

NBER WORKING PAPER SERIES

VOTING RULES, TURNOUT, AND ECONOMIC POLICIES

Enrico Cantoni  
Vincent Pons  
Jérôme Schäfer

Working Paper 32941  
<http://www.nber.org/papers/w32941>

NATIONAL BUREAU OF ECONOMIC RESEARCH  
1050 Massachusetts Avenue  
Cambridge, MA 02138  
September 2024

I am the cofounder of Explain, a company in Europe. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2024 by Enrico Cantoni, Vincent Pons, and Jérôme Schäfer. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Voting Rules, Turnout, and Economic Policies  
Enrico Cantoni, Vincent Pons, and Jérôme Schäfer  
NBER Working Paper No. 32941  
September 2024  
JEL No. D72, D73, J15, P00

### **ABSTRACT**

In recent years, voter ID laws and convenience voting have generated heated partisan debates. To shed light on these policy issues, we survey the recent evidence on the institutional determinants and effects of voter turnout and broaden the perspective beyond the most debated rules. We begin by discussing the importance of electoral participation both for its consequences on policy choices and for democratic legitimacy. Building on a simple cost-benefit model of voting, we then review (quasi)-experimental work studying the effects of voting procedures and of other election rules. Voting procedures (which determine how people vote) primarily affect the cost of participation. The obstacles they create matter more when they occur ahead of the election, when the stakes are not salient (e.g., voter registration requirements), and less when parties mobilize voters against them and when alternative ways to vote exist (e.g., when people can choose whether to vote by mail or in person). Election rules upstream from the election (such as campaign finance laws) and downstream (such as the use of proportional representation vs. plurality rule to map vote choices into a set of election winners) mostly operate through benefits, for instance by affecting electoral competitiveness and the number of candidates. We conclude by highlighting questions for future research.

Enrico Cantoni  
University of Bologna  
Department of Economics  
Piazza Scaravilli 2, Bologna  
Italy  
enrico.cantoni@unibo.it

Jérôme Schäfer  
University of Munich  
jerome.schaefer@gsi.uni-muenchen.de

Vincent Pons  
Harvard Business School  
Morgan Hall 289  
Soldiers Field  
Boston, MA 02163  
and CEPR  
and also NBER  
vpons@hbs.edu

# Voting Rules, Turnout, and Economic Policies

Enrico Cantoni<sup>1</sup>, Vincent Pons<sup>2</sup>, Jerome Schafer<sup>3</sup>

August 2024

**Abstract:** In recent years, voter ID laws and convenience voting have generated heated partisan debates. To shed light on these policy issues, we survey the recent evidence on the institutional determinants and effects of voter turnout and broaden the perspective beyond the most debated rules. We begin by discussing the importance of electoral participation both for its consequences on policy choices and for democratic legitimacy. Building on a simple cost-benefit model of voting, we then review (quasi)-experimental work studying the effects of voting procedures and of other election rules. Voting procedures (which determine how people vote) primarily affect the *cost* of participation. The obstacles they create matter more when they occur ahead of the election, when the stakes are not salient (e.g., voter registration requirements), and less when parties mobilize voters against them and when alternative ways to vote exist (e.g., when people can choose whether to vote by mail or in person). Election rules upstream from the election (such as campaign finance laws) and downstream (such as the use of proportional representation vs. plurality rule to map vote choices into a set of election winners) mostly operate through *benefits*, for instance by affecting electoral competitiveness and the number of candidates. We conclude by highlighting questions for future research.

*Keywords:* Voter turnout, Political institutions, Causal inference

*JEL codes:* D72, D73, J15, P00

## Introduction

In recent years, laws mandating voters to show identification at the polls and suspected of disenfranchising some groups of voting-eligible citizens have generated heated debates, particularly so in the U.S. (e.g., Stewart et al. 2016), but also in other countries such as the U.K (Alonso-Curbelo 2023). Voting by mail, early voting, and other forms of convenience voting have also spurred controversy, with advocates citing evidence that these rules increase political participation (e.g., Gerber et al. 2013) and opponents raising concerns that convenience voting may be more susceptible

---

<sup>1</sup> University of Bologna, [enrico.cantoni@unibo.it](mailto:enrico.cantoni@unibo.it)

<sup>2</sup> Harvard Business School, [vpons@hbs.edu](mailto:vpons@hbs.edu)

<sup>3</sup> LMU Munich, [jerome.schaefer@lmu.de](mailto:jerome.schaefer@lmu.de)

to fraud than voting in-person on Election Day (Gronke et al. 2008). As Figure 1 illustrates, U.S. states have recently enacted many changes to voting rules: while 12 states implemented a strict voter ID law in the 2022 general election compared to no state in 2000, the number of states allowing early voting and no-excuse absentee voting has doubled over the same period, and an increasing number of states have facilitated automatic and same-day voter registration. Similar reforms have been considered and often caused controversy in other countries as well, such as facilitating voter registration for internal migrants in India (Gaikwad & Nellis 2021), reintroducing compulsory voting

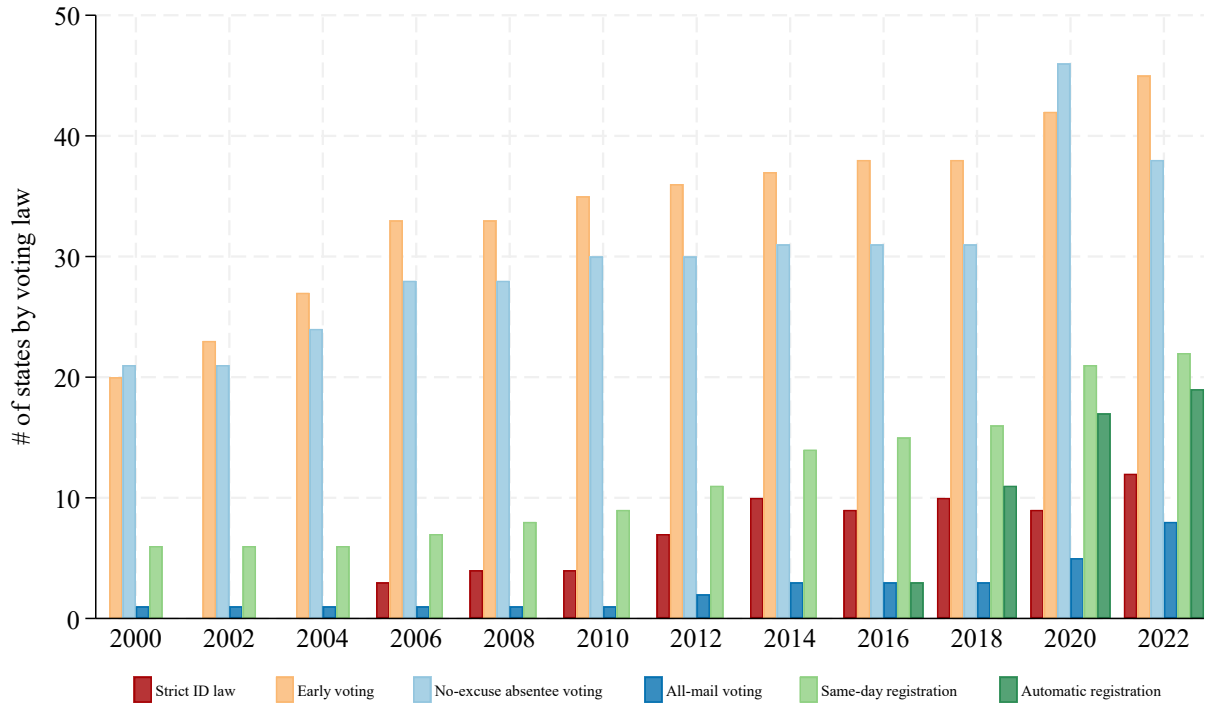


Figure 1: Evolution of Voting Laws in U.S. States

*Notes:* The figure plots counts of states (including the District of Columbia) implementing a given voting law in each general election, 2000-2022. The figure is based on data from the National Conference of State Legislatures and on individual states' statutes. The voting laws are defined as follows. Strict ID laws require voters to show an accepted form of identification before casting a ballot; voters without proper ID can cast a provisional ballot, which will be counted only if the voter presents valid ID in the next few days (see <https://www.ncsl.org/elections-and-campaigns/voter-id> for current rules. Accessed: August 7, 2024). Early in-person voting means that voters can cast a ballot in person during a designated time before Election Day (<https://www.ncsl.org/elections-and-campaigns/early-in-person-voting>. Accessed: August 7, 2024). States with no-excuse absentee voting mail an absentee ballot to all registered voters requesting one, without voters having to justify their request (<https://www.ncsl.org/elections-and-campaigns/table-1-states-with-no-excuse-absentee-voting>. Accessed: August 7, 2024). All-mail voting means a state conducts all elections by mail, mailing a ballot to all registered voters (<https://www.ncsl.org/elections-and-campaigns/table-18-states-with-all-mail-elections>. Accessed: August 7, 2024). Under same-day registration, voters can register to the voter rolls at the polls on Election Day (<https://www.ncsl.org/elections-and-campaigns/same-day-voter-registration>. Accessed: August 7, 2024). Finally, with automatic voter registration, eligible individuals are automatically registered to vote upon interacting with certain government agencies, like a state department of motor vehicles (<https://www.ncsl.org/elections-and-campaigns/automatic-voter-registration>. Accessed: August 7, 2024).

in Chile (Briebe & Bunker 2019), or expanding voting rights for immigrants in France (Delemotte 2007) and Sweden (Aggeborn et al. 2023). Beyond voting procedures, these debates also encompass other election rules, like campaign finance and redistricting, which may affect both candidates' electoral prospects and voter participation. Issues related to voting rules have drawn the attention of scholars, policymakers, and the broader public. Ahead of the 2022 midterms, a majority of both Democratic and Republican registered voters indicated that "policies about how elections and voting work in the country [were] very important" to their vote.<sup>4</sup> As a recent report by the Council of Economic Advisers emphasizes, and as we hope this paper will make clear, protecting voting rights and encouraging voter participation has important ramifications not just for levels of turnout but also for economic outcomes.<sup>5</sup>

Debates on voting procedures and election rules tend to be very partisan, with each side supporting and implementing the rules they think will advantage them and opposing those that would advantage competing parties. For example, in the U.S., strict ID laws have mostly been adopted by Republican states (Hicks et al. 2015), while early voting is more common in Democratic states (Biggers & Hanmer 2015). In a context of increasing polarization (Boxell et al. 2024), the very partisan nature of the discussion on voting rules creates two risks. First, misleading arguments regarding the rules may be put forward. Second, the policy debate focuses on a specific set of rules, possibly ignoring others that may be more impactful on voter turnout. For instance, rules common to all U.S. states and which have been stable for a very long time, like plurality voting and holding general elections on a weekday, are considered self-evident by most Americans and receive much less attention than rules varying across U.S. states, even though cross-country correlational evidence suggests they may matter as much (Blais 2006). In fact, tracking millions of American voters relocating over time to decompose cross-state and cross-county variation in political behavior between their contextual and individual drivers, Cantoni & Pons (2022) provide evidence that low minority turnout in the U.S. likely results from rules that do not vary much across states. Indeed, low average voter turnout among non-Whites seems to be driven by a combination of individual factors and of contextual factors that are present in all states (such as racial disparities in voting wait times; e.g., Chen et al. 2019), more than by exclusionary voting laws and by other contextual factors characterizing only certain states.

Calling for sound scientific evidence, the current policy debates provide a unique opportunity to clarify what we know about the effects of voting rules and to broaden the perspective beyond the rules that receive most scholarly and media attention (Kaplan 2019). To this end, we can take

---

<sup>4</sup> <https://www.pewresearch.org/short-reads/2022/11/03/key-facts-about-u-s-voter-priorities-ahead-of-the-2022-midterm-elections/>. Accessed: May 3, 2024.

<sup>5</sup> <https://www.whitehouse.gov/cea/written-materials/2021/08/16/the-importance-of-protecting-voting-rights-for-voter-turnout-and-economic-well-being/>. Accessed: March 18, 2024.

advantage of the rich, well-identified empirical literature that, in the past two decades, has studied the institutional determinants of voter turnout and its downstream effects on social and economic outcomes. For a while, the method of choice to measure effects of electoral rules was cross-country (Powell 1986, Jackman 1987) or cross-state regressions (e.g., Besley & Case 2003), sometimes controlling for country/state and year fixed-effects. However, analyses of this kind risk picking up correlations that do not reflect the causal impact of voting rules on election results: for instance, a state may change its voting rules due to factors such as changes in voters' policy preferences that directly affect electoral outcomes. Over the last twenty years, like in other subfields of economics and political science, this line of inquiry has been transformed by the "credibility revolution" (Angrist & Pischke 2010), with attention to research designs providing credible causal identification, like differences-in-differences carefully examining pre-trends and accounting for heterogeneous effects across units and over time (e.g., De Chaisemartin & d'Haultfoeuille 2020, Chiu et al. 2023), Regression Discontinuity Designs (RDDs), as well as field experiments. Recently, the field has also exploited the availability of better data, including large-scale individual-level data on voter registration, turnout, and party affiliation.<sup>6</sup>

In this paper, we survey the literature studying the consequences of voter turnout as well as turnout's institutional determinants, including voting procedures and election rules. We focus on empirical studies using research designs that can credibly estimate causal effects.<sup>7</sup>

First, we document the decline in voter turnout in many countries since the 1980s and discuss the importance of strong and equal political participation for citizens' sense of national belonging, for the legitimacy of elected officials, and for the representativeness of electoral outcomes and future policy choices. While there is ample evidence that voting law reforms like the 1965 Voting Rights Act (VRA) and the introduction of women's suffrage, both of which enfranchised large swathes of the population

---

<sup>6</sup> In the U.S., voter file data are made available by state authorities. Companies like Catalist and TargetSmart systematically collect voter file data from all states and merge them with other individual-level "commercial" data coming from retailers and direct marketing companies (Cantoni & Pons 2022).

<sup>7</sup> Our focus on voting rules departs from previous review papers such as Blais (2006), which provides a broad survey of the possible causes of cross-country variation in voter turnout, as well as Green et al. (2013), which discusses the field experimental literature assessing the effectiveness of campaign tactics and testing psychological theories of voting behavior. Moreover, we do not attempt to analyze the voluminous literature on socio-demographic correlates of voter turnout or differences between electoral participation in national and subnational elections and across geographic areas (Geys 2006, Smets & Van Ham 2013, Cancela & Geys 2016). Finally, we expand on prior reviews of the effects of convenience voting (Berinsky 2005, Gronke et al. 2008, Menger & Stein 2020) by studying convenience voting laws together with other types of rules possibly affecting turnout, including compulsory voting, as well as rules like voter registration requirements and voter ID laws that generate costs for citizens (Highton 2017). Moreover, we examine outcomes beyond voter turnout and evidence from countries other than the U.S.

and thus dramatically changed the composition of the electorate, had important consequences for policymaking, we know little about the policy impact of smaller reforms.

Second, we provide a simple theoretical framework based on the classic cost-benefit model of voting to highlight two ways in which voting rules may affect participation: namely, by altering either the benefits or the costs of casting a ballot. Voters' belief that their vote matters and social image considerations explain why people vote despite the minuscule probability that their vote will be pivotal. However, these benefits are modest, so any administrative obstacle to voting can disenfranchise many voters.

Third, we use this framework to analyze which voting procedures matter most for voter turnout while also discussing the different types of empirical strategies used in the literature to estimate these effects. Voter registration barriers, which occur before the election, when the stakes are not salient, have particularly large effects. By contrast, the act of voting itself is generally less costly, particularly when people can choose between alternative ways to vote. Convenience voting laws still require voters to go through some hurdle, perhaps explaining why they increase participation less than same-day registration or automatic registration. We further discuss the (exaggerated) tension between combating voter fraud and facilitating voter participation and review the cross-country evidence on the large effects of compulsory voting.

Fourth, we examine the turnout effect of rules that, before the election, govern redistricting, primaries, candidacy requirements, and campaigns, and of rules that determine how votes cast map into a set of election winners (e.g., through plurality voting versus proportional representation). These rules can dramatically affect the number and types of candidates as well as electoral competitiveness and, as a result, they can be just as crucial for political participation as voting procedures. However, the amount of well-identified evidence on the effect of these laws on turnout remains limited.

Finally, we discuss avenues for future work. The existing literature has paid little attention to election rules that have not changed much over time and that tend to vary at the national level – such as holding elections on Tuesdays in the U.S. Future research should also focus more on how voting procedures are implemented in practice and on the effects of election administration quality on voter turnout, and consider the cost-effectiveness of specific proposals to reform voting procedures. Another gap in the literature is that we know relatively little about how being an active voter affects other individual outcomes, such as accepting election outcomes or seeking political information. More broadly, future work should address the puzzle of why voter turnout has declined in many

countries in recent years even though barriers to voting have generally been coming down. One possible explanation is a weakening sense of civic duty, calling for more systematic work on the reasons explaining the erosion of the civic norm and on possible remedies.

### **1. The Consequences of Voter Turnout**

Is the ongoing public debate about voting rules and electoral participation just another issue that parties use to mobilize their base? We do not believe so: As Figure 2 shows, voter turnout has either been declining or stagnating in many countries around the globe. In Italy and Germany, for example, voter turnout in national elections used to be above 90% in the 1970s and has steadily declined to less than 80% today. We also observe a negative trend in the U.K. and France, where average turnout has declined from around 80% until the 1970s to less than 70% today. The U.S. is an exception: while American levels of turnout are lower than in other advanced democracies, they have not declined and, if anything, they have slightly increased in recent elections – possibly partly due to rising polarization and animosity between Democrats and Republicans, and partly to the changes in voting rules shown in Figure 1. The comparatively lower levels of turnout in the U.S. are linked with historically higher institutional restrictions on voting (Powell 1986, Taylor et al. 2014).

The low and, in most countries, declining electoral participation is worrisome, since strong participation is desirable from many points of view.

First, as a way for citizens to reaffirm their identity as members of the national community, voting can foster a national sense of belonging. For instance, Owens (2014) finds suggestive evidence that voting promotes the social re-integration of ex-felons, while Hainmueller et al. (2017) show that immigrants who are granted citizenship, thereby receiving an opportunity to become more politically engaged and to voice their preferences through the democratic process, feel stronger attachment to their country of adoption than to their country of origin. Voting can affect other important political attitudes too: voters on the losing side who participated in an election may avoid the negative feeling of regret that can otherwise arise among abstainers (Ferejohn & Fiorina 1974), and they may be more likely to accept electoral outcomes (Nadeau & Blais 1993). Following the Brexit referendum, for example, many non-voters indicated that they would vote remain if they were given another chance to vote, and the proportion of survey respondents saying that it is everyone's duty to vote in a general election increased significantly (Drinkwater & Jennings 2022). Furthermore, high turnout may increase the legitimacy of elected officials (Putnam et al. 1994, Norris 2011). Conversely, low turnout in some EU referendums has raised the question of whether important decisions such as supranational transfers of authority should rather be taken by parliamentary elites (Hobolt 2006). Overall, there is suggestive evidence that enhanced participation may improve satisfaction with

democracy. For example, Norris (2011) notes that the global decline in turnout correlates with lower satisfaction with democracy, and Kostelka & Blais (2018) use panel survey data from five countries to document that higher participation increases satisfaction with democracy across all voters — even those supporting losing parties — if there is a clear link between election outcomes and government composition. On the other hand, citizens who engage with the electoral process might also become more critical of it, now that they are invested in it or when they observe failures. For example, using panel data from Uganda, Conroy-Krutz & Kerr (2015) find that active voters who supported losing

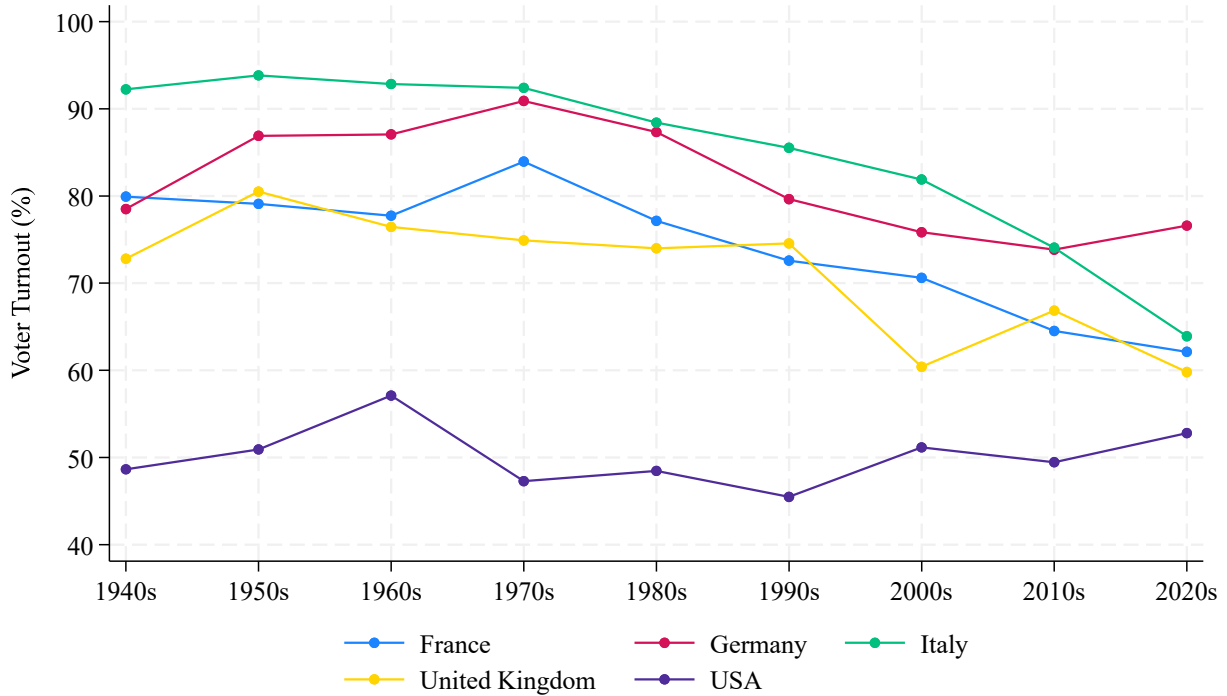


Figure 2: Evolution of Average Voter Turnout in National Elections in Five Democracies

*Notes:* the figure plots average voter turnout in general elections by decade for select countries, 1940—2023. Underlying voter turnout data for France cover both first and second rounds of all legislative and presidential elections, starting with the June 1946 legislative election. These data come from the *Centre de données socio-politiques* at Sciences Po, from the Ministry of the Interior (for the 2024 legislative elections; [https://www.resultats-elections.interieur.gouv.fr/legislatives2024/ensemble\\_geographique/index.html](https://www.resultats-elections.interieur.gouv.fr/legislatives2024/ensemble_geographique/index.html). Accessed: July 15, 2024), and, for a few earlier elections, from the International Institute for Democracy and Electoral Assistance (International IDEA; [https://www.idea.int/data-tools/data/question-country?question\\_id=9188&country=76&database\\_theme=293](https://www.idea.int/data-tools/data/question-country?question_id=9188&country=76&database_theme=293). Accessed: August 8, 2024). Voter turnout statistics in German legislative elections come from the German Federal Statistical Office, Election Statistics (<https://www.gut-leben-in-deutschland.de/indicators/democracy-and-freedom/voter-turnout/>. Accessed: August 13, 2024; [https://www.destatis.de/EN/Press/2022/01/PE22\\_036\\_14.html](https://www.destatis.de/EN/Press/2022/01/PE22_036_14.html). Accessed: August 13, 2024). Data on legislative election turnout in Italy come from the Ministry of Interior – Central Directorate for Electoral Services (<https://elezionistorico.interno.gov.it/index.php?tpel=C>. Accessed: August 13, 2024). Data for U.K. general elections come from the U.K. Parliament, House of Commons Library (<https://commonslibrary.parliament.uk/research-briefings/cbp-7529/>. Accessed: July 9, 2024; <https://researchbriefings.files.parliament.uk/documents/CBP-10009/CBP-10009.pdf>. Accessed: August 13, 2024). For the U.S., we use Michael McDonald’s voting-eligible population turnout rates in both midterm and presidential elections (McDonald 2023).

parties became more dissatisfied because participating in the election made them more aware of anti-opposition abuses that occurred during the campaign. Similarly, Marx et al. (2021) find that text messages sent by Kenya’s electoral commission increased turnout but decreased trust in electoral institutions and satisfaction with the functioning of democracy due to failures of the systems put in place to verify voters’ identity and to tally the votes.

Second, and most importantly, strong participation is a crucial condition for representative policies. Comprehensive evidence shows that the lower voter turnout is, the more unequal it is (e.g., Rosenstone & Hansen 1993, Beuve et al. 2022). For example, Hajnal et al. (2022) analyze the consequences of holding California local elections concurrently with national elections. They find that when local elections are held on-cycle, voter turnout is on average twice as large as when local elections are held off-cycle. Moreover, on-cycle local elections increase the share of Hispanics in the voting electorate, with similar effects on other traditionally underrepresented groups of voters, including voters under 40 and voters with less than \$30k wealth. Such differences in participation levels across sociodemographic and ethnic groups or across geographical areas can have wide-ranging consequences: they can affect vote shares, the identity of the election winner and/or the composition of the legislature (e.g., Henderson & Brooks 2016, Kaplan & Yuan 2020), and, ultimately, implemented policies as well as the social and economic outcomes affected by these policies (e.g., Lijphart 1997, Acemoglu & Robinson 2000, Cascio & Washington 2014).

The extent to which changes in voter turnout affect electoral, social, and economic outcomes depends first on how much turnout changes overall and on the extent to which the partisan preferences of the most affected groups differ from the preferences of other citizens. Grimmer & Hersh (2024) argue that recent changes in U.S. voting rules likely yielded only modest changes in the partisan make-up of the voting electorate. In fact, unlike historical reforms that enfranchised large parts of the population, contemporary election laws often affect relatively narrow shares of the electorate, translating into small effects on voter turnout and on two-party vote shares. However, there are also instances of recent reforms that have been consequential for election results. For example, Kim (2023) leverages voter-file records of more than 1.5 million unique voters in Orange County, California, to show that automatic registration increased turnout by 5.8 p.p., on average, and that this effect was concentrated among Republicans and independents, with a null effect among Democrats. Comparing individuals who live close to either side of borders between counties that offer different access to early voting, Kaplan & Yuan (2020) find that early voting in Ohio had a large impact on Democratic vote shares, and they estimate that a national mandate of 23 days of early voting would have been sufficient to swing the 2016 election.<sup>8</sup>

---

<sup>8</sup> Recent changes in the partisan composition of the electorate make it more difficult to predict how changes in aggregate turnout affect election outcomes. In the U.S., while Republicans have long tended to vote at higher

The link between voter turnout and policy choices may then work through two different mechanisms. The first relates to politicians' representativeness: the characteristics (age, gender, ethnicity) and propositions of newly elected politicians are more likely to be aligned with the entire citizenry if participation is similar across groups, as predicted both by the median voter theorem – since politicians adjust their platforms and policies to the median voter's preferences (Downs 1957) – and citizen candidate models – where the candidate with the policies or characteristics preferred by most people is elected and the inclusion of new voters may tilt the scale towards a new type of candidates (Osborne & Slivinski 1996, Besley & Coate 1997). One key prediction of these models is that the increased participation of low-income voters in politics will translate into increased government spending on redistributive politics (Meltzer & Richard 1981). The second mechanism through which voter turnout may affect policy choices is accountability and retrospective voting: when governing, elected politicians may be more likely to prioritize the interests of groups with higher expected turnout in the next election.

In line with these predictions, there is ample evidence showing that large changes in the composition of the electorate have dramatic effects on policy outcomes. Although the literature documenting this relationship used to be mostly correlational (see Besley and Case 2003's survey of the earlier evidence), recent work has leveraged quasi-experimental methods to provide more convincing causal evidence. For example, a series of recent papers employ different sources of plausibly exogenous variation to document the important economic consequences of the 1965 VRA, which dismantled barriers – such as literacy tests – that had impeded Southern Blacks from registering to vote since the 1890s. Cascio & Washington (2014) use a triple-difference framework that compares counties with a larger vs. lower preexisting Black population (first difference), in areas covered by the VRA vs. not covered (second), before vs. after the VRA (third) to test the hypothesis that the VRA had a greater enfranchising effect in Southern counties with higher Black population shares. They show that the VRA increased Black voter registration and led Blacks to receive a larger share of public spending.<sup>9</sup> Bernini et al. (2023) implement a Geographic Regression Discontinuity design comparing counties across borders between covered and non-covered states, and they find that the economic consequences of the VRA were partly driven by increases in the number of Black elected officials. Finally, Aneja & Avenancio-León (2022) show that, through public employment and fiscal redistribution, the VRA reduced the Black-white earnings gap by around 6.5 percentage points

---

rates than Democrats (e.g., Shaw & Petrocik 2020), this difference has narrowed since the 2016 election as highly educated voters, who tend to vote more often, increasingly lean towards the Democratic party (Stephanopoulos 2024).

<sup>9</sup> The repeal of the VRA's federal pre-clearance requirement in *Shelby County v. Holder* (2013) reduced Black turnout relative to White turnout (Billings et al. 2024).

between 1950 and 1980. Their main design exploits both the temporal variation arising from the expansion of voting rights protection as well as within-state variation. In additional analyses, they observe effects of similar directions and magnitudes by examining a separate 1975 expansion of the VRA and limiting the analysis to one state (North Carolina) where approximately half of all counties were covered and the remainder were not covered. Collectively, these three papers provide a nice illustration of the different types of empirical designs and sources of variation that can be used to measure the impact of a given election reform.

Other studies document the economic consequences of historical and of more recent enfranchising laws. Miller (2008), for example, uses the staggered introduction of women's suffrage across the U.S. states from 1869 to 1920 to show that women's votes increased local public health spending, which in turn decreased child mortality. Similarly, studying the effects of pre-registration laws adopted following the 1993 National Voter Registration Act in a difference-in-differences framework, Bertocchi et al. (2020) show that higher turnout among the youth led to higher state-level education spending. This literature is not limited to the U.S. Leveraging the staggered adoption of compulsory voting in Australia from 1914 to 1941, Fowler (2013) shows that higher working-class turnout led to an increase in Labor Party vote shares and welfare state spending. Fujiwara (2015) studies the adoption of electronic voting as a substitute for paper ballots in Brazil. This technology primarily aimed to reduce the time and cost of vote counting, but it also included other features such as the use of candidates' photographs as visual aids. This reform changed the composition of the electorate by reducing the number of invalid ballots cast by less educated voters – rather than by increasing turnout –, leading to increased public health spending and to improved healthcare outcomes for mothers without primary schooling.

Yet, there is a dearth of well-identified papers showing how smaller changes in turnout (i.e., changes that are not driven by an expansion of the suffrage) and in the composition of the electorate affect policies. To the best of our knowledge, the only evidence in the existing literature comes from correlational work, such as Hill et al. (1995), who suggest that even modest changes in state-level turnout may affect policy outcomes by increasing the representation of low-income interests. However, studying this question in a causal framework will be challenging, as exogenous variations in turnout taking place at a disaggregated level (e.g., county-level) do not enable to study effects on policies implemented at a higher geographical level (e.g., state-level).<sup>10</sup> Furthermore, small changes in turnout might not provide sufficient statistical power to explore effects on policies. Finally, many

---

<sup>10</sup> A notable exception – albeit one looking at a major enfranchising reform – is Fujiwara (2015), since the rollout date of electronic voting in Brazil was determined at the city level based on a population threshold, while health outcomes are studied at the state level, by comparing outcomes trends of states that had a larger vs. smaller share of population living in early-treated cities.

changes in turnout result from changes in institutions or voting procedures that might directly impact the policies desired by voters and the orientation of their vote. For example, changes in campaign finance laws can affect the relative amount of campaign money spent by different candidates, resulting in direct effects on both turnout and vote choice (Besley & Case 2003). Examining the geographic expansion of coverage under the 1975 revision of the VRA, Ang (2019) shows that federal oversight over voter registration increased voter turnout by 4 to 8 percentage points while also reducing Democratic vote shares due to increased Republican support among whites opposed to government aid for minorities.

For all the benefits of strong turnout, one may worry that institutions facilitating participation bring less-informed voters to the ballot box (e.g., Jakee & Sun 2006, Selb & Lachat 2009). This could lead to noisier outcomes, in that election winners may be less representative of the population's true preferences (e.g., Hodler et al. 2015). Moreover, less-informed voters may weaken accountability, as whoever gets elected has fewer incentives to put effort if they expect next election's voters to have low information on their performance. In sum, while stronger participation implies more equal participation, which is desirable both from representation and accountability points of view, it may also imply noisier participation, which is undesirable from both points of view as well. Following this logic would bring the conclusion that it may sometimes be best for uninformed voters to stay out. In a common-value model, for example, the possibility to abstain can lead to better outcomes, because voters with a noisy signal will choose this option (e.g., Feddersen & Pesendorfer 1996, Battaglini et al. 2010). However, people's levels of political interest and knowledge are not necessarily fixed, because voters helped and encouraged to take part in elections may endogenously acquire information during the campaign and, later, pay more attention to election results (e.g., Braconnier et al. 2017), thus alleviating concerns about noisy voting. Shineman (2018) is a case in point: In a field experiment providing monetary incentives to participate in a city election, the author finds that subjects who were mobilized to vote also became more informed about the content of the election.

## **2. Benefits vs. Cost of Voting**

Having established the importance of the overall level of participation and of cross-group differences, we next review existing evidence on political institutions' effects on these outcomes. In the simple framework of Downs (1957) and Riker & Ordeshook (1968), an individual votes if the instrumental and expressive benefits of voting outweigh the "costs": if  $pB + D - C$  is higher than 0, where  $p$  denotes the probability of casting the pivotal ballot (i.e., a ballot that breaks an electoral tie),  $B$  is the instrumental benefit a voter derives from their favorite politician succeeding at the polls,  $D$  is the expressive benefit a voter receives from voting (independently of the outcome of the election), and  $C$

represents the voting cost (e.g., the time, information, and administrative processes required to vote). Accordingly, voting rules may affect participation by altering both the benefits and the costs of casting a ballot.

The paradox of voting is that, strictly speaking, instrumental benefits are close to null, given the minuscule probability of casting a pivotal ballot. Yet, note that  $p$  could either represent the actual probability of being pivotal or, more loosely, voters' belief that their vote matters, which may increase in closer elections (Duffy & Tavits 2008). In fact, Gerber et al. (2020) and Bursztyn et al. (2023) show that exogenous increases in voters' perception of election closeness increase participation. Moreover, if voters also have altruistic (in addition to self-interested) preferences, then the  $B$  term may grow as the size of the electorate increases, and the instrumental benefits of voting may not necessarily vanish when  $p$  becomes very small (Edlin et al. 2007).

Other approaches in the literature focus on the  $D$  term — which, in Riker & Ordeshook (1968), captures the sense of civic duty — to explain why, in the presence of positive voting costs, anyone would vote. Recent formal work has endogenized this term. For example, group rule utilitarian models by Coate & Conlin (2004) and Feddersen & Sandroni (2006) provide a powerful intuition: people vote because this behavior makes sense as a rule followed by other members of their group, and they receive a warm glow for doing so. In addition, voters may be motivated by social image considerations — that is, they may derive pride from telling others that they voted or feel shame from admitting that they did not vote, provided that lying is costly (DellaVigna et al. 2016).

### **3. The Effects of Voting Procedures**

Using this cost-benefit framework, we now review the literature on voting procedures, meaning all dimensions of election administration that directly determine how people vote.

By now, we have accumulated relatively good evidence on all the steps required to vote, from voter registration (e.g., Nickerson 2015, Braconnier et al. 2017) to rules regarding how people vote, such as voting in person on Election Day, early voting, absentee voting, and voting by mail (e.g., Kaplan & Yuan 2020, Thompson et al. 2020); distance to and waiting times at the polls (e.g., Chen et al. 2019, Cantoni 2020, Pettigrew 2021); the verification of voters' identity at the polls (e.g., Cantoni & Pons 2021b, Henninger et al. 2021); and even the actual technology used to vote at polling stations (Fujiwara 2015). Additional evidence shows that what matters for voter turnout are not just the formal rules but also how they are implemented (e.g., Atkeson et al. 2014, White et al. 2015). Using

the case of Iowa, for example, Meredith & Morse (2015) show that ex-felons were more likely to vote if they were informed about a policy change automatically restoring their voting rights.

The work on voting procedures includes studies exploiting how these procedures vary across space and over time, studies leveraging differences in the costs borne by different voters, as well as field experiments facilitating compliance with some procedures for random selections of citizens. As an example of the first type of work, Thompson et al. (2020) leverage the staggered introduction of universal vote-by-mail in the states of California, Utah, and Washington in a difference-in-differences design to show that, while the policy modestly increased turnout, on average, it had no impact on partisan turnout or vote shares. Cantoni (2020) illustrates the second type of studies. He utilizes highly granular geographic and voter file data from Massachusetts and Minnesota to compare small geographic units (i.e., census blocks and parcels) that are very close to one another but on opposite sides of borders separating adjacent electoral precincts. These geographic units and their residents are observationally identical, except for their assigned polling locations and, consequently, for the distance that residing voters must travel to cast their ballots. Results show that a 1 standard deviation (0.245 mile) increase in distance to the polling place reduces ballots cast by 2 to 5 percent across the 2012 presidential, 2013 municipal, 2014 midterm, and 2016 presidential primary elections, an effect that, in non-presidential elections, is disproportionately larger in high-minority areas. Finally, Nickerson (2015)'s field experiment exemplifies the third approach. In that experiment, Nickerson randomly assigned 620 streets across six cities to receive face-to-face visits encouraging voter registration or to a control group that received no attention from the campaign. On average, 10 more newly registered people appeared in treatment streets than in control streets, which resulted, on average, in two more votes per street in the treatment group compared to the control group. From a methodological point of view, Nickerson advanced a literature that had been limited by the lack of variation in registration rules at the local level by creating random variation in the obstacles that existing rules generate across voters, without changing the rules themselves.

Since turnout is a low-benefit activity, one may expect any obstacle, however small, to disenfranchise many voters. But of all the different steps in the voting process, which create the biggest obstacles? This question is relevant both to better understand the act of voting and to guide policymakers interested in facilitating participation. Theoretically, one could expect obstacles to matter relatively more if the direct cost they create is larger, and if this cost needs to be incurred before Election Day, at a time in which the stakes of the election are not salient and future benefits may be discounted. Conversely, obstacles should matter less if individual citizens can circumvent them — for example, because there is an alternative way to vote — and if parties and other organizations inform and mobilize voters against the obstacle. In other words, when evaluating the participation effects of

voting procedures, one should disentangle direct effects from voters' and parties' reactions. Finally, the same voting procedure may create a bigger obstacle for some voters than for others depending, for instance, on voters' distance (both geographical and informational) to the vote. Therefore, it is important to assess effects both on the overall level of participation and on participation differences across groups. Most of these predictions hold empirically.

First, the literature documents that voter registration barriers, which occur before the election and add an entire step before voting, have particularly large effects (Cancela & Geys 2016). In a field experiment in France, Braconnier et al. (2017) compare the impact of different interventions to identify the obstacles created by the requirement for individuals (rather than the state) to bear the cost of the registration procedure. They find that providing information about voter registration (as in Nickerson 2015's experiment) increases registration rates, but that helping citizens to register at home has even larger effects, indicating that many citizens fail to register because it is too costly to do so and that both lack of information and bureaucratic barriers contribute to that cost. Interventions were more effective when they occurred closer to the registration deadline, likely because the need to register and the forthcoming election were more salient then. Importantly, the vast majority (93%) of individuals who registered because of the experiment turned out at least once in the subsequent elections, indicating that registration obstacles were the binding constraint causing these voters' failure to turn out. Furthermore, alleviating registration obstacles helped include several types of underrepresented citizens: the youth, immigrants, and less educated voters. Using a difference-in-differences design, Grumbach & Hill (2022) find that same-day registration laws in the U.S., which enable voters to register and vote at the same time, on Election Day or during the early voting period, have particularly large positive effects on youth turnout, thus helping to equalize voter participation across age groups. Beyond same-day registration, automatic registration, which automatically updates the addresses of registered voters who move within a county (Kim 2023), also appears to have large positive effects on turnout. Voter registration barriers remain understudied, despite their importance. Indeed, in countries like the U.S. there is a clear definition of the sample of individuals who can be affected by interventions targeting voter turnout: the list of registered citizens. Studying the determinants of registration is harder because there is generally no comprehensive list of citizens who are not registered but are otherwise eligible to vote.

Second, conditional on being registered, the need to go to the polling station to vote, on Election Day, appears to be a lesser obstacle, although the associated cost is higher for people who live further away from the polling station, particularly those who do not have a car (Cantoni 2020); when there are important search costs, due for instance to polling place reassignments (Alipour & Lindlacher 2024, forthcoming); and when the line and waiting time before being able to vote are long (Stewart &

Ansolabehere 2015).<sup>11</sup> Barriers to voting in person, such as distance to the polling station, matter less when it is easy to vote in another way, for instance by mail (Bagwe et al. 2020, Tomkins et al. 2023). Yet, the overall effects on turnout of voting-by-mail and of other convenience voting laws such as early voting and absentee voting remain smaller than the effects of interventions or laws facilitating voter registration (e.g., Kaplan & Yuan 2020, Thompson et al. 2020). One possible interpretation is that choosing a form of convenience voting still requires gathering information and going through some hurdle (e.g., mailing one's ballot or going to the polling station) ahead of Election Day. Accordingly, convenience voting procedures often retain existing high-propensity voters, including older and partisan voters, rather than stimulating new ones (Berinsky 2005; Burden et al. 2014, Ashok et al. 2016).

The abundant evidence on the negative turnout effects of obstacles to voting raises the broader question of whether there is a tension between safeguarding the integrity of the vote (i.e., combating voter fraud) and ensuring high levels of voter participation. Indeed, procedures put in place to verify that only eligible citizens vote may make it more difficult to participate. For example, requiring voters to present ID at the polls may decrease the risk of voter impersonation but it may also disenfranchise voters without valid ID. In practice, however, this tension is exaggerated. Empirical evidence shows that voter ID laws have small effects, which may be partly due to mobilization against the laws (Cantoni & Pons 2021b). Moreover, in established democracies, modern states have the capacity to prevent voter fraud without imposing costs on citizens. For instance, creating voter rolls and keeping them up to date is important to ensure that only eligible citizens vote and that they only vote once, but the state can take care of registering citizens instead of asking citizens to do it themselves. Similarly, the state can distribute (voter) IDs to all citizens, as already happens automatically in many countries (Bennett & Lyon 2013). In less-established democracies, the objectives of combating voter fraud and increasing participation may also be complementary rather than rival, since citizens who distrust the electoral system may choose not to vote (e.g., Marx et al. 2021). In such contexts, voting procedures aimed at safeguarding the integrity of the vote can improve participation if they increase citizens' likelihood to believe that elections are free and fair and if, in turn, this belief increases turnout.

While the literature has often focused on the cost of voting, the benefits of voting may also vary with voting procedures. Beyond the benefit of knowing that one's vote will be counted fairly, many studies

---

<sup>11</sup> While we have few rigorous estimates on the impact of waiting time on people's decision to vote, Chen et al. (2019) use cellphone data to document that this time varies greatly across areas. For example, relative to entirely white neighborhoods, residents of entirely Black neighborhoods waited 29% longer to vote during the 2016 U.S. presidential elections and they were 74% more likely to spend more than thirty minutes at their polling place.

(e.g., Fauvelle-Aymar & François 2015, Garmann 2016, Cantoni et al. 2021, Hajnal et al. 2023) document that holding multiple elections on the same day, which mechanically increases benefits, also improves turnout. Yet, the positive effect of concurrency depends on the type of election. Leveraging city-level differences-in-differences in Italy, Cantoni et al. (2021) show that concurrent high-salience municipal elections increase turnout in lower-salience provincial and European elections, but not vice-versa. In addition, putting too many different contests on the same ballot may lead to “choice fatigue” and increase abstention on down-ballot choices (Augenblick & Nicholson 2016). Conversely, the positive but relatively modest effects of some forms of convenience voting could be explained in part by the fact that the benefits of voting are larger when people vote in person on Election Day than otherwise. For example, Funk (2010) finds that allowing people to vote by mail actually decreased turnout in small towns in Switzerland. The author’s interpretation is that while the reform decreased the cost of voting, it also eliminated the benefit of being seen at or outside one’s polling site and thus reduced the social incentives to vote in tight-knit communities. By the same token, experimental results by DellaVigna et al. (2016) suggest that telling others that one voted is an important benefit of voting.

Finally, voting costs can be balanced not just with larger benefits but also by imposing a cost on abstainers. In fact, evidence from multiple countries shows that compulsory voting dramatically increases turnout. Fowler (2013) leverages the staggered introduction of compulsory voting across Australian states in the first half of the 20<sup>th</sup> century and finds that the policy increased voter turnout by 24 p.p. Examining mandatory voting laws with weakly enforced fines in Austria after WW2, Hoffman et al. (2017) estimate a 10 p.p. increase in voter turnout. Yet, contrary to Australia (Fowler 2013), compulsory voting in Austria did not affect electoral outcomes or government spending patterns, possibly because its effects on turnout were larger among non-partisan and uninformed voters (Hoffman et al. 2017). In the context of Peru, Gonzales et al. (2022) find that higher fines for non-voting led to higher voter turnout. However, the effect of an exemption from compulsory voting for senior citizens is five times larger than that of a full fine reduction, suggesting that non-monetary incentives are the most relevant aspect of compulsory voting. Consistent with this interpretation, evidence from the Netherlands suggests that the effect of compulsory voting holds even if the fines are not imposed (Miller & Dassonneville 2016), perhaps because voters are unaware of the limited enforcement, or because of the expressive content of the law: it reminds all citizens about the importance of voting and may thus increase the warm glow associated with it – which brings us back to the importance of voting benefits. Finally, examining participation in referendums in the canton of Vaud in Switzerland in a difference-in-differences framework, Bechtel et al. (2018) find that the large positive effect of mandatory voting on turnout (30 p.p.) disappears quickly after voting is no longer

compulsory. This suggests that the effect of compulsory voting follows from incentives rather than habit formation.

#### **4. The Effects of Upstream and Downstream Election Rules**

Beyond voting procedures, election rules which are not directly related to the organization of the vote may also affect turnout, both upstream from the election (e.g., laws regulating redistricting, primaries, candidacy requirements, and campaigns) and downstream (e.g., the use of plurality voting vs. proportional representation to map vote choices into a set of election winners). By contrast with voting procedures, the effects of such rules mostly operate through benefits. While effects on turnout are rarely discussed when contemplating whether to adopt or change these rules, we believe that they should be taken into account.

The effects of campaign finance laws on voter turnout are ambiguous. Campaign spending limits and public funding may first affect turnout by altering the intensity of campaign activities that mobilize voters, such as door-to-door canvassing (e.g., Gerber & Green 2000, Pons & Liegey 2019). In addition, rules that level the playing field may encourage more candidates to participate (Fourniaies 2021) and make the election more competitive, thereby increasing turnout (Pons & Tricaud 2018). Yet, using an RDD based on a population threshold to exploit variation in campaign finance rules across French municipalities, Broberg et al. (2022) find null effects of spending limits and public funding on counts of candidates running for office and on voter turnout. Furthermore, using an RDD in Brazilian municipal elections, Avis et al. (2022) find null effects of spending limits on turnout, even though the limits do attract more candidates, including candidates who are relatively less wealthy and less reliant on self-financing — a null result that may be driven by voters' low levels of knowledge about these politicians.

Rules that shape the pool of political candidates more directly, such as gender quotas, have been found to be more consequential for voter turnout. Leveraging random variation in Indian local governments, Deininger et al. (2015) find that reserved seats for women increase self-reported voter turnout by 4 p.p. Similarly, De Paola et al. (2014) study the impact of gender quotas (1993-1995) in Italian municipal elections in a difference-in-differences framework and find that, over the years, turnout decreased relatively less in municipalities affected by the reform. However, the positive effect of gender quotas was smaller in Southern regions, which are characterized by more traditional gender roles.

Looking further back before the election, party primary rules affect who runs in general elections and their policy stances, which may in turn influence electoral competitiveness, instrumental benefits of voting, and participation in the general election. Leveraging a close-election RDD, Hall & Thompson (2018) show that parties suffer electorally when they nominate extremist candidates, largely because of counter-mobilization by voters who support their opponents, which decreases their party's share of the vote in the general election. Similarly, when redistricting results in gerrymandering, lack of competitiveness may a priori depress turnout in constituencies artificially created to be won in a landslide. Exploiting court-ordered redrawing of Pennsylvania districts in 2018 aimed at undoing partisan gerrymandering, Jones et al. (2023) show that high levels of partisan gerrymandering *decrease* turnout. However, leveraging large-scale voter file data, Fraga et al. (2021) document that district changes can also result in turnout *increases* for individuals assigned to districts aligned with their partisanship as compared to individuals in misaligned districts, consistent with voters deriving benefits from voting for the winning party (Granzier et al. 2022).

Finally, the literature documents that turnout tends to be higher in proportional representation than in majoritarian electoral systems (Blais 2006). Leveraging an RDD in French municipal elections, where cities above a certain population threshold are required to use proportional representation while those below use plurality voting, Eggers (2015) suggests the following mechanism: Relative to plurality rule, proportional representation leads to more candidates running in general elections and increases the value of each vote; by contrast, plurality rule makes many constituencies non-competitive. Both factors mean that proportional representation increases turnout. Similarly, ranked-choice voting may increase voter turnout compared to first-past-the-post elections, as suggested by correlational evidence from voter files in U.S. cities, possibly because it increases campaign mobilization efforts in races that would otherwise be less competitive (Dowling et al. 2024).

Together, up- and down-stream election rules may be as important for political participation as voting procedures, due in part to their effects on electoral competitiveness. However, the amount of well-identified evidence remains limited, both because these rules exhibit little over-time variation and because the causal chain linking these rules with voting is indirect and we lack evidence on some steps of this connection. For instance, we lack good data on the amount of money spent on mobilization campaigns, which, in turn, affects the impact of campaign finance rules on turnout.

## **5. Avenues for Further Work**

We conclude our article by highlighting avenues for future research.

First, we have identified a few gaps in the literature on the effects of voting procedures and of other election rules on turnout, as well as their consequences for other important outcomes.

The existing evidence on the turnout effects of *voting procedures* is perhaps the richest. While the public debate tends to focus on procedures which vary across states, have changed recently, and tend to be implemented along party lines, the evidence we reviewed suggests that dimensions of voting procedures which are less partisan, have been in place for a long time, and tend to vary at the substate level (such as distance to polling stations) or at the national level (such as the lack of universal automatic voter registration in France and holding elections on Tuesdays in the U.S.), could possibly affect participation even more, and certainly deserve more attention than they normally receive. In particular, we need more work on the impact of procedures that do not vary much in the U.S., either at the state level or over time, but which seem to be important based on correlational cross-country evidence. In the absence of natural experiments, one avenue is to evaluate randomized treatments that manipulate the costs and benefits associated with such procedures, such as in Braconnier et al. (2017). For instance, holding elections on Tuesdays may decrease the participation of people unable to take time off from work. Of course, the day of the election itself can generally not be randomized. However, one way to test this hypothesis would be to run a field experiment, making it easier for a random subset of workers to take time off on Election Day.

For all the evidence about the effects of different voting procedures, we lack evidence on the effects of how these procedures are implemented in practice. Existing work suggests that the resources available to organize elections as well as election administration quality substantially vary across places. For example, the largest of the approximately 8,000 local election jurisdictions in the U.S. have hundreds of staff, and the smallest only one or two (Hale et al. 2023). Local differences in election administration can have important consequences: the unusual butterfly ballot used in Palm Beach County, Florida, in the 2000 presidential election not only caused more than 2,000 Democratic voters to vote by mistake for Reform candidate Pat Buchanan, a number larger than George W. Bush's certified margin of victory in Florida, but it might have also increased the number of spoiled ballots (Wand et al. 2001). However, measuring the quality of election administration in a systematic way is difficult. Based on 19 state-level indicators, the Elections Performance Index<sup>12</sup> is a useful indicator in that respect. Some studies propose ways to improve election administration quality (e.g., Burden & Stewart 2014, Hale et al. 2015, Ritter & Tolbert 2020) and measure effects on immediate outcomes such as the fraction of problematic ballots (e.g., Aldashev & Mastrobuoni 2019, Shino et al. 2022), trust in elections (e.g., Sances & Stewart 2015), or waiting time (e.g., Stewart & Ansolabehere 2015). There are two important avenues for further work on the administration of elections. First, the

---

<sup>12</sup> <https://electionlab.mit.edu/research/projects/election-performance-index>. Accessed: August 7, 2024.

existing literature is mostly descriptive and correlational, calling for future work to use causal inference techniques to uncover causal relationships. Second, the literature should more systematically collect evidence about effects of election administration quality on the end outcome we care about: turnout.

From a policy perspective, we also know little about the compared cost-effectiveness of different reforms. Scholars should systematically document the cost of reforms (such as increasing the number of early voting days or the density of polling stations) to help election administration officials use their resources in the most effective way. In a field experiment, Grose (2022) shows that a randomized encouragement increased the likelihood that local election officials applied for non-partisan philanthropic funding from a university institute supported by the Schwarzenegger foundation, and he provides suggestive evidence that the resulting increase in the number of polling stations also led to higher turnout. Yet, using a nationwide difference-in-differences design, Lal & Thompson (2023) document that, while Democratic-leaning counties were more likely to apply for election grants from the Center for Tech and Civic Life (i.e., the largest private election administration donor in 2020, which received significant funding from Facebook CEO Mark Zuckerberg), the effects on voter turnout and Democratic vote shares were negligible. Such differences may be driven by election administration officials using additional funding in different ways, highlighting the importance of informing officials about voting procedures known to be effective facilitators of voter turnout.

Debates on *election rules* (e.g., proportional representation vs. plurality voting as well as campaign finance laws) typically focus on the expected or actual effects of these rules on individual vote choice and, in turn, on aggregate vote or seat shares, rather than on turnout. Indeed, voting rules are primarily evaluated based on their ability to ensure the fair representation of all political forces and to give citizens an incentive to truthfully express their preferences when casting their ballot. However, turnout effects may be equally important, and they should be studied more systematically, since high and equal participation is a necessary condition to ensure that all preferences get expressed, even before they are aggregated.

Finally, for all the evidence on the aggregate effects of shifts in turnout on policies and social and economic outcomes, we know little about other consequences of voting. There is little rigorous evidence about effects that are often hypothesized but remain to be proved — e.g., on the legitimacy of the winner. Furthermore, existing evidence about the effects on other outcomes remains inconclusive. For instance, while Braconnier et al. (2017) and Shineman (2018) find that voters who

are experimentally induced to turn out also become more informed, Holbein & Rangel (2020) find no effect.

Second, in addition to these delimited gaps, our review of the literature on turnout leaves us with an unresolved puzzle. While we have reviewed ample evidence that obstacles to participation can substantially decrease voter turnout, many historical barriers have been lifted in the recent decades. In the U.S., for example, disenfranchising laws have been abolished and voter registration procedures have been facilitated. Other countries have also enacted reforms. For instance, France has facilitated proxy-voting, made voter registration automatic for the youth, and moved the registration deadline closer to Election Day for other voters. Moreover, the strongest individual-level predictors of turnout (age, education, and income) have increased, on average. And yet, as discussed at the beginning of this paper and shown in Figure 2, voter turnout has been *decreasing* in most Western democracies since the 1980s (Kostelka & Blais 2021). Work on the forces underlying the turnout decline includes quasi-experimental studies, like Gentzkow (2006), who estimates large negative effects of TV on voter turnout, likely due to the TV displacing other media with more political coverage such as newspapers or radio (see the broader review of the literature on media effects in Campante et al. 2022). But changes in voters' media consumption habits can only explain a relatively small part of the decline in turnout. What might have decreased is both instrumental benefits (e.g., if parties' platforms are perceived to be too close; Downs 1957) and expressive benefits (e.g., due to decreased sense of civic duty). On the one hand, correlational evidence shows that left-wing parties have moderated their platform on economic issues, leading to abstention of their traditional blue-collar base (e.g., Anderson & Beramendi 2012). In some cases, ruling parties have strategically adopted policies that comport with their opponents' platform with the aim to asymmetrically demobilize them (see Bierbrauer et al. 2022's study of the 2009 German federal elections). On the other hand, recent work points to the role played by decreased sense of civic duty (Tiberj 2018, Kostelka & Blais 2021), though underlying analyses are mostly correlational.

More systematic empirical research is required on the reasons for the decline in perceived benefits of turnout. This agenda may, first, investigate differences in political attitudes and behaviors across generations. For example, leveraging decades of survey data and a novel dynamic model that improves on the conventional age-period-cohort approach, Ghitza et al. (2023) show that the political events voters experience in their formative years leave lasting effects on partisan preferences, resulting in five meaningful generations of voters: New Deal Democrats, Eisenhower Republicans, 1960s Liberals, Reagan Conservatives, and Millennials. Yet, it remains to be shown whether these patterns are also visible for voter turnout. Second, this agenda may seek to identify the factors responsible for generational differences; for example, the technology used to gather information, like

TV (Putnam 2000) and social media (Haidt 2024), or specific historical events experienced during a generation's formative years, such as corruption scandals (Daniele et al. 2023).

The policy recommendations we can provide to reduce voting costs by simplifying voting procedures are unlikely to fully reverse the decline in turnout. Instead, one should build evidence on interventions capable of improving citizens' sense of civic duty. Beyond get-out-the-vote campaigns, which are typically conducted by parties and other non-state actors, we have identified three possible remedies which should be tested in future work. First, Minozzi et al. (2015) show that direct interactions with politicians can increase trust towards elected officials and even change people's policy preferences. Accordingly, it seems important to test whether giving voters the chance to meet elected officials also increases voter turnout. While Cantoni & Pons (2021a) show that meeting low-level candidates does not suffice, the impact of meeting actual elected officials may be different. Second, encouraging in-depth deliberation with other citizens can change opinions on policy issues and reduce affective polarization (Fishkin et al. 2021). Future work should investigate whether such discussions can also strengthen civic engagement. Third, growing evidence suggests that contextual factors experienced in adolescence and early adulthood shape participation later in life (e.g., Neundorf & Smets 2017, Cantoni & Pons 2022). Using nationally comprehensive voter files and reconstructing voters' childhood location histories based on their parents' addresses, Brown et al. (2023) find that growing up in a county where their peers are 10 p.p. more likely to vote makes individuals 4.75 p.p. more likely to vote upon entering the electorate. Accordingly, improving civic education in schools is a promising avenue. Rather than focusing on abstract content regarding democracy and political institutions, civics classes could be more effective if they included case studies as well as practical elements such as showing students how to register and cast a ballot at the polls (Addonizio 2011, Holbein & Hillygus 2020). Given its relatively low cost, reforming the content of civics classes shows great promise for increasing voter turnout in the long term.

## *Bibliography*

Acemoglu D, Robinson JA. 2000. Why did the West extend the franchise? Democracy, inequality, and growth in historical perspective. *The Quarterly Journal of Economics* 115(4): 1167-1199.

Addonizio E. 2011. *The Fourth of July Vote: A Social Approach to Voter Mobilization and Election Day*. Ph.D. Dissertation, Yale University, Department of Political Science.

Aggeborn L, Andersson H, Dehdari SH, Lindgren K. 2023. Granting Immigrants the Right to Vote in National Elections: Empirical Evidence from Swedish Administrative Data. *British Journal of Political Science* 54(3): 1-18.

Aldashev G, Mastrobuoni G. 2019. Invalid Ballots and Electoral Competition. *Political Science Research and Methods* 7(2): 289-310.

Alipour J, Lindlacher V. 2024 [Forthcoming]. No Surprises, Please: Voting Costs and Electoral Turnout. *Journal of Political Economy: Microeconomics*.

Alonso-Curbelo A. 2023. The voter ID debate: an analysis of political elite framing in the UK Parliament. *Parliamentary Affairs* 76(1): 62-84.

Anderson CJ, Beramendi P. 2012. Left parties, poor voters, and electoral participation in advanced industrial societies. *Comparative Political Studies* 45(6): 714-746.

Aneja A, Avenancio-León CF. 2022. *The effect of political power on labor market inequality: Evidence from the 1965 Voting Rights Act*. Working Paper.

Ang D. 2019. Do 40-year-old facts still matter? Long-run effects of federal oversight under the Voting Rights Act. *American Economic Journal: Applied Economics* 11(3): 1-53.

Angrist JD, Pischke J. 2010. The credibility revolution in empirical economics: How better research design is taking the con out of econometrics. *Journal of Economic Perspectives* 24(2): 3-30.

Ashok V, Feder D, McGrath M, Eitan Hersh E. 2016. The dynamic election: Patterns of early voting across time, state, party, and age. *Election Law Journal* 15(2): 115-128.

Atkeson LR, Kerevel YP, Alvarez RM, Hall TE. 2014. Who asks for voter identification? Explaining poll-worker discretion. *The Journal of Politics* 76(4): 944-957.

Augenblick N, Nicholson S. 2016. Ballot position, choice fatigue, and voter behaviour. *The Review of Economic Studies* 83(2): 460-480.

Avis E, Ferraz C, Finan F, Varjao C. 2022. Money and Politics: The Effects of Campaign Spending Limits on Political Entry and Competition. *American Economic Journal: Applied Economics* 14(4): 167-199.

Bagwe G, Margitic J, Stashko A. 2020. *Polling Place Location and the Costs of Voting*. Working Paper.

Battaglini M, Morton RB, Palfrey TR. 2010. The Swing Voter's Curse in the Laboratory. *The Review of Economic Studies* 77(1): 61-89.

Bechtel MM, Hangartner D, Schmid L. 2018. Compulsory voting, habit formation, and political participation. *Review of Economics and Statistics* 100(3): 467-476.

Bennett CJ, Lyon D. 2013. *Playing the identity card: Surveillance, security and identification in global perspective*. New York: Routledge.

Berinsky AJ. 2005. The perverse consequences of electoral reform in the United States. *American Politics Research* 33(4): 471-491.

Bernini A, Facchini G, Testa C. 2023. Race, Representation, and Local Governments in the US South: The Effect of the Voting Rights Act. *Journal of Political Economy* 131(4): 994-1056.

Bertocchi G, Dimico A, Lancia F, Russo A. 2020. Youth enfranchisement, political responsiveness, and education expenditure: Evidence from the US. *American Economic Journal: Economic Policy* 12(3): 76-106.

Besley T, Case A. 2003. Political institutions and policy choices: evidence from the United States. *Journal of Economic Literature* 41(1): 7-73.

Besley T, Coate S. 1997. An economic model of representative democracy. *The Quarterly Journal of Economics* 112(1): 85-114.

Beuve J, Fize E, Pons V. 2022. *Les absents ont toujours tort*. Conseil d'Analyse Economique Focus n° 85. <https://docs.google.com/viewerng/viewer?url=https://cae-eco.fr/staticfiles/pdf/cae-focus085.pdf>

Bierbrauer F, Tsyvinski A, Werquin N. 2022. Taxes and turnout: when the decisive voter stays at home. *American Economic Review* 112(2): 689-719.

Biggers DR, Hanmer MJ. 2015. Who Makes Voting Convenient? Explaining the Adoption of Early and No-Excuse Absentee Voting in the American States. *State Politics & Policy Quarterly* 15: 192-210.

Billings SB, Braun N, Jones DB, Shi Y. 2024. Disparate racial impacts of Shelby County v. Holder on voter turnout. *Journal of Public Economics* 230: 105047.

Blais A. 2006. What Affects Turnout?. *Annual Review of Political Science*: 111-25.

Boxell L, Gentzkow M, Shapiro JM. 2024. Cross-country trends in affective polarization. *Review of Economics and Statistics* 106(2): 557-565.

Braconnier C, Dormagen J, Pons V. 2017. Voter registration costs and disenfranchisement: experimental evidence from France. *American Political Science Review* 111(3): 584-604.

Brieba, Daniel, and Kenneth Bunker. 2019. "Voter equalization and turnout bias after electoral reform: Evidence from Chile's voluntary voting law." *Latin American Politics and Society* 61(4): 23-46.

Broberg N, Pons V, Tricaud C. 2022. *The impact of campaign finance rules on candidate selection and electoral outcomes: Evidence from France*. NBER Working Paper 29805.

Brown JR, Cantoni E, Chinoy S, Koenen M, Pons V. 2023. *The Effect of Childhood Environment on Political Behavior: Evidence from Young US Movers, 1992–2021*. NBER Working Paper 31759.

Burden BC, Canon DT, Mayer KR, Moynihan DP. 2014. Election laws, mobilization, and turnout: The unanticipated consequences of election reform. *American Journal of Political Science* 58(1): 95-109.

Burden BC, Stewart III C. 2014. *The measure of American elections*. Cambridge: Cambridge University Press.

Bursztyn L, Cantoni D, Funk P, Schönenberger F, Yuchtman N. 2023. Identifying the Effect of Election Closeness on Voter Turnout: Evidence from Swiss Referenda. *Journal of the European Economic Association* 22(2): 876-914.

Campante F, Durante R, Tesei A. 2022. Media and social capital. *Annual Review of Economics* 14: 69-91.

Cancela J, Geys B. 2016. Explaining voter turnout: A meta-analysis of national and subnational elections. *Electoral Studies* 42: 264-275.

Cantoni E. 2020. A precinct too far: Turnout and voting costs. *American Economic Journal: Applied Economics* 12(1): 61-85.

Cantoni E, Gazzè L, Schafer J. 2021. Turnout in concurrent elections: Evidence from two quasi-experiments in Italy. *European Journal of Political Economy* 70: 102035.

Cantoni E, Pons V. 2021a. Do interactions with candidates increase voter support and participation? Experimental evidence from Italy. *Economics & Politics* 33(2): 379-402.

Cantoni E, Pons V. 2021b. Strict ID laws don't stop voters: Evidence from a US nationwide panel, 2008–2018. *The Quarterly Journal of Economics* 136(4): 2615-2660.

Cantoni E, Pons V. 2022. Does Context Outweigh Individual Characteristics in Driving Voting Behavior? Evidence from Relocations within the United States. *American Economic Review* 112(4): 1226-72.

Cascio EU, Washington W. 2014. Valuing the vote: The redistribution of voting rights and state funds following the voting rights act of 1965. *The Quarterly Journal of Economics* 129(1): 379-433.

Chen MK, Haggag K, Pope DG, Rohla R. 2019. Racial disparities in voting wait times: evidence from smartphone data. *The Review of Economics and Statistics* 104(6): 1-27.

Chiu A, Lan X, Liu Z, Xu Y. 2023. "What to do (and not to do) with causal panel analysis under parallel trends: Lessons from a large reanalysis study." SSRN: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4490035](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4490035).

Coate S, Conlin M. 2004. A group rule-utilitarian approach to voter turnout: Theory and evidence. *American Economic Review* 94(5): 1476-1504.

Conroy-Krutz J, Kerr N. 2015. Dynamics of democratic satisfaction in transitional settings: Evidence from a panel study in Uganda. *Political Research Quarterly* 68(3): 593-606.

Daniele G, Aassve A, Le Moglie M. 2023. Never forget the first time: The persistent effects of corruption and the rise of populism in Italy. *The Journal of Politics* 85(2): 468-483.

De Chaisemartin C, d'Haultfoeuille X. 2020. Two-way fixed effects estimators with heterogeneous treatment effects. *American Economic Review* 110(9): 2964-2996.

De Paola M, Scoppa V, De Benedetto MA. 2014. The impact of gender quotas on electoral participation: Evidence from Italian municipalities. *European Journal of Political Economy* 35: 141-157.

Deininger K, Jin S, Nagarajan HK, Xia F. 2015. Does female reservation affect long-term political outcomes? Evidence from rural India. *The Journal of Development Studies* 51(1): 32-49.

Delemotte B. 2007. Le droit de vote des étrangers en France. Historique et état des lieux, *Migrations Société* 114(6): 205-217.

DellaVigna S, List JA, Malmendier U, Rao G. 2016. Voting to tell others. *The Review of Economic Studies* 84(1): 143-181.

Dowling E, Tolbert C, Micatka N, Donovan T. 2024. Does ranked choice Voting Increase voter turnout and mobilization?. *Electoral Studies* 90: 102816.

Downs A. 1957. *An economic theory of democracy*. New York: Harper.

Drinkwater S, Jennings C. 2022. The Brexit referendum and three types of regret. *Public Choice* 193(3): 275-291.

Duffy J, Tavits M. 2008. Beliefs and voting decisions: A test of the pivotal voter model. *American Journal of Political Science* 52(3): 603-618.

Edlin A, Gelman A, Kaplan N. 2007. Voting as a rational choice: Why and how people vote to improve the well-being of others. *Rationality and society* 19(3): 293-314.

Eggers AC. 2015. Proportionality and turnout: Evidence from French municipalities. *Comparative Political Studies* 48(2): 135-167.

Fauvelle-Aymar C, François A. 2015. Mobilization, cost of voting and turnout: a natural randomized experiment with double elections. *Public Choice* 162(1): 183-199.

Feddersen T, Pesendorfer W. 1996. The swing voter's curse. *American Economic Review* 86(3): 408-424.

Feddersen T, Sandroni A. 2006. A theory of participation in elections. *American Economic Review* 96, (4): 1271-1282.

Ferejohn JA, Fiorina MP. 1974. The paradox of not voting: A decision theoretic analysis. *American Political Science Review* 68(2): 525-536.

Fishkin J, Siu A, Diamond L, Bradburn N. 2021. Is deliberation an antidote to extreme partisan polarization? Reflections on "America in one room". *American Political Science Review* 115(4): 1464-1481.

Fournaies A. 2021. How do campaign spending limits affect elections? Evidence from the United Kingdom 1885–2019. *American Political Science Review* 115(2): 395-411.

Fowler A. 2013. Electoral and policy consequences of voter turnout: Evidence from compulsory voting in Australia. *Quarterly Journal of Political Science* 8(2): 159-182.

Fraga BL, Moskowitz DJ, Schneer B. 2021. Partisan Alignment Increases Voter Turnout: Evidence from Redistricting. *Political Behavior* 44: 1883-1910.

Fujiwara T. 2015. Voting technology, political responsiveness, and infant health: Evidence from Brazil. *Econometrica* 83(2): 423-464.

Funk P. 2010. Social incentives and voter turnout: evidence from the Swiss mail ballot system. *Journal of the European economic association* 8(5): 1077-1103.

Gaikwad N, Nellis G. 2021. Overcoming the political exclusion of migrants: Theory and experimental evidence from India. *American Political Science Review* 115(4): 1129-1146.

Garmann S. 2016. Concurrent elections and turnout: Causal estimates from a German quasi-experiment. *Journal of Economic Behavior & Organization* 126: 167-178.

Gentzkow M. 2006. Television and voter turnout. *The Quarterly Journal of Economics* 121(3): 931-972.

Gerber AS, Green DP. 2000. The effects of canvassing, telephone calls, and direct mail on voter turnout: A field experiment. *American Political Science Review* 94(3): 653-663.

Gerber AS, Huber GA, Hill SJ. 2013. Identifying the effect of all-mail elections on turnout: Staggered reform in the evergreen state. *Political Science Research and Methods* 1(1): 91-116.

Gerber AS, Hoffman M, Morgan J, Raymond C. 2020. One in a million: Field experiments on perceived closeness of the election and voter turnout. *American Economic Journal: Applied Economics* 12(3): 287-325.

Geys B. 2006. Explaining voter turnout: A review of aggregate-level research. *Electoral Studies* 25(4): 637-663.

Ghitza Y, Gelman A, Auerbach J. 2023. The great society, Reagan's revolution, and generations of presidential voting. *American Journal of Political Science* 67(3): 520-537.

Gonzales M, León-Ciliotta G, Martínez LR. 2022. How effective are monetary incentives to vote? Evidence from a nationwide policy. *American Economic Journal: Applied Economics* 14(1): 293-326.

Granzier R, Pons V, Tricaud C. 2022. The Large Effects of a Small Win: How Past Rankings Shape the Behavior of Voters and Candidates. Conditionally accepted at *American Economic Journal: Applied Economics*.

Green DP, McGrath MC, Aronow PM. 2013. Field experiments and the study of voter turnout. *Journal of Elections, Public Opinion and Parties* 23(1): 27-48.

Grimmer J, Hersh E. 2024. How Election Rules Affect Who Wins. *Journal of Legal Analysis* 16(1): 1-25.

Gronke P, Galanes-Rosenbaum E, Miller PA, Toffey D. 2008. Convenience voting. *Annual Review of Political Science* 11: 437-455.

Grumbach JM, Hill C. 2022. Rock the registration: Same day registration increases turnout of young voters. *The Journal of Politics* 84(1): 405-417.

Haidt J. 2024. *The anxious generation: How the great rewiring of childhood is causing an epidemic of mental illness*. New York: Penguin Press.

Hainmueller J, Hangartner D, Pietrantuono G. 2017. Catalyst or crown: Does naturalization promote the long-term social integration of immigrants?. *American Political Science Review* 111(2): 256-276.

Hajnal ZL, Kogan V, Markarian GA. 2022. Who votes: City election timing and voter composition. *American Political Science Review* 116(1): 374-383.

Hale K, Brown M, Altindag D, Anthony A, Incher B, Gruendler S, King B, Logan D, e Messenger-Cooper M, Rudy H, Seals A, Wang X. 2023. *Election Official and Poll Worker Recruitment, Training, and Retention*. White Paper MIT Election Lab. [https://electionlab.mit.edu/sites/default/files/2023-10/election-officials-poll-workers\\_MEAES.pdf](https://electionlab.mit.edu/sites/default/files/2023-10/election-officials-poll-workers_MEAES.pdf)

Hale K, Montjoy R, Brown M. 2015. *Administering elections: How American elections work*. London: Palgrave Macmillan.

Hall AB, Thompson DM. 2018 Who punishes extremist nominees? Candidate ideology and turning out the base in US elections. *American Political Science Review* 112(3): 509-524.

Henderson J, Brooks J. 2016. Mediating the electoral connection: The information effects of voter signals on legislative behavior. *The Journal of Politics* 78(3): 653-669.

Henninger P, Meredith M, Morse M, Solomon DH, Soltes E, Katz O. 2021. Who Votes Without Identification? Using Affidavits from Michigan to Learn About the Potential Impact of Strict Photo Voter Identification Laws. *Journal of Empirical Legal Studies*: 1-31.

Hicks WD, McKee SC, Sellers MD, Smith DA. 2015. A principle or a strategy? Voter identification laws and partisan competition in the American states. *Political Research Quarterly* 68(1): 18-33.

Highton B. 2017. Voter identification laws and turnout in the United States. *Annual Review of Political Science* 20: 149-167.

Hill KQ, Leighley JE, Hinton-Andersson A. 1995. Lower-class mobilization and policy linkage in the US states. *American Journal of Political Science* 39: 75-86.

Hobolt SB. 2006. Direct democracy and European integration. *Journal of European Public Policy* 13(1): 153-166.

Hodler R, Luechinger S, Stutzer A. 2015. The effects of voting costs on the democratic process and public finances. *American Economic Journal: Economic Policy* 7(1): 141-71.

Hoffman M, León G, Lombardi M. 2017. Compulsory voting, turnout, and government spending: Evidence from Austria. *Journal of Public Economics* 145: 103-115.

Holbein JB, Hillygus DS. 2020. *Making young voters: Converting civic attitudes into civic action*. Cambridge: Cambridge University Press.

Holbein JB, Rangel MA. 2020. Does voting have upstream and downstream consequences? Regression discontinuity tests of the transformative voting hypothesis. *The Journal of Politics* 82(4): 1196-1216.

Jackman RW. 1987. Political institutions and voter turnout in the industrial democracies. *American Political Science Review* 81(2): 405-423.

Jakee K, Sun G. 2006. Is compulsory voting more democratic?. *Public Choice* 129(1): 61-75.

Jones D, Silveus N, Urban C. 2023. Partisan gerrymandering and turnout. *The Journal of Law and Economics* 66(3): 557-579.

Kaplan E. 2019. *Election Law and Political Economy*. Economists for Inclusive Prosperity Research Brief.

Kaplan E, Yuan H. 2020. Early voting laws, voter turnout, and partisan vote composition: Evidence from Ohio. *American Economic Journal: Applied Economics* 12(1): 32-60.

Kim SS. 2023. Automatic Voter Reregistration as a Housewarming Gift: Quantifying Causal Effects on Turnout Using Movers. *American Political Science Review* 117(3): 1137-1144.

Kostelka F, Blais A. 2018. The chicken and egg question: Satisfaction with democracy and voter turnout. *PS: Political Science & Politics* 51(2): 370-376.

Kostelka F, Blais A. 2021. The generational and institutional sources of the global decline in voter turnout. *World Politics* 73(4): 629-667.

Lal A, Thompson DM. 2024 [Forthcoming]. Did Private Election Administration Funding Advantage Democrats in 2020?. *PNAS*.

Lijphart A. 1997. Unequal participation: Democracy's unresolved dilemma presidential address, American Political Science Association, 1996. *American Political Science Review* 91(1): 1-14.

Marx B, Pons V, Suri T. 2021. Voter mobilisation and trust in electoral institutions: Evidence from Kenya. *The Economic Journal* 131(638): 2585-2612.

McDonald M. 2023. *1980-2022 General Election Turnout Rates (v1.0)*. Gainesville, FL: University of Florida. <https://election.lab.ufl.edu/dataset/1980-2022-general-election-turnout-rates/>

Meltzer AH, Richard SF. 1981. A rational theory of the size of government. *Journal of political Economy* 89(5): 914-927.

Menger A, Stein RM. 2020. How to measure and assess the turnout effects of election reforms. *Journal of Political Institutions and Political Economy* 1(2): 209-237.

Meredith M, Morse M. 2015. The politics of the restoration of ex-felon voting rights: The case of Iowa. *Quarterly Journal of Political Science* 10: 41-100.

Miller G. 2008. Women's suffrage, political responsiveness, and child survival in American history. *The Quarterly Journal of Economics* 123(3): 1287-1327.

Miller P, Dassonneville R. 2016. High turnout in the Low Countries: Partisan effects of the abolition of compulsory voting in the Netherlands. *Electoral Studies* 44: 132-143.

Minozzi W, Neblo MA, Esterling KM, Lazer D. 2015. Field experiment evidence of substantive, attributional, and behavioral persuasion by members of Congress in online town halls. *Proceedings of the National Academy of Sciences* 112(13): 3937-3942.

Nadeau R, Blais A. 1993. Accepting the election outcome: the effect of participation on losers' consent. *British Journal of Political Science* 23(4): 553-563.

Neundorf A, Smets K. 2017. *Political Socialization and the Making of Citizens*. Oxford Handbooks Online.

Nickerson DW. 2015. Do voter registration drives increase participation? For whom and when?. *The Journal of Politics* 77(1): 88-101.

Norris P. 2011. *Democratic deficit: Critical citizens revisited*. Cambridge: Cambridge University Press.

Osborne MJ, Slivinski A. 1996. A model of political competition with citizen-candidates. *The Quarterly Journal of Economics* 111(1): 65-96.

Owens ML. 2014. Ex-felons' organization-based political work for carceral reforms. *The ANNALS of the American Academy of Political and Social Science* 651(1): 256-265.

Pettigrew S. 2021. The downstream consequences of long waits: How lines at the precinct depress future turnout. *Electoral Studies* 71: 102188.

Pons V, Liegey G. 2019. Increasing the Electoral Participation of Immigrants: Experimental Evidence from France. *Economic Journal* 129(617): 481-508.

Pons V, Tricaud C. 2018. Expressive Voting and Its Cost: Evidence from Runoffs with Two or Three Candidates. *Econometrica* 86(5): 1621-1649.

Powell GB. 1986. American voter turnout in comparative perspective. *American Political Science Review* 80(1): 17-43.

Putnam RD. 2000. *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.

Putnam RD, Leonardi R, Nanetti RY. 1994. *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.

Riker WH, Ordeshook PC. 1968. A Theory of the Calculus of Voting. *American Political Science Review* 62(1): 25-42.

Ritter M, Tolbert CJ. 2020. *Accessible elections: How the states can help Americans vote*. Oxford: Oxford University Press.

Rosenstone SJ, Hansen JM. 1993. *Mobilization, Participation and Democracy in America*. New York: Macmillan

Sances MW, Stewart III C. 2015. Partisanship and confidence in the vote count: Evidence from US national elections since 2000. *Electoral Studies*. 40: 176-188.

Selb P, Lachat R. 2009. The more, the better? Counterfactual evidence on the effect of compulsory voting on the consistency of party choice. *European Journal of Political Research* 48(5): 573-597.

Shaw DR, R. Petrocik JR. 2020. *The turnout myth: Voting rates and partisan outcomes in American national elections*. Oxford: Oxford University Press.

Shineman VA. 2018. If you mobilize them, they will become informed: experimental evidence that information acquisition is endogenous to costs and incentives to participate. *British Journal of Political Science* 48(1): 189-211.

Shino E, Suttman-Lea M, Smith DA. 2022. Determinants of rejected mail ballots in georgia's 2018 general election. *Political Research Quarterly* 75(1): 231-243.

Smets K, Van Ham C. 2013. The embarrassment of riches? A meta-analysis of individual-level research on voter turnout. *Electoral Studies* 32(2): 344-359.

Stephanopoulos N. 2024. *Election Law for the New Electorate*. Working Paper. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4871529](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4871529)

Stewart III C, Ansolabehere S. 2015. Waiting to vote. *Election Law Journal* 14(1): 47-53.

Stewart, C, Ansolabehere S, Persily N. 2016. Revisiting Public Opinion on Voter Identification and Voter Fraud in an Era of Increasing Partisan Polarization. *Stanford Law Review* 68: 1455-1489.

Taylor SL, Shugart MS, Lijphart A, Grofman B. 2014. *A different democracy: American government in a 31-country perspective*. New Haven: Yale University Press.

Tiberj V. 2018. Decentered voting. *Revue Française de Science Politique* 68(5): 821-845.

Thompson DM, Wu JA, Yoder J, Hall AB. 2020. Universal vote-by-mail has no impact on partisan turnout or vote share. *Proceedings of the National Academy of Sciences* 117(25): 14052-14056.

Tomkins S, Yao K, Gaebler J, Konitzer T, Rothschild D, Meredith M, Goel S. 2023. Blocks as geographic discontinuities: The effect of polling-place assignment on voting. *Political Analysis* 31(2): 165-180.

Wand JN, Shotts KW, Sekhon JS, Mebane WR, Herron MC, Brady HE. 2001. The butterfly did it: The aberrant vote for Buchanan in Palm Beach County, Florida. *American Political Science Review* 95(4): 793-810.

White AR, Nathan NL, Faller JK. 2015. What Do I Need to Vote? Bureaucratic Discretion and Discrimination by Local Election Officials. *American Political Science Review* 109(1): 129-142.