

10.1

1/1 point (graded)
Fill in the blanks. In the Card and Krueger (1994) study, New Jersey was the ____ group and Pennsylvania was the ____ group.

☐ control; treatment

☒ treatment; control



Explanation
The Card and Krueger (1994) study took advantage of the different policies between two neighboring states: New Jersey was going to raise its state minimum wage while Pennsylvania was not. In other words, New Jersey was going to receive the treatment while Pennsylvania was not. Therefore, New Jersey was the treatment group and Pennsylvania was the control (comparison) group.

Submit

You have used 1 of 1 attempt

Answers are displayed within the problem

10.2

2/2 points (graded)
Fill in the blanks. In the Card and Krueger (1994) study, the difference in employment between the baseline and the
endline for Pennsylvania is the Answer: time effect and Difference-in-Difference estimation
 Answer: eliminates this effect.

Explanation
The difference in employment between the baseline and the endline for Pennsylvania is the time effect ($\Delta Y_{\text{Pennsylvania}} = \delta t$) while that for New Jersey is the time effect plus the treatment effect ($\Delta Y_{\text{New Jersey}} = \delta t + T$). Difference-in-Difference estimation cancels out the time effect to yield the treatment effect ($\Delta Y_{\text{New Jersey}} - \Delta Y_{\text{Pennsylvania}} = \delta t + T - \delta t = T$).

Submit

You have used 1 of 2 attempts

Answers are displayed within the problem

10.3

1/1 point (graded)
What is the most critical assumption for Difference-in-Difference estimation? Please choose the one mentioned in the lecture.

☐ It assumes that there must be a time effect.

☐ It assumes that there must be a treatment effect.

☒ It assumes that the time effect (if present) applies equally to treatment and control groups.

☐ It assumes that there is a time effect for the control group but not for the treatment group.



Explanation
Difference-in-Difference estimation assumes that in the absence of treatment, the difference between treatment and control group is constant over time. That is, if there is a time effect, this effect applies equally to both groups. This assumption is called the “parallel trend assumption” which is the most critical assumption for Difference-in-Difference estimation.

Submit

You have used 1 of 2 attempts

Answers are displayed within the problem

Discussion

Hide Discussion

Topic: The Minimum Wage Debate and Causal Inference / Question 10

Add a Post

Show all posts

by recent activity

There are no posts in this topic yet.