Homework 9 Submission

David Wilson Economics 7103

April 8, 2024

1 Stata

1. Figure 1 contains the annual recycling rates in NYC compared to the control states.

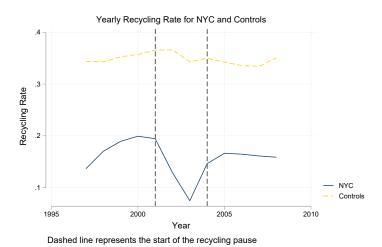


Figure 1: Plot of the annual recycling rate in NYC compared to control states.

- 2. The coefficient is -0.0619874 with a standard error of 0.0058221.
- 3. The average treatment effect for SDID is -0.06436 with a standard error of 0.00664.

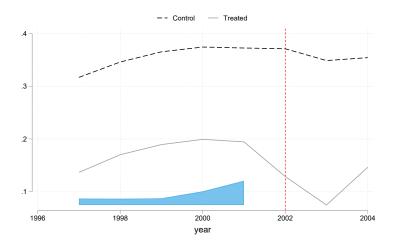


Figure 2: Event study plot of the β_l .

4. Event study regression using coefplot.

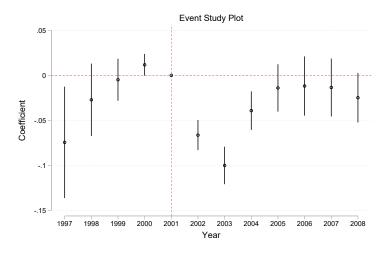


Figure 3: Event study plot of the β_l .

5. Reports of synthetic control estimates:

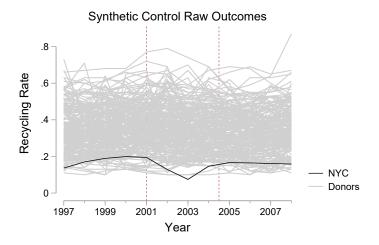


Figure 4: The plot of raw outcomes for treated and control groups over time.

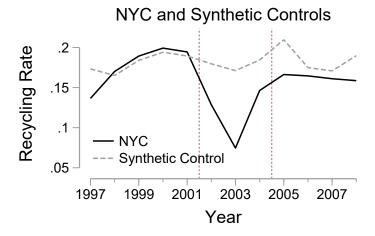


Figure 5: The plot of raw outcomes for treated group and synthetic control group over time.

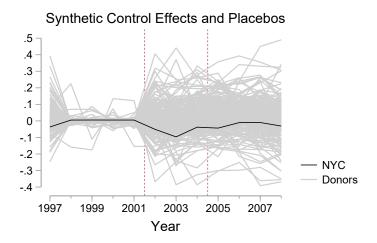


Figure 6: The plot of estimated synthetic control effects and placebo effects over time.

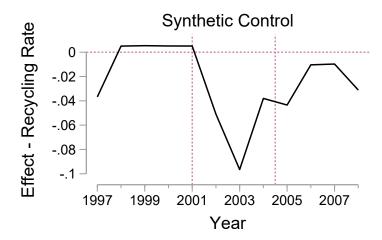


Figure 7: The plot of final synthetic control estimates over time.