



Who benefits from voter identification laws?

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In the first two decades of the twenty-first century, many American state governments implemented voter identification (ID) laws for elections held in their states. These laws, which commonly mandate photo ID and/or require significant effort by voters lacking ID, sparked an ongoing national debate over the tension between election security and access in a democratic society. The laws' proponents—primarily politicians in the Republican Party—claim that they prevent voter fraud, while Democratic opponents denounce the disproportionate burden they place on historically disadvantaged groups such as the poor and people of color. While these positions may reflect sincerely held beliefs, they also align with the political parties' rational electoral strategies because the groups most likely to be disenfranchised by the laws tend to support Democratic candidates. Are these partisan views on the impact of voter ID correct? Existing research focuses on how voter ID laws affect voter turnout and fraud. But the extent to which they produce observable electoral benefits for Republican candidates and/or penalize Democrats remains an open question. We examine how voter ID impacts the parties' electoral fortunes in races at the state level (state legislatures and governorships) and federal level (United States Congress and president) during 2003 to 2020. Our results suggest negligible average effects but with some heterogeneity over time. The first laws implemented produced a Democratic advantage, which weakened to near zero after 2012. We conclude that voter ID requirements motivate and mobilize supporters of both parties, ultimately mitigating their anticipated effects on election results.

voter identification laws | elections | political parties

In the early 2010s, Republicans in the North Carolina General Assembly gathered detailed data on the recent voting behavior and racial background of North Carolinians. For instance, staff members compiled information on early versus Election Day voting by race and the number of black and white voters who did not possess a driver's license (1). Soon after, the Republican-controlled legislature passed a comprehensive election administration bill that included a requirement that all voters must show photo identification (ID) to access a ballot. Supporters emphasized the need to prevent voter fraud, while Democratic opponents maintained that the bill reverted North Carolina back to the Jim Crow era of southern politics in the United States. Political commentators, such as Republican consultant Carter Wrenn, noted that these positions on the bill simply reflected the parties' electoral incentives:

Of course it's political. Why else would you do it? ... [The election law] wasn't about discriminating against African Americans. They just ended up in the middle of it because they vote Democrat (1).

This contention leads to an important empirical question: Do these laws actually benefit Republican candidates? Existing research on voter ID laws focuses on their impact on voter turnout (2, 3), voter fraud (4), public opinion (5, 6), and the factors predicting their adoption in state legislatures (7, 8). Scholars have also found that the voters most burdened by the laws are the poor and people of color, who tend to support the Democratic Party (9, 10). Voter access and election security are the most consequential outcomes in this debate. But secondary variables such as election results are also relevant to understanding the laws' role in a democratic society. Partisan division over voter ID is relatively weak in the mass public (6), yet it has remained quite strong among elected officials for years. Thus, whether or not the laws achieve the (sometimes) hidden political objectives behind their motivation is a crucial—but open—question.

We address that question here. Specifically, we examine whether voter ID requirements affect the vote share advantage of Republican or Democratic candidates in races for significant political offices at the state level (state legislature and governor) and federal level (US Congress and president). To strengthen causal identification, we leverage plausibly exogenous variation in the timing of voter ID implementation induced by legal

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challenges to the laws. Combining this design strategy with multiple methods to further mitigate confounders yields small average effects. Additionally, it uncovers temporal variation; the first voter ID laws produced a Democratic advantage that weakened over time. We conclude that the long-term implications of voter ID are more nuanced than simply favoring one party. The extent to which they mobilize both parties' supporters is also relevant to their ultimate impact on elections.

Materials and Methods

We analyze state-year panel data on legislative and executive elections at the state and federal levels that occurred during 2003 to 2020. This timeframe includes laws adopted since the implementation of the federal Help America Vote Act, which is a common scope for empirical analyses of voter ID (3, 4). See supporting information (*SI Appendix*) for additional details.

Outcome Variable. Our outcome of interest is the difference in average vote share for major party candidates during general election races for the offices noted above. Specifically, for a given office, we compute the average vote share for candidates from each party in each state and election year and then compute the difference (Republican average — Democratic average).^{*} Positive (negative) values from this measure indicate a Republican (Democratic) advantage. We then compute the average advantage for state-level offices (state legislative lower and upper chambers and governors) and federal offices (US House of Representatives, Senate, and president). Finally, we average over all six office types in a grand summary measure.

Treatment. We consider a state treated in a given year if a law that is in force for general elections stipulates at least one of the following two conditions:

- Voters without acceptable identification must vote on a provisional ballot and take on a substantial burden to officially count their votes;
- The primary acceptable identification documents are those with a photo of the voter.

These conditions reflect the two major requirements that opponents of voter ID argue disproportionately affect historically disadvantaged groups (10).

Due to their contentious nature, many states have enacted voter ID laws only to have them placed on hold through injunctions from the courts or other delays. For example, Indiana's law passed in 2005 but did not go in force until after the US Supreme Court upheld it in *Crawford v. Marion County Election Board* in 2008. Prior to 2013, several states were required to seek preclearance from the Department of Justice under Section 5 of the Voting Rights Act before implementation could commence. And in a few cases, these laws faced the uncertainty of a ballot initiative either before or after the legislature passed implementing legislation.[†]

These delays represent one component of our identification strategy. While voter ID laws are clearly not randomly assigned to states, we contend that the timing of their implementation in states that enact them is as-if random. When a governor signs a voter ID bill into law, supporters are uncertain about 1) whether or not it will be challenged in court, 2) which court(s) will hear any potential challenges, 3) the outcome(s) of their decisions, and 4) the timing of the entire process. Furthermore, preclearance requirements and/or ballot initiatives only add to this uncertainty. Accordingly, we argue that from the point of selection into treatment, the year in which a state is actually treated is plausibly exogenous. States whose laws were delayed can serve as better counterfactuals for states whose laws were not delayed compared to states that never adopted them, allowing us to identify the average treatment effect on the treated (ATT).[‡]

To execute this design strategy, in some analyses, we subset the data to only those election years after a state adopted a law. Consequently, the

^{*}We use major party candidates' share of the total vote.

[†]*SI Appendix* for summaries of the legal history of all voter ID laws examined here.

[‡]In *SI Appendix*, we discuss empirical support for this identification strategy.

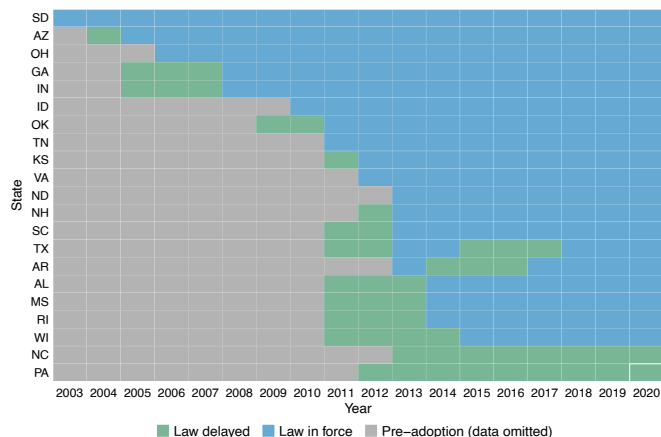


Fig. 1. Variation in treatment status after subsetting to isolate legal delays in the implementation of voter ID laws, 2003 to 2020.

variation in our treatment variable comes entirely from the unpredictability of the implementation process rather than states' decisions to adopt a voter ID law or not. Fig. 1 displays the variation in state-year treatment status during 2003 to 2020 in this subset, which isolates delays in the implementation of voter ID laws. We examine only states that adopted a law (as defined above) beginning in the year in which the law was adopted (e.g., 2011 for Wisconsin). That is, in our subset analyses, the sample consists only of those state-years denoted in green or blue in Fig. 1.

Covariates. In addition to our subsetting strategy, we use several time-varying covariates to mitigate confounding. These data (described in *SI Appendix*) include variables that may be associated with the choice to adopt a voter ID law and could also plausibly correlate with our outcome variable. They include measures of the liberal-conservative ideology of states' governments and citizens, a categorical variable ranging from unified Republican control to unified Democratic control of the state legislature, the nonwhite proportion of state populations, and the average level of racial resentment (animosity toward nonwhites) in a state-year.

Estimation. We employ three methods to estimate treatment effects: the two-way fixed effects (TWFE) estimator, fixed effects counterfactual trends (FECT), and PanelMatch (PM). TWFE is a regression model with indicator variables for states and years. It adjusts for time-invariant confounders and temporal shocks, identifying the ATT under the parallel trends assumption: that the outcome trend would be the same in treated units in the absence of treatment (11). We employ TWFE because it is widely used, generally robust, and easy to interpret. However, it carries key limitations, such as functional form assumptions (12).

Accordingly, we also estimate treatment effects with FECT (12) and PM (13). The former imputes counterfactual outcomes for treated observations, permits assessment of pretreatment trends, and can estimate dynamic effects. The latter estimates the ATT after matching treated and control units based on treatment timing and covariates. Both alternatives provide notable advantages over TWFE in estimating treatment effects and diagnosing identifying assumptions (12, 13). See *SI Appendix* for details.

Results

Average Effects. Table 1 reports the estimates and their 95% confidence intervals for all data samples and with each estimator. Recall that positive (negative) effects indicate an average vote share advantage in favor of Republican (Democratic) candidates. The sample sizes vary due to the timing of the elections for offices included in each group. See *SI Appendix* for further details on the estimated models.

The results show negligible average effects of voter ID. The estimates are generally near zero with a few exceptions.

Table 1. Estimated effects of voter ID law implementation on average party vote share advantage, US elections 2003 to 2020

Estimator	Office	Sample	Estimate	95% lower	95% upper
TWFE	State	Full	0.029	-0.011	0.068
		Subset	0.017	-0.048	0.081
	Federal	Full	-0.007	-0.053	0.039
		Subset	-0.032	-0.199	0.136
	All	Full	0.004	-0.033	0.040
		Subset	-0.013	-0.113	0.087
FECT	State	Full	0.022	-0.022	0.066
		Subset	0.078	0.002	0.154
	Federal	Full	-0.007	-0.064	0.051
		Subset	-0.061	-0.143	0.022
	All	Full	0.003	-0.038	0.044
		Subset	-0.004	-0.061	0.053
PM	State	Full	0.016	-0.041	0.064
		Subset	0.056	-0.016	0.137
	Federal	Full	-0.003	-0.097	0.084
		Subset	-0.059	-0.205	0.072
	All	Full	-0.011	-0.078	0.044
		Subset	0.009	-0.058	0.083

Cell entries report treatment effects and their 95% confidence intervals. N_{Full} , N_{Subset} : State (394, 100); Federal (441, 121); All (472, 127).

For instance, the state-level FECT estimate from the subset dataset reports an average Republican advantage of about eight percentage points, and its 95% CI excludes zero. In contrast, the federal elections subset FECT estimate implies a six-percentage point Democratic advantage (with a CI that includes zero).

The estimates that average over all six election types suggest that the advantage to either major party is about 1% point or less, with confidence intervals that indicate that Republican or Democratic advantages are plausible. This finding holds while controlling for confounders via the estimation method, covariates, and/or subsetting the data to isolate exogenous treatment variation. In short, we find no evidence from these average effects to reject the null hypothesis.

Dynamic Effects. Fig. 2 presents dynamic treatment effects from both samples, averaged across all races and grouped by calendar time using FECT. Points represent estimates in each election year for which sufficient data are available and point size is proportional to the number of treated states in that year. Vertical lines denote pointwise 95% confidence intervals. The points are summarized by loess trend lines. Dashed horizontal red lines denote the average effects from Table 1.

These estimates indicate that the first few voter ID laws (i.e., until about 2012) exerted substantively large and statistically significant ($P < 0.05$) negative effects—a Democratic advantage. The small sample sizes warrant appropriate caution, but the

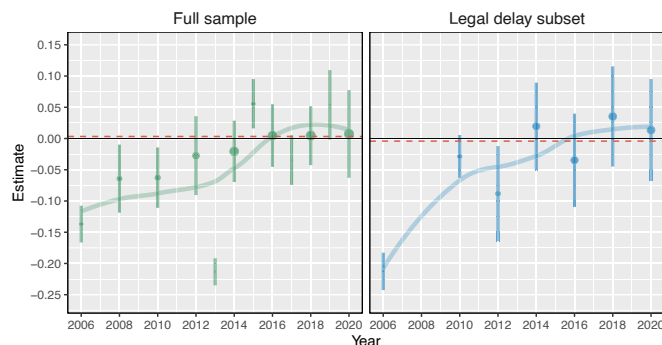


Fig. 2. FECT estimates and 95% confidence intervals over calendar time.

estimates imply average differences around 10% points during the early years. The effects then weakened in subsequent elections, leveling off near zero. This heterogeneity suggests that initial Democratic efforts to counteract the laws were quite effective but may have waned in efficacy over time.

Conclusions

What do these results mean for the voter ID debate? It is important to consider that any impact these laws exert on voter access occurs concurrently with their effects on other elements of the electoral process. For instance, an ID requirement might generate anger among Democrats and enthusiasm among Republicans, motivating both groups to vote (14). The laws might deactivate some Democratic voters if all else was equal, but in practice also lead Democratic groups to expand mobilization efforts, disrupting the deactivation effect (15). Additionally, perhaps voters have become used to following the laws over time as they have become more common. An increase in familiarity could have weakened their controversial status in the mass public (6) and ultimately reduced their effects on election outcomes.

Nonetheless, this research does not imply that voter ID laws represent a benign reform. A broad majority of the American public supports them (6), but these laws can also alienate disadvantaged groups from politics (10). Thus, they are most useful to the extent that they solve a problem observed in American elections. Empirical evidence—which examines voter turnout (2, 3), voter fraud (4), and now, election results—shows essentially no such problem. Thus, future election policy may benefit from a shift in the debate. Instead of focusing on security versus access, lawmakers should consider the threshold for a baseline level of voter responsibility while avoiding the enactment of barriers that lack empirical support.

Data, Materials, and Software Availability. Quantitative data and software code. Data have been deposited in Harvard Dataverse (TBD) (<https://doi.org/10.7910/DVN/IA5AXD>).

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