesty are not tolerated. The use of Artificial Intelligence (AI) for the development of knowledge and learning is encouraged at many stages of the learning process. While we value technology for educational purposes, we also value originality and the retainment of knowledge, and thus using AI for assignments and examinations, even if rephrased, is strictly prohibited and considered an academic integrity violation, unless the instructor explicitly allows for it in the context of evaluated work

### **UPCES Non-Discrimination/Harassment Policy**

The UPCES program in Prague promotes a diverse learning environment where the dignity, worth, and differences of each individual are valued and respected. Discrimination and harassment, whether based on a person's race, gender, sexual orientation, color, religion, national origin, age, disability, or other legally protected characteristic, are repugnant and completely inconsistent with our objectives. Retaliation against individuals for raising good faith claims of harassment and/or discrimination is prohibited.

### **UPCES Diversity Policy**

UPCES fully embraces diversity and strives to create a safe and welcoming environment for students from all backgrounds. Prague is a wonderfully diverse community and UPCES is no different. All students should feel at home while studying abroad and UPCES will do its utmost to make sure that becomes a reality. Although unique challenges may arise, we believe that students from all walks of life will encounter wonderful opportunities for enrichment as they explore a new culture while studying abroad.

# Reading

There is no textbook for this course. Instead, during the lecture we will discuss (some) of the seminall papers from the following list.

### I. Individual Decision Making

### **Topic 1. Individual Decision Making**

- Camerer, Colin, "Progress in Behavioral Game Theory." Journal of Economic Perspectives, v. 11, n. 4, fall 1997, 167-188.
- Crawford, Vincent P., "Theory and Experiment in the Analysis of Strategic Interaction." in Kreps and Wallis, eds., Advances in Economics and Econometrics: Theory and Application, 7th World Congress, 1997, pp. 206-42.
- Costa-Gomes, Miguel, Vincent P. Crawford and Bruno Broseta, "Cognition and Behavior in Normal-Form Games: An Experimental Study." Econometrica, 2001, 1193-1235.
- Harbaugh, William, Kate Krause, and Timothy Berry, "GARP for Kids: On the Development of Rational Choice Behavior." AER, 2001, December 1539-1545.

### **Topic 2. Decision Making and the Endowment Effect**

- Knetsch, Jack L., Richard H. Thaler, Daniel Kahneman, "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias." Journal of Economic Perspectives, Vol. 5, No. 1. (Winter, 1991), 193-206.
- Kahneman, Daniel; Jack L. Knetsch, and Richard H. Thaler, "Experimental Tests of the Endowment Effect and the Coase Theorem." Journal of Political Economy; 98(6), December 1990, 1325-48.
- Harbaugh, William-T., Kate Krause, and Lise Vesterlund, "Are Adults Better Behaved Than Children? Age, Experience, and the Endowment Effect" Economics Letters; 70(2), February 2001, pages 175-81.

### Topic 3. Expected Utility, Risk Aversion and Prospect Theory

- Kahneman, Daniel; Tversky, Amos, "Prospect Theory: An Analysis of Decision under Risk," Econometrica; 47(2), March 1979, pages 263-91.
- Tversky,-Amos, and Peter Wakker, "Risk Attitudes and Decision Weights" Econometrica; 63(6), November 1995, 1255-80.
- Caplin, Andrew and John Leahy, "Psychological Expected Utility Theory and Anticipatory Feelings." QJE, 2001, 55-79.
- Rabin, Matthew; Thaler, Richard-H, "Anomalies: Risk Aversion" Journal of Economic Perspectives; 15(1), Winter 2001, pages 219-32.
- Tversky,-Amos; Kahneman,-Daniel, "Loss Aversion in Riskless Choice: A ReferenceDependent Model," Quarterly Journal of Economics; 106(4), November 1991, 1039-61.

• Tversky, Amos; Thaler, Richard H, "Anomalies: Preference Reversals" Journal of Economic Perspectives; 4(2), Spring 1990, pages 201-11.

### **Topic 4. Intertemporal Choice and Hyperbolic Discounting**

- George Loewenstein, Richard H. Thaler, "Anomalies: Intertemporal Choice." Journal of Economic Perspectives, Vol. 3, No. 4. (Autumn, 1989), pp. 181-193.
- Harris, Christopher and David Laibson, "Dynamic Choices of Hyperbolic Consumers." Econometrica, 2001, 935-957.

### II. Other-regarding preferences and pro-environmental behavior

### **Topic 5. Fairness**

- Rabin, Matthew, "Incorporating Fairness into Game Theory and Economics." AER, 1993, 1281-302.
- Fehr, Ernst and Klaus M. Schmidt, "A Theory of Fairness, Competition, and Cooperation." QJE, 1999, 817-868.
- Gary Charness and Matthew Rabin, "Understanding Social Preferences with Simple Tests'.' QJE 117 (3), 2002, 817-869

### Topic 6. Altruism

- Forsythe, Robert, J. Horowitz, N.E. Savin and Martin Sefton, "Fairness in Simple Bargaining Experiments." GEB, 1994, 6, 347-69.
- Eckel, Catherine C. and Philip Grossman, "Altruism in Anonymous Dictator Games," GEB, 16, 1996, 181-191.

### **Topic 7. Trust and Reciprocity**

- Berg, Dickhaut and McCabe, "Trust, Reciprocity and Social History." GEB, 1995, 122142.
- Glaeser, Edward L., David I. Laibson, Jose A. Scheinkman and Christine L. Soutter, "Measuring Trust." QJE, 2000, 811-846.
- Bolton, Gary E. and Axel Ockenfels, "ERC: A Theory of Equity, Reciprocity, and Competition." AER, 2000, 166-193.

# **Topic 8. Punishments and/or Rewards**

- Prasnikar, Vesna and Alvin E. Roth, "Considerations of Fairness and Strategy: Experimental Data from Sequential Games." QJE, 1992, 865-88.
- Ferh, Ernst, et al., "Does Fairness Prevent Market Clearing? An Experimental Investigation." QJE, May 1993,437-59.

### III. Reputation Building

### **Topic 9. Reputation Building**

- Selten, Reinhardt and R. Stoecker, "End Behavior in Sequences of Finite Prisoner Dilemma Supergames." Journal of Economic Behavior and Organization, 1986, 47-70.
- Camerer, Colin and Keith Weigelt, "An Experimental Test of the Sequential Equilibrium Reputation Hypothesis." Econometrica, 1988, 56, 1-36.
- McKelvey, Richard and Thomas Palfrey, "An Experimental Study of the Centipede Game." Econometrica, 1992, 803-36.
- Andreoni, James and John H. Miller, "Rational Cooperation in the Finitely Repeated Prisoner's Dilemma: Experimental Evidence." Economic Journal, 1993, 103, 570-585.

#### IV. Public Goods

# **Topic 10. Linear Public Good**

- Palfrey, Thomas and Jeffrey Prisbrey, "Anomalous Behavior in Public Goods Experiments: How Much and Why?" AER, December 1997, 829-46.
- Andreoni, James, "An Experimental Test of the Public Goods Crowding Out Hypothesis." AER, 1993.
- Andreoni, James, "Cooperation in Public Goods Experiments: Kindness or Confusion?" AER, 1995.
- Fehr, Ernst and Simon Gachter, "Cooperation and Punishment in Public Goods Experiments." AER, 2000, 980-994.

### **Topic 11. Mechanisms and Institutions**

- Falkinger, Josef, Ernst Fehr, Simon Gachter and Rudolf Winter-Ebmer, "A Simple Mechanism for the Efficient Provision of Public Goods: Experimental Evidence." AER, 2000, 247-264.
- Brookshire, D. and D. Coursey, "Measuring the Value of a Public Good: An Empirical Comparison of Elicitation Procedures.." AER, 1987, 554-66.
- Chen, Yan and Fang-Fang Tang, "Learning and Incentive-Compatible Mechanisms for Public Goods Provision: An Experimental Study." Journal of Political Economy, 1998, 633-662.

### V. Group Differences and Economic Bias

### **Topic 12. Gender and Economic Bias**

 Brown-Cruise and Hummels, "Gender Effects in Laboratory Public Goods Contributions: Do Individuals Put Their Money Where There Mouth Is?" Journal of Economic Behavior and Organization, 1993, 255-67.

- Andreoni, James and Lise Vesterlund, "Which is the Fair Sex? Gender Differences in Altruism." QJE, 2001, 293-312.
- Carter and Irons, "Are Economists Different, and if so Why?" Journal of Economic Perspectives, 1991,171-7.
- Frank, Robert, Tom Gilivich and D. Regan, "Does Studying Economics Inhibit Cooperation?" Journal of Economic Perspectives, 1993, 159-71.

### **Topic 13. Status and per Group Effects**

- Ball, Sheryl, Catherine Eckel, Philip J. Grossman and William Zame, "Status in Markets." QJE, 2001, 161-188.
- Sacerdote, Bruce, "Peer Effects with Random Assignment: Results for Dartmouth Roommates." QJE, 2001, 681-704.
- Gneezy, Uri and Aldo Rustichini, "Pay Enough or Don't Pay at All." QJE, 2000, 791-810.

### **Topic 14. Social Distance and Anonymity**

- Hoffman, E, K. McCabe, K. Shachat, and V. Smith, "Preferences, Property Rights and Anonymity in Bargaining Games." GEB, 1994, 346-380.
- Hoffman, E, K. McCabe, and V. Smith, "Social Distance and Other Regarding Behavior in Dictator Games." AER, 1996, 653-660.
- Bolton, Gary E., and Rami Zwick, "Anonymity versus Punishment in Ultimatum Bargaining." GEB, 10, 1995, 95-121.

### VI. Coordination Problems

# **Topic 15. Coordination and Conventions**

- Cooper, Russell, Douglas DeJong, Robert Forsythe and Ross, "Selection Criteria in Coordination Games: Some Experimental Results," AER, 1990, 218-33.
- Battalio, Raymond, Larry Samuelson and John Van Huyck. "Optimization Incentives and Coordination Failure in Laboratory Stag Hunt Games." Econometrica, 2001, 749-764.
- Van Huyck, John B., Ray B. Battalio, and Frederick Rankin, "On the Origins of Conventions: Evidence from Coordination Games." Economic Journal, 107, 1997, 576-597.

# VII. Signaling

### **Topic 16. Signaling and Information Transmission**

- Cooper, Russell, Douglas DeJong and Robert Forsythe, "Forward Induction in Signaling Games." AER, 1993, 1303-16.
- Blume, Andreas, Douglas V. DeJong, Yong-Gwan Kim and Geoffrey B. Sprinkle, "Experimental Evidence on the Evolution of Meaning of Messages in Sender-Receiver Games." AER, 1998, 1323-1340.

### VIII. Learning

### **Topic 17. Learning**

- Binmore, Ken, John Gale, and Larry Samuelson, "Learning to be Imperfect: The Ultimatum Game." GEB, 1995.
- Stahl, Dale O., "Boundedly Rational Rule Learning in a Guessing Game," GEB, 1996, 303-330.

#### IX. Auctions

# **Topic 18. Auctions**

- Richard H. Thaler, "Anomalies: The Winner's Curse." Journal of Economic Perspectives, Vol. 2, No. 1. (Winter, 1988), pp. 191-202.
- Kagel, Harstad and Levin, "Information Impact and Allocation Rules in Auctions with Affiliated Private Values: A laboratory Study." Econometrica, 1987, 12751304.
- Lucking-Reiley, David, "Using Field Experiments to Test Equivalence Between Auction Formats: Magic on the Internet." American Economic Review, December 1999.

### **Topic 19. Common Value Auctions**

- Levin, Dan, John Kagel, and Jean-Francois Richard, "Revenue Effects and Information Processing in English Common Value Auctions." AER, 1996, 442460.
- Kagel, John H. and Dan Levin, "Common Value Auctions with Insider Information." Econometrica, 1999, 1219-1238.
- Andreson, Simon P., Jacob K. Goeree and Charles A. Holt, "Rent Seeking with Bounded Rationality: An Analysis of the All-Pay Auction." Journal of Political Economy, 1998, 828-853.
- List, John A. and David Lucking-Reiley, "Demand Reduction in Multiunit Auctions: Evidence from a Sportscard Field Experiment." AER, 2000, 961-972.

### X Asset Markets

### **Topic 20. Asset Markets**

- Plott, Charles and Shyam Sunder, "Rational Expectations and the Aggregation of Diverse Information in Laboratory Securities Markets." Econometrica, 1988,1085 1118.
- Plott, Charles and Shyam Sunder, "Efficiency of Experimental Securities Markets with Insider Information: An Application of Rational-Expectations Models." JPE, 1982, 663-98