Program Evaluation Methods
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2013-14

Program

1. Empirical approaches, potential outcomes, and causality
   1.1. Structural and treatment effect approaches.
   1.2. Descriptive analysis vs. causal inference.
   1.3. Potential outcomes and causality.

2. Social experiments
   2.1. Experimental testing of welfare programs in the US.
   2.2. Employment effects of job and earnings subsidies.
   2.3. Experimental evaluation of labor histories.
   2.4. Econometric models of labor histories.

3. Matching
   3.1. Exogeneity, matching, and multiple regression.
   3.2. Methods based on the propensity score.
   3.3. The common support condition.
   3.4. Quantile treatment effects

4. Instrumental variables
   4.1. Instrumental variable estimation using natural experiments.
   4.2. Interpreting IV estimates when effects are heterogeneous.
   4.3. Local average treatment effects and marginal treatment effects.
   4.4. Estimating the distributions of potential outcomes.
   4.5. The econometric selection model.

5. Regression-discontinuity
   5.1. Identification from discontinuities in assignment rules.
   5.2. Parametric ans semiparametric estimation methods.
   5.3. Financial aid offers and college enrollment decisions.

6. Differences in differences and synthetic controls
   6.1. Comparisons based on policy changes.
   6.2. Identifying the average treatment effect for the treated.
   6.3. Changes in the distribution of effects vs. changes in means.
   6.4. Synthetic control methods.

7. Further topics
   7.1. Combining randomized trials and structural estimation for ex ante evaluation.
   7.2. Treatment effects in duration analysis.
   7.3. Continuous treatments.
Readings

Lesson 1: Empirical approaches, potential outcomes, and causality

• General

• Potential outcomes and causality

Lesson 2: Social experiments


Lesson 3: Matching


**Lesson 4: Instrumental variables**


**Lesson 5: Regression-discontinuity**


**Lesson 6: Differences in differences and synthetic controls**


**Lesson 7: Further topics**

- Combining randomized trials and structural estimation for ex ante evaluation

- Treatment effects in duration analysis

- Continuous treatments

**Slides**

"Econometric Methods of Program Evaluation" by Manuel Arellano, last revision: January 2014.