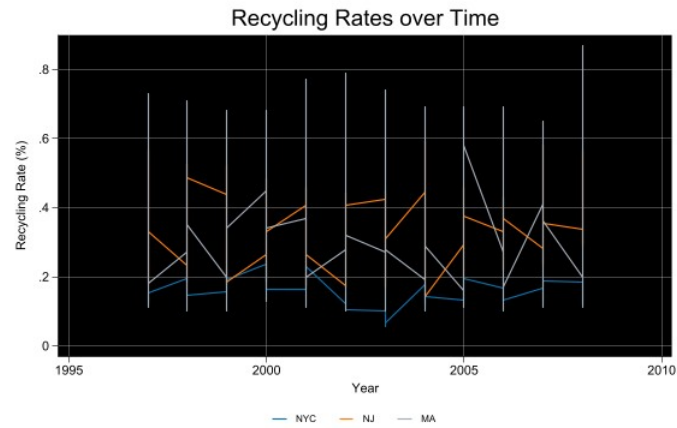# Environmental HW 8

Suneye Rae Holmes

March 31, 2025

1 Stata

1. Yearly plot of the Recycling Rate for NYC and controls in NJ in MA:

2. The estimated Average Treatment Effect on the Treated and standard errors are reported below:

Table 1: Average Treatment Effect on the Treated: NYC

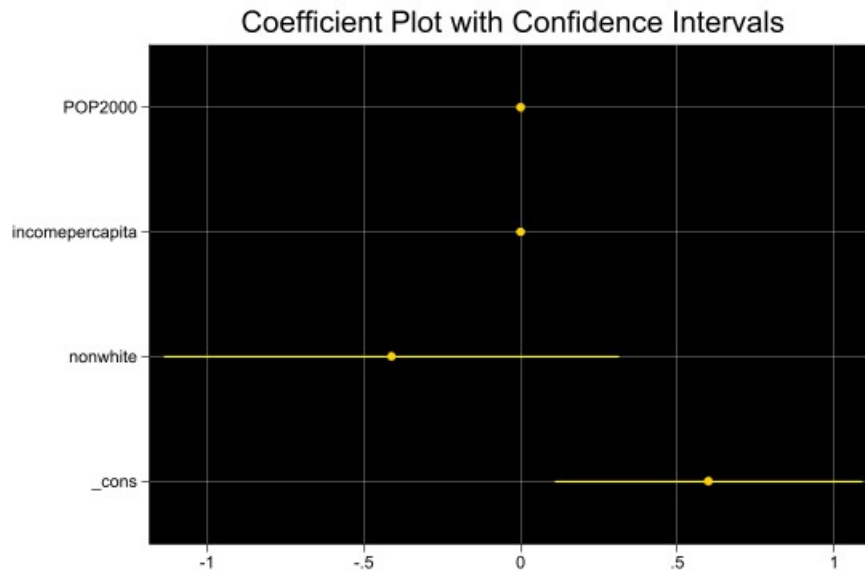|	recyclingrate
(first) nyc	-0.191
	(0.015)
Intercept	0.349
	(0.007)
N	2520

3. I consistently received an error message here when attempting to execute the following code:

sdid recyclingrate id year nyc, vce(placebo) graph

The received error states that "certain units are treated in the first period of the panel. Any units which are treated the entire panel should not be included in the synthetic DiD procedure."

The treatment variable I am using is ***nyc***, which contains ids which were treated in the first period of the panel, i.e., 1997. As far as I can tell, this is unavoidable. I am not sure if I am supposed to drop observations in the year 1997 to avoid this error?

4. The regression coefficient plot of the event study are below:

5. I am not able to install the synth runner package into Stata 17. After installing synth, I was able to get estimates for part A, but could not figure out how to plot the estimates! I am also at a loss for parts B - D. The syntax from my effort at part A is in the hw8.do file.