

GV903: Advanced Research Methods

Class 20 Causal Inference

This is just a brief introduction to quasi-experimental methods to give you a taste of what is available. Although we keep it simple in this session in order to help you understand the rationale of each method, you need to be very careful to implement these methods. I highly recommend you to go through a proper textbook on these methods, read the appropriate manuals references of the software packages that are available and even better attend a course designated with a focus on these.

For every case we will study we use a small subset of the actual data used in each paper to help you focus on the intuition of each method, rather than focusing on replicating each result. For this you should go to the appropriate websites, download the full data and follow authors' directions.

Difference in Differences:

We use data from “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania” by David Card and Alan Krueger (1994).

Regression Discontinuity Design:

We use data from “Do Congressional Candidates Have Reverse Coattails? Evidence from a Regression Discontinuity Design” by David Broockman (2009).

Propensity Score Matching:

We use data from “Evaluating the Econometric Evaluations of Training Programs with experimental data” by Robert Lalonde (1986).