# 1 Overview

At our previous meeting we decided to do the following:

- Compare same state Senators who are up for reelection against those who aren't, taking Levitt (1996), Table 4 as inspiration

- Reconduct analyses with an interaction effect between member vote share and presidential vote share

- Conduct analyses with noncall response rate (`pfrate100`) as the DV

- Produce figures which plot our main independent variable (`ideological_extremism`) against party call response rate (`pirate100`) and noncall response rate (`pfrate100`)

These are included below.

# 2 Tables and Figures

## 2.1 Difference in Differences Tests

In order to test the effects of election proximity, William and I settled on a difference in differences like approach in which we compare the differences in responsiveness rates between 2 same state Senators in Congresses which one of them is treated. This differs from a standard diff in diff test by including only times when one member of a pair is treated.

With this test, we estimate the effect as well as a placebo derived from a randomly assigned treatment condition. Analysis is provided separately with responsiveness rate to party calls (tables 1 through 3) and responsiveness rate to noncalls (tables 4 through 6) as dependent variables. Within these, we report the estimate for the ATT and the lower and upper bounds of the 95% confidence interval. The confidence interval is calculated through a bootstrap at the state level. The first table in each set provides a naive calculation of the confidence interval while the second uses weights the effect by seat pair type. The third table provides the estimated effect for each seat pair type.

Table 1: Difference in Differences, Party Influenced Rate, Reelection Treatment vs. Random Assignment

| Test | DV | Estimate | Lower Bound | Upper Bound |
|---|---|---|---|---|
| Effect | pirate100 | -1.5685604 | -2.0957029 | -0.97344617 |
| Placebo | pirate100 | -0.6902020 | -1.2397304 | 1.23271255 |

Table 2: Weighted Difference in Differences, Party Influenced Rate, Reelection Treatment vs. Random Assignment

| Test | DV | Estimate | Lower Bound | Upper Bound |
|---|---|---|---|---|
| Adjusted Effect | pirate100 | -1.5685604 | -2.1541096 | -0.97751751 |
| Adjusted Placebo | pirate100 | -0.6902020 | -6.1688446 | 6.06350669 |

Table 3: Disaggregated Difference in Differences, Party Influenced Rate, Reelection Treatment vs. Random Assignment

| Test | DV | Estimate |
|---|---|---|
| 2 Maj Dems Effect | pirate100 | 0.0708958 |
| 2 Maj Dems Placebo | pirate100 | -0.2036783 |
| 2 Min Dems Effect | pirate100 | -1.8733904 |
| 2 Min Dems Placebo | pirate100 | -0.9602191 |
| 2 Maj Reps Effect | pirate100 | -1.1307379 |
| 2 Maj Reps Placebo | pirate100 | -0.2868056 |
| 2 Min Reps Effect | pirate100 | 0.3990873 |
| 2 Min Reps Placebo | pirate100 | 0.0147628 |
| Split, Maj Dem Effect | pirate100 | -2.4804711 |
| Split, Maj Dem Placebo | pirate100 | -0.7279546 |
| Split, Maj Rep Effect | pirate100 | -4.3246972 |
| Split, Maj Rep Placebo | pirate100 | 0.3390961 |

Table 4: Difference in Differences, Party Free Rate, Reelection Treatment vs. Random Assignment

| Test | DV | Estimate | Lower Bound | Upper Bound |
|---|---|---|---|---|
| Effect | pfrate100 | -0.2969119 | -0.7350467 | 0.13767116 |
| Placebo | pfrate100 | -0.3120122 | -1.0565962 | 1.06650160 |

Table 5: Weighted Difference in Differences, Party Free Rate, Reelection Treatment vs. Random Assignment

| Test | DV | Estimate | Lower Bound | Upper Bound |
|---|---|---|---|---|
| Adjusted Effect | pfrate100 | -0.2969119 | -0.7111920 | 0.14368690 |
| Adjusted Placebo | pfrate100 | -0.3120122 | -6.5885299 | 6.18565591 |

Table 6: Disaggregated Difference in Differences, Party Free Rate, Reelection Treatment vs. Random Assignment

| Test | DV | Estimate |
|------|-----|---------|
| 2 Maj Dems Effect | pfrate100 | 0.1900901 |
| 2 Maj Dems Placebo | pfrate100 | -0.9693719 |
| 2 Min Dems Effect | pfrate100 | -0.0480525 |
| 2 Min Dems Placebo | pfrate100 | -0.4318845 |
| 2 Maj Reps Effect | pfrate100 | 1.0805092 |
| 2 Maj Reps Placebo | pfrate100 | 0.4701269 |
| 2 Min Reps Effect | pfrate100 | -0.3783909 |
| 2 Min Reps Placebo | pfrate100 | 0.6484191 |
| Split, Maj Dem Effect | pfrate100 | -1.3097195 |
| Split, Maj Dem Placebo | pfrate100 | 0.5617371 |
| Split, Maj Rep Effect | pfrate100 | -0.6552082 |
| Split, Maj Rep Placebo | pfrate100 | 0.3091112 |

## 2.2 Models with Vote Share Interaction