

Experimental economics

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Overview

This course aims to equip students with the necessary tools to analyze the behavior of economic agents in complex economic systems, using an experimental approach.

This module provides a comprehensive overview of the experimental methodology:

- types of experiments implemented (laboratory, lab-in-the-field, field, natural),
- the differences between experimental methods
- the use of the experiments: theory testing, exploring behavior, elicit attitudes, preferences, and beliefs...

Upon completion of the course, students will be able to interpret experimental research. Students are strongly encouraged to read ahead the material assigned for each topic and to actively participate in class with questions and comments.

As part of the course work, each student must present one paper: the presentation should include a short summary of the paper, a detailed analysis of the strengths and weaknesses of the paper.

The final assignment consists in a research proposal. Each student must write a research proposal of a possible extension of the paper presented. The proposal should describe the main research questions, possible links to the existing literature, the experimental design (protocol, short instructions, implementation methodology,...), expected results.

This course targets students that are interested in the experimental literature, either because they plan to run experiments as a part of their future research, or because they would like to be able to read with a critical view the experimental literature available in their area of specialization.

Prerequisites

Knowledge of game theory, microeconomics and statistics.

Structure of the reading group

The module is divided in two parts. In the first part the teacher will provide some basics information about applications in experimental economics; in the second part students will present some papers and discuss them in class.

The final assignment will be a research proposal with a detailed extension of the paper presented.

The final evaluation will depend on class participation, the individual presentation and the final assignment.

Reading list

This list of papers includes articles with very different applications in experimental economics (this is a preliminary list)

The first part of the course aims to introduce all topics: in the second part, students should select one paper to present to class. The paper can be either selected between the articles in the reading list, or any other article related to EE (upon approval).

In addition, each student must write a final research proposal with a possible extension of the paper presented.

Textbook:

Cartwright, E. (2018). *Behavioral economics*. Routledge.

Introduction

Banerjee, A. V., & Duflo, E. (2009). The experimental approach to development economics. *Annu. Rev. Econ.*, 1(1), 151-178.

Binmore, K. (1999). Why experiment in economics?. *The Economic Journal*, 109(453), 16-24.

Dhami, S. (2016). *The foundations of behavioral economic analysis*. Oxford University Press.

Guala, F. (2005). *The methodology of experimental economics*. Cambridge University Press.

Holt, C. A. (2007). *Markets, games, & strategic behavior*. Boston.: Pearson Addison Wesley.

Kagel, J. H., & Roth, A. E. (Eds.). (2020). *The handbook of experimental economics, volume 1 and 2*. Princeton university press.

Ostrom, E. (2010). Revising theory in light of experimental findings. *Journal of Economic Behavior & Organization*, 73(1), 68-72.

Smith, V. L. (1994). Economics in the Laboratory. *Journal of economic perspectives*, 8(1), 113-131.

Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *science*, 211(4481), 453-458.

Design of experiments – experimental practice – interaction between subjects

Croson, R., & Gächter, S. (2010). The science of experimental economics. *Journal of Economic Behavior & Organization*, 73(1), 122-131.

Bardsley, N., Cubitt, R., Loomes, G., Moffatt, P., Starmer, C., & Sugden, R. (2009). *Experimental economics*. In *Experimental Economics*. Princeton University Press.

List, J. A., Sadoff, S., & Wagner, M. (2011). So you want to run an experiment, now what? Some simple rules of thumb for optimal experimental design. *Experimental Economics*, 14, 439-457.

What experiments can do?

(Social preferences)

Brock, J.M., Lange, A., & Ozbay, E.Y. (2013). Dictating the risk - experimental evidence on giving in risky environments. *American Economic Review*, 103, 415–37.

Cox, J.C., Friedman, D., Gjerstad, S., 2007. A tractable model of reciprocity and fairness. *Games and Economic Behavior* 59, 17–45.

DellaVigna, S., List, J. A., & Malmendier, U. (2012). Testing for altruism and social pressure in charitable giving. *The quarterly journal of economics*, 127(1), 1-56.

Engel, C. (2011). Dictator games: A meta study. *Experimental economics*, 14, 583-610.

Engelmann, D., & Strobel, M. (2004). Inequality aversion, efficiency, and maximin preferences in simple distribution experiments. *American economic review*, 94(4), 857-869.

Fehr, E., & Schmidt, K. M. (1999). A theory of fairness, competition, and cooperation. *The quarterly journal of economics*, 114(3), 817-868.

Karlan, D., & List, J. A. (2007). Does price matter in charitable giving? Evidence from a large-scale natural field experiment. *American Economic Review*, 97(5), 1774-1793.

(Risk preferences)

Castillo, M., Leo, G., & Petrie, R. (2020). Room composition effects on risk taking by gender. *Experimental Economics*, 23, 895-911.

Castillo, M., Petrie, R., Cotla, C. R., & Torero, M. (2018). Risk preferences and decision quality of the poor. Working Paper.

Cox, J. C., & Sadiraj, V. (2006). Small-and large-stakes risk aversion: Implications of concavity calibration for decision theory. *Games and Economic Behavior*, 56(1), 45-60.

Conte, A., Hey, J. D., & Moffatt, P. G. (2011). Mixture models of choice under risk. *Journal of Econometrics*, 162(1), 79-88.

Holt, C. A., & Laury, S. K. (2002). Risk aversion and incentive effects. *American economic review*, 92(5), 1644-1655.

Harrison, G. W., Johnson, E., McInnes, M. M., & Rutström, E. E. (2005). Risk aversion and incentive effects: Comment. *American Economic Review*, 95(3), 897-901.

Harrison, G. W., & Rutström, E. E. (2009). Expected utility theory and prospect theory: One wedding and a decent funeral. *Experimental economics*, 12(2), 133-158.

(Time preferences)

Andersen, S., Harrison, G. W., Lau, M. I., & Rutström, E. E. (2008). Eliciting risk and time preferences. *Econometrica*, 76(3), 583-618.

(Cooperation, trust, bargainig, public good games....)

Egas, M., & Riedl, A. (2008). The economics of altruistic punishment and the maintenance of cooperation. *Proceedings of the Royal Society B: Biological Sciences*, 275(1637), 871-878.

Fischbacher, U., Gächter, S., & Fehr, E. (2001). Are people conditionally cooperative? Evidence from a public goods experiment. *Economics letters*, 71(3), 397-404.

Güth, W., Schmittberger, R., & Schwarze, B. (1982). An experimental analysis of ultimatum bargaining. *Journal of economic behavior & organization*, 3(4), 367-388.

Güth, W., & Kocher, M. G. (2014). More than thirty years of ultimatum bargaining experiments: Motives, variations, and a survey of the recent literature. *Journal of Economic Behavior & Organization*, 108, 396-409.

Póvoa, A. C. S., Pech, W., & Woiciekovski, E. (2020). Trust and social preferences: A cross-cultural experiment. *Journal of Behavioral and Experimental Economics*, 86, 101526.

Sonnemans, J., Schram, A., & Offerman, T. (1998). Public good provision and public bad prevention: The effect of framing. *Journal of Economic Behavior & Organization*, 34(1), 143-161.

(Confidence)

Alós-Ferrer, C., & Garagnani, M. (2023). Part-time Bayesians: incentives and behavioral heterogeneity in belief updating. *Management Science*, 69(9), 5523-5542.

Augenblick, N., Lazarus, E., & Thaler, M. (2025). Overinference from weak signals and underinference from strong signals. *The Quarterly Journal of Economics*, 140(1), 335-401.

Cipriani, M., De Filippis, R., Guarino, A., & Kendall, R. (2020). *Trading by professional traders: An experiment* (No. 939). Staff Reports.

Enke, B., & Graeber, T. (2023). Cognitive uncertainty. *The Quarterly Journal of Economics*, 138(4), 2021-2067.

Harrison, G. W., Ross, D., & Swarthout, J. T. (2024). Gender, Confidence, and the Mismeasure of Intelligence, Competitiveness and Literacy.

(Others)

Banerjee, R., Dasgupta, U., & Mitra, S. (2023). A Review of Models and Experimental Methods of Corruption Experiments. *The Political Economy of Corruption*.

Battigalli, P., & Dufwenberg, M. (2007). Guilt in games. *American Economic Review*, 97(2), 170-176.

Bigoni, M., Potters, J., & Spagnolo, G. (2019). Frequency of interaction, communication and collusion: an experiment. *Economic Theory*, 68(4), 827-844.

Brandts, J., Ellman, M., & Charness, G. (2016). Let's talk: How communication affects contract design. *Journal of the European Economic Association*, 14(4), 943-974.

Camerer, C., & Thaler, R. H. (1995). Anomalies: Ultimatums, dictators and manners. *Journal of Economic perspectives*, 9(2), 209-219.

Cameron, L., Erkal, N., Gangadharan, L., & Meng, X. (2013). Little emperors: behavioral impacts of China's One-Child Policy. *Science*, 339(6122), 953-957.

Charness, G., Rigotti, L., & Rustichini, A. (2007). Individual behavior and group membership. *American Economic Review*, 97(4), 1340-1352.

Van Dijk, F., Sonnemans, J., & Van Winden, F. (2001). Incentive systems in a real effort experiment. *European Economic Review*, 45(2), 187-214.

Fisman, R., Jakiela, P., & Kariv, S. (2017). Distributional preferences and political behavior. *Journal of Public Economics*, 155, 1-10.

Gneezy, U. (2005). Deception: The role of consequences. *American Economic Review*, 95(1), 384-394.

Gill, D., & Prowse, V. (2012). A structural analysis of disappointment aversion in a real effort competition. *American Economic Review*, 102(1), 469-503.

Mullainathan Sendhil, Joshua Schwartzstein, Andrei Shleifer. "Coarse Thinking and Persuasion," *Quarterly Journal of Economics*, 2008

Niederle, Muriel; Vesterlund, Lise. (2007) "Do Women Shy Away from Competition? Do Men Compete Too Much?," *QJE* 122 (3). p 1067-1101

Riedl, A., & Smeets, P. (2017). Why do investors hold socially responsible mutual funds?. *The Journal of Finance*, 72(6), 2505-2550.

Van den Assem, M. J., Van Dolder, D., & Thaler, R. H. (2012). Split or steal? Cooperative behavior when the stakes are large. *Management Science*, 58(1), 2-20.

Experiments: lab, field and other methodologies

Gneezy, U., & Imas, A. (2017). Lab in the field: Measuring preferences in the wild. In *Handbook of economic field experiments* (Vol. 1, pp. 439-464). North-Holland.

Bigoni, M. & Dragone, D., Effective and efficient experimental instructions, *Economics Letters*, 2012, 117, 460- 463

Lab experiments

Cameron, L., Chaudhuri, A., Erkal, N., & Gangadharan, L. (2009). Propensities to engage in and punish corrupt behavior: Experimental evidence from Australia, India, Indonesia and Singapore. *Journal of public economics*, 93(7-8), 843-851.

Harrison, G. W., Lau, M., & Rutström, E. E. (2015). Theory, Experimental Design, and Econometrics Are Complementary (And So Are Lab and Field Experiments). In *Handbook of Experimental Economic Methodology* (pp. 296-338). Oxford University Press.

Reuben E., Li S.X., Suetens S., Svorenčík A., Turocy T., Kotsidis V. Trends in the publication of experimental economics articles. *Journal of the Economic Science Association*. 2022 Dec;8(1-2):1-5.

Snowberg, E., & Yariv, L. Testing the waters: Behavior across participant pools. *American Economic Review* 2021, 111(2), 687-719.

Field experiments

Angerer, S., Bolvashenkova, J., Glätzle-Rützler, D., Lergetporer, P., & Sutter, M. (2023). Children's patience and school-track choices several years later: Linking experimental and field data. *Journal of Public Economics*, 220, 104837.

Bott, K. M., Cappelen, A. W., Sørensen, E. Ø., & Tungodden, B. (2020). You've got mail: A randomized field experiment on tax evasion. *Management Science*, 66(7), 2801-2819.

Cappelen, A., List, J., Samek, A., & Tungodden, B. (2020). The effect of early-childhood education on social preferences. *Journal of Political Economy*, 128(7), 2739-2758.

Castillo, Marco, John List, Ragan Petrie and Anya Samek, "Detecting Drivers of Behavior at an Early Age: Evidence from a Longitudinal Field Experiment," December 2020, conditionally accepted, *Journal of Political Economy*.

Charness, G., & Viceisza, A. (2016). Three risk-elicitation methods in the field: Evidence from rural Senegal. *Review of Behavioral Economics*, 3(2), 145-171.

Charness, G., & Fehr, E. (2015). From the lab to the real world. *Science*, 350(6260), 512-513.

Harrison, G. W., & List, J. A. (2004). Field experiments. *Journal of Economic literature*, 42(4), 1009-1055.

Karlan, D., & List, J. A. (2007). Does price matter in charitable giving? Evidence from a large-scale natural field experiment. *American Economic Review*, 97(5), 1774-1793.

Levitt, S. D., & List, J. A. (2009). Field experiments in economics: The past, the present, and the future. *European Economic Review*, 53(1), 1-18.

List, J. A. (2007). Field experiments: a bridge between lab and naturally occurring data. *The BE Journal of Economic Analysis & Policy*, 6(2).

Surveys, Online experiments, Neuroeconomics

Brocas, Isabelle; Carrillo, Juan D. (2008) "The Brain as a Hierarchical Organization," AER 1312-46

Burger, N., Charness, G., & Lynham, J. (2011). Field and online experiments on self-control. *Journal of Economic Behavior & Organization*, 77(3), 393-404.

Buso IM, Di Cagno D, De Caprariis S, Ferrari L, Larocca V, Lorè L, Marazzi F, Panaccione L, Spadoni L. Lab-like Findings from Online Experiments. *Journal of the Economic Science Association*, 7(2), 184-193, 2021.

Camerer, Lowenstein, and Prelec (2005) "Neuroeconomics: How neuroscience can inform economics," *Journal of Economic Literature*, 9-64.

Fetzer T, Hensel L, Hermle J, Roth C. Coronavirus perceptions and economic anxiety. *Review of Economics and Statistics*. 2020 Jun 19:1-36.

Knutson, B., Rick, S., Wimmer, G. E., Prelec, D., & Loewenstein, G. (2007). Neural predictors of purchases. *Neuron*, 53(1), 147-156.

Rustichini, A. (2009). Neuroeconomics: what have we found, and what should we search for. *Current opinion in neurobiology*, 19(6), 672-677.

Stantcheva S. How to run surveys: A guide to creating your own identifying variation and revealing the invisible. National Bureau of Economic Research; 2022 Oct 3.

Experiments nowadays

Camerer, C.F., Dreber, A., Forsell, E., Ho, T.H., Huber, J., Johannesson, M., Kirchler, M., Almenberg, J., Altmeld, A., Chan, T. and Heikensten, E. Evaluating replicability of laboratory experiments in economics. *Science*, 2016, 351(6280), pp.1433-1436.

List, J. A., Sadoff, S., & Wagner, M. So you want to run an experiment, now what? Some Simple Rules of Thumb for Optimal Experimental Design. *Experimental Economics*, 2011, 14(4), 439-457.

Page, L., Noussair, C.N. & Slonim, R. The replication crisis, the rise of new research practices and what it means for experimental economics. *Journal of the Economic Science Association* 7, 210–225, 2021

Limits of the experimental approach

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

Zizzo, D. J. (2010). Experimenter demand effects in economic experiments. *Experimental Economics*, 13, 75-98.