# Obstacles To Estimating Voter ID Laws' Effect on Turnout

#### Justin Grimmer

Associate Professor

Department of Political Science

University of Chicago

with Eitan Hersh, Marc Meredith, Jonathan Mummolo, and Clayton Nall

April 27, 2018

#### Effect of Voter ID Laws

Voter Identification laws: require government ID to vote

- Minority voters: much less likely to hold IDs (Ansolabehere and Hersh 2016)
- What is effect of ID laws on turnout?
- Methods question: assess effect using surveys?

# Survey Data and Effects of Election Administration

"Our article evaluates this research and disputes the strength of the statistical arguments used to support findings of an observable negative effect on turnout from voter ID laws. Alternatively, we adjust the models using state samples and difference-indifferences techniques and reanalyze the CPS data for the 2002 and 2006 midterm elections. While we do not conclude that voter ID rules have no effect on turnout, our data and tools are not up to the task of making a compelling statistical argument for an effect " (Erikson and Minnite 2009)

# Obstacles to Estimating Voter ID Laws' Effect

Hajnal, Lajevardi, and Nielson (2017) (HLN) → Voter ID laws suppress turnout of minority voters, estiamte effect using CCES survey data

- General election → hispanic voters
- Primary election → hispanic, black, and asian voters

#### Limitations of the design

- 1) Placebo test: cross sectional designs suffer from selection
- 2) Difference in Differences in HLN reports positive effect → Merge error in Virginia (2006, 2008, and 2010) and other 2006 states
- Once merge error corrected: data + designs provide positive, negative, or null effects

No reliable inference Administrative data essential to estimate effects

HLN: Influential and High Profile Study of Turnout Effects

"The analysis shows that strict identification laws have a differentially negative impact on the turnout of racial and ethnic minorities in primaries and general elections"

## HLN: Research Design

Data: Cooperative Congressional Election Study (2006-2014)

- Merge: Strict voter ID law in state
- Dependent Variable: General/Primary Election Turnout
- Treatment: Strict Voter ID Law
- 1) Selection on observables: cross sectional comparion
  - Effect heterogeneity by race, party ID, and ideology
- 2) Difference-in-Differences: state and year fixed effects
  - Effect heterogeneity by race, party ID, and ideology

#### **HLN** Results

#### Voter ID laws suppress turnout

- General election: increase gap between white and hispanic turnout (general election)
- Primary Election: Increase gap between white and hispanic, black, and asian turnout (primary elections)

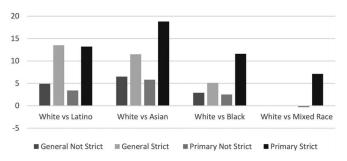


Figure 2. Photo ID laws and predicted racial gaps in turnout. Race-specific effect for white versus Asian and white versus black in general elections and multiracial effect in primaries are not significant at p < .05.

- If cross sectional (selection on observables) design works:

- If cross sectional (selection on observables) design works:
  - States that implement voter ID laws are (conditionally) on average similar to states that do not

- If cross sectional (selection on observables) design works:
  - States that implement voter ID laws are (conditionally) on average similar to states that do not
  - No "effect" of being a strict voter ID law in the past

- If cross sectional (selection on observables) design works:
  - States that implement voter ID laws are (conditionally) on average similar to states that do not
  - No "effect" of being a strict voter ID law in the past
- Placebo test: assess "effect" of being future strict voter ID law state on turnout before law implemented

	(1)	(2)	(3) General	(4) Elections	(5)	(6)
Include respondents who self-classify as unregistered Include unmatched respondents as non-voters	No No	No No	Yes No	Yes No	Yes Yes	Yes Yes
Number of Observations	93,652	93,652	99,864	99,864	114,230	114,230
Future Strict Voter ID State	-0.368 (0.117)	-0.385 (0.141)	-0.344 (0.092)	-0.356 (0.116)	-0.253 (0.077)	-0.258 (0.097)
Black X Future Strict Voter ID State	()	0.057 $(0.134)$	()	0.016 $(0.142)$	()	-0.004 $(0.122)$
Hispanic X Future Strict Voter ID State		0.077 $(0.108)$		0.050 $(0.118)$		0.088 (0.097)
Asian X Future Strict Voter ID State		0.398 $(0.505)$		$0.670 \\ (0.382)$		0.409 $(0.348)$
Mixed Race X Future Strict Voter ID State		-0.219 $(0.141)$		-0.263 $(0.128)$		-0.406 $(0.103)$

- If cross sectional (selection on observables) design works:
  - States that implement voter ID laws are (conditionally) on average similar to states that do not
  - No "effect" of being a strict voter ID law in the past
- Placebo test: assess "effect" of being future strict voter ID law state on turnout before law implemented
- Hajnal, Kuk, and Lejavardi (2018) suggest placebo test using difference in differences (state and year fixed effects): not possible to estimate this placebo test.
  - Why?: no within state variation on future strict voter ID law status.
  - Coefficients from placebo test in HKL: estimated by statistical routine automatically dropping states to fit model. Strict voter ID law reported coefficient just a state fixed effect, interaction estimated solely from within state racial composition variation
  - Does not provide an assessment of the plausibility of the design

#### Cross Sectional → Difference in Differences

Cross Sectional Design Fails → Difference in Differences Design HLN: "one of the most rigorous ways to examine panel data"

Table A9: The Impact of Strict Voter ID Laws: State Fixed Effects

	(1) General Election	(2) Primary Election	(3) General Election	(4) Primary Election	(5) Primar Electio
VOTER ID LAW	Turnout	Turnout	Turnout	Turnout	Turnou
Strict Voter ID Law	0.109**	0.0677**	0.100**	0.0309**	0.0108
	(0.00754)	(0.0105)	(0.00884)	(0.0118)	(0.0118)
Strict Voter ID * Black	-0.00497	-0.0432**	,	,	
	(0.00841)	(0.00985)			
Strict Voter ID * Latino	-0.0446**	-0.0556**			
	(0.0133)	(0.0157)			
Strict Voter ID * Asian	0.0161	-0.00137			
	(0.0345)	(0.0400)			
Strict Voter ID * Mixed Race	-0.0263	-0.0367			
	(0.0223)	(0.0258)			
Strict Voter ID * White			0.00799	0.0359**	
			(0.00661)	(0.00775)	
Strict Voter ID * Party ID			180000000000000000000000000000000000000		0.0115*
Charles Alberta and Charles W 1975					(0.0013)
Strict Voter ID * Ideology					
Strict Voter ID * Ideology					

Table A9: The Impact of Strict Voter ID Laws: State Fixed Effects

Nomen in a liv	(1) General Election Turnout	(2) Primary Election Turnout	(3) General Election Turnout	(4) Primary Election Turnout	(5) Primar Electio Turnot
VOTER ID LAW Strict Voter ID Law	0.109** (0.00754)	0.0677** (0.0105)	0.100** (0.00884)	0.0309** (0.0118)	0.0108
Strict Voter ID * Black	-0.00497	-0.0432**			
Strict Voter ID * Latino	(0.00841) -0.0446**	(0.00985) -0.0556**			
	(0.0133)	(0.0157)			
Strict Voter ID * Asian	0.0161 $(0.0345)$	-0.00137 (0.0400)			
Strict Voter ID * Mixed Race	-0.0263	-0.0367			
Strict Voter ID * White	(0.0223)	(0.0258)	0.00799 (0.00661)	0.0359** (0.00775)	
Strict Voter ID * Party ID					$0.0115^{\circ}$ $(0.0013)$
Strict Voter ID * Ideology					(-10020

Table A9: The Impact of Strict Voter ID Laws: State Fixed Effects

	(1) General Election Turnout	(2) Primary Election Turnout	(3) General Election Turnout	(4) Primary Election Turnout	(5) Primar Electio Turno
VOTER ID LAW	Turnout	Turnout	Turnout	Turnout	Turnot
Strict Voter ID Law	0.109** (0.00754)	0.0677** (0.0105)	0.100** (0.00884)	0.0309** (0.0118)	0.0108
Strict Voter ID * Black	-0.00497 (0.00841)	-0.0432** (0.00985)	,	, , , ,	
Strict Voter ID * Latino	-0.0446** (0.0133)	-0.0556** (0.0157)			
Strict Voter ID * Asian	0.0161 (0.0345)	-0.00137 (0.0400)			
Strict Voter ID * Mixed Race	-0.0263 (0.0223)	-0.0367 (0.0258)			
Strict Voter ID * White			0.00799 (0.00661)	0.0359** (0.00775)	
Strict Voter ID * Party ID			A \$00000 A \$100000 \$10000000000000000000		0.0115
Strict Voter ID * Ideology					

Table A9: The Impact of Strict Voter ID Laws: State Fixed Effects

	(1) General Election Turnout	(2) Primary Election Turnout	(3) General Election Turnout	(4) Primary Election Turnout	(5) Primar Electio Turnou
VOTER ID LAW	Tumout	Turnout	Turnout	Turnout	Turnot
Strict Voter ID Law	0.109** (0.00754)	0.0677** (0.0105)	0.100** (0.00884)	0.0309** (0.0118)	0.0108
Strict Voter ID * Black	-0.00497 (0.00841)	-0.0432** (0.00985)		, , , ,	
Strict Voter ID * Latino	-0.0446** (0.0133)	-0.0556** (0.0157)			
Strict Voter ID * Asian	0.0161 (0.0345)	-0.00137 (0.0400)			
Strict Voter ID * Mixed Race	-0.0263 (0.0223)	-0.0367 (0.0258)			
Strict Voter ID * White			0.00799 $(0.00661)$	0.0359** (0.00775)	
Strict Voter ID * Party ID			Administration to	186. 66.000.86	0.0115* $(0.0013)$
Strict Voter ID * Ideology					

# Implied Effect of Voter ID Laws from Diff-in-Diff in General Elections (All Statistically Significant)

	Estimate
White	10.9
African American	10.4
Latinos	6.5
Asian Americans	12.5
Mixed Race	8.3

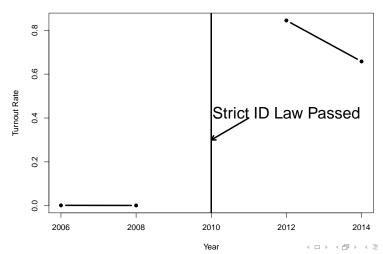
Results are not credible  $\rightsquigarrow$  due to merge error in data

# WE ARE NOT ARGUING VOTER ID LAWS INCREASE TURNOUT

## What went wrong?

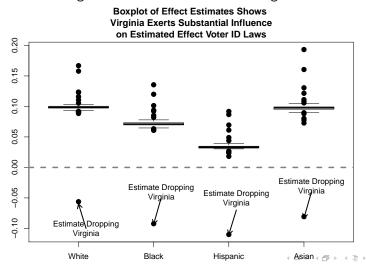
CCES turnout in Virginia shows 0% turnout in control period, plausible turnout levels in treatment period  $\leadsto$  "positive effect" due to merge error

#### Virginia Turnout, HLN Data



#### What went wrong?

To see influence of Virginia, we can drop one state at a time and assess the effect on the estimated effect of strict voter ID laws on turnout, estimated using a difference in differences design



What went wrong?

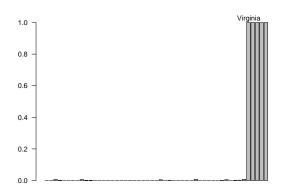
This is a risk with any fixed effect regression

- Use within unit variation, average across units to calculate effect
- Inspect Your Data!

 Hajnal, Kuk, and Lejavardi (2018): Argue specification is Missing Political Control Variables (Partisan control of governor, State House, and State Senate)

Originally provided political control variables had state-level missingness for states (alphabetically) from Virginia to Wyoming from 2006-2008. Figure below shows percent missing for respondents from each state for Republican governor, 2006-2008 This missingness effectively drops the problematic Virginia years from the analysis. Once corrected, political control variables do not resolve implausible positive effects

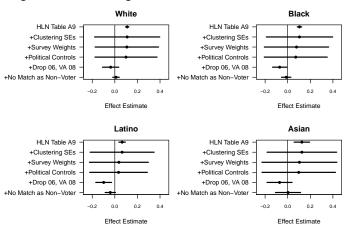
Percent Missing Data, Republican Governor HLN/HKL Variable, 2006-200



HKL (2018) Also Argue:

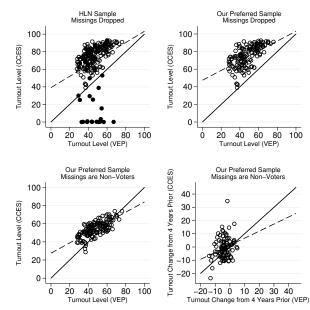
- No clustering of Standard Errors
- No Survey Weights

The top estimate in each figure shows original HLN estimate of strict voter ID laws on general election turnout from difference in differences model, second is the estimate after clustering standard errors, third is estimate after including survey weights, fourth after including political controls, fifth from dropping Virginia, sixth recoding turnout so nonmatches are zero

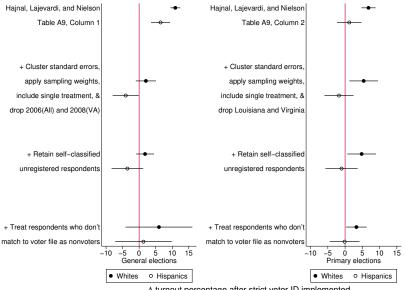


After correcting data, Survey not up to the task (Erikson and Minnite 2009)

#### Survey Data and Effects of Election Administration



#### Survey Data and Effects of Election Administration



∆ turnout percentage after strict voter ID implemented

#### How to Assess Effect of Voter ID Laws?

- Even with large sample CCES unable to inform debate on voter ID laws because small samples in each state
- Placebo tests: useful, but caution must be used because statistical routines drop variables to enable regression to estimate, coefficients may not reflect what you think.
- Fixed effect regression, worry about unit-level errors that exercise substantial influence on estimates