

Assignment 4

Ph.D. Applied Microeconometrics
KDI School Fall 2023

2023-10-31

Due date: Friday, November 10th at 11:59pm

For this assignment, you will be continuing with the `castle.dta` data – which I’ve put in the assignment folder – the same data from last week.

Below is a list of tasks. I would like you to create a properly formatted PDF file, as if it were a paper. This means that raw code should not appear in the PDF file. In a change, *this week I would like you to format this more like a paper*. I want a short introduction (you can use `# Introduction` in your R Markdown file), and then a separate section for each task. Each section should have a title, and then a discussion of the results. You do not need a conclusion section here.

Tasks:

1. Recreate the two-way fixed effects estimates from your last assignment. Put them in a nice table. Discuss the results again.
2. Discuss the recent literature on (possible) bias in two-way fixed effects. What is the “forbidden comparison” we discussed in class?
3. Using a package of your choice (you might want to just use `did2s` from class), estimate the two-way fixed effects model. How do they compare to the results you got in 1.? Why do you think the results are different/similar (depending on what you got)?
4. Create an event study plot for the two-way fixed effects model. You may want to reference my code from class. Discuss the results.

Make sure to *interpret* your output. Do not just present regressions/figures/summary statistics.

As before, please submit the following files:

- Your R Markdown file
- Your knitted PDF file
- Any other scripts you used to complete the assignment