State Legislative Aggregate Ideology Data*

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1 Introduction

The Shor-McCarty state legislative aggregate ideology data is being released as an update to the data underlying Shor and McCarty (2011). These are based on individual-level ideal point estimates described fully in that article. Estimates are all in NPAT common ideological space to facilitate explicit comparisons across time and between states.

The new data has around 130 additional chamber-years of new data. These now include party data for Nebraska thanks to Seth Masket, who generously provided the informal but well-known partisan affiliations for Unicameral legislators. The individual level data underlying this release has been extensively cleaned to minimize the random noise inherent in acquiring roll call votes from printed journals.

The newest version of the data and codebook can always be found on the American Legislatures web site (http://americanlegislatures.com).

2 Overview

Ideology and polarization estimates are measured at the chamber level. Not all state-years have measurements, due to the ragged availability of state legislative roll call data. The authors are actively working on additional data, and will be releasing updated data sets over time.

We generated bootstrapped error estimates for our scores at both individual and aggregate levels. At the individual level, we take advantage of the simulations that underlie the Bayesian IRT model to get a sense of the estimation uncertainty of legislator ideology in roll call space. We then simulate a large number of state-specific mapping coefficients for each state. Then, for each simulation of the legislator's ideal point, we randomly draw (with replacement) one set of mapping coefficients, predicting an NPAT score each time. The standard deviation of the simulations is our bootstrapped error estimate. At the aggregate level, we simulate quantities of interest using the individual common space scores and their bootstrapped errors. For example, in each simulation, we calculate a chamber median. Iterating over a large number of simulations, we take the standard deviation of the simulated medians as our measure of aggregate uncertainty.

3 Codebook

`st`
State abbreviation

`alpha`
State code, alphabetical order

`fips`
State FIPS code

`icpsr`
State ICPSR code

`year`
Chronological Year

`*_chamber`
Whole chamber median, by chamber

`*_dem`
Democratic party median, by chamber

`*_rep`
Republican party median, by chamber

`*_majority`
Majority party median, by chamber

`*_diffs`
Distance between party medians, by chamber. This is a common measure of polarization.

`*_distance`
Average distance between any two members, by chamber. This is an alternative, party-free, measure of polarization.

`*_dem_sd`
Democratic party heterogeneity, by chamber

`*_rep_sd`
Republican party heterogeneity, by chamber

`*_chamber_sd`

Whole chamber heterogeneity, by chamber

`*_dem_error`
Democratic party median error estimate, by chamber

`*_dem_error`
Republican party median error estimate, by chamber

`*_chamber_error`
Whole chamber median error estimate, by chamber

4 Plots

For illustrative purposes, we show updated versions of plots from Shor and McCarty (2011).

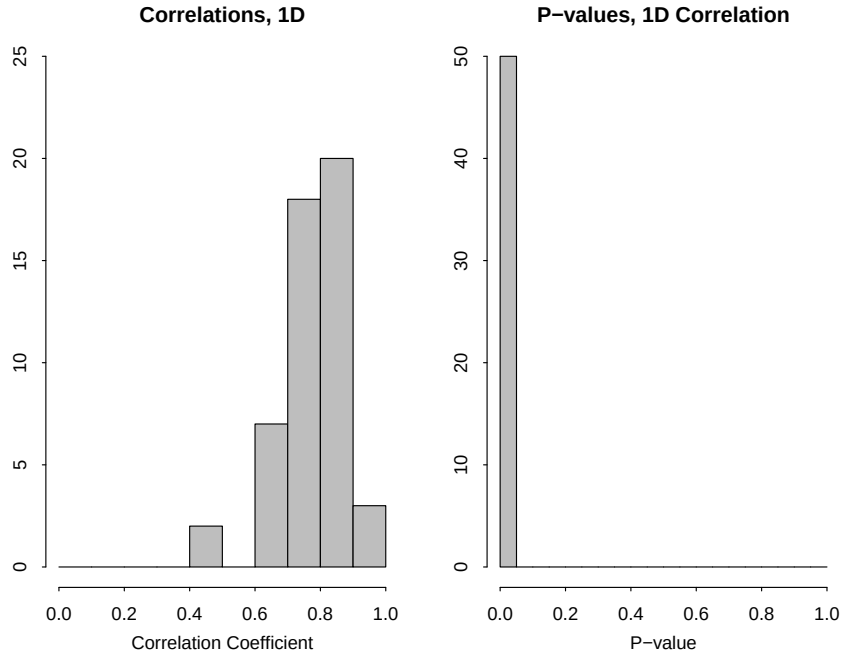

Figure 1: *Correlation of First Dimension NPAT Scores with First Dimension State Roll Call Scores.*

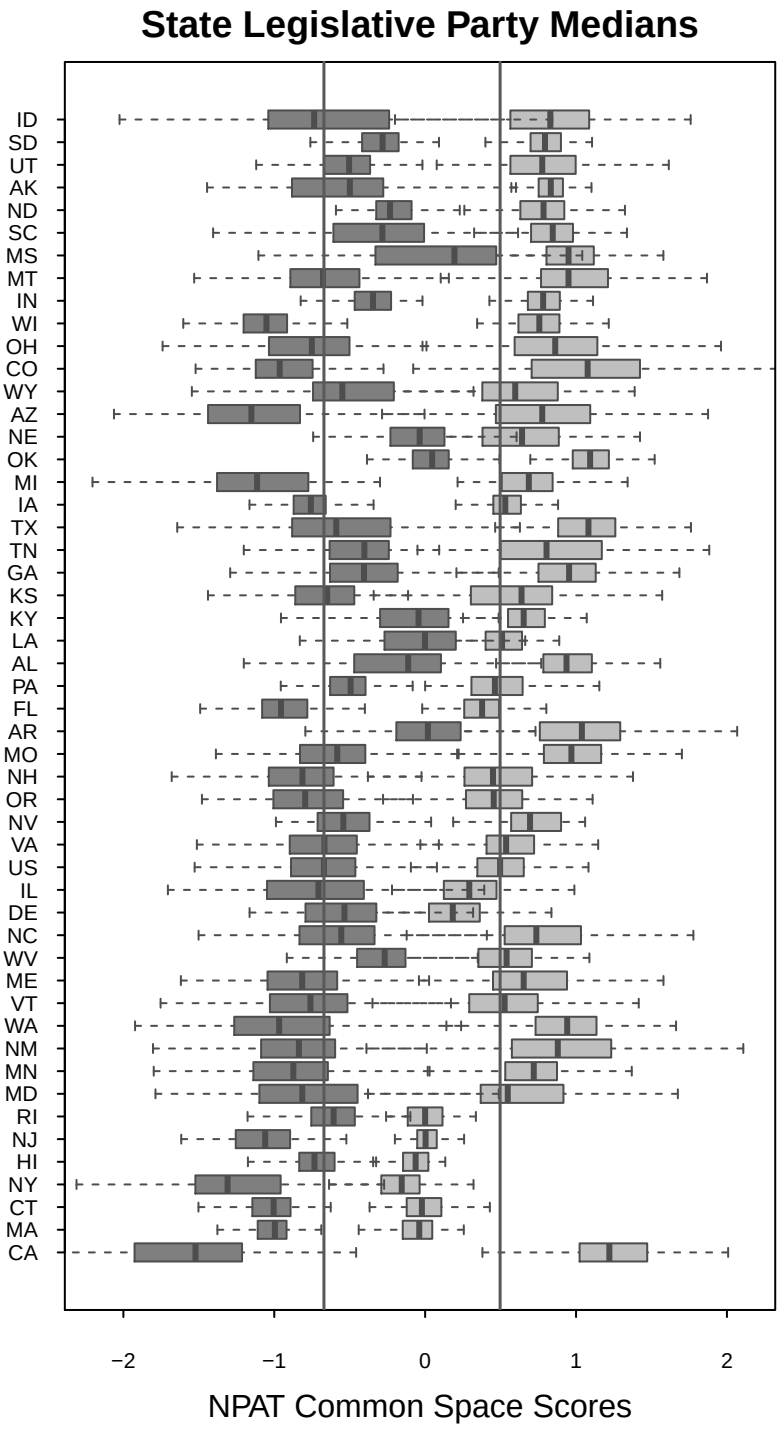

Figure 2: *Boxplot of estimated NPAT common space scores for pooled state legislatures compared with scores for Congress (with vertical lines drawn at the pooled Congressional party medians). States are sorted by pooled medians, with the most conservative states at the top. Dark gray represents Democrats; light gray, Republicans. Boxes are interquartile distances, with whiskers at 1.5 times that range.*

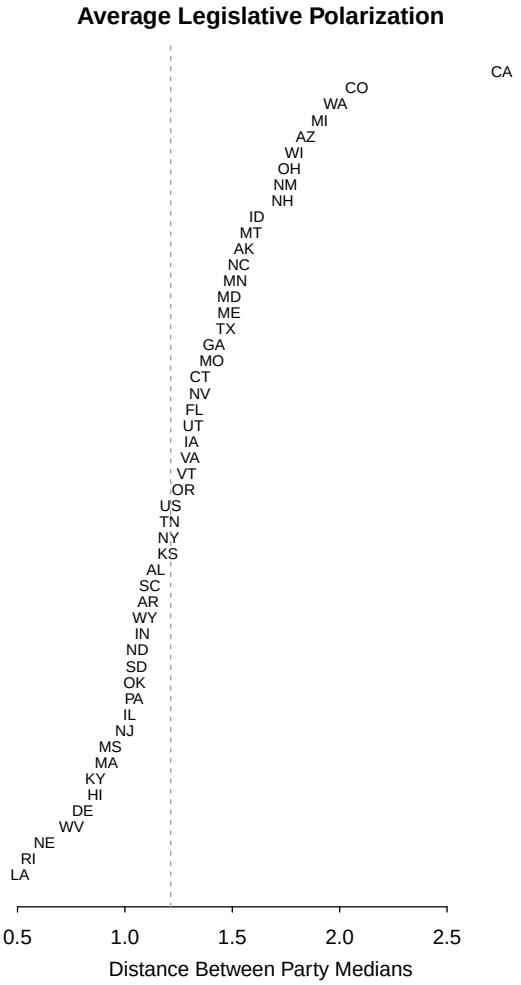

Figure 3: *Plot of mean levels of state legislative polarization (measured by distance between party medians) over the full time period available for each state, averaged between both chambers. Dotted line represents average of U.S. Congress polarization for comparison.*

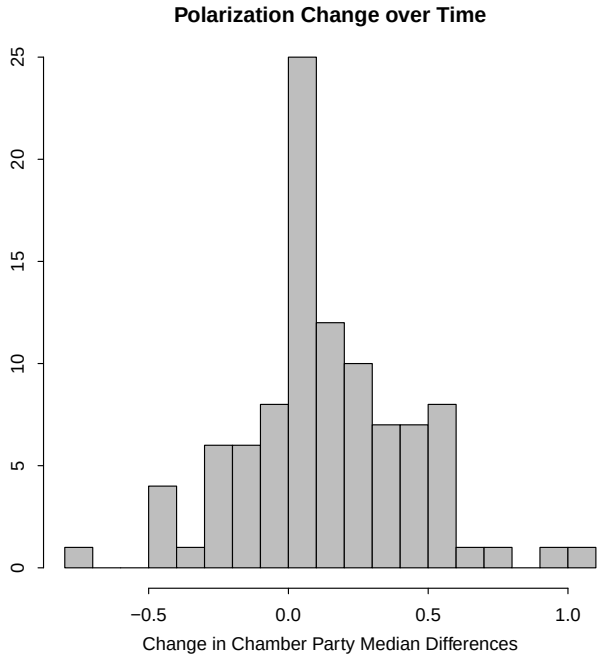

Figure 4: *Histogram of changes in polarization for all 99 state legislative chambers, as measured by the difference in levels of polarization from the first to the last year available.*

References

Shor, Boris and Nolan McCarty. 2011. "The Ideological Mapping of American Legislatures." *American Political Science Review* 105(3):530–551.