# Top-Two Open Primary Systems Increase Ideological Diversity in State Legislative Parties

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# Research Question

Does the top-two primary increase ideological heterogeneity in parties in state legislatures?

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INTRODUCTION 0 • 00

Does the top-two primary increase ideological heterogeneity in parties in state legislatures?

Yes

## Motivation: California and Oregon

- Top 2 implemented in 2012 in CA, OR does not have top two
- Ideological diversity grows CA party legislative caucuses, Dems divided
- New Dems + Mod Dems. + Progressive Dems





- Political scientists have debated whether the top-two and associated primary systems lead to greater moderation among individual legislators and candidates (e.g., most people in this room have written about this)...
- But scholars have not considered the aggregate impacts of these election institutions on the overall mix of ideological diversity within legislative party caucuses.

## Theory: Top two primaries

- Legislators have incentives to run to left in Democratic primary; and to right in GOP primary, except strategies are less predictable given presence of all candidates on ballot
- Second general election stage has potential to produce same-party competition. Sometimes parties deter multiple serious same-party candidates, sometimes they don't (Crosson 2020).

## Theory: Motivating Example of Same Party General Election







## Theory - Same-party electoral competition

- Same party general: Voters may choose **randomly**. Simple coin flips of Dem vs. Dem general could yield an ideologically heterogeneous aggregate Democratic legislative party caucus.
- Voters may choose based on other characteristics (gender, race, ethnicity; Mendez and Sadhwani 2018; Stauffer and Fisk 2022) in same party elections - also leading to greater ideological heterogeneity in state legislative party caucuses if these candidate characteristics not correlated with ideology.
- Southern Dems in 1950s another example of ideologically diverse Dem. caucuses with same-party competition.
- Hypothesis: Top-two yields greater state legislative ideological heterogeneity in party caucus.

## Research Design

- The goal is to causally estimate the effect of the top-two primary implementation in CA on party heterogeneity
- Ideally, we'd like to find a suitable state or pool of states to compare CA to that: (1) did not pass or implement a top-two open primary; (2) did not have open primaries throughout the study period; and (3) had similar trends prior to 2010 when CA passed their top-two open primary policy
- Only then we could estimate the average treatment effects by Difference-in-differences (DID)
- However, in reality...

## Research Design

- ...this does not always happen!
- In the absence of a single comparison unit for CA that we can confidently say is comparable, we can create one that more successfully resembles important characteristics of CA
- How? By finding the weighted average of all potential control states that most closely resemble CA in order construct a counterfactual CA to observe how ideological heterogeneity in party legislative caucuses would have looked like if it would have never adopted a top-two open primary system.
- This is operationalized through the synthetic control (SCM) estimator proposed by Abadie and Gardeazabal (2003) and Abadie et al. (2010)

### Synthetic Control Methods (Overview)

- Synthetic control estimator uses data to create comparable counterfactual by selecting control units (other states in this case) whose characteristics (outcome + predictor variables), when combined, can closely resemble our treated unit of interest (California) just before the treatment (passing of top-two primary system) occurs
- The estimator, then, uses this pre-treatment data to impute treatment-free observations for the counterfactual unit to compare against CA.
- We end by visually comparing the outcome between CA and its constructed counterfactual
- Visualized comparison makes interpretation of results clearer

### Unit of analysis and outcome measures

- Unit of analysis: State legislature party caucuses
- Study Period: 1997 2020
- Treated unit: One state (California)
- Control units: States with closed, semi-closed, semi-open, and open primary systems (38 states)

DESIGN AND APPROACH

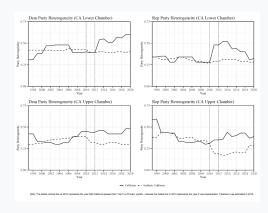
- Outcome variables: Ideological heterogeneity score for each chamber and party (Dems/lower upper; GOP/lower upper)
  - o Measured as Shor-McCarty ideological heterogeneity scores for each legis. party

### Covariates

- Covariates used in synthetic control model:
  - Average heterogeneity score throughout pre-treatment period (1997 - 2010)
  - o State unemployment rates (1997 2020)
  - o State professionalization scores (1996, 2003)
  - o State Democratic presidential votes (2000, 2004, 2008)
  - Aggregate state constituency ideological scores (2008)
  - o State gini index scores (2006 2010)
  - o Binary variable for state's open primary status

#### **SCM** Results

- Y-axis: Ideological heterogeneity in party/chamber
- X-axis: Year
- Vertical line: Top-2 treatment (treatment observed in 2010)
- Treatment (CA/solid line) vs. Synthetic control (dashed line) trends on outcome variable are displayed



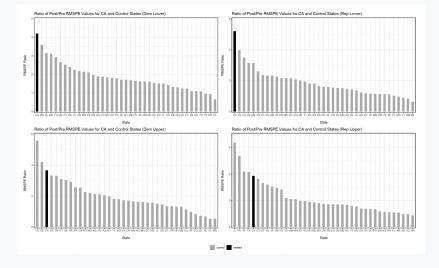
#### **SCM** Results

- Persistent treatment effect of top-two primary in majority party
- Treatment effect of top-two primary in minority party with some decay over time
- Top-two primary causes increased ideological heterogeneity in Democratic/majority party in both chambers. Effect is only significant in lower chamber though
- Top-two primary caused short-term GOP/minority party ideological heterogeneity in both chambers, though ideological diversity declines several years after top-two is implemented. Effect found in the lower chamber, not upper chamber

#### How We Conducted Inference

- In absence of traditional inference tools (e.g., SEs and p-values), we can use an inference method based on permutations
- Assigned treatment to control pool of states that did not experience a top-two primary implementation, measure the effects for each control state, and compare the magnitude of the effects to California's
- Abadie, Diamond and Hainmueller (2010, 2015) refer to this metric as the Root Mean Squared Prediction Ratio
  - o Higher Ratio indicates stronger magnitude of effects
  - Ideally, we want to see CA have the strongest magnitude to show the effects are not by chance

### Inference Results



### Conclusion

- Electoral systems affect party caucuses
- Top two yields Democratic party that is much more ideologically all over the place
- This systematic causal work supports anecdotal evidence from observers of Sacramento who talk about the "mod Dems" in the legislature, business Dem legislators, and union Dem legislators within the majority party
- First causal evidence of primary type on legislatures
- Political reforms may lead to ideological diversity within legislative parties
- Same-party competition (South in the 1950s; top two general elections) lead to ideological heterogeneity in legislative parties

Thank You

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