

Policy evaluation lab (60h – 9CFU)

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Course learning objectives and skill acquisition

The course aims at providing students a first exposure to some of the most relevant quantitative methods for the economic policy analysis. The course is structured in two modules.

Module 1: Counterfactual evaluation of public policies ex-post impact

The module focuses on the evaluation of the ex-post impacts of public policies. The purpose is to provide students with the concepts and the quantitative skills for approaching policy evaluation. It is organized in three parts. First, it introduces the relevance of the independent evaluation in the evidence-based approach to policy making, the relation between monitoring and evaluation and the key conditions (e.g., data and policy design/implementation) enabling ex-post impact evaluation. Second, it presents the key issue for the identification of causal impacts in non-randomized contexts where most of public policies are designed, and the counterfactual methods that can be used to reproduce randomization in different contexts and to estimate net impacts. Third, it turns concepts into practice showing how to run a counterfactual evaluation to assess the impact of a public policy.

Students will become familiar with the conceptual background and the empirics of policy assessment and will have acquired awareness on the value of adequate data, policy design and methods to ensure robust evaluation able to inform and guide the policy making.

Module 2: Introduction to Computable General Equilibrium Modeling

The objective of this module is to engage participants in an active, team-based process of learning about computable general equilibrium (CGE) models and their use in applied economic policy analysis. The module emphasizes an intuitive and graphical treatment of economic theory in the CGE model, and provides structured experiences in manipulating and running the standard GTAP Model within the RunGTAP software environment. During the course, students will:

- review core economic theories from macro, micro, trade and public finance and observe how they are operationalized in an applied general equilibrium model;
- learn to recognize, control and interpret the theoretically consistent behavior of consumers and producers in the model;

- observe the aggregated, macroeconomic impacts of microeconomic behaviors;
- define model experiments that represent real-world issues and problems; and
- learn to interpret general equilibrium model results by calling on and integrating their knowledge of multiple fields of economic study.

Assessment

The course assessment will be based on an oral exam.

Students attending the class regularly will have the possibility to substitute the final exam with two mid-term examinations.

Course general schedule

Module 1

Impact assessment of public policies

Theoretical framework of counterfactual evaluation

Models: Matching, Difference-in-differences, Regression discontinuity, Synthetic control

Empirical applications: different methods for different policies

Module 2

Model structure, an overview of CGE-based analysis and data requirement

Designing the model, formulating scenarios and running policy simulations

Reporting and interpreting the results

Applications: trade in value added, regional trade agreements, multilateral liberalization, preferential policies

Teaching material

Lecture slides and other teaching material will be downloadable from the course website.

Module 1

Textbooks

Title book #1

Angrist, J. and Pischke, J.S. (2009): Mostly harmless econometrics, Princeton University Press, NJ.

Additional readings

Athey, S. and Imbens, G. (2016): The State of Applied Econometrics - Causality and Policy Evaluation, [arXiv:1607.00699](https://arxiv.org/abs/1607.00699) [stat.ME]

Blundell, R. and Costa-Dias, M. (2009): Alternative Approaches to Evaluation in Empirical Microeconomics, Journal of Human Resources, 44(3)

Dell, M. (2010): The Persistent Effects of Peru's Mining Mita, Econometrica, 78, 1863–1903

Module 2

Textbooks

Burfisher, M. (2017). Introduction to Computable General Equilibrium Models. Cambridge: Cambridge University Press. Chapters: 1, 2, 3, 7 & 8 (required)

Additional readings

Kehoe, T. J., Pujolàs, P. S. and Rossbach, J. (2017). Quantitative Trade Models: Developments and Challenges. Annual Review of Economics, 9:295–325

Hertel T. W. (2012). Global Applied General Equilibrium Analysis using the GTAP Framework. GTAP Working Paper No. 66.