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.

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.

Introduction

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

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

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.

What experiments can do?

(Social preferences)

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.

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.

(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.

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.

(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.

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.

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.

(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.

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, Nueroeconomics

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.

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., Altmejd, 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