

## **Case Study: Minimum Wage and the NJ/PA fast food industry, con't.**

We continue our analysis of minimum wage and employment using Card and Krueger's data about the 1992 New Jersey minimum wage increase. We now use a different version of the data that contains covariate and outcome values for each store both before and after New Jersey's policy change. This dataframe can be loaded as `fastfood2` from the `stat20data` package.

1. Describe in words how to construct a pre/post estimate for this dataset, and how to construct a difference in difference estimate. What are the differences in the assumptions we rely on between these two designs? Which do you think is more plausible?
2. What additional data would we need to have available to conduct an interrupted time series design? How would the associated assumptions differ from those in a pre/post design?
3. Sketch a line plot showing how you anticipate employment levels will change between the two time-points, with one line averaging over all New Jersey restaurants and one line averaging over all Pennsylvania restaurants.
4. Write code to create a line plot like the one in the previous question and construct it. Describe similarities and differences between the hypothesized and actual plots.

