# Dottorato in Scienze Economiche e Aziendali

UNIVERSITÀ DEGLI STUDI DI CAGLIARI



## **Experimental Methods in Economics and Business**

Vittorio Pelligra (UniCa) Andrea Isoni (UniCa & Warwick University)

#### Aims of the course:

The course is a short introduction (12 hrs.) to the behavioral and experimental approach to the study of economic behavior and institutions. Experiments are now an established method of investigation in economics ("experimental economics") and the experimental method is now widely considered as a tool among others in the typical economist's toolbox. Its use has shed light on many areas, on the theoretical side (decision theory, game theory, markets) as on the more applied ones (policy, development, labor economics, industrial organization, health economics, etc.). The purpose of this course is to provide students with the methodological skills required to understand the design and the results of economic experiments and to introduce the basics on how to conduct experiments in their own research.

#### Learning outcomes and competences:

Upon successful completion of this course, students will be able to:

- Think in an interdisciplinary way. Behavioral Economics combines knowledge from several disciplines, such as Economics, Psychology, Sociology and Neuroscience. Students will learn how to formalize the concepts from social sciences outside Economics (e.g., fairness, reciprocity, trust, envy etc.) and how to incorporate them into economic models.
- Understand the logic of various types of experiments (lab, field, natural, etc.) and learn how to use experiments to test theoretical ideas.
- Think critically with respect to the results of economic research.

### Assessment methods:

Students are required to write an essay (about 2500 words) on a selected topic agreed with the teachers.

## Course contents and Syllabus:

| Lecture 1         | Part I: Introduction and Methodology   |
|-------------------|--|
| Vittorio Pelligra | Historical developments  |
|                   | Correlation and causality  |
| 05/03/2024        | Difference between psychology and economics  |
| h. 10-13          | Homo Economicus  |
| (3 hours)         | WEIRD subjects   |
|                   |  |
|                   | Part II: How to design and conduct an experiment                                   |
|                   | Hypotheses   |
|                   | Design   |
|                   | Procedures   |
|                   | Experimental subjects  |
|                   | Incentives   |
|                   | Controls   |
|                   | Data analysis  |
|                   |  |
|                   | Part I Suggested readings:   |
|                   | • Falk, A. and Heckman, J. (2009): Lab Experiments Are a Major                     |
|                   | Source of Knowledge in the Social Sciences. <i>Science</i> 326 (5952):             |
|                   | 535-8.   |
|                   | Croson, Rachel and Simon Ga2chter (2010): The Science of                           |
|                   | Experimental Economics, Journal of Economic Behavior and                           |
|                   | Oraanization 73(1): 122-31.  |
|                   | Thaler, Richard H. 2000, "From Homo Economicus to Homo                             |
|                   | Sapiens," Journal of Economic Perspectives 14: 133-141                             |
|                   | Hertwig, R. & Ortmann, a. (2001). Experimental practices in                        |
|                   | economics: a methodological challenge for nsychologists? The                       |
|                   | Behavioral and Brain Sciences, 24(3), 383–403                                      |
|                   | Henrich I Heine S I & Norenzavan A (2010) "The weirdest                            |
|                   | neople in the world?" <i>Behavioral and brain sciences</i> 33(2-3) 61-             |
|                   | 83   |
|                   | <ul> <li>Symposium on 'Experimental economics' in Economic Journal 1999</li> </ul> |
|                   | F1-F45 containing papers by C Starmer ('Experimental                               |
|                   | economics: hard science or wasteful tinkering?'). K. Binmore ('Why                 |
|                   | experiment in economics?'), G. Loewenstein ('Experimental                          |
|                   | economics from the viewpoint of behavioural economics') and G.                     |
|                   | Loomes ('Some lessons from past experiments and some challenges                    |
|                   | for the future').  |
|                   |  |
|                   | Part II Suggested readings:  |
|                   | • Jacquemet, N., L'Haridon, O., (2018). <i>Experimental Economics:</i>             |
|                   | Method and Applications. Cambridge University Press.                               |
| Lecture 2         | Part III: Experimental tests of decision theory                                    |
| Andrea Isoni      | Introduction to Expected Utility Theory  |
|                   |  |

| 12/03/2022   | The Common Ratio Effect, the Common Consequence Effect, and                                  |
|--------------|--|
| h. 14-16     | the Preference Reversal phenomenon   |
| (2 hours)    | <ul> <li>Practical issues in designing risky-choice experiments</li> </ul>                   |
|              |  |
|              | Part III Suggested readings:   |
|              | <ul> <li>Machina, M (1987). Choice under Uncertainty: Problems Solved</li> </ul>             |
|              | and Unsolved. Journal of Economic Perspectives 1(1): 121–154.                                |
|              | • Seidl, C. (2002). Preference Reversal. Journal of Economic Surveys                         |
|              | 16(5): 621–655.  |
|              | <ul> <li>Starmer, C. and Sugden, R. (1991). Does the Random Lottery</li> </ul>               |
|              | Incentive System Elicit True Preferences? An Experimental                                    |
|              | Investigation. American Economic Review 81(4): 971–978.                                      |
| Losturo 2    | Deat N/s Francisco esta esta Consultanti en an di Franci Deinte                              |
| Andrea Isoni | Part IV: Experiments on Coordination and Focal Points  |
|              | Coordination problems  |
| 19/03/2024   | Salient labels and focal points  |
| h. 14-16     | Iacit bargaining   |
| (2 hours)    | Matching vs. bargaining  |
|              | <ul> <li>De-emphasising payoff information</li> </ul>  |
|              | <ul> <li>Conflict of interest vs. payoff inequality</li> </ul>                               |
|              | <ul> <li>Player labels vs. strategy labels</li> </ul>  |
|              | Explicit bargaining  |
|              | Emergence of salience  |
|              |  |
|              | Part IV Suggested readings:  |
|              | Crawford, V.P., U. Gneezy and Y. Rottenstreich (2008), 'The                                  |
|              | power of focal points is limited: even minute payoff asymmetry                               |
|              | 98, 1443–1458.   |
|              | <ul> <li>Isoni, A., A. Poulsen, R. Sugden and K. Tsutsui (2013), 'Focal points</li> </ul>    |
|              | in tacit bargaining games: experimental evidence', European<br>Economic Review, 59, 167—188. |
|              | <ul> <li>Isoni, A., A. Poulsen, R. Sugden and K. Tsutsui (2014), 'Efficiency,</li> </ul>     |
|              | equality and labelling: An experimental investigation of focal                               |
|              | points in explicit bargaining', American Economic Review, 104,                               |
|              | 3256– 3287.  |
|              | <ul> <li>Isoni, A., A. Poulsen, R. Sugden and K. Tsutsui (2019), 'Focal points</li> </ul>    |
|              | and payoff information in tacit bargaining', Games and Economic                              |
|              | Behavior, 114, 193–214.  |
|              | <ul> <li>Isoni, A., K. Sugden and J. Zneng (2020), The pizza highr game:</li> </ul>          |
|              | focal points' European Economic Peview 127 103/28  |
|              | <ul> <li>Isoni A Sugden R and J Zheng (2022) Focal Points in</li> </ul>                      |
|              | Experimental Baragining Games In: Karagözoğlu F. Hyndman                                     |
|              | K.B. (eds) Bargainina. Palarave Macmillan.   |
|              | Cham. <u>https://doi.org/10.1007/978-3-030-76666-5</u> 6.                                    |
|              | Mehta, J., C. Starmer and R. Sugden (1994), 'The nature of                                   |
|              | salience: an experimental investigation of pure coordination                                 |
|              | games', American Economic Review, 84, 658–673.   |
|              | • Schelling, T.C. (1960), The Strategy of Conflict, Cambridge, MA:                           |
|              | Harvard University Press.  |

| Lecture 4         | Part IV: Nudging and Experiments in Behavioural Change  |
|-------------------|---|
| Andrea Isoni      | The concept of Nudging  |
| 26/02/2024        | Examples of Nudges: Defaults, Social Norms and Honesty Priming  |
| h 14-16           | Nudging in the real world: applications by the Behavioural Insights   |
| (2 hours)         | Team (practical challenges in conducting Randomised Control   |
|                   | l rials)  |
|                   | Nudging in the lab: understanding when and how nudges work     (numerical challenges in finding valights nudges to test now |
|                   | (practical challenges in finding reliable hodges to rest new hypotheses)  |
|                   | Replication and pre-registration  |
|                   | An illustration with Honesty Priming  |
|                   |   |
|                   | Part V Suggested readings:  |
|                   | • Thaler, R. H. and Sunstein, C. (2003). Libertarian Paternalism.   |
|                   | American Economic Review Papers and Proceedings 93(2): 175–   |
|                   |   |
|                   | • Johnson, E. J. and Goldstein, D. (2003). Do Defaults Save Lives?<br>Science 302: 1338–1339.                               |
|                   | • Mazar, N., Amir, O. and Ariely, D. (2008). The Dishonesty of  |
|                   | Honest People: A Theory of Self-Concept Maintenance. Journal of   |
|                   | Marketing Research 45: 033–044.   |
|                   | <ul> <li>Bin report</li> <li>Isoni A Read D Kolodko I Arango-Ochog I Chug I Tiku S</li> </ul>                               |
|                   | and Kariza. A. (2019) "Can Upfront Declarations of Honesty  |
|                   | Improve Anonymous Self-Reports of Sensitive Information?" in  |
|                   | Bucciol, A. and Montinari, N. (Eds.), Dishonesty in Behavioral  |
|                   | Economics, Elsevier.  |
|                   | • Verschuere, B., Meijer, E. H., Jim, A., McCarthy, R., Hoogesteyn, K.,   |
|                   | Skowronski, J., Orthey, K., Acar, O. A.,, Isoni, A.,, Yildiz, E.  |
|                   | Ariely, D. (2008)". Advances in Methods and Practices in  |
|                   | Psychological Science: 1(3) 299–317.  |
|                   |   |
| Lecture 5         | Part VI: Social Preferences and Cooperation   |
| Vittorio Pelligra | Dictator Game and Ultimatum Game  |
| 04/04/2024        | Voluntary contribution in the Public Good Game  |
| h. 10-13          | Irust Game, Intentionality and menu-dependence  |
| (3 hours)         | Part VI: Some examples of Lab, Field and Survey experiments   |
|                   | Obedience and Experimenter's demand effect  |
|                   | External validity the other way round   |
|                   | Information in the field  |
|                   | Non-standard subject pools  |
|                   | Social norms and norm-nudging   |
|                   |   |
|                   | Part VI Suggested readings:   |
|                   | Pelligra, V., Reggiani, T., Zizzo, D.J. (2020). "Responding to  |
|                   | (Un)Reasonable Requests by an Authority", <i>Theory and</i>   |
|                   | <b>Decision</b> 89(3), pp. 287–311.   |

| <ul> <li>Frigau, L., Medda, T., Pelligra, V., (2019), "From the Field to the Lab.<br/>An Experiment on the Representativeness of Standard Laboratory<br/>Subjects", <i>Journal of Behavioral and Experimental Economics</i> 78,<br/>160–169.</li> <li>Becchetti, L., Pelligra, V., Reggiani, T., (2017), "Information, Belief<br/>Elicitation and Threshold Effects in the 5X1000 Tax Scheme: A<br/>Framed Field Experiment", <i>International Tax and Public Finance</i>,<br/>24(6), 1026-1049.</li> <li>Pelligra, V., Isoni, A., Fadda, R., Doneddu, G., (2015) "Theory of Mind,<br/>Perceived Intentions and Reciprocal Behavior: Evidence from<br/>Individuals with Autism Spectrum Disorder", <i>Journal of Economic</i><br/><i>Psychology</i> 49, 95–107.</li> <li>Craparotta, F., Pelligra, V., Reggiani, T., (2022). "Trust, Reciprocity<br/>and Menu-(in)dependence" <i>Mimeo</i>.</li> <li>Ballicu, G., Pelligra, V., (2024). "What motives increase blood<br/>donation? A field experiment with framing messages" <i>Mimeo</i></li> </ul> |
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