

30300 - Empirical Research Methods

Spring 2015

Profs. Tommaso Nannicini and Paolo Pinotti

First part of the course taught by Tommaso Nannicini

Office: 5-D1-16; e-mail: tommaso.nannicini@unibocconi.it

Second part of the course taught by Paolo Pinotti

Office: 3-B1-11; e-mail: paolo.pinotti@unibocconi.it

TA: Enrico Di Gregorio: enrico.digregorio@unibocconi.it

Assistant: Alessandra Startari

Office: 5-C1-08; e-mail: alessandra.startari@unibocconi.it

Goals:

The course will introduce students to the main tools used for data analysis and applied empirical research, focusing in particular on the estimation of causal relationships. The methods covered will allow students to address questions that are relevant from a social, economic, and political perspective: Which are the economic returns of one additional year of schooling? Do longer prison sentences deter crimes? Do better paid politicians perform better? Does health insurance make people healthier? What's the economic impact of immigration flows? These are just examples of the type of questions that will motivate the use of empirical methods.

At the end of the course, students should be able to go through the multiple stages of empirical research: searching for interesting questions, devising an appropriate research design, collecting the data, and implementing the analysis. Throughout the course, the craft of empirical design will be discussed both during class lectures and during computer lab sessions, where sample datasets will be analyzed with the use of the statistical software Stata.

Topics:

1. The ideal experiment: Causal effects and the selection problem.
2. Randomized controlled trials.
3. From observational data to natural experiments: instrumental variables.
4. Panel, difference-in-differences, and synthetic control models.
5. Regression discontinuity designs.

Grading System:

Final exam (written only): 28 points out of 30.

Empirical assignment: 3 points if the final exam is taken by the Summer session; 2 points if the final exam is taken afterwards.

Textbook:

- ✓ J.D. Angrist and J.S. Pischke, *Mastering 'Metrics: The Path from Cause to Effect*, Princeton University Press, 2014
- ✓ Lecture notes, datasets, and additional readings will be posted on the Learning Space

Università Bocconi conceives of education as an ongoing process that stretches across a person's entire professional life. The University hopes that the entire Bocconi community will respect the values of fairness and correctness associated with it, values which inspire and guide the conduct of all community members as they pursue common objectives and a shared mission. The Università Bocconi Honor Code is published at <http://www.unibocconi.eu/honorcode>. We encourage all students to read it.