## Field course Economic and Social Policy

WIRTSCHAFTS UNIVERSITÄT WIEN VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS

Sophie Guthmuller, January 17th, 2023



# **Objectives of the course**



#### This class introduces to theory and methods of program evaluation

- present a comprehensive framework to evaluate programs (economic and social policies)
- introduce key concepts and quantitative methods for evidence-based analyses of policies: measuring the causal effects
- develop critical appraisal skills

### Applications of methods on economic and social policies



# **Objectives of the course**



#### After this course , you will be:

- aware of the importance of the program theory to understand how and why a program works or fails to work,
- familiar with the components of an evaluation plan,
- aware of the importance of the **social context** of program evaluation,
- familiar with the causality concept in impact evaluation and its prerequisites,
- familiar with different econometric approaches to identify program effects,
- familiar with different approaches how to relate program benefits to its costs and draw conclusions about efficiency,
- able to critically reflect on different methods of impact and economic evaluation in terms of their limitations and benefits.



The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2019

Abhijit Banerjee Esther Duflo Michael Kremer

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You will learn and apply how to measure causal effects based on : Field experiments or Randomized control trials (RCT)

Example



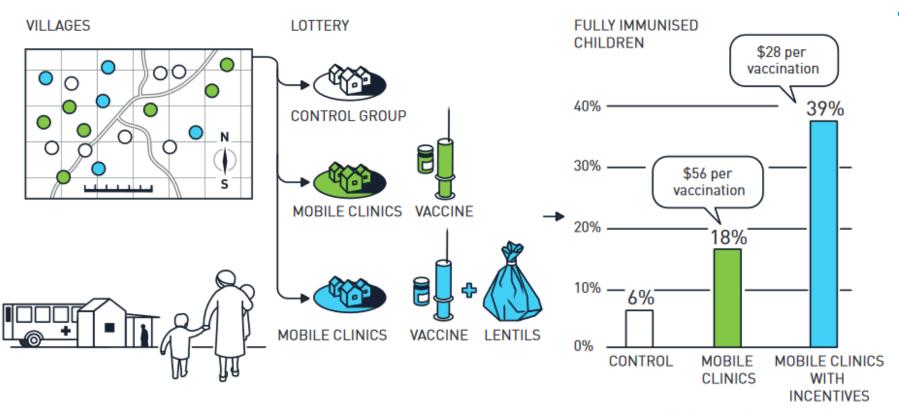
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David Card Joshua D. Angrist Guido W. Imbens

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#### You learn and apply how to measure causal effects based on : Natural experiments

- Difference-in-differences (DD)
- Matching

Example

 Regression discontinuity design (RDD)



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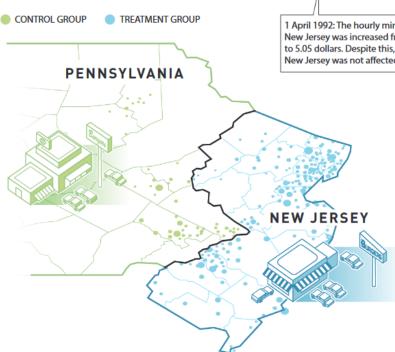
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# The effect of increasing the minimum wage

Card and Krueger used a natural experiment to study how increasing the minimum wage affects employment.

The researchers identified a treatment group (restaurants in New Jersey) and a control group (restaurants in eastern Pennsylvania) to measure the effect of increasing the minimum wage.





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## Structure of the course



- Tuesday mornings
- The course will be divided in two parts:
  - 1. Lectures : weeks 1-6
  - 2. Practical sessions: weeks 7-11
    - Week 12: written exam



# **1.** Lectures



### Introduction:

- Key concepts of policy evaluation
- Typologies of policy evaluation

## Module 1: Preparing for Policy Evaluation

- Describing and eliciting a Program Theory
- The social and political context of program evaluation
- Evaluation plan

## Module 2: Impact Evaluation

- Randomized controlled experiment
- Quasi-experimental methods: DD, RDD, matching
- Module 3: Economic Evaluation
  - Cost-benefit, cost-effectiveness, cost-utility analysis



# **2.** Practical sessions



- Reading of research papers/evaluation reports
- Apply methods with statistical software

### • Group project:

- By group, apply one of the evaluation method covered : Matching, RCT, RDD, DD, IV, Cost effective analysis
- To a policy of your choice
- Prepare an evaluation plan
- Prepare and moderate a hands-on tutorial (Stata, R, Excel)





#### Assessment Components (relative weights in the final grade)

- 40% (Individual) Written exam
- 50% (Group) project
- 10% (Individual) active participation

#### **Grade Key (point ranges)**

- 1: Excellent (90-100 points)
- 2: Good (80-89 points)
- 3: Satisfactory (65-79 points)
- 4: Sufficient (50-64 points)
- 5: Fail (0-49 points)







- Apply quantitative methods of program evaluation covered during the course
  - Examples of (current) topics at the Health Economics and Study group
  - Dr. Sophie Guthmuller
  - Cancer screening programmes (breast, colorectal, cervical): The impact on Takeup, Diagnoses and Mortality (Europe or Austria) (Data available!)
  - Geographical access to abortion services (UK data and google health trends data available!)
  - Student aid and academic success in Austria (Data access on-going)
- Other topics aiming at studying and measuring the effects of a policy are welcome!

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