

Election Administration

Gov 1347: Election Analytics

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Today's agenda

- **Why do we care about election admin?**
- **Review: What do we know about the cost of voting (from discussion)?**
 - Fundamental questions
 - What is the relationship between the cost of voting index and turnout? Vote margin by party?
 - How do we *empirically* understand the causal relationship between COVI and election outcomes?
 - How this might affect election night
- **Redistricting: What to do about it in our models**
 - Fundamental questions
 - How does (can) it substantively affect election outcomes?
 - Suggestions for incorporating it into a predictive model
- **Updating our data**
 - Pulling up-to-date polling and expert ratings
 - Pulling 2022 district shapefiles from the Census

**Why do we care about election
admin?**

What is election administration?

| Component | Examples |
|---------------------------|---|
| Information | registration status, polling place look-up |
| Registration | eligibility, roll-off |
| Convenience voting | vote-by-mail, early voting |
| Ballot access | wait times, photo ID, provisional balloting |
| Ballot count | security, technology, audits |
| News coverage | exit polls, decision desks |
| Redistricting | polling places, incentives to vote (individual power) |

Discussion: what do we know about the cost of voting?

-From discussion:

$U = pB - C + D$, where $-U = \text{Utility}$

-if $U > 0$, vote

-if $U < 0$, don't vote

- p = probability of casting pivotal vote

- B = benefit of candidate winning

- C = cost

- D = expressive benefit of voting

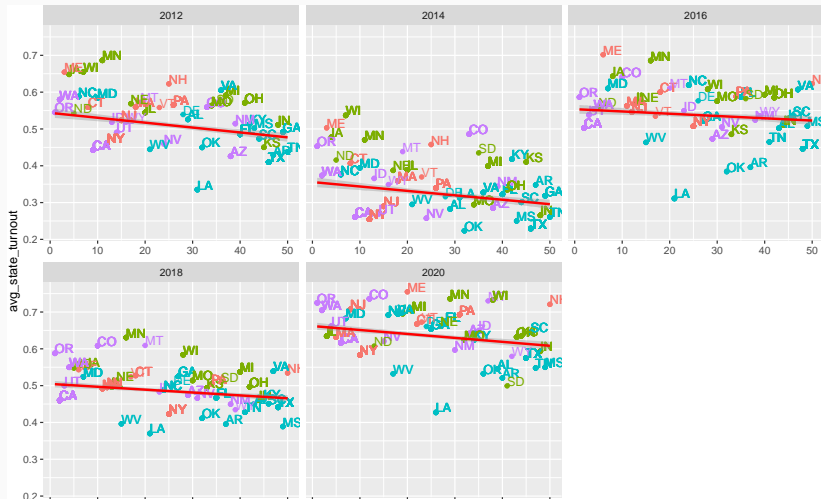
COVI and turnout - visualization

-What time trends do we see?

-What regional and state trends do we see?

```
plot
```

```
## `geom_smooth()` using formula 'y ~ x'
```



COVI and turnout - regression

```
library(stargazer)
stargazer(fit1, fit2, header=FALSE, type='latex', no.space = TRUE,
          column.sep.width = "3pt", font.size = "scriptsize", si
          keep = c(1:7, 62:66), omit.table.layout = "sn",
          title = "State-level turnout and COVI")
```

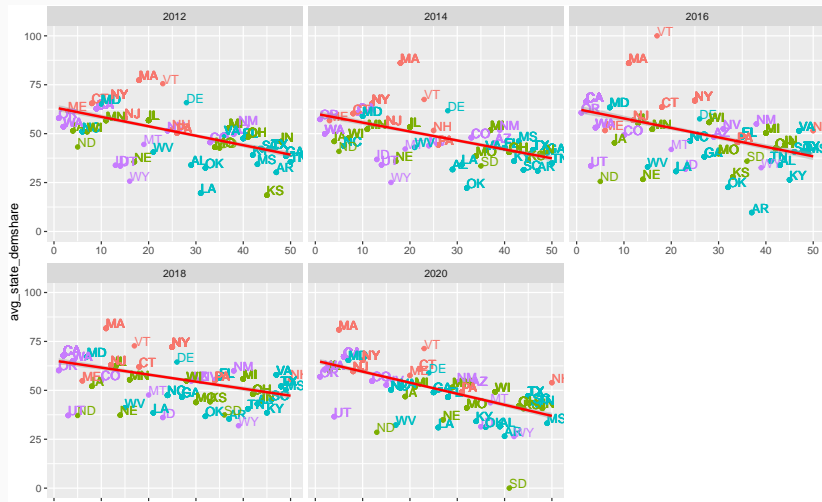
Table 1: State-level turnout and COVI

| <i>Dependent variable:</i> | | |
|----------------------------|--------------------|--------------------|
| avg_state_turnout | | |
| | (1) | (2) |
| FinalRank | −0.001*** (0.0002) | −0.001*** (0.0002) |
| black | | 0.035* (0.020) |
| age20_29 | | −0.632*** (0.084) |
| Constant | 0.532*** (0.005) | 0.656*** (0.017) |

COVI and voteshare margin by party - visualization

```
plot2
```

```
## `geom_smooth()` using formula 'y ~ x'
```



COVI and voteshare margin by party - regression

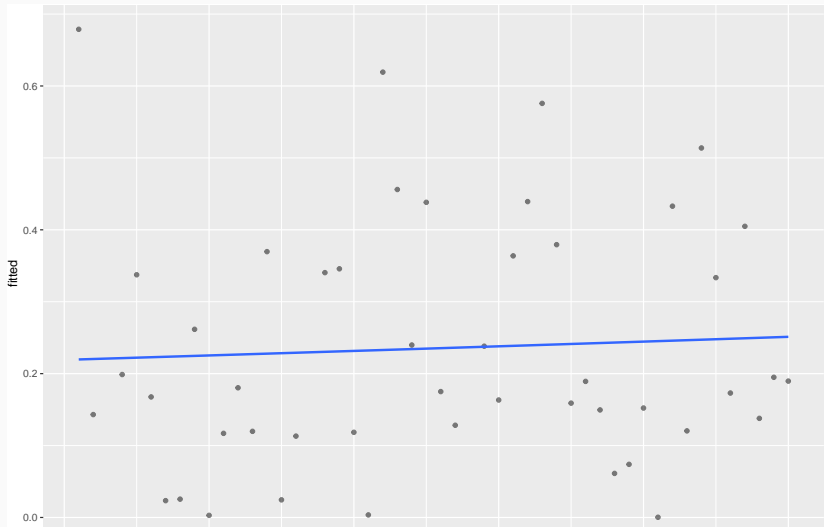
```
stargazer(fit3, fit4, header=FALSE, type='latex', no.space = TRUE,
          column.sep.width = "3pt", font.size = "scriptsize", si
          keep = c(1:7, 62:66), omit.table.layout = "sn",
          title = "State-level Democratic voteshare and COVI")
```

Table 2: State-level Democratic voteshare and COVI

| <i>Dependent variable:</i> | | |
|----------------------------|-------------------|-------------------|
| avg_state_demshare | | |
| | (1) | (2) |
| FinalRank | −0.469*** (0.013) | −0.463*** (0.013) |
| black | | −3.350** (1.585) |
| age20_29 | | 0.831 (6.796) |
| Constant | 63.350*** (0.394) | 63.454*** (1.378) |

Prediction using COVI - can we predict the probability of Democrats winning in 2022 from historical COVI data?

```
## `geom_smooth()` using formula 'y ~ x'
```



Prediction using COVI - can we predict turnout from COVI?

-Try this on your own! Would this be a more or less useful than predicting turnout based on historical turnout data?

Trying to empirically understand the relationship between election admin and voting

- Read the following sections of this paper by Grimmer et al. (2018):
 - INTRO; USE OF NATIONAL SURVEYS FOR STATE RESEARCH; ESTIMATING VOTER ID LAWS' EFFECTS ON TURNOUT

- In small groups, discuss the following questions:

- 1) What makes identifying the effects of voter ID laws (and election admin more broadly) on turnout empirically challenging? (Think endogeneity)
- 2) What analyses do the authors present as evidence?
- 3) What should we take away normatively from a paper like this?

The (maybe not so bad after all) bane of our existence as Midterm election forecasters: redistricting

-High-level thoughts:

- (1) In general, we can assume that most districts retain a substantial portion of their previous voters from one redistricting cycle to the next

-We want to corroborate this, though — but how? → let's take a look at district-level population overlap between cycles

-Courtesy of Chris Kenny from the Gov PhD program: './section_data/pop_overlap_vtd_estimates.csv'

-What this tells us: an estimated $x\%$ of new district i in 2022 came from old districts $\{i,j,k\}$ in 2012. . .

-Population and VAP come from the 2020 Decennial Census

-Take the map outputs from the 50-states simulations and gets a VTD (voting district) level estimate

-<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/SLCD3E>

-What would be the best way to use this? No right answer, but a few suggestions:

(a) interact the proportion overlap with the old district with IVs

ex: interact with incumbency. This would dampen the effect of incumbency. In any interaction, you would basically be downweighting or upweighting accordingly.

-Assess model fit with and without interactions

Redistricting options continued

- (2) Reconstructing the dependent variable
 - Recalculate new vote totals from historical vote totals at the precinct level for new districts → Lucy's VTD estimates!
 - Precinct boundaries do change some, so this approach does involve some error
- (3) Including a variable at the district level that accounts for changes in expert predictions, so if lean R/D doesn't change between two districts from one redistricting cycle to the next, we may feel more comfortable making predictions based on last redistricting cycles' data
- (4) Because we're using all districts 2012-2020 as the training data (as opposed to only one district 2012-2020) and applying national betas to the individual seat, we can feel more comfortable with our predictions