Policy evaluation

PROF. LORENZO CAPPELLARI; DOMENICO MASSARO

Course aims and intended learning outcomes

Decision making often coincides with the design of policy interventions. As decisions translate in the allocation of resources, the demand for professionals evaluating the effectiveness of interventions blending economic theory with robust quantitative tools is high. The main challenge for policy evaluation is to establish a causal link between interventions and outcomes. The objective of this course is to introduce the main approaches used in policy evaluation, both public policies but also firm policies in human resources or corporate governance, illustrating how to use econometric tools to assess policy effectiveness.

At the micro level, the course will focus on randomized evaluations, natural experiments, discontinuity designs, selection on observables and difference-in- differences. The course presents strengths and weaknesses of each approach in terms of internal and external validity. Each approach will be presented and illustrated with specific policies in the areas of labor, health, education, development and firm organization.

At the macro level the focus we will be on the application of econometric tools tailored to understand the effectiveness of fiscal and monetary policies and how economic activity reacts to policy stimulus over the business cycle.

In the lab sessions, students themselves replicate the results of a widely-cited published study for each evaluation approach.

At the end of the course, students will:
1. have acquired knowledge and understanding of the econometric techniques and statistical softwares needed to evaluate the impact of policy interventions both at the micro and macro level;
2. be able to apply the econometric methodologies developed during the course to the evaluation of real policy scenarios using both micro and macro data;
3. be able to critically assess the effectiveness of different policy measures based on the outcomes of their econometric analysis;
4. have developed a technical language to communicate policy prescriptions based on their analysis to policymakers;
5. have developed learning skills that will enable them to pursue further advanced studies.

Course content

PART I: Evaluation of microeconomic policies (Prof. Lorenzo Cappellari)
1. Randomized Control Trials.
   Application: Business Literacy and Development
2. Selection on Observables and Propensity Score Matching.
   Application: An Evaluation of Active Labour Market Programmes
3. Difference -in-Differences.
   Application: Evaluating the Effectiveness of Selective College Admissions
4. Regression Discontinuity Designs.
   Application: Evaluating the Effect of an Antidiscrimination Law

PART II: Evaluation of macroeconomic policies (Prof. Domenico Massaro)
1. Stationary ARMA Processes.
   Application: The Term Structure of Interest Rates

2. Unit Roots.
   Application: Exchange Rates and the Long-Run PPP
3. Cointegration and Error Correction Mechanisms.
   Application: Money Demand, Inflation and Policy Rates
4. VAR and Structural Models.
   Application: Evaluating the Impact of Monetary Policy:

Reading list

J.D. ANGRIST-J.S. PISCHKE, Mostly Harmless Econometrics: An Empiricist's Companion, Princeton University Press, 2009.

M. VERBEEK, A Guide to Modern Econometrics, Wiley (4th ed.).

Detailed reading lists of papers, class notes, and additional teaching material will be uploaded on teachers web pages and/or Blackboard (http://blackboard.unicatt.it/).

Teaching method

The course is based on classroom lectures (60 hours) and is complemented by econometric laboratory sessions (20 hours).

Assessment method and criteria

Students will be evaluated through a written examination, which will include both theory and empirical questions. Questions will be aimed at proving the student's understanding of the topics discussed during the lectures, but also, and importantly, ability to apply appropriate estimation methods and to provide the correct economic interpretation to estimation results. Each question will be evaluated out of thirty and the final mark will be the average of the marks obtained in each question.

Students presentations and an empirical project will also be assessed during the course and will contribute to the final mark.