# Political Science 406 Lab 7: Bounds and Synthetic Control

2024-05-06

## Due Date: May 17, 2024

Submit your lab here.

### Problem 1: In-Your-Face Television

Consider Mutz's 2007 APSR article, "Effects of "in-your-face" television discourse on perceptions of a legitimate opposition." The data for several of the analyses is available on the course website as mutz.csv. The treatment variable, treat is randomly assigned and reflects whether a research subject saw a civil or uncivil debate between a Democrat and a Republican. Outcome variables include mfvcanth for the feeling thermometer score for your own candidate; lfvcanth, for the feeling thermometer score for the other candidate; own, for the perceived legitimacy of policy arguments for the participant's own issue stance; and other, for the perceived legitimacy of policy arguments for the opposite issue stance.

Look only at the bivariate relationship between treat and lfvcanth. How strong would omitted variables need to be in order to substantially affect the estimated relationship? Answer using both sensitivity analysis and extreme bounds analysis. (For the extreme bounds analysis, you may choose to dichotomize variables as helpful. This is artificial and probably shouldn't be done in real research, but can be useful in exercises.)

### Problem 2: Trump and Immigration

Can we use a synthetic controls strategy to come up with a statistical test of the effect of Trump's election in 2016 on (legal and/or illegal) immigration to the U.S.? Provide a proposed research design complete with necessary data and estimator, explain the required assumptions, and discuss the strengths and weaknesses of your proposal. Then show your results if possible.