

# Homework 6 Submission

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Economics 7103

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## 1 Hourly data - Stata

2. The number of ATTs with negative weights is 48,547.
3. I clustered at the individual level. The estimates are below in Table 1.

Table 1: Two-Way Fixed Effects Estimates at the Hourly Level

	Energy Consumption (kWh)
ATT	-0.0434*** (0.0002)
Temperature (F°)	0.0046*** (0.0000)
Precipitation (inches)	-0.0006 (0.0020)
Relative Humidity (%)	0.0023*** (0.0000)
Constant	0.5387*** (0.0011)
Observations	720000
Adjusted $R^2$	0.663

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## 2 Daily data - Stata

1. At first glance they differ a lot, but then when we take into consideration that the first question is at the hourly level. When scaled up to the daily level, they are similar. The  $R^2$  is about a third lower at the daily level.

Table 2: Two-Way Fixed Effects Estimates at the Daily Level

	Energy usage (kWh)
ATT	-0.9356*** (0.0056)
Temperature (F°)	0.1109*** (0.0004)
Precipitation (inches)	0.0681 (0.1882)
Relative Humidity (%)	0.0552*** (0.0002)
Constant	12.8783*** (0.0341)
Observations	30000
Adjusted $R^2$	0.971

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

2. Figure 1 contains the event-study using reghdfe and plotted using coefplot.

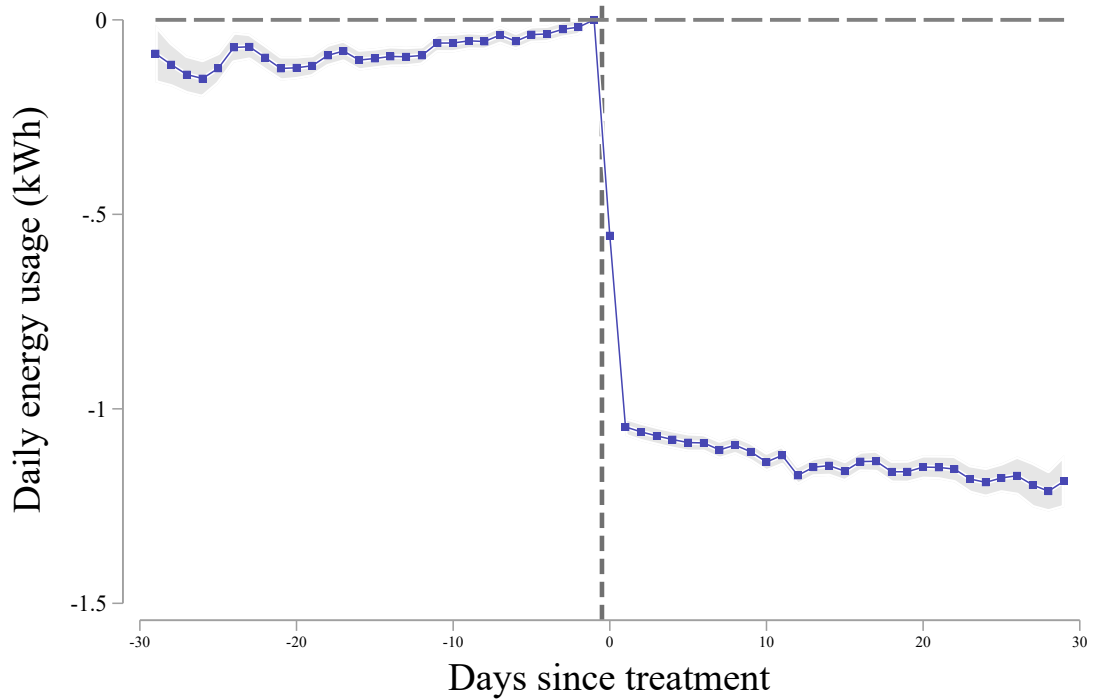


Figure 1: Plot using coefplot.

3. Results and plot using eventdd.

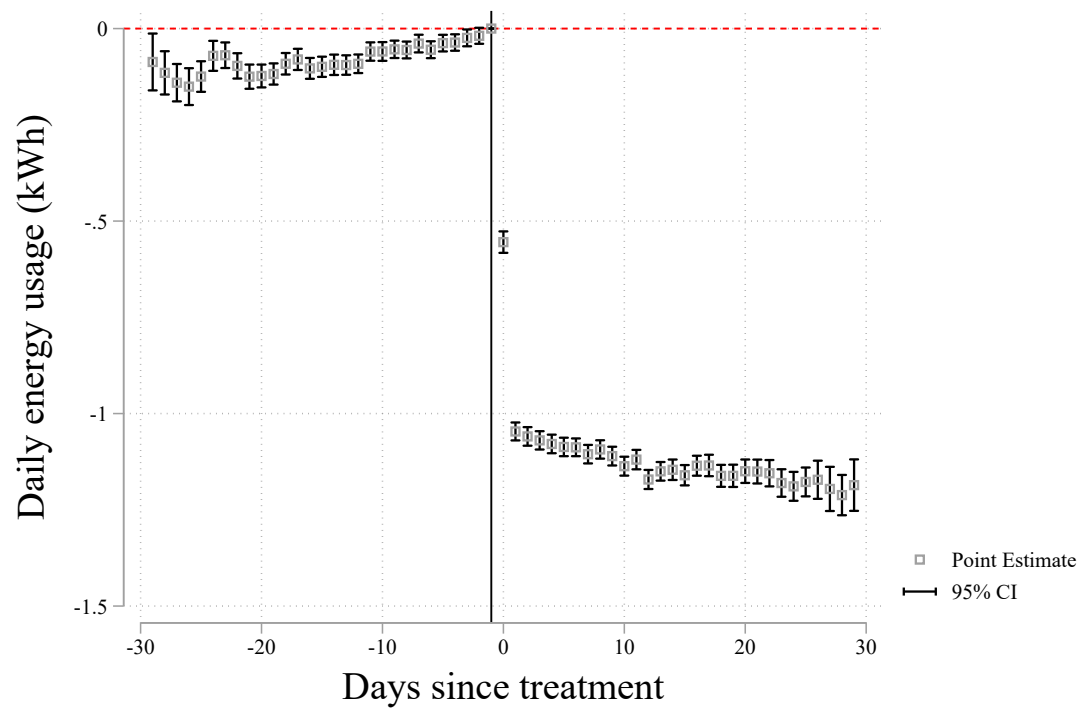


Figure 2: Plot using eventdd.

4. Plot from the CSDID from Callaway and Sant'Anna.

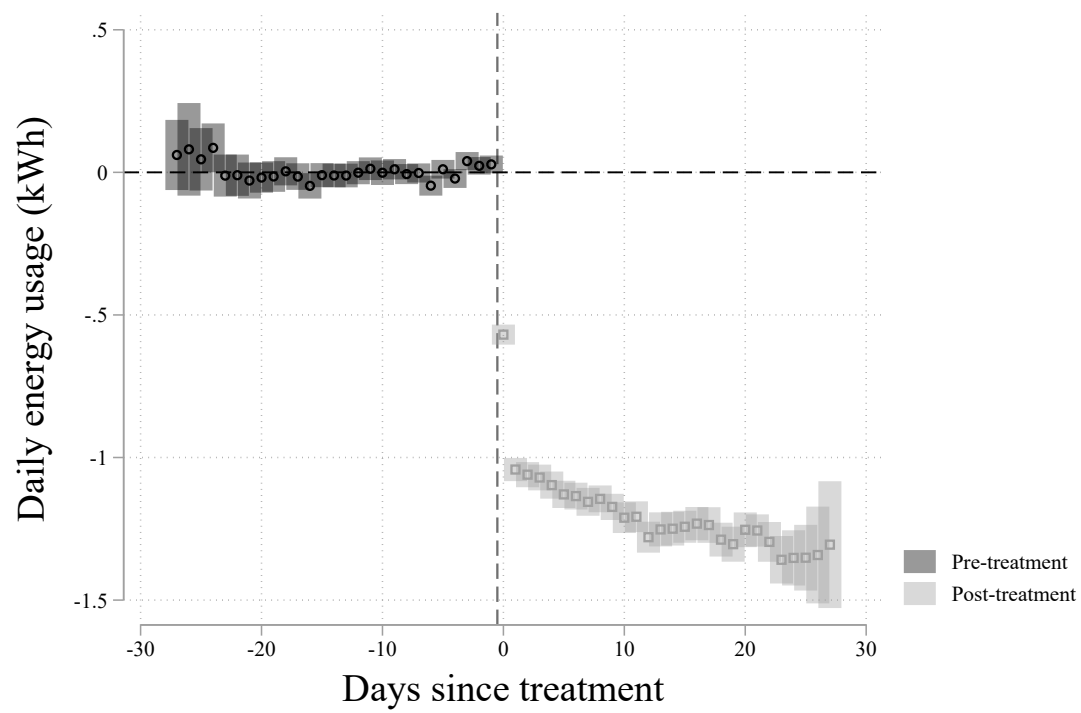


Figure 3: CSDID package estimation.