

The Impact of Election Day Registration on Voter Turnout and Election Outcomes

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ABSTRACT

It is widely believed that voter registration is a substantial barrier to voter participation in general, but particularly so for likely Democratic voters. A popular solution is election day registration (EDR), which eliminates the closing date by permitting registration at the polls. We posit a small positive effect of EDR on turnout and, contrary to conventional wisdom, theorize that individuals most likely to take advantage of EDR are in fact Republican voters. We investigate the causal effect of EDR on turnout and the partisan vote distribution using a powerful natural experiment in Wisconsin. When EDR was implemented in Wisconsin, only municipalities that required registration were affected by the change in the law. Using the leverage afforded by this experiment we show convincingly that EDR did increase turnout in Wisconsin by about three points. We find that the introduction of EDR increased turnout but actually decreased the Democratic share of the two-party vote for president by four to six points.

Although a prominent group of scholars once declared election day registration (EDR) to be a “dead issue” (Squire, Wolfinger, and Glass 1987, 57), the controversy surrounding the 2000 presidential election helped to reignite interest in reforms that would allow for registration at the polls in all states (Wattenberg 2002). Most recently, in late 2009 Senator Russ Feingold (D-WI) and Representative Keith Ellison (D-MN) introduced a bill in Congress that would allow all Americans to register at the polls on election day. The primary sponsors of this proposed legislation and a majority of the bill’s cosponsors, hailed from states that pioneered election day registration.¹ In arguing for the necessity of implementing EDR nationwide, these sponsors pointed to the high levels of turnout in their home states as evidence that EDR effectively helps to increase voter participation. That all 22 cosponsors happened to be Democrats also suggests a partisan motivation for EDR.

Scholarly research on the effects of EDR has helped to reinforce these views. Many studies conducted since the mid-1970s – when EDR was introduced in Wisconsin, Maine, and Minnesota – have produced sizable estimates of the increases in voter turnout attributable to EDR. At the extreme, one study estimated that turnout might increase by as much as 14 percentage points if EDR were implemented nationwide (Rhine 1995). More recent studies, however, suggest that these estimates may greatly overstate the impact of EDR (Fitzgerald 2005; Hanmer 2009). Others have even argued that EDR has no effect on turnout rates whatsoever (Keele and Minozzi 2010). Knowing whether EDR actually increases turnout is important in its own right. At a more pragmatic level, politicians also care whether EDR affects the partisan composition of the voting public. Most observers assume that EDR increases turnout primarily by mobilizing supporters of Democratic candidates. Surprisingly, this assumption has yet to be tested.

¹ The 2001 bill proposing to implement EDR nationwide was likewise introduced by a congressman from an EDR state—Representative Bill Luther (D-MN) (Wattenberg 2002).

In this paper we seek to resolve these two debates with results from a natural experiment in Wisconsin. The setting is attractive because the state long had a dual system of voter registration whereby individuals in many parts of the state were not required to register at all before casting a ballot. When EDR was implemented in Wisconsin, only those communities that already had voter registration laws on the books were affected by the change in the law. This kind of within-state variation in the application of registration laws has been held up as the gold standard for assessing whether a causal relationship exists between different systems of voter registration and electoral turnout (Ansolabehere and Konisky 2006; Keele and Minozzi 2010). Keele and Minozzi note that “The best research design would be one where the analysis is conducted within a single state” (2010, 40). Using the leverage afforded by this experiment, we employ a variety of methods to show that EDR did increase county-level turnout, but to a lesser extent than previous studies have led us to expect.

We also use this opportunity to test for any possible partisan effects of EDR. Because nonvoters tend to have demographic characteristics that associated with voting Democratic, conventional wisdom suggests that “increases in turnout,” such as those associated with the implementation of EDR in the state, should “enlarge the vote share of Democratic candidates” (Hansford and Gomez 2010, 269; see also Berinsky 2005; Franklin and Grier 1997; Hanmer 2009; Knack and White 1998). For instance, it has long been speculated that the introduction of EDR in Wisconsin may have contributed to Jimmy Carter’s win in the state (Smolka 1977). Here we test this conjecture by comparing the change in Democratic vote share from 1972 to 1976 in municipalities with EDR with the change in vote share in municipalities that continued to run elections without any system of voter registration at all. Using difference-in-difference models, we find, contrary to common wisdom, that the introduction of EDR actually *decreased* the Democratic share of the two-party vote for president.

We suggest that this finding should not be surprising based on what is known about the demographic profiles of likely voters and the varying consequences of individual registration processes. The traditional analogy between nonvoters and Democratic voters is flawed because it fails to identify the nonvoters most likely to be influenced by changes in registration laws. Those most likely to take advantage of EDR tend to have higher levels of education and income, factors that also make them likely to vote Republican. In addition, unlike “motor voter,” EDR does not create an early list of registrants from which Democratic campaigns might mobilize, thus making individual level factors more important. The result is that, at least in the short term, the turnout boost caused by EDR occurs primarily through the mobilization of Republican supporters.

ELECTION DAY REGISTRATION AND VOTER TURNOUT IN THE UNITED STATES

First introduced in just a few states in the mid-1970s, the number of states with EDR doubled in the early 1990s (Knack 2001). This spawned a cottage industry of studies seeking to evaluate the effects of the program on voter turnout and the composition of the electorate. And in study after study using a variety of different methodologies, scholars have come to the same basic conclusion: EDR lowers the cost of voting for many Americans and increases overall turnout (Knack and White 2000).

The precise magnitude of the effect, however, has been a subject of much dispute in the scholarly literature (Brians and Grofman 1999). Most studies have found that EDR likely increases turnout anywhere from three to six percentage points on average (Burden *et al.* 2010; Fenster 1994; Fitzgerald 2005; Hanmer 2009; Knack 1995, 2001; Rhine 1995; Rosenstone and Wolfinger 1980).² Highton’s (2009, 509) review of the literature concludes that the effect of EDR on turnout is “about five percentage points,” although some studies have uncovered effects as large as fourteen points (Rhine 1996) and as small as zero (Keele and Minozzi 2010).

² Interestingly, Smolka’s (1977) original case study of the effects of EDR on turnout in Minnesota and Wisconsin estimated that the introduction of EDR had an impact on turnout of no more than two percentage points.

Scholars have long noted that the “closing date” for registration stands as perhaps the foremost legal barrier to voting (Wolfinger and Rosenstone 1980). The closing date forces voters to take two actions: first registration before the campaign has reached its maximum intensity and then voting on a separate date at a different location. Because the closing date is believed to be the most burdensome part of the registration process, replacing it with EDR should increase turnout significantly. At least in theory, then, EDR allows voters to register and vote in “one essentially continuous act” (Wolfinger, Highton, and Mullin 2005, 3; see also Brians and Grofman 2001; Burden *et al.* 2010; Highton 1997; Highton and Wolfinger 1998; Knack 1995). Some have even gone so far as to argue that same-day registration eliminates “all barriers to voting that are associated with registration” (Mitchell and Wlezien 1995, 191; cf., Burden and Neiheisel 2010).

Researchers have measured EDR in a variety of ways (see Brians and Grofman 2001; Highton and Wolfinger 1998; Knack 1995). It seems likely that this heterogeneity in how scholars have attempted to measure the effect of EDR on turnout is at least partially responsible for the often divergent estimates found in the existing literature. The quasi-experimental design employed here, however, neatly avoids the difficulties encountered in earlier studies. As we explain below, municipalities in Wisconsin either (1) had voter registration before EDR was implemented, and were therefore affected by the switch to EDR or (2) continued to vote without any form of voter registration throughout the time period under consideration.

Previous studies have suffered more seriously in terms of the methodology and data that they have employed. Brians and Grofman (2001) summarize the different ways in which scholars have attempted to gauge the effects of EDR on turnout, dividing the previous literature into several distinct camps and pointing out the limitations of each approach in turn. Studies of turnout using cross-sectional designs likely overstate the effects of registration requirements on voter turnout because they often overlook important differences between states (Highton 1997; Highton and

Wolfinger 1998; Squire, Wolfinger, and Glass 1987; Wolfinger and Rosenstone 1980). The main problem is that the first states that introduced EDR in the 1970s already had high levels of voter turnout (Hanmer 2009; Knack 1995), thereby suggesting that there are other factors such as state culture or campaign strategies that affect turnout rates across the states. Inevitably, these factors go unmeasured (Ansolabehere and Konisky 2006; cf., King 1994). Longitudinal (Brians and Grofman 1999, 2001; Fitzgerald 2005; Knack 1995) or quasi-experimental designs (Fenster 1994; Knack 2001; Knack and White 2000) that employ state-level data alleviate many of these concerns, but have nevertheless been plagued by their own share of limitations. As Keele and Minozzi point out, such studies have been unable to establish *causal* linkages between EDR and increased levels of voter turnout, as “it can be quite difficult to separate state level fixed effects from state level treatment effects” (2010, 40). In short, cross-state analyses will always be plagued by concerns about whether the researcher has actually captured causal effects.

What is more, with few exceptions (Ansolabehere and Konisky 2006; Burden and Neiheisel 2010) previous studies have treated states as though they were internally homogenous with respect to the application of the laws governing the registration process, even as they have acknowledged the existence of such sub-state variation. At one time or other, though, a number of states used a “dual system” of voter registration whereby voter registration was only mandated in some municipalities within the state (Ansolabehere and Konisky 2006; Burden and Neiheisel 2010; Hanmer 2009; Knack 2001). For instance, before a statewide system of voter registration was implemented in Minnesota, about one-third of the state’s population voted without first having to register. For many Minnesota residents, then, EDR represented a *more* restrictive system of voter registration than had existed previously (Smolka 1977; see also Ansolabehere and Konisky 2006).³

³ Even after the adoption of a statewide system of voter registration in Minnesota, individual counties containing no city greater than 10,000 persons were permitted to be exempted from the statewide registration system by resolution of the

Given this fact it is little wonder that turnout in “EDR” states actually declined as a group after same day registration was put into place (Knack 1995; Smolka 1977).

More recent attempts at estimating the impact of EDR on voter turnout have employed a variety of quasi-experimental methods in an effort to determine whether EDR is causally linked to increased levels of voter turnout. While these studies acknowledge that states are not always internally homogenous with respect to the implementation of registration laws, even these more sophisticated analyses rely on cross-state comparisons. Hanmer (2009), for instance, enlists Iowa and South Dakota as comparison states for Minnesota and Wisconsin, respectively, in estimating EDR’s effects using a difference-in-difference approach. Similarly, Keele and Minozzi (2010) take advantage of the sequential adoption of EDR in Minnesota and Wisconsin to examine the impact of EDR, using genetic matching to pair Current Population Survey respondents from comparable urban areas in both states.

As careful and sophisticated as these studies are, neither can credibly rule out the possibility that unobserved differences between states are actually driving their results. By contrast, the present study is able to hold a variety of state-level factors constant by exploiting within-state variation to examine the effect of EDR on turnout and the presidential vote distribution. Municipalities with more than 5,000 persons were required by statute to register voters. Municipalities under this threshold, however, were permitted to adopt registration requirements voluntarily.⁴ It was not until 2006 with the introduction of the Statewide Voter Registration System (SVRS) that voters in all of Wisconsin’s municipalities were forced to register before they could cast a ballot on election day (Burden and Neiheisel 2010; Huefner et al. 2007). To the best of our knowledge Wisconsin is the only state in which EDR was introduced across localities at different times.

county board. Prior to 1976 only one county (Pope County) exercised this option. After the 1976 presidential election Itasca County also chose to do so (Smolka 1977).

⁴ See Burden and Neiheisel (2010), Huefner et al. (2007), or Smolka (1977) for more details on the history of voter registration requirements in Wisconsin.

To summarize, our approach improves upon previous studies of EDR in nearly every respect. The natural experiment in Wisconsin neatly avoids issues regarding the measurement of EDR that plagued earlier observational studies. Our design also allows us to hold constant unobserved state-level characteristics such as state culture and campaign activities that have often gone unaccounted for in previous studies.

After estimating the turnout effect, we take further advantage of this design to revisit another longstanding debate in the literature. Political observers of all stripes have long suspected that higher voter turnout disproportionately benefits Democratic candidates (Franklin and Grier 1997; Knack and White 1998, 2000; Wolfinger and Rosenstone 1980). Much of the debate about the 1993 passage of the National Voter Registration Act – also known as the “motor voter” law – was based on the common belief that easier registration would increase turnout and the vote share for Democrats. It is not surprising, then, that Democratic officials in EDR states overwhelmingly support the practice, while GOP party leaders in the same states have often expressed a great deal of antipathy toward EDR (Franklin and Grier 1997). As Hanmer suggests, “Party officials’ feelings about EDR tend to correspond with views about participation and the perceived effect EDR has on the success of their party” (2010, 171; see also Knack and White 1998). The driving logic behind this perception is fairly straightforward, as it has long been noted that the social characteristics of those who are most likely to vote are many of variables that predict support for the Republican Party (see DeNardo 1980; Hansford and Gomez 2010). Conversely, nonvoting is often associated with the same set of demographic predictors – being young, minority, unmarried, less educated, lower income, and less religious – that are also associated with Democratic supporters. Increasing voter turnout by reducing the costs of voting through the introduction of EDR has therefore led many to believe that the EDR aids Democrats at the polls.

Surprisingly, the assumption that EDR serves to advantage the Democratic Party has gone untested. There have only been cursory examinations inferred from simple correlations (Brians and Grofman 2001; Calvert and Gilchrist 1993) or even more indirectly by examining the demographic characteristics of EDR voters (Brians and Grofman 1999). Recently Hansford and Gomez (2010) investigated the possibility of using registration laws as instruments for voter turnout, but concluded that they are not sufficiently exogenous to electoral outcomes because most such reforms were implemented by Democratic-controlled state legislatures, a concern echoed by Hanmer (2009). Fortunately, our study is free of this endogeneity concern because voter registration requirements were not universal in Wisconsin prior to the introduction of statewide voter registration in 2006. We compare the Democratic vote share in communities that were affected by EDR to otherwise similar communities that could not have been affected. Focusing on *changes* in the Democratic vote share for president from 1972 to 1976 *within state* further allows us to control for a number of unobserved factors that might influence the Democratic share of the vote, providing a clean test of the so-called “Partisan Effect Hypothesis” (Hansford and Gomez 2010).

As circumstances would have it, the time period under examination here is particularly fortuitous for another reason, as it allows us to *de facto* control for the possible confounding influence of incumbency. A prominent finding in the literature on the electoral effects of voter turnout is that higher turnout not only helps Democratic candidates, but also hurts the incumbent candidate, regardless of party (see DeNardo 1980; Hansford and Gomez 2010). The incumbent in both the 1972 and 1976 presidential elections was a Republican, leaving, as near as is possible, a clear look at the causal effect of EDR on the Democratic share of the vote. Thus, our analysis of the partisan vote is also a test of the anti-incumbent hypothesis.

COUNTY-LEVEL ANALYSIS OF VOTER TURNOUT

To examine the effects of EDR on voter turnout we assembled a county-level dataset from a variety of sources. Our dependent variable, voter turnout, is calculated in traditional fashion by dividing the total number of votes in the county for the highest office on the ballot by the voting age population (VAP) in the county.⁵ The numerator was collected from county canvasses of election returns compiled by the Wisconsin Elections Board, while the denominator was culled from census data. Values for non-census years were estimated using simple linear interpolation (Ansolabehere and Konisky 2006). With the exception of county population, which was estimated at the county level for each year by the Wisconsin Department of Administration, all other control variables were pulled from the census using linear interpolation to estimate values in non-census years.

Our key independent variable is the proportion of a county's population affected by the adoption of EDR. Although we are not the first to use such a measure (see Ansolabehere and Konisky 2006), this variable construction requires some explanation, for in Wisconsin, as in a number of other states, elections are administered at the municipal level. Prior to 1975 some municipalities required voters to register before they could vote, while others had no such restriction.⁶ Only in those municipalities that already had voter registration requirements on the books could voters have been affected by EDR. Voters living in non-registration municipalities went to the polls on election day in November 1976 and found the process to be no different than they had experienced in past elections.

We were able to collect estimates of the total population in each municipality from the Wisconsin Department of Administration. Our treatment variable, then, is constructed by adding

⁵ Although a measure of voting eligible population (VEP) that takes into account the number of persons in the county who are ineligible to vote would be preferable (McDonald and Popkin 2001), all of the components involved in estimating the VEP simply are not available at the county level over the time period under consideration. Fortunately, the divergence between VAP and VEP should not vary much over the short time period we examine.

⁶ The list of municipalities in Wisconsin with voter registration was collected from various editions of the *Election and Campaign Manual* published by the state elections board (Wisconsin State Elections Board 1979, 1980).

the total population of all the municipalities in a county that had voter registration together and dividing by the total population in the county. It represents the proportion of each county's total population that was covered under the provisions of EDR from 1972 to 1980. Because this operationalization overstates the extent of EDR's reach in each county, we estimated the VAP at the municipal level by multiplying the total population in each municipality by our estimates of the proportion of those 18 and over in the surrounding county.⁷ In this version, the treatment variable is constructed by adding the total estimated VAP of all the municipalities in each county that had voter registration and dividing by the VAP in the county. While certainly not ideal, the measures nevertheless represent a significant improvement over extant studies, most of which have simply designated entire states as having EDR. Below we estimate models using both versions of the EDR coverage variable.

Our control variables include a common set of factors known to influence turnout. These are the proportion of the population that is African American, the proportion with a high school education, logged median family income, and logged total population. Although fixed effects will pick up most of the variation across counties, we might expect turnout to increase with education and income, and to decrease with a rise in African Americans and overall population.

We begin with the effects of EDR on turnout at the county level. Our first regression model is a fixed effects specification that includes both county and year dummies. Results from this model are displayed in the first column in Table 1. Our key predictor in the model—the percentage of the county covered by EDR—is positive and statistically significant. No other independent variables reach conventional levels of statistical significance. This is probably due to the year and county fixed effects picking up most of the variation, making it more remarkable that EDR shows an independent effect.

⁷ This is the Wisconsin Department of Administration's preferred methodology for producing such estimates.

The regression coefficient on our treatment variable indicates that as a county moves from no coverage of EDR to full coverage, voter turnout is predicted to increase by approximately three percentage points. This is based on a measure computed from total population figures. Re-running the same model using an alternate operationalization of our treatment variable that employs estimates of the voting age population in the county covered by EDR rather than total population produces reassuringly similar estimates across the board, as shown in the second column of Table 1.

[Insert Table 1 about here]

As an additional robustness test, we also estimated a pair of random effects models that are identical in specification to the fixed effects models.⁸ Although we have greater confidence in the estimates from our fixed effects models, for the sake of comparison we present model results using both estimators (see the last two columns in Table 1). Happily, the coefficient on our key independent variable remains essentially unchanged even with the random effects approach, demonstrating once again that the introduction of EDR had a modest and statistically significant effect on voter turnout of approximately 3.3 percentage points.⁹

Our findings stand in some contrast to those of numerous earlier studies, many of which have produced sizable estimates of EDR's impact on turnout. Most previous work in this area has estimated the effect of EDR to be anywhere from three to six percentage points. Using a more appropriate methodology that guards against unmeasured confounders, we find an effect at the low

⁸ Although there are advantages to the random effects estimator, as it is thought to be more efficient than the fixed effects estimator in many situations, its use requires additional assumptions that are rarely satisfied in practice. In deciding between the fixed effects and random effects estimator it is therefore common to conduct a Hausman test. The standard Hausman test, however, often leads to invalid inferences in panel datasets, such as the one we employ in this study, where there is cause to suspect that the errors are not identically and independently distributed (Hoechle 2007). It is for this reason that we turn to a robust version of the Hausman test described by Wooldridge (2002). This test provides evidence against the random effects approach. A robust version of the Hausman test with Driscoll and Kraay standard errors implemented using the `-xtsec-` program in Stata (Hoechle 2007) likewise favors the use of the fixed effects estimator. A similar result is obtained using `-xtoverid-` (Schaffer and Stillman 2006). Interestingly, the standard Hausman test would have led us to conclude that the use of the random effects estimator was justified.

⁹ A difference-in-difference model likewise suggests that EDR increased voter turnout in 1976, if only slightly. The coefficient on the treatment variable is not significant ($p=.131$), although with only 72 cases in the differenced county-level dataset there is obviously a great deal of concern about statistical power.

end of this range. Importantly, though, we do find evidence of a positive effect on voter turnout whereas other recent investigations have turned up little support for a causal link between the adoption of EDR and increases in voter turnout (Keele and Minozzi 2010).

WHY EDR IS NOT MOTOR VOTER

Having established the turnout effects of EDR, we now provide what we believe to be the first test of the widely-held belief that EDR disproportionately aids Democratic candidates. It is important to note, however, that no existing study has examined EDR's impact on the vote directly. Rather, previous estimates have been generated from observing the effects of "motor voter" reforms on party registration (Knack and White 1998) and the Democratic share of the two party vote (Franklin and Grier 1997). Many existing studies have "treated EDR and motor voter as functionally equivalent" (Hanmer 2009, 31).¹⁰ That is, higher turnout should always help the Democrats.

In contrast, we theorize that while the introduction of either EDR or motor voter will increase turnout, they will have different effects on election outcomes. Individuals who take advantage of motor voter by registering to vote when they renew their driver's license or file paperwork in another government office are likely to show up on the registration lists that the parties use in mobilizing voters, even if they lack a track record of voting in previous elections. By contrast, those who register at the polls on the day of the election are unlikely to be subject to mobilization efforts from the parties (Hanmer 2009). Research has documented that mobilization efforts by parties, candidates, and other political actors have large impacts on turnout (Rosenstone and Hansen 1993[2003]). It seems plausible that those who were brought to the polls without a great deal of exposure to partisan messages may behave much like the set of "peripheral" voters that DeNardo argues are "just as fickle inside the voting booth as they are about getting to it" (1980, 418).

¹⁰ As with the EDR bill introduced in 2009, the National Voter Registration Act of 1993, which authorized "motor voter" was cosponsored by 111 members of Congress, all of them Democrats.

More importantly, our theory centers on the demographic composition of those induced to vote by easing registration requirements. In the past, political scientists and other observers have simply assumed that because the same demographic characteristics that are associated with nonvoting also predict voting for Democratic candidates, eliminating restrictions on the franchise would naturally advantage the Democrats (Franklin and Grier 1997; Knack and White 1998, 2000; Wolfinger and Rosenstone 1980). But that approach assumes that the people most likely to be mobilized by a registration reform are drawn randomly from the pool of nonvoters.

People registered via motor voter are probably fairly representative of the nonvoting population, which skews them toward the Democrats. In contrast, nonvoters who are most easily persuaded to turn out to vote by EDR share more in common with those who vote Republican than they do with those who vote Democratic. A person with a higher probability of voting to begin with probably possesses many of the same demographic characteristics as regular voters – higher incomes, more education, more likely to be married, more likely to belong to church, and more likely to own a home – all traits that skew Republican. This is the logic in Berinsky’s (2005) ironic argument that electoral reforms further exacerbate socioeconomic biases in the composition of the electorate.

Perhaps universal turnout would help Democrats by mobilizing even the most unlikely of voters (Calvert and Gilchrist 1993; Lacy and Burden 1999; Citrin, Schickler, and Sides 2003). But we have already shown that EDR increases turnout by only a few percentage points. In mobilizing the most likely voters among the nonvoters, EDR is apt to draw Republicans disproportionately to the polls precisely because the factors that make them “near voters” also push them toward Republican candidates. In related work, Rigby and Springer (forthcoming) find that EDR does not reduce the income bias in turnout in midterm elections and does so only in presidential elections in states where the registration bias was previously large. So there is already mounting evidence that registration

reforms do not always disproportionately mobilize people on the lower rungs of the socioeconomic ladder.

MUNICIPAL-LEVEL ANALYSIS OF PARTISAN VOTE SHARE

In testing this hypothesis we shift the unit of analysis away from counties and instead employ a municipal-level dataset that includes observations on all 1,864 municipalities in the state. Democratic vote share is readily available at the ward level and aggregated up to the municipal level. This variable was collected from various editions of the *Wisconsin Blue Book* series. At this level of aggregation our treatment variable is simply a dichotomous indicator for whether the municipality had voter registration in a given year.¹¹ The only other control available to us at this level is the total population of the municipality, estimated for each year by the Wisconsin Department of Administration.

We estimate a difference-in-difference model to examine the change in the Democratic share of the two-party vote for president from 1972 to 1976 that can be attributed to the introduction of EDR. Contrary to the conventional wisdom surrounding the partisan effects of increases in voter turnout, the introduction of EDR appears to have actually *decreased* the Democratic share of the vote for president in 1976. As the results displayed in Table 2 show, Democratic vote share dropped by about four percentage points, on average, when EDR was imposed on municipalities that already had a system of voter registration in place.

One methodological concern is that there might be something distinctive about the municipalities that began to register voters without being forced to do so by virtue of population size (see also Burden and Neiheisel 2010). Our basic conclusions, though, obtain even when omitting those municipalities that voluntarily began to register voters from the analysis. Indeed, the size of the effect increases from four percentage points to six percentage points, as shown in the

¹¹ For comparability with the turnout analysis, we also estimated the models below at the county level and found similar results. See Table A in the Appendix for more details.

second column in Table 2. This result is not trivial. Because Jimmy Carter won Wisconsin by less than two points, EDR would have had a large enough effect to throw the state's electoral votes to incumbent Gerald Ford.

[Insert Table 2 about here]

The model also finds no support for the anti-incumbent hypothesis. Because the incumbent president was a Republican in 1972 and 1976, the coefficient on the EDR variable should be positive if it helped the “out” party.¹² Indeed, if the expected anti-incumbent effect and the expected pro-Democratic effect both held, we might observe a net coefficient that is near zero. Instead, the effect is negative, indicating that EDR worked to the advantage of Republicans, who also happened to be in office. This makes the surprising partisan effects of EDR even more convincing.

These data also allow us to test another hypothesis regarding the partisan effects of EDR. In his study of turnout and the vote, DeNardo (1980) found that increases in turnout have “two effects.” While high levels of voter turnout should help Democratic candidates on average, this effect is conditioned by the partisan composition of the electorate, owing to the presence of greater numbers of peripheral voters with more loosely held partisan ties. We should therefore expect to see higher levels of turnout in heavily Democratic areas leading to increases in the Republican share of the two-party vote. Even though we do not measure turnout at the municipal level *per se*, we have already demonstrated that the introduction of EDR precipitated a small increase in voter turnout.

Following DeNardo's reasoning, then, we should expect to a negative coefficient on an interaction term involving the partisan composition of the municipality and our indicator for whether EDR was implemented in 1976. Table 3 displays estimates from a series of OLS models predicting the Democratic share of the two-party vote in 1976. The first column in Table 3 displays estimates from a model that includes an indicator for whether the municipality had EDR, logged

¹² There was not a gubernatorial election in Wisconsin in 1972 or 1976. In 1976 there was a U.S. Senate race featuring a Democratic incumbent, William Proxmire, who easily won reelection.

municipal population, and the Democratic share of the two-party vote in the previous presidential election (our “base” model). Roughly consistent with the above results in Table 2 (the more convincing “difference-in-difference” model), the estimates displayed in the first column of Table 3 provide additional evidence to the effect that the introduction of EDR drove down Democratic vote share, if only slightly.

The second column in Table 3 displays estimates from a model that includes an interaction term that allows us to examine DeNardo’s “two effects” hypothesis. Although the interaction term in this model does not reach conventional levels of statistical significance ($p = 0.09$), the coefficient is negatively signed, indicating that as the Democratic share of the two-party vote for president in 1972 (our proxy for the partisan composition of the municipality) increased, the negative effect that EDR exerted on Carter’s vote share in 1976 declined. Stated another way, the decrease in the Democratic share of the two party vote wrought by the introduction of EDR is moderated by the partisan composition of the municipality, but in the opposite way that DeNardo’s “two effects” hypothesis suggests.

[Insert Table 3 about here]

As an additional robustness check we reestimated our interactive model after dropping the municipalities that voluntarily adopted voter registration requirements from the dataset. Estimates from this model are shown in the third column of Table 3. As with the base and interactive models described above, the main effect of EDR on the Democratic share of the two party vote for president in 1976 is negative. The interaction term involving the partisan composition of the municipality and our indicator for whether EDR had been introduced in the municipality is positive and, this time, statistically significant at conventional levels.¹³ Once again, our results contradict the

¹³ The results displayed in Tables 2 and 3 are essentially unchanged even when taking into account any potential nonlinearities in the data. Specifically, we estimated semiparametric versions of each model using generalized additive

findings of DeNardo (1980) and others (Hansford and Gomez 2010) who have argued that the influx of peripheral voters with weaker partisan attachments that accompany increases in voter turnout help to drive down the vote share for Democrats in what may otherwise be Democratic strongholds. The “two effects” hypothesis may hold with regard to changes in voter turnout due to campaign mobilization or other election laws. The evidence that we present here, though, suggests that the increase in voter turnout that accompanied the introduction of EDR did not follow the same pattern found in previous studies. Rather, EDR seems to have precisely the opposite effect, driving down the Democratic share of the two party vote for president on average, but to a lesser extent in heavily Democratic municipalities.

We find this result to be entirely sensible given our theory of how registration reforms affect potential voters. First, we contend that higher socioeconomic status individuals are more likely to take advantage of EDR and that those same individuals are more prone to vote Republican. Second, in highly Republican communities, this relationship will be enhanced as each new voter is more likely to be Republican as well. This produces the ironic conclusion that Democrats only benefit from EDR in jurisdictions where they are already winning rather than in communities where they hope to overcome a deficit.

DISCUSSION AND CONCLUSION

With this study we provide the clearest test yet of the effect of EDR on voter turnout and, to the best of our knowledge, the first exploration of EDR’s impact on Democratic vote share. Drawing on a powerful natural experiment, we provide the most valid estimate of EDR’s causal effect on turnout and the first demonstration of how EDR affects the parties’ vote shares. Most studies have found that EDR increases voter turnout anywhere from three to six percentage points with more recent work arguing for no effect. While we have shown that EDR did increase voter

models (GAMs). Although a semiparametric approach offers a slightly better fit to the data, the substantive conclusions drawn from the models are exactly the same.

turnout upon its introduction in Wisconsin, the size of the effect is quite modest when compared to most existing estimates. What is more, if Hanmer (2009) is correct in his observation that EDR produced the largest gains in voter turnout in states like Minnesota and Wisconsin where demand for participation is thought to be quite high, the prospect that the adoption of EDR in additional states will increase voter turnout, as a number of current proposals contend, seems unlikely. At the same time, a highly participatory state such as Wisconsin may be a difficult setting in which to increase turnout further, suggesting that EDR's turnout effects could be larger in states with lower levels of turnout.

We also argue and find that the introduction of EDR actually decreased the Democratic share of the two party vote for president by several percentage points. Even though increases in voter turnout, such as those associated with removing restrictions on the franchise, may indeed aid Democratic candidates *on average*, it would be a mistake to believe that higher levels of turnout always favor the Democrats. Previous studies have assumed that all increases in turnout, no matter what the cause, have the same effect on the vote. As Hanmer (2009) points out, different reforms influence turnout in different ways. Since the parties rely on registration lists in organizing their efforts to mobilize voters, those who take advantage of EDR are far less likely to be exposed to partisan messages prior to heading to the polls. Persons brought to the voting booth solely by virtue of the presence of EDR therefore may be "peripheral" voters who lack the partisan attachments of more regular participants (DeNardo 1980). At the same time here we argue that those who are brought to the polls with the elimination of the closing date are likely to be better educated and wealthier than chronic nonparticipants, and therefore look much more Republican on average than many previous observers have suspected. This contrasts with reforms such as motor voter, which are likely to stimulate a more representative set of nonvoters and put them on a registration list used by Democratic candidates to mobilize supporters.

Although we are unable to test all of these conjectures with the data employed in this study, it seems clear that, whatever the mechanism, the introduction of EDR in Wisconsin reduced the Democratic share of the vote for president. A growing number of scholars have begun to note that electoral reforms can have “perverse” consequences (Berinsky 2005). We echo such conclusions in this study, and submit that those who push for the adoption of EDR and other electoral reforms with hopes of increasing participation among likely Democratic supporters may be surprised at the true effects of such policies as they are put into practice.

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Table 1
The Effect of Election Day Registration on Voter Turnout, 1972-1980:
Fixed and Random Effects Models

Explanatory Variable	Fixed Effects Models†		Random Effects Models‡	
	1	2	3	4
Proportion of County Covered by EDR [^]	0.033** (0.011)	0.032** (0.010)	0.033** (0.008)	0.033** (0.008)
Proportion African American	0.476 (0.447)	0.476 (0.445)	0.034 (0.163)	0.034 (0.164)
Proportion with a High School Education	0.199 (0.446)	0.198 (0.446)	0.453** (0.142)	0.452** (0.142)
Median Family Income (Logged)	-0.242 (0.145)	-0.243 (0.145)	0.002 (0.043)	0.002 (0.043)
Population (Logged)	0.0007 (0.0569)	-0.0002 (0.0569)	-0.029** (0.007)	-0.029** (0.007)
Constant	2.816 (1.517)	2.826 (1.517)	0.800* (0.321)	0.802* (0.320)
Within R ²	0.95	0.95	0.95	0.95
Between R ²	0.10	0.11	0.40	0.40
Overall R ²	0.81	0.81	0.89	0.89
N	360	360	360	360

* $p < .05$; ** $p < .01$.

Standard errors clustered by county.

†Year and county fixed effects are not reported.

‡Year fixed effects not reported.

[^] Models 1 and 3 are based on total population; Models 2 and 4 use estimates of voting age population.

Table 2
The Effect of EDR on the Democratic Share of the Two-Party Vote, 1972 to 1976:
Difference-in-Difference Models

Explanatory Variable	Base Comparison	Without Voluntary Registration Municipalities
EDR	-0.041** (0.004)	-0.064** (0.007)
Population (Logged)	-0.036 (0.035)	-0.059** (0.019)
Constant	0.114** (0.002)	0.115** (0.002)
Adjusted R ²	0.042	0.055
N	1,864	1,734

* $p < .05$; ** $p < .01$. Entries are OLS estimates. Standard errors are clustered by municipality. All variables are measured in changes (Δ).

Table 3
The Effect of EDR on the Democratic Share of the Two-Party Vote in 1976

Explanatory Variable	Base Model	With Interaction	Without Voluntary Registration Municipalities
EDR	-0.011* (0.005)	-0.042* (0.019)	-0.060** (0.023)
Population (Logged)	-0.021** (0.002)	-0.022** (0.002)	-0.024** (0.003)
Democratic Vote Share (1972)	0.799** (0.014)	0.791** (0.015)	0.789** (0.015)
EDR × Democratic Vote Share	---	0.082† (0.048)	0.163** (0.053)
Constant	0.337** (0.016)	0.343** (0.017)	0.361** (0.020)
Adjusted R ²	0.714	0.714	0.711
N	1,864	1,864	1,734

† < .10; * $p < .05$; ** $p < .01$. Entries are OLS estimates. Standard errors are clustered at the municipal level.

APPENDIX

Table A
The Effect of Election Day Registration on Democratic Vote Share, 1972-1980:
Fixed Effects Models

Explanatory Variable	1	2	3	4
Proportion of County Covered by EDR [^]	-0.048** (0.013)	-0.048** (0.013)	-0.066** (0.016)	-0.066** (0.016)
Proportion African American	0.672 (0.425)	0.671 (0.425)	0.695 (0.421)	0.685 (0.419)
Proportion with a High School Education	0.130 (0.257)	0.129 (0.257)	-0.242 (0.309)	-0.240 (0.309)
Median Family Income (Logged)	-0.086 (0.079)	-0.086 (0.079)	-0.090 (0.106)	-0.090 (0.106)
Population (Logged)	-0.011 (0.064)	-0.011 (0.064)	-0.083 (0.071)	-0.081 (0.071)
Constant	1.287 (0.998)	1.283 (0.997)	2.170 (1.121)	2.150 (1.121)
Within R ²	0.80	0.80	0.58	0.58
Between R ²	0.05	0.05	0.03	0.03
Overall R ²	0.25	0.25	0.09	0.09
<i>N</i>	216	216	360	360

* $p < .05$; ** $p < .01$.

Standard errors are clustered by county.

Year and county fixed effects are not reported.

[^] Models 1 and 3 are based on total population; Models 2 and 4 use estimates of voting age population.