

Impact Evaluation (cod. EI041)

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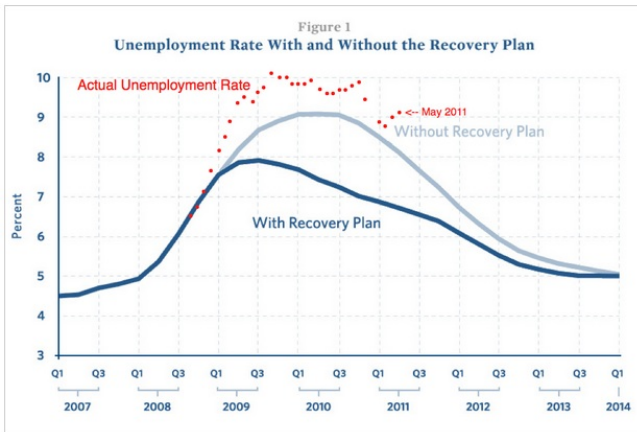
Academic year 2024-2025

Impact Evaluation

- ▶ What does it mean that a certain policy intervention has an impact on some outcome?
- ▶ The notion of causality is the key to this definition
 - ▶ did the policy intervention cause a change in the outcome?
 - ▶ yes or no? what magnitude?
 - ▶ can we know it beforehand? Ex-ante vs. exp-post evaluations [*Wolpin, 2007*]
- ▶ In this course you will (hopefully) learn...
 - ▶ to define the causal effect of an intervention
 - ▶ to understand what assumptions are needed to identify causal effects
 - ▶ various techniques to produce estimates of causal effects

The importance of good policy evaluation

The Romer-Bernstein unemployment chart



Why is it difficult?

- ▶ Why is it difficult to estimate causal effects?
 - ▶ Sliding Doors
- ▶ The missing counterfactual
 - ▶ what would have happened in the absence of the policy?
 - ▶ each of the methods that we will review uses different assumptions to create the counterfactual

This course

- ▶ Objective:
 - ▶ learn how to use data to estimate the causal effect of a policy intervention

- ▶ Syllabus
 - ▶ one lecture (possibly two if necessary) on revising key notions of econometrics and statistics
 - ▶ one lecture on defining causality and causal effects
 - ▶ presentation of the most popular empirical strategies for policy evaluation

- ▶ The sweet comes at the end...
 - ▶ Replication study of a published paper using one of the methods presented in the course
 - ▶ Presentation of your study in class

Replication study - logistics

- ▶ Form a group of 2-3 students
 - ▶ if you don't find a group, the TA will find you one.
- ▶ Each group picks a method (the TA coordinates the process) and chooses a paper for replication (TA validates the choice)
 - ▶ the paper must be published in a good academic journal;
 - ▶ the paper must make use of your method;
 - ▶ the data to replicate the paper must be available.
- ▶ Assessment based on presentation (same grade to all group members)

Replication study - content

- ▶ You don't need to replicate everything that is in the paper
 - ▶ select main, most meaningful results. Or results that you find the most interesting
- ▶ Do something new that is not in the paper
 - ▶ is there something you are not convinced about? Do a robustness check the authors didn't do
 - ▶ is there a result you would have liked to see but was not in the paper? Do it yourself

Organization of the course

- ▶ One teaching session per week
 - ▶ Wednesday from 14:15 to 16:00 in room S6
- ▶ Teaching assistant: Hossein Tohidimehr (hossein.tohidimehr@graduateinstitute.ch)
 - ▶ will assist you with statistical software, group formation, choice of method and replication paper, et.
 - ▶ available on demand but might organise group/class sessions if needed
- ▶ [Moodle page](#): calendar, announcements, materials, et.
- ▶ My office hour: Wednesday 13:00-14:00 (before class), room MdP-P1-633

Teaching material

- ▶ Textbooks:
 - ▶ Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*. Second edition. MIT Press.
 - ▶ Angrist, Joshua D. and Jorn-Steffen Pischke. 2009. *Mostly Harmless Econometrics*. Princeton University Press.
 - ▶ Cameron, A. Colin, and Pravin K. Trivedi (2005). *Microeconometrics: Methods and Applications*. Cambridge University Press, New York.
 - ▶ Cameron, A. Colin, and Pravin K. Trivedi (2010). *Microeconometrics Using Stata, Revised Edition*. College Station, TX: Stata Press.
- ▶ A few academic articles (not many, in fact)
- ▶ Software: STATA or R