

Experimental Economics

Module 4, 2021-2022

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Course information

Course Website: <https://my.nes.ru>

Instructor's Office Hours: TBA

Class Time: TBA

Room Number: TBA

Course description

Experimental economics is a relatively new and vibrant field of economics. It is based on using controlled laboratory and field experiments with real human subjects to validate theoretical predictions from economic models, as well as to better understand psychological mechanisms underlying economic interactions. In this course, we will study the main methods of experimental design and analysis of experimental data. Besides, the course provides an extensive overview over the major topics that have been addressed by economic experiments so far. At the end of the course, the students will be able to design their own economic experiments, as well as to use insights from published experimental papers for the analysis of a broad set of economic problems.

Course requirements, grading, and attendance policies

A successful completion of Microeconomics, Game Theory and Econometrics is necessary. The final grade will be based on a term project where the students are asked to design their own experiment (50%) and a final exam (50%).

Course contents

Methodology of experimental economics

Roth, A., 1995. Introduction to Experimental Economics, in Kagel and Roth (eds.), *The Handbook of Experimental Economics*, Princeton University Press, 3-109.

Falk, A. and Heckman, J.J., 2009. Lab experiments are a major source of knowledge in the social sciences. *Science*, 326(5952), pp.535-538.

Levitt, S.D. and List, J.A., 2007. What do laboratory experiments measuring social preferences reveal about the real world?. *Journal of Economic perspectives*, 21(2), pp.153-174.

Experimental markets

Smith, V.L., Suchanek, G.L. and Williams, A.W., 1988. Bubbles, crashes, and endogenous expectations in experimental spot asset markets. *Econometrica*, 56, pp.1119-1151.

Lei, V., Noussair, C.N. and Plott, C.R., 2001. Nonspeculative bubbles in experimental asset markets: Lack of common knowledge of rationality vs. actual irrationality. *Econometrica*, 69(4), pp.831-859.

Huck, S., Lünser, G.K. and Tyran, J.R., 2016. Price competition and reputation in markets for experience goods: An experimental study. *The RAND Journal of Economics*, 47.1, pp.99-117.

Time and risk preferences

Ebert, J.E. and Prelec, D., 2007. The fragility of time: Time-insensitivity and valuation of the near and far future. *Management Science*, 53(9), pp.1423-1438.

Frederick, S., Loewenstein, G. and O'donoghue, T., 2002. Time discounting and time preference: A critical review. *Journal of Economic Literature*, 40(2), pp.351-401.

Holt, C.A. and Laury, S.K., 2002. Risk aversion and incentive effects. *American Economic Review*, 92(5), pp.1644-1655.

Choi, S., Fisman, R., Gale, D. and Kariv, S., 2007. Consistency and heterogeneity of individual behavior under uncertainty. *American Economic Review*, 97(5), pp.1921-1938.

Fairness and social preferences

Bolton, G.E. and Ockenfels, A., 2000. ERC: A theory of equity, reciprocity, and competition. *American Economic Review*, 90(1), pp.166-193.

Fehr, E. and Schmidt, K.M., 2006. The economics of fairness, reciprocity and altruism—experimental evidence and new theories. *Handbook of the Economics of Giving, Altruism and Reciprocity*, 1, pp.615-691.

Charness, G. and Rabin, M., 2002. Understanding social preferences with simple tests. *The Quarterly Journal of Economics*, 117(3), pp. 817-869.

Belief-dependent and reference-dependent preferences

Dufwenberg, M., Gächter, S. and Hennig-Schmidt, H., 2011. The framing of games and the psychology of play. *Games and Economic Behavior*, 73(2), pp.459-478.

Charness, G. and Dufwenberg, M., 2006. Promises and partnership. *Econometrica*, 74(6), pp.1579-1601.

Khalmetski, K., Ockenfels, A. and Werner, P., 2015. Surprising gifts: Theory and laboratory evidence. *Journal of Economic Theory*, 159, pp.163-208.

Marzilli Ericson, K.M. and Fuster, A., 2011. Expectations as endowments: Evidence on reference-dependent preferences from exchange and valuation experiments. *The Quarterly Journal of Economics*, 126(4), pp.1879-1907.

Karle, H., Kirchsteiger, G. and Peitz, M., 2015. Loss aversion and consumption choice: Theory and experimental evidence. *American Economic Journal: Microeconomics*, 7(2), pp.101-20.

Trust and cooperation

Berg, J., Dickhaut, J. and McCabe, K., 1995. Trust, reciprocity, and social history. *Games and Economic Behavior*, 10(1), pp.122-142.

Karlan, D.S., 2005. Using experimental economics to measure social capital and predict financial decisions. *American Economic Review*, 95(5), pp.1688-1699.

Chaudhuri, A., 2011. Sustaining cooperation in laboratory public goods experiments: a selective survey of the literature. *Experimental Economics*, 14(1), pp.47-83.

Fehr, E. and Gächter, S., 2002. Altruistic punishment in humans. *Nature*, 415(6868), pp.137-140.

Houser, D., Xiao, E., McCabe, K. and Smith, V., 2008. When punishment fails: Research on sanctions, intentions and non-cooperation. *Games and Economic Behavior*, 62(2), pp.509-532.

Social norms and identity

Krupka, E.L. and Weber, R.A., 2013. Identifying social norms using coordination games: Why does dictator game sharing vary?. *Journal of the European Economic Association*, 11(3), pp.495-524.

Krupka, E.L., Leider, S. and Jiang, M., 2017. A meeting of the minds: informal agreements and social norms. *Management Science*, 63(6), pp.1708-1729.

Güth, W., Levati, M.V. and Ploner, M., 2008. Social identity and trust—An experimental investigation. *The Journal of Socio-Economics*, 37(4), pp.1293-1308.

Goette, L., Huffman, D. and Meier, S., 2006. The impact of group membership on cooperation and norm enforcement: Evidence using random assignment to real social groups. *American Economic Review*, 96(2), pp.212-216.

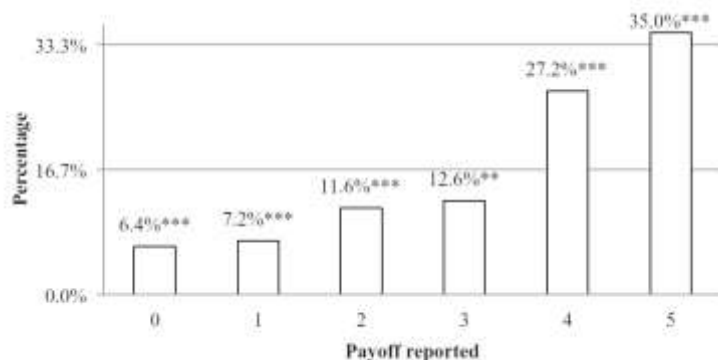
Chen, Y. and Li, S.X., 2009. Group identity and social preferences. *American Economic Review*, 99(1), pp.431-57.

Sample tasks for course evaluation

- 1) Consider the experiment of Grossman (2015). Subjects play a binary dictator game where the dictator chooses between a fair and a selfish payoff allocation of a fixed sum between herself and a random recipient. At the same time, with probability q the dictator's choice is overridden by the computer implementing a random choice. Parameter q can be either high ($q=1$) or low ($q=1/3$). In one of the experimental treatments, the recipient observes only the outcome and the value of q , but not the actual dictator's choice. Discuss, how the dictator behavior is predicted to change in this treatment if q increases from $1/3$ to 1 if:
 - a) dictators are assumed to care only about their monetary payoff;
 - b) dictators are assumed to care about both their monetary payoff and self-image (i.e. they gain additional utility from perceiving their own choice as fair);
 - c) dictators are assumed to care about both their monetary payoff and social image (i.e. they gain additional utility if the recipient perceives their choice as fair).

Formalize the dictator's utility function in each case.

- 2) The paper of Fischbacher and Föllmi-Heusi (2013) studies a simple die-reporting experiment. Each subject is asked to roll a 6-sided die with only her/him privately observing the outcome. After that, the subject reports the rolled number to the experimenter, with her/his payoff depending only on the reported number. The resulting distribution of final payoffs resulting from the reports of all subjects is given in the following figure.



The stars indicate the significance level of the difference between the observed share of the payoff and 1/6 (i.e. the predicted share of each payoff if all reports were truthful). Discuss whether the observed payoff distribution (in particular, significant overreporting of 4) is consistent with the hypothesis that all subjects are either payoff maximisers or tell the truth. What could be alternative explanations?

Course materials

There are no required textbooks, but the following sources are helpful to get a deeper understanding of the experimental methods and applications:

Bardsley, N., Cubitt, R., Loomes, G., Moffatt, P., Starmer, C. and Sugden, R., 2010. *Experimental economics: Rethinking the rules*. Princeton University Press.

Fréchette, G.R. and Schotter, A. eds., 2015. *Handbook of experimental economic methodology*. Handbooks of Economic Methodology

Kagel, J.H. and Roth, A.E. eds., 2020. *The Handbook of Experimental Economics, Volume 2*. Princeton university press.

Weimann, J. and Brosig-Koch, J., 2019. *Methods in Experimental Economics*. Springer International Publishing.

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated. For all assignments, exams and attendance, the NES academic integrity policy applies. Students should consult the NES Student Handbook for further details.