Homework 9 Answers

Economics 7103

1. See 1. It appears that when I wrote the simulation that I accidentally included a common shock for year 3, but even though the graph is unrealistic, we can see the rollout of the second set of treatments.

2. See column 1 of table 1.

3. See column 2 of table 1. Note the estimates did not change, but the standard errors did change due to clustering two way.s

4. Now, there is no "clean control" or never-treated group. The TWFE estimator will give the weighted average of all the possible DIDs.

5. The command reports that out of 924 ATTs, 600 receive a positive weight and 324 receive a negative weight.

6. See column 3 of table 1. It turns out that the command is not written in a standard way so that you can use `outreg2` to easily store the results. Instead, I wrote a program around the command that would output the results into Stata's e-class. Finally, I used `esttab` instead of `outreg2` to create the tables. See the code.

7. Now, all 324 weights are positive. This is because dropping the last month leaves us in a "standard" DID setting where there is only one treatment time.

	(1) xtreg	(2) reghdfe	(3) DID_M
Treatment	-6424.0*	-6424.0*	-8155.3**
	(-2.15)	(-2.21)	(-3.24)
Shrimp	1.792***	1.792***	
	(11.13)	(9.89)	
Salmon	-6.710***	-6.710***	
	(-13.59)	(-9.35)	
N	1800	1800	50

t statistics in parentheses
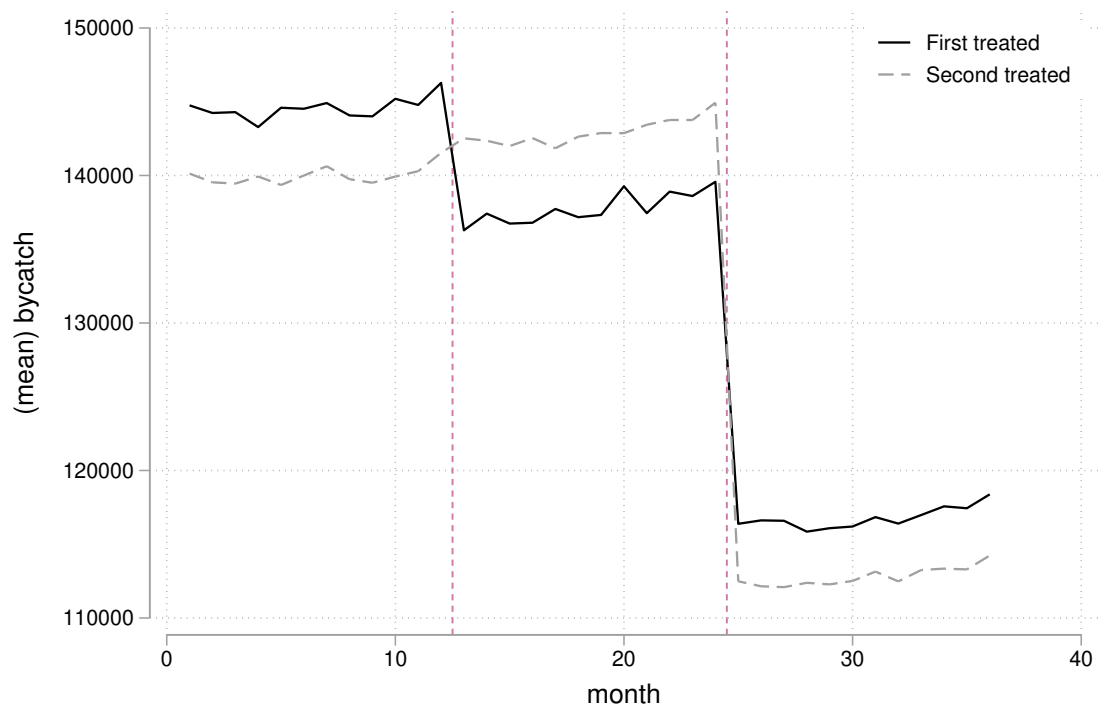
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 1: Caption

Figure 1: Fish bycatch over time by group