

Mini-Course in Behavioral Economics

Leeat Yariv

The goal of this mini-course is to give an overview of the state of the art of behavioral economics. I hope to trigger some research in the field and will thus present open questions all along. The course will be Micro oriented, but applications to Macro behavior will seriously be explored throughout (e.g., saving and debt behavior, financial markets, etc.).

Attached below is the course outline and reading list. Required readings are asterisked.

Behavioral Economics - Course Outline

Judgment Under Uncertainty

- Heuristics in decision making: representativeness, availability, and anchoring and adjustment.
- Experimental evidence for biases due to the use of heuristics and their economic implications.

Prospect Theory

- Experimental evidence against the standard utility function.
- Prospect theory and cumulative prospect theory.

Mental Accounting and Consumer Choice

- The endowment effect, loss aversion, and status quo bias – applications to consumption theory, finance, and memory.
- Separation of mental accounts and saving behavior.

Intertemporal Choice

- Experimental evidence on intertemporal choices.
- Theoretical models of dynamic utility functions - hyperbolic discounting, variety seeking.
- Saving behavior with hyperbolic discounting.

Preference Reversal

- Experimental evidence on differences between choice and pricing and the effects of added options.
- Possible explanations - tradeoff contrast and extremeness aversion.

Beliefs as Goods

- Description of cognitive dissonance and confirmatory bias.
- Theoretical models.
- Some implications on information economics.

Fairness

- Experimental evidence on fair behavior.
- Fairness equilibrium notion.
- Theoretical explanations - reciprocal behavior and inequality aversion.
- Fairness and social feedback, the labor market being the prime example.

Emotions and Economic Theory

- The effects of mood on choices and interactions with others.
- The effects of mood on risk taking - evidence and a bit of theory.

Learning

- Reinforcement learning - theory and evidence.
- Comparison between reinforcement learning and the more standard learning theories of fictitious play and evolutionary (replicator) dynamics.

Behavioral Economics - Reading List

Recommended Books

- Kahneman, D., Slovic, P. and Tversky, A. (Eds.) [1982], *Judgment under uncertainty: Heuristics and biases*, Cambridge: Cambridge University.
- Thaler, R. H. [1992], *The Winner's Curse: Paradoxes and Anomalies of Economic Life*, Princeton, N. J.: Princeton University Press.

Judgment Under Uncertainty

- * Tversky, A. and Kahneman, D. [1974], "Judgment under Uncertainty: Heuristics and Biases," *Science*, pp. 1124-1131.
- Kahneman, D., Slovic, P. and Tversky, A. (Eds.) [1982], *Judgment under uncertainty: Heuristics and biases*, Cambridge: Cambridge University.

Prospect Theory

- * Kahneman, D. and Tversky, A. [1979], "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica*, 47(2), pp. 263-291.
- * Tversky, A. and Kahneman, D. [1992], "Advances in Prospect Theory: Cumulative Representation of Uncertainty," *Journal of Risk and Uncertainty*, 5, pp. 297-323.

Mental Accounting and Consumer Choice

- Thaler, R. H. [1994], *Quasi Rational Economics*, Russel Sage Foundation/New York, chapters 1-3.
- Thaler, R. H., Kahneman, D., Knetsch, J. [1992], "The Endowment Effect, Loss Aversion, and Status Quo Bias," *The Winner's Curse*, New York: Free Press.
- * Thaler, R. H. [1992], "Savings, Fungibility, and Mental Accounts," *The Winner's Curse*, New York: Free Press.

Intertemporal Choice

- * Lowenstein, G. and Thaler, R. H. [1989], “Anomalies: Intertemporal Choice,” *Journal of Economic Perspectives*, Vol. 3, No. 4, pages 181-193.
- * Thaler, R. H., Kahneman, D., Knetsch, J. [1992], “Intertemporal Choice,” *The Winner’s Curse*, New York: Free Press.
- Laibson, D. [1995], “hyperbolic Discount Functions, Undersaving, and Saving Policy,” Harvard University.
- Laibson, D. [1997], “Golden Eggs and Hyperbolic Discounting,” *Quarterly Journal of Economics*, Vol. 112, No. 2, pages 443-478.
- Prelec, D. and Loewenstein, G. [1998], “The Red and The Black: Mental Accounting of Savings and Debt,” *Marketing Science*, Vol. 17, No. 4, pages 4-28.

Preference Reversal

- Simonson, I. and Tversky, A [1992], “Choice in Context: Tradeoff Contrast and Extremeness Aversion,” *Journal of Marketing Research*, vol. 29, No. 3, pages 281-295.
- * Thaler, R. H. [1992], “Preference Reversals,” *The Winner’s Curse*, New York: Free Press.

Beliefs as Goods

- * Rabin, M. and Schrag, J. L. [1999], “First Impressions Matter: A Model of Confirmatory Bias,” *Quarterly Journal of Economics*, pages 37-82.
- Akerlof, G. A. and Kranton, R. E. [1998], “Economics and Identity,” mimeo.
- Akerlof, G. A. and Dickens, W. T. [1982], “The Economic Consequences of Cognitive Dissonance,” *The American Economic Review*, pages 307-319.
- Benabou, R. and Tirole, J. [1999], “Self-confidence: Intrapersonal Strategies,” mimeo.
- Koszegi, B. [1999], “Self-image and Economic Behavior,” mimeo.

Fairness

- * Thaler, R. H. [1994], *Quasi Rational Economics*, Russel Sage Foundation/New York, chapters 10 and 11.
- Levine, D. K. [1997], "Modeling Altruism and Spitefulness in Experiments," mimeo.
- Fehr, E. and Schmidt, K. M. [1997], "A Theory of Fairness, Competition, and Cooperation," mimeo.
- Fehr, E. and Gächter, S. [1997], "Reciprocity and Economics: The Economic Implications of Homo Reciprocans," mimeo.
- Fehr, E. and Gächter, S. [1996], "Cooperation and Punishment – An Eperimental Analysis of Norm Formation and Norm Enforcement," *Discussion Paper*, Institute for Empirical Research in Economics, University of Zurich.
- Gächter, S. and Fehr, E. [1997], "Collective Action as Social Exchange," mimeo.

Emotions and Economic Theory

- Isen, A. M., "Positive Affect and Decision Making." In Lewis, M. and Haviland, J. M. (Eds.), *Handbook of Emotions*, NY: Guilford.
- Johnson and Tversky [1983], "Affect, Generalization, and The Perception of Risk," *Journal of Personality and Social Psychology*.

Learning

- Camerer, C. and Ho, T. [1997], "Learning in Games." To appear in *The Handbook of Experimental Economic Results*.
- * Erev, I. And Roth, A. E. [1997], "Modeling how people play games: Reinforcement learning in experimental games with unique, mixed strategy equilibria," mimeo.
- Roth, A. E. and Erev, I. [1995], "Learning in Extensive-Form Games: Experimental Data and Simple Dynamic Models in the Intermediate Term," *Games and Economic Behavior*, Special Issue: Nobel Symposium, 8, pp. 164-212.