

Evaluating the Impact of Same-Day Voter Registration on 2020 Election Turnout

Executive Summary

An effective democracy relies on elections that provide for accurate representation of all of a government's constituents. While the United States suffers from relatively low voter turnout rates that threaten poor governing representation, particularly for marginalized groups, the implementation of same-day registration policies allowing a voter to register on the day they vote seeks to enhance turnout. I evaluate the effect of same-day voter registration via a differences-in-differences design comparing turnout in states that implement same-day registration with those that do not between the 2016 and 2020 general elections. I ultimately find that same-day registration has a significant, positive effect on turnout and propose states across the United States adopt same-day registration in order to maximize the number of Americans represented in elections.

I. Introduction

One of the founding ideals of democratic governance is that elected officials should be subject to the accurate representation of their constituents. The most direct means of contributing to accurate representation for most United States residents is by casting a vote in elections—the greater the share of the population that takes part in selecting their representatives, the more likely those representatives are to reflect the true interests of the people. Given the United States is often hailed as an international paragon of democracy, it may come as a surprise that a Pew Research Center analysis of fifty developed countries across the world ranked American voter turnout, 66.6 percent in 2020, at a mediocre 31st place (DeSilver 2022; McDonald 2022). From

expanding mail-in voting to increasing the number of polling centers, states across the country have implemented a variety of electoral policies with the aim of enhancing this statistic. One of the most promising strategies that has experienced increasing nationwide implementation over the past decade is same-day voter registration: a policy that enables eligible citizens to bring proof of identity and residency in order to get registered to vote at their polling place, on the same day they cast their ballot. Same-day registration is no new phenomenon, but the recent trend of states implementing it provides valuable data enabling evaluation of its effectiveness at raising voter turnout.

In this paper, I will first review established findings on the factors that drive voter turnout, as well as on the efficacy of same-day voter registration policies in the United States. Next, I present a differences-in-differences evaluation design comparing voter turnout in states that implemented same-day registration policies between the 2016 and 2020 general elections against states that did not. I also explain the threats to endogeneity that necessitate such a design. I will then present my findings from the evaluation to confirm the positive impact same-day registration policies have on statewide voter turnout. Finally, I prescribe my policy recommendations for states and explore further research that can be conducted to clarify optimal implementations and potential externalities of said policies.

II. Literature Review

When making the decision to vote in an election, all voters in the U.S. conduct a calculus of voting . That is, they weigh the likely benefits of casting their ballot against the costs required to do so (Riker and Ordeshook 1968). Benefits to voters may include electoral competitiveness (the extent to which they believe their vote will change the outcome), relevance of consequent

policy change, and a sense of civic fulfillment. On the other hand, a time-consuming registration process, polling places with limited locations and opening hours, and a complex ballot may dissuade voters from making the effort to vote. Marginalized communities, including young people, racial minorities, people with lower education levels, and those with lower incomes face a disproportionate burden of such costs (Vij 2020) due to separation from voter education resources, limited access to transportation, and lacking excess time outside of work to dedicate to research and voting.

Despite lagging internationally, voter turnout in the United States has actually experienced a recent spike; 60.1 percent of the voting-eligible population turned out in the 2016 general election, rising to 66.6 percent in 2020. Likewise, only the 2014 midterms saw a 36.7 percent turnout rate compared to 50 percent in 2018 (McDonald 2022). Within these metrics lies an anomaly distinguishing the U.S. from other countries; Pew reported 2020 voting-age population turnout was 62.8 percent, while registered-voter turnout sat substantially higher at 94.1 percent. In relation to most other studied countries, whose most recent registered-voter turnout rates were within five percentage points of their voting-age population turnout (DeSilver 2022). This signifies the U.S. has no problem turning out its already-registered voters and loses many would-be voters before the registration stage.

Same-day voter registration lowers the cost of registration by essentially creating a one-stop shop for voters who would otherwise be devoting separate time to navigate a potentially confusing registration by themselves. Twenty-three states and Washington D.C. have currently adopted same-day registration throughout the early voting period, and all but two states allow same-day registration on Election Day (“Same-Day Voter Registration” 2023).

Burden et al. (2009) found that states that implemented their own same-day registration policies experienced a three to seven percentage point increase in voter turnout in the 2008 general election. This effect was moderated by the length of the same-day registration window; the more days same-day registration was offered, the greater the increase in turnout. Their finding corresponds to that of Brians and Grofman (2001), who concluded that average turnout in the 1996 general election increased by about four percentage points for states with election-day registration policies. This study also found no partisan bias in the turnout gains from same-day registration, suggesting theoretical bipartisan appeal, however it noted states that implemented election-day registration already reported higher turnout to begin with (Brians and Grofman 2001). More recently, a study on North Carolina's same-day registration policy implementation in 2007 supported the theory that otherwise disenfranchised marginalized voters are most likely to benefit—African-American voters comprised 35 percent of same-day registrants while only representing 22 percent of North Carolina's general electorate (Green and Mach 2015).

It is important to note that while these studies all indicate same-day voter registration has a significant, positive impact on voter turnout, they were all conducted over a decade ago. As suggested by contrasting turnout rates throughout electoral history, each election and time-period provides a distinct landscape for voter access policy to make its impact, thus it is worth reevaluating the efficacy of same-day voter registration in the most recent general election. Thus, my study replicates former work by testing the relationship between new same-day voter registration policies on 2020 voter turnout.

III. Methods

(Note: All data referenced and analyzed in this paper, while modeled on real national average turnout and demographic data, was randomly simulated in R for each U.S. state.)

I employ a differences-in-differences methodology to evaluate the impact of same-day registration on turnout. Specifically, I will compare the difference in 2016 and 2020 general election turnout rates for the treatment group of five states that implemented same-day registration between the 2016 and 2020 general elections (Michigan, Utah, Washington, New Mexico, and Nevada) against the control group of 27 states that never adopted the policy. While Virginia passed a same-day registration law in 2020, it did not go into effect until 2022, which is why I omit it along with states that have already implemented same-day registration before 2016 from my analysis. The outcome variable, voting-age voter turnout, is generally easily accessible online from publications by state elections authorities and/or Secretaries of State. The same-day registration treatment variable will be a dummy distinguishing the five states that implemented same-day registration between 2016 and 2020. The time period variable will likewise be a dummy differentiating 2016 data from 2020 data. A significant, positive coefficient on the interaction effect between same-day registration treatment and time period at the $\alpha = 0.05$ level will indicate same-day voter registration increases voter turnout in the states that adopt it.

DID offers two primary benefits to addressing endogeneity issues in this evaluation, the first being time differences. National data has already indicated that voter turnout can greatly differ between elections (McDonald 2022), explained by a variety of variables such as candidate qualities, economic conditions, and dominant national policy concerns. DID resolves these temporal differences by comparing treatment and control groups rather than the before-and-after effects of just the treatment group. Theoretically, both states with same-day registration and those without should experience the same changes between 2016 and 2020.

Brians and Grofman (2001) asserted that states with same-day registration tend to exhibit higher voter turnout than those that didn't, even before policy implementation. DID also takes into account these treatment vs. control group differences by comparing each group's turnout trend from 2016 and 2020, not their single-period outcomes in 2020. While both groups will be expected to show higher turnout rates in 2020, any difference in the rate of increase should theoretically be attributable to the same-day registration treatment.

The greatest limitation of a DID evaluation design is the strong assumption of parallel trends, or that states with same-day registration policies, had they not implemented those policies, would have experienced the same trend in voter turnout between 2016 and 2020 as states that never offered same-day registration. In order to minimize the effects of interstate differences, I include various covariates in my linear regression analysis of turnout rates on intervention treatment and time periods. These controls, including median age, share of white residents, share with a college degree, and median income, are all based on electorate demographics, as I anticipate they take into account identities of marginalization less likely to turn out in each state but related to higher likelihood of a state legislature implementing same-day registration laws to meet constituent needs. I will also control for the share of Democratic party identifiers in each state, as expanding voter access (the treatment intervention) tends to be a liberal policy platform, and more even partisan population splits are likely to make elections more competitive and therefore incentivize higher turnout. Like voter turnout, all of these state-level demographic variables can be obtained online.

IV. Results

My DID regression of voter turnout on the same-day registration treatment, time period, and demographic controls yielded a significant interaction effect ($p < 0.001$) with a coefficient of 0.041. In other words, holding all else equal, the same-day registration treatment resulted in a significant 4.1 percentage point increase in voter turnout (see Table 1).

Table 1. Differences-in-differences regression results

	Turnout
SDR Effect	0.041*** (0.005)
Observations	66
R ²	0.982
<i>Note:</i> * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$	

The coefficient plot makes the significant outcome effect of same-day registration clearer—as expected, treatment states that implemented same-day registration exhibited higher turnout rates in the 2016 pre-treatment period. Also as hypothesized, turnout rates rose for both the treatment and control groups, justifying my DID design ex post facto. As indicated on the plot, the treatment group states would have exhibited a mean turnout rate 4.1 percentage points lower than their observed post-treatment turnout, assuming they would have followed the same trend as control states (see Figure A). Coefficients for both groups and periods can be found in Table 2.

Figure A. Coefficient plot of differences-in-differences comparison over pre- and post-treatment periods

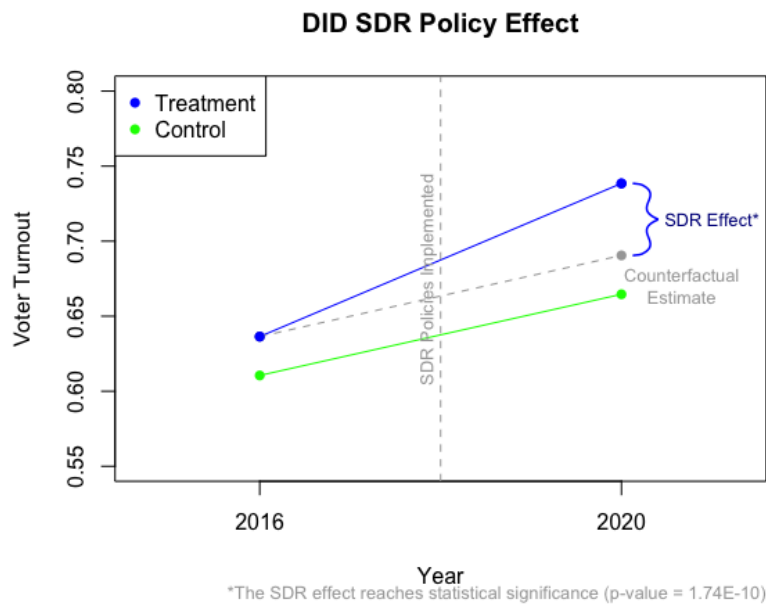


Table 2: Treatment vs. control group means for pre- and post-treatment periods

MEANS	2016	2020
Control	.6105	.6646
Treatment	.6364	.7385

V. Discussion

My DID evaluation of same-day registration confirmed the policy has a significant, positive effect on voter turnout. Not only did its effect achieve high statistical significance, its associated coefficient of 4.1 percentage points suggests a relatively large substantive effect. In a country with an estimated voting-age population of over 250 million prospective voters as of 2021 (“Estimates of the Voting Age Population for 2021” 2022), a 4.1 point difference translates into millions of voters brought to the polls that would otherwise not have made their voices electorally heard. As a result of my evaluation, I recommend that states across the country

implement their own same-day registration policies in order to guarantee more representative governance.

It is worth noting that the five treatment states I examined in my evaluation employed election-day registration in addition to early voting same-day registration. Only two states, Montana and North Carolina, currently practice same-day registration in the early voting period only, but it is worth additional evaluation to determine whether the significance of same-day registration also holds for states that don't offer election-day registration.

While Brian and Grofman (2001) have established there are no partisan biases in turnout driven by same-day registration, the policy debate persists on the optimal balance between enhancing voter access and preventing voter fraud. In order to alleviate concerns that making voter registration easier will increase the likelihood of fraudulent registrations and ballots, further research on the relationship between same-day registration implementation and voter fraud may be warranted.

As alluded to earlier, my study may suffer from limited generalizability due to the strong assumption of parallel trends demanded to extrapolate my results outside of the 2016 to 2020 period. While there is no way to guarantee this condition, my evaluation contributes to the existing literature from past decades to support the theory that same-day registration is a durable policy with consistently significant effects throughout various evaluation periods.

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