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Strict Voter Identification Laws, Turnout, and Election Outcomes
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ABSTRACT

Since 2000, ten states have enacted strict voter identification laws, which require that voters show identification in order for their votes to count. While proponents argue these laws prevent voter fraud and protect the integrity of elections, opponents argue they disenfranchise low-income and minority voters. In this paper, we document the extent to which these laws can affect voter turnout and election outcomes. We do so using historical data on more than 2,000 races in Florida and Michigan, which both allow and track ballots cast without identification. Results indicate that at most only 0.10% and 0.31% of total votes cast in each state were cast without IDs. Thus, even under the extreme assumption that all voters without IDs were either fraudulent or would be disenfranchised by a strict law, the enactment of such a law would have only a very small effect on turnout. Similarly, we also show under a range of conservative assumptions that very few election results could have been flipped due to a strict law. Collectively, our findings indicate that even if the worst fears of proponents or critics were true, strict identification laws are unlikely to have a meaningful impact on turnout or election outcomes.

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1. Introduction

From 2000 to 2018, 20 states enacted voter identification requirements, bringing the total to 34. The most pronounced shift has been toward strict voter identification; Figure 1 shows that while zero states had such laws in 2000, ten states had enacted (and sustained) such laws as of 2018. Under strict requirements, votes are counted only if the voter produces a photo ID (seven states) or non-photo ID (three states) within a specified period of time (NCLS, 2019). These laws are the most controversial and have come under immense public and legal scrutiny.¹ Proponents argue these laws are necessary for protecting the election process from fraud and note that identification is required for other normal life activities. Critics argue that voter impersonation fraud is rare and that the laws are designed to disenfranchise low-income and minority voters. They also note that as many as 11 percent of American adults lack a valid photo ID required to vote, and argue there are significant costs and impediments associated with acquiring a valid ID (Brennan Center of Justice, 2006). The purpose of this paper is to evaluate the potential effects of these strict voter identification laws on voter turnout and election outcomes.

Assessing the causal impact of these laws is difficult for multiple reasons. First, the combination of infrequent elections and the recent enactment of these laws means there are few post-law observations with which to assess the effects. Similarly, the infrequency of elections makes it difficult to assess the parallel trends assumption of the commonly-used differences-in-differences approach. Evaluation is made further difficult by the fact that the vast majority of prospective voters have IDs. This means that any effect is averaged across either all voters or certain subgroups of voters, many or most of whom could not have been affected by the law. In addition, it is difficult to know whether the idiosyncrasies of different elections lead to differential effects across groups more and less affected by these laws. Finally, numerous legal challenges have made it difficult for prospective voters to know whether a strict ID law was in place for a given election. For example, Texas's strict voter law was enacted in May of 2011, struck down by a federal court in August of 2012, reinstated in June of 2013, struck down again in October of 2014, reinstated five days later, and ultimately struck down by the U.S. 5th Circuit of the Court of Appeals in July of 2016 (The Texas Tribune 2016). Eventually, Texas passed a non-strict version

¹ Indeed, absent legal challenges resulting in the overturning of strict laws in Pennsylvania and Missouri and a softening to non-strict laws in Texas and Arkansas, these requirements would be even more common.

of the law in 2017, where a voter without ID could cast a provisional ballot and have it be counted by signing an affidavit, bringing an end to the seven-year-long litigation (The Texas Tribune 2018). While Texas is perhaps an extreme example, the general legal ambiguity of these laws raises questions as to whether voters correctly perceived whether the law was in effect and what the law required.

To overcome these challenges, we take a novel approach to addressing these laws' impact on turnout and election outcomes. Rather than attempt to identify effects using a typical policy evaluation methodology, we carefully document how many people vote without IDs in states that do not (yet) have a strict voter identification law. Specifically, we use administrative voting records from Michigan and Florida to identify the size of the voting population that potentially could be either fraudulent (if you believe the law's proponents) or disenfranchised (if you believe the critics). Both Michigan and Florida have non-strict voter identification laws, which means they ask for an ID from voters but have provisions through which votes may be cast and counted without the voter actually producing an ID. Michigan counts votes cast by voters without IDs after they sign a legal affidavit at the poll as to their identity. Florida allows voters without an ID to cast provisional ballots and then counts the ballots if the signature at the poll matches that on the voter registration form. Importantly for this study, because of these provisions, both states track the number of ballots cast by individuals who did not have an ID.

Using these data, we are able to record the number of votes cast by individuals without IDs. In doing so, we identify the maximum number of votes cast that might not be cast and counted if a strict voter ID law were passed in these states. This enables us to show, under a variety of conservative assumptions, the maximum extent to which a strict voter ID law would reduce turnout or affect election outcomes. The strength of this approach is it enables us to estimate the impact of a strict voter identification requirement without relying on assumptions regarding the counterfactual. In contrast, we identify clear upper bounds as to the effect of the law on both turnout and election outcomes. We view this as the central contribution of our study. The limitations of this approach are twofold. While we can clearly identify effects for potential laws if passed in these two (large) states, it is an open question whether the results would extend to other states. In particular, our results are most relevant for the more than 20 states that already have some voter identification law in place; we would expect our results to be less relevant for the minority of states that have no voter identification requirements. In addition, while we expect our approach

to overestimate effects given that some people without ID will acquire an ID if a law were passed, we do not account for effects on voters who already have the necessary ID. For example, we will not capture effects on those who falsely perceive the law affects their ability to vote, or those who are more likely to vote because they perceive an improvement in election integrity.

Results indicate there is little scope for strict voter identification laws to affect voter turnout. This finding stems directly from the extremely small number of votes cast by individuals without IDs, even in settings where such votes are explicitly allowed and counted. Specifically, we show that a voter identification law would reduce turnout by no more than 0.06 percent in Florida, and 0.2 percent in Michigan. This suggests that at least in these two states, very few civilians without IDs choose to vote, even when they can.

Unsurprisingly, the small effects on turnout imply there are very few races in our sample that could have been affected by a strict voter ID law. Even under the most extreme assumption – that all votes cast without an ID for the winner (and none for the runner-up) would be excluded under a strict law – we estimate that a strict law could have changed the election outcome in fewer than 0.35 and 0.09 percent of local and state/national elections in Florida, respectively. Similarly, we show that fewer than 0.55 percent of state and national elections in Michigan could have been affected. Estimates under more reasonable assumptions result in even smaller (and likely more accurate) potential electoral impacts. In short, the evidence presented here indicates that even if the worst fears of critics or proponents were true – that all those who would have voted without IDs are fraudulent, or all would be disenfranchised – it would have at most a tiny effect on election turnout or outcomes.

To our knowledge, this is the first paper to use administrative data to carefully document the number of civilians who voted without ID, and the number of elections that could potentially be affected by strict voter identification laws. In doing so, it complements two other strands of literature on voter identification laws. The first has focused on estimating the number of people in the general population who lack the identification necessary to satisfy strict voter identification laws. Estimates are generally nontrivial, giving rise to concern about these laws' potential effects. A national survey sponsored by the Brennan Center for Justice (2006) reports that nearly 7% of United States citizens did not have ready access to documents providing proof of citizenship and as many as 11% of citizens lacked government-issued photo identification. Studies have also documented that the lack of identification is concentrated among those who were low-income,

female (often due to name change after marriage), elderly, African-American, or Hispanic (Brennan Center for Justice 2006; Barreto, Nuno, and Sanchez, 2009). Similarly, the American National Elections Survey indicates that 7% of citizens lack a government-issued photo ID (Perez 2015). The estimates in this paper do not necessarily imply those estimates are overstated. Rather, it is possible that the vast majority of individuals without identification do not vote even in the absence of a strict ID requirement. This could be because they have little interest in voting, or because they mistakenly believe that their vote will not be counted if they do not have an ID, despite efforts by the states to make it clear the votes can count.² Regardless, our results indicate that a change from a non-strict voter ID law to a strict law—which is the margin over which the most serious legal challenges have been raised—is unlikely to have a meaningful effect on voter turnout or election outcomes.

In addition, our paper also contributes to the literature that uses policy evaluation methodologies such as difference-in-differences to identify the effect of these laws. Results from those studies are mixed. Milyo (2007) compares changes across counties in Indiana and finds surprising evidence of increased turnout among counties with higher proportions of democrats. Hopkins, Meredith, Morse, Smith, and Yoder (2017) compare changes across Virginia precincts with different proportions of civilians over 85 or without a driver’s license. They report increases in turnout for the most affected precincts following Virginia’s change to a strict photo identification law. Esposito, Focanti, and Hastings (2019) and Bestenbostel (2019) use data from Rhode Island and Texas, respectively, to assess the impact of strict voter identification laws. Both use difference-in-differences approaches, and cleverly use administrative data on residents that did and did not have drivers’ licenses to define treatment and control groups. Both papers find significant declines in voter turnout; Esposito, Focanti, and Hastings (2019) estimate that turnout in Rhode Island was reduced by 2.7 percentage points among those without drivers’ licenses and 0.42 percentage points overall, and Bestenbostel (2019) estimates turnout in Texas was reduced by 7.6 percentage points among those without drivers’ licenses and 1.8 percentage points overall.³ The advantage of our approach relative to these studies is we can assess the prospective effects of

² Both Florida and Michigan clearly state that votes can be counted even if the voter does not have an ID. See <http://dos.myflorida.com/elections/for-voters/voting/election-day-voting/> and <https://www.michigan.gov/sos/0,4670,7-127-29836-202520--F,00.html>.

³ There is also a large and growing literature in political science, with mixed results. For example, Hajnal, Lajevardi, and Nielson (2017) report that voter identification laws suppress minority votes, a result that was disputed by Grimmer et al. (2018), and supported by Hajnal, Kuk, and Lajevardi (2018, 2019). See Highton (2017) for a review.

the laws without making assumptions about the counterfactual. In doing so, our study is most similar to Henninger, Meredith, and Morse (2018), who study a random sample of affidavits cast in Michigan in 2016 and find that those without IDs make up 0.6 percent of voters, and that nonwhites are 2.5 to 6 times as likely to not have ID compared to whites.

Our results suggest the practical importance of strict voter identification laws is likely overstated. Specifically, our findings indicate that unless civilians without identification in other states vote at much higher rates than their counterparts in Michigan and Florida, or unless the laws affect the voting of citizens who have IDs, the passage of these laws is unlikely to affect voting behavior and election outcomes.

2. Background and Data

In order to assess the impact of strict voter identification laws, we carefully document the extent to which citizens vote without IDs in states that have not yet enacted strict laws. In doing so, our objective is to estimate the upper bound for the effect these laws could have on turnout and election outcomes.

As alluded to earlier, we use this approach rather than a more conventional policy evaluation approach for several reasons. First, because these laws have been enacted recently, and because elections occur infrequently, there are relatively few post-law observations with which to identify effects using an approach such as difference-in-differences. In addition, because most of the strict laws enacted faced legal challenges, there was significant uncertainty facing citizens as to whether the law would be in effect at the time of the election. Finally, policy evaluation methods necessarily require assumptions about counterfactual behavior. For example, a difference-in-differences approach assumes that those believed to be less likely to have a satisfactory ID would have changed their voting behavior over time similar to those with IDs. While there are various informal tests that can speak to the likelihood that these assumptions hold—such as parallel pre-trends—there is, of course, no way to know with certainty whether the assumptions hold. In addition, turnout in elections can be driven by idiosyncratic factors, of which there have been many. For example, recent presidential contests have been characterized by a number of firsts, including the first black candidate, the first black incumbent president, the first female candidate, and Donald Trump. This increases the likelihood of idiosyncratic shocks that affect one group differentially compared to another. As a result, we instead focus on providing a careful descriptive analysis of the prevalence

of voting without identification.

Specifically, we use data from Michigan and Florida, two states with non-strict voter identification laws. In both states, a picture ID is required for a person to cast a normal ballot. In the absence of an accepted form of identification, the person will be required to cast a provisional ballot. In Florida, the voter is required to sign the provisional ballot, which is then counted if it matches the voter's signature in the registration record. In Michigan, voters without the proper identification are required to cast affidavit ballots confirming their identity and their lack of possession of an acceptable form of identification. The affidavit is shown in Appendix Figure A1.⁴ These ballots will then be counted along with all the other ballots. In Michigan, the number of affidavit ballots corresponds exactly to the number of votes cast without an ID. In Florida, provisional ballots can be cast for other reasons as well. These include a voter not bringing a previously requested absentee ballot when attempting to vote at the polls, a voter's name not found in the register, and an inability to establish voter eligibility. As a result, for Florida, we use more detailed data collected from individual counties to conservatively estimate the fraction of provisional ballots cast due to the lack of identification.

One potential concern with using these data is that voters may not know that they can vote without the requested identification. While it is difficult for us to assess voters' perceptions of the requirement, both states make it clear that votes can be cast and counted without identification. The Florida Division of Elections website states "If you do not bring proper ID, you can still vote a provisional ballot. As long as you are eligible and voted in the proper precinct, your provisional ballot will count provided the signature on your provisional ballot matches the signature in your registration record" (Florida Division of Elections, 2019). Similarly, the Michigan Secretary of State Office website states "Michigan does have a voter identification requirement at the polls. Voters are asked to present an acceptable photo ID such as a Michigan driver's license or identification card. Please note that voters who do not have an acceptable form of ID or failed to bring it with them to the polls still can vote. They simply sign a brief affidavit stating that they're not in possession of a photo ID. Their ballots are included with all others and counted on Election Day" (Michigan Secretary of State, 2019).

We use two datasets from Florida. The first covers local races (i.e., county and below), was obtained from county websites and contains granular election results including information on the

⁴ Filing a false affidavit is punishable by a fine up to \$1,000, imprisonment for up to five years, or both.

different types of votes cast (regular, absentee, early, provisional, etc.) for each candidate in a race. We were able to extract these detailed data for 858 general and primary races in nine counties between 2008 and 2012. Details of the counties and election years for which we observe these data are shown in Appendix Table A1.

The second dataset we use is also from Florida and is used to assess turnout for state and national elections. We obtained county-level election results including the number of ballots cast for each candidate in every race (Florida Division of Elections 2017a) and county-level data on the number of provisional ballots cast (Florida Division of Elections 2017b) for all general elections from 2004 to 2016 from the Florida Division of Elections website. For each state and national level race in the data, we calculate the number of provisional ballots by summing the number of provisional ballots cast in all counties within the jurisdiction of the race. We also aggregate vote counts across counties by candidate to determine the winner and runner-up.

Our third dataset is from Michigan. We obtained election results at the precinct level for all general elections from 2004 to 2016 (Michigan Secretary of State 2017a) and county-level data on the number of affidavit ballots cast in general elections from 2012 to 2016 (Michigan Secretary of State 2017b) from the website of Michigan's Secretary of State. We note that while the vote tallies for each candidate are at the precinct level, the number of affidavits cast is only known at the county level. As a result, we assume the rate of usage of affidavits among voters is uniform across all precincts in a county in an election year. We then calculate the number of affidavit votes cast in a precinct by multiplying the county affidavit rate by the total number of ballots cast in the precinct. Since the data on affidavit ballots are only available from 2012, the county affidavit voting rates for general elections from 2004 to 2010 are assumed to be the same as that in 2012. In addition, we also report results separately for 2004 – 2016 and 2012 – 2016. Finally, we calculate the number of affidavit ballots cast in a race by adding the number of affidavit ballots in all precincts that fall in the jurisdiction of the race. For instance, affidavit ballots cast in a race for mayor would be the sum of calculated affidavit ballots cast only in the precincts within the particular city.

3. Voter Turnout

Table 1 presents our main findings on voter turnout. It shows descriptive statistics at the race level for all three of our data sets. Column 1 shows statistics for 858 local races in Florida where

we use candidate-level provisional ballot data. Column 2 shows statistics for 1,132 state- and national-level races in Florida where we use county-level provisional ballot data. For Michigan, we show data for the 1,084 races for election years from 2004 to 2016 in column 3. In column 4 we restrict to the 445 races from 2012 to 2016, which corresponds to the Michigan sample for which we observe affidavit ballots. The average margin of win as a percentage of total votes ranges from 23 to 35 percent.

As noted earlier, in Florida only a fraction of provisional ballots are cast due to the lack of an appropriate ID. As a result, we collected data from five of the six largest counties in Florida from general elections spanning 2008 to 2018 in order to construct a conservative estimate for the proportion of provisional ballots cast due to lack of identification. These figures are shown in Appendix Table A2, and they range from 3.5% to 37%. The average (weighted by vote total) ranges from 4.8% to 18.7% across election years. We use the overall weighted average of 10.3% as our best estimate of the proportion of provisional ballots cast without an ID. However, for our upper bound estimate, we assume this proportion to be 40%, which is greater than that observed in any election year for any of those five counties.

We present figures from these two assumptions—our best guess, and an upper bound—in columns 1 and 2 of Table 1. Since all affidavit ballots in Michigan are cast by voters without the necessary identification, our best and upper bound estimates of the average number of votes cast without ID in columns 3 and 4 are equal to the average number of affidavit ballots cast in a race.

Results in column 1 from Florida indicate that our best guess as to the fraction of ballots cast without identification in local elections in Florida is only 0.03%. Our upper bound estimate is that 0.10% of ballots cast are without ID. Similarly, column 2 shows that in state and national elections in Florida, our best estimate and upper bound of the fraction of votes cast without identification are only 0.016% and 0.064%, respectively. The rate of voting without ID is somewhat higher in Michigan, where we estimate that 0.3% (from 2004 – 2016) and 0.31% (2012 – 2016) were cast without IDs.

These findings highlight the central finding of our paper: very few votes are cast without IDs, even in states that do not impose strict voter identification requirements. Overall, we estimate the rate of voting without ID to range from 0.016% to 0.31%. This is small in absolute magnitude, and tiny in comparison to the average margin of victory, which ranges from 23 to 35 percent. Thus, while we turn to formally estimating the potential electoral impact in the next section, these

findings suggest strict laws are unlikely to have a meaningful impact on election outcomes.

4. Strict Voter Identification and Potential Effects on Election Outcomes

We now directly examine the potential impact of strict voter identification requirements on election outcomes. These effects could, in theory, arise for two different reasons. The first is if fraudulent votes are being cast due to voter impersonation, then preventing those votes could potentially change the election outcome depending on the split of fraudulent votes cast for the winner relative to the runner-up. Second, to the extent that legitimate, registered voters are disallowed from the voting process due to the lack of identification, and to the extent those votes are cast disproportionately for the winner, the election outcome could be affected.

3.1. Effect of strict voter identification laws on local races

Using candidate-level data from Florida on the number of provisional votes cast, we ask how many of the races could have a different outcome in the presence of a stricter voter ID law. Since we do not observe which of the provisional ballots were cast because of the lack of ID, we first need to make an informed assumption about the proportion of such provisional ballots. As discussed in the previous section, the best estimate of the proportion of provisional ballots cast without ID is 10.3%. However, in the interest of being conservative in this analysis, we assume that 40% of all provisional ballots are cast without ID. We choose 40% as it is greater than the largest proportion of provisional ballots cast without ID in any election in any of the five counties for which we observe these data, as shown in Appendix Table A2.

Second, we need to make an assumption about the proportion of ballots cast without the appropriate ID that would be invalidated in the presence of a strict law. We present results under varying assumptions, the most extreme of which is that 100% of these votes would be deterred or invalidated in the presence of a strict law. We note that this is implausible, as it does not allow for voters casting provisional ballots due to having temporarily misplaced their ID or forgotten to bring it to the polls. It also does not allow for anyone without ID to acquire one after the passage of a strict law. For each race, we then subtract the number of provisional ballots that would be eliminated from the winner's vote count (and in some cases we also subtract some from the runner-up's vote count) and ask whether the outcome of the election would be different.

The results from this analysis for local races are shown in Table 2. Panel 1 shows results using the most conservative assumptions, while Panels 2, 3, and 4 progressively make more reasonable assumptions. In each panel, we first show the number and proportion of votes that would get eliminated on average followed by the number and percentage of races whose outcomes could get affected.

In Panel 1 we assume that 100% of all votes cast without ID for the winner would be eliminated under a strict law. We also conservatively assume that 40% of provisional ballots cast in Florida are due to the lack of an ID, which is significantly higher than the average of 10% observed for the five counties for which we have these data. Intuitively, in Panel 1 we are assuming that among the votes cast without ID, only those cast for the winner are fraudulent (or disenfranchised), and all of them would be eliminated. Since this is the most extreme assumption we can make, the results in Panel A represent the absolute upper bound of the effect of stricter voter identification laws. Under these assumptions, on average 32 votes or 0.06% of total votes would be eliminated in a race. This could potentially overturn only three local races, which represents 0.35% of all races in our data.

We progressively relax the assumptions in Panels 2 and 3, where we assume that 50% and 25% of votes cast without ID for the winner would be eliminated. Under these assumptions, we find that two local races (0.23% of all races) could have different outcomes. Finally, in Panel 4, we show our least conservative case where we assume that 25% of votes cast without an ID for both the winner and the runner-up are eliminated. This is less conservative than the other cases because we allow for some of the votes cast without ID for the runner-up to also be potentially fraudulent. In this case, on average 13 votes or 0.024% of total votes would be eliminated in a race and this could overturn two local races, which represents 0.23% of all races in our data.⁵

3.2. Effect of strict voter identification laws on state and national races

Next, we ask whether state or national races could potentially be affected by the enactment of a strict voter ID law. We do so using county-level data on the number of provisional ballots or

⁵ The two races whose outcomes would have changed are for Town Mayor and a Community Development District (CDD) seat. In both cases, the top two candidates received the same number of votes, and one of them received 1 provisional ballot. So, under all of our assumptions in Table 2, the outcome would change from a tie to having a clear winner.

affidavit ballots cast in Florida and Michigan elections, respectively.

To bound the effect of a stricter voter identification law on election outcomes, we need to make a set of assumptions. First, we need to determine the number of ballots cast without ID in every race. For the races in Michigan from 2012 to 2016, the number of affidavit ballots provides us the exact number ballots cast without ID. For election years 2004 to 2010 in Michigan, we assume that the proportion of total ballots cast in a county using affidavits was the same as it was in 2012. For the Florida races, using the information in the provisional ballot reports, as before we conservatively assume that 40% of the provisional ballots were cast because the voter failed to present the necessary identification.

Second, since we do not observe the number of provisional or affidavit ballots cast for each candidate in the county-level data in Florida and the precinct-level data in Michigan, we are required to make assumptions about the number/proportion of votes cast without ID for the winner and, in some cases, the runner-up. Based on candidate-level data in Florida, the winners on average received 57.9% of the total votes and 58.1% of the provisional votes. Runner-ups on average received 34.4% of the total votes and 36.3% of the provisional votes. Using these benchmarks, we conservatively assume that winners received 60% of the provisional and affidavit ballots in Florida and Michigan respectively. For the sake of simplicity, where necessary, we assume the runner-ups received 40% of the provisional and affidavit ballots.

Third, we need to make an assumption about the proportion of voters who cast ballots without the necessary ID that would be deterred or discouraged from voting under such a law. As discussed in the previous section, assuming that 100% of such voters would be deterred is likely to be extreme. Consequently, we make a range of assumptions about the share of the ballots cast without ID that would be eliminated and then compute how many election outcomes would be changed as a result.

The results are presented in Table 3. Results from Florida are in column 1. Results from Michigan for election years 2004 to 2016 are in column 2 and for election years 2012 to 2016 are in column 3. Similar to Table 2, Panel 1 shows results using the most extreme assumption. In particular, we assume that 60% of the votes cast without ID are for the winner, and all of them (but none of the votes for the runner-up) would be eliminated under a strict voter ID law. We relax this assumption in panels 2 and 3 where we assume 50% and 25% of the votes cast without ID for the winner would be eliminated. Finally, in panel 4, we show results for the least conservative—and

arguably most plausible—set of assumptions, where we assume that 25% of votes cast without ID for *both* the winner and runner-up would be eliminated. In every panel, for every column, we report the mean number and proportion of votes that would be eliminated and the corresponding number and proportion of election outcomes that would be altered as a result.

Panel 1 of Table 3 shows that even under our most extreme assumption, only 0.04% of the votes would be eliminated on average in a race in Florida, and only 0.19% in Michigan. This is extremely small relative to the average win margin in these races of around 30 percent. Consequently, only 0.09% of races in Florida and 0.55 – 0.90% of races in Michigan would have a different outcome. In panels 2 and 3 with somewhat less conservative assumptions, none of the state or national races in Florida would have a different outcome. In Michigan, if 50% of the votes cast without ID for the winner are eliminated, only around 0.4% of races would be affected. With 25% elimination in Panel 3, only one race would be affected. Finally, under the least stringent assumption where 25% of votes cast without ID for both the winner and runner-up are eliminated, none of the races in Florida or Michigan would have a different outcome.

3.3. Effect of strict voter identification laws on presidential races

Lastly, we turn to the question of whether voter identification laws could have affected presidential races. We note this analysis is necessarily limited by the small sample of recent presidential elections. In addition, presidential races are determined in large part by states for which we do not have data. We note that even aside from the costs of collecting similar data from other states, it is not possible to collect data on votes cast without an ID in many states. This is partly because no identification is required to vote in some states (e.g., California, Illinois), which means that there is no way to know which voters in past elections did not have the identification required under a prospective strict law. In addition, other states (e.g., Kansas) have strict laws under which it is not possible for votes to be counted without an ID, which also makes our approach impossible. Finally, as discussed earlier, not all states that do allow voting without IDs track which votes come from that process. For these reasons, we view our analysis of presidential elections as significantly more limited than our analysis of state and local elections.

With those caveats in mind, we are able to perform a basic extension of our analysis to historical presidential races. To do so, we first make an assumption about the proportion of votes cast by voters without identification. We focus on Michigan as Table 3 indicates a higher

proportion of ballots are cast by voters without ID in Michigan than in Florida. Specifically, we use the fact that 0.39% of total votes in the 2016 presidential race in Michigan were cast by affidavit—that is, without appropriate identification. Under the assumption that 60% of the affidavit ballots were cast for the winner and that all of them would be eliminated (and none for the runner-up), this implies that 0.234% (0.39×0.6) of votes could be hypothetically eliminated. Recall that this is the most extreme assumption we make in our analysis. We then ask how the historical winning margins for states in the electoral college compare to this 0.234%, which implicitly assumes a similar proportion of voters without ID in other states.

Results are summarized in Table 4. Panel a of Table 4 shows every state in a presidential election from 1996 to 2016 that could have flipped under the extreme assumptions above. For example, Donald Trump won Michigan by 0.223% in 2016, which is (barely) less than the 0.234% figure computed above. This indicates that it is hypothetically possible—albeit still very unlikely—for Michigan to have flipped from Trump to Clinton in 2016 had Michigan imposed a strict law prior to the election. As shown in Panel a of Table 4, there are four other states that could have flipped, including Missouri in 2008, and Florida, New Mexico, and Wisconsin in 2000.

Panel b of Table 4 shows the results of these hypothetical flips on the overall outcome of the presidential race. It shows that while Michigan could have flipped in 2016, it would not have been enough to swing the election in Hillary Clinton’s favor. The only presidential election outcome that could have flipped (out of six total) was the 2000 Bush v. Gore election. This is unsurprising given the famously close outcome in Florida, where hanging chads and any number of other things could have changed the outcome.

5. Conclusion

In this paper, we examine the likely impact of strict voter identification laws on turnout and election outcomes. Rather than use a conventional research design that requires assumptions about counterfactual voting outcomes, we take an approach similar to papers that document the number of voting-age adults who lack identification. However, rather than assessing the number of voting-age adults without IDs, we document the number of voters that previously voted without identification. We do so in two states—Michigan and Florida—that have (different) processes in place to allow and count such votes. In this way, we generate an upper bound as to the number of voters whose votes could possibly be eliminated due to fraud or disenfranchisement. This estimate

is an upper bound for several reasons. First, many of those who vote without identification likely do have identification and merely forgot to bring it to the polls or misplaced it. Second, we would expect some of those without the required identification to acquire it if a strict law were passed. Third, we make a series of conservative and even implausible assumptions to generate an upper bound; more reasonable assumptions will lead to smaller estimates.

The results are striking. We find that no more than 0.1% of votes cast in Florida and no more than 0.3% of votes cast in Michigan were due to the lack of appropriate identification. This implies that even if the worst fears of critics of these laws were true—that all those who vote without IDs would be wrongfully disenfranchised—there would be little effect on turnout. Similarly, if the worst fears of these laws' proponents were realized—that all those currently voting without proper identification were fraudulent, and could be prevented—our results suggest it would be of little practical importance.

These results contrast with much of the existing literature. As discussed earlier, much of this literature has estimated that large fractions of the population lack the necessary IDs to vote under a strict law. This presents a puzzle. One potential explanation is that citizens of Michigan and Florida are much less likely to lack IDs than citizens elsewhere. We think this is unlikely. We believe a more plausible explanation is that either previous estimates are overstated, or more likely, that those without IDs choose not to vote even when they can.

Our results also contrast with many of the quasi-experimental studies that estimate reductions in turnout due to strict identification laws. For example, Esposito, Focanti, and Hastings (2019) and Bestenbostel (2019) estimate effects implying reductions in overall turnout of 0.4 and 2 percentage points, respectively, both of which are larger than the upper bounds shown in this study. While it is again possible that this difference is due to heterogeneity in the frequency of voting without IDs across states, there are other explanations. For example, it is possible that subpopulations judged to be at risk of not having proper identification (i.e., the treatment group) vote less in response to the law *even if they have proper identification*. In addition, it is hard to rule out the possibility that idiosyncratic election shocks differentially affect the turnout of one type of voters versus another.

Our results also raise another interesting puzzle: if these laws affect at most a trivial part of the electorate, why is there so much controversy surrounding them? We speculate part of the answer may be ignorance about the size of the affected population that votes. In addition, we hypothesize

that the controversy around these laws may be motivated in part by a desire of each party to motivate their base by trying to make the other side look as bad as possible. Indeed, our results suggest that for these laws to matter, they need to affect the turnout of those unaffected by the law's requirements. This is consistent with evidence from a field experiment in Virginia conducted by Endres and Panagopoulos (2018), who found that informational mailers stating that identification requirements disproportionately affect women and minorities resulted in increased turnout by Democrats.

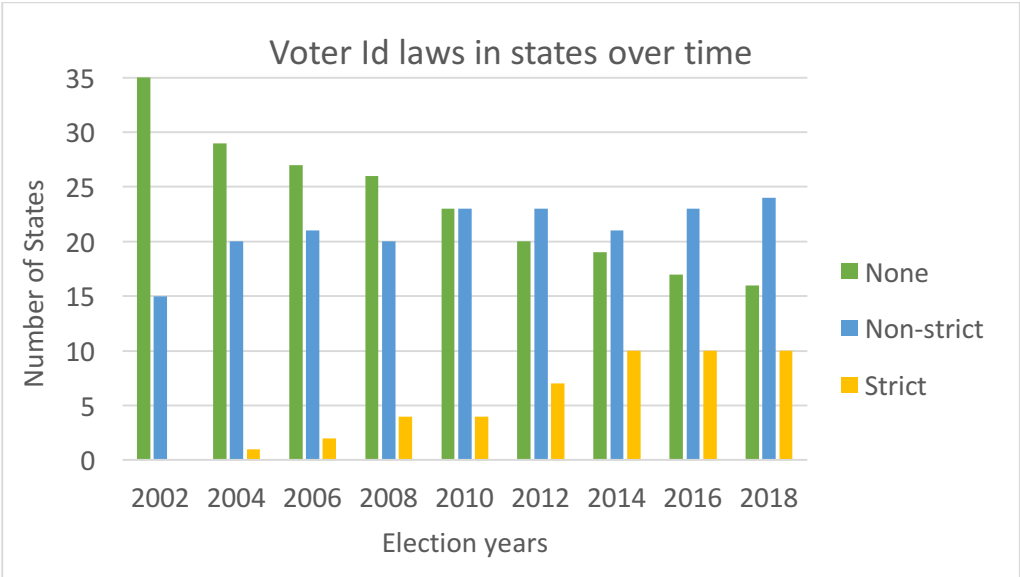
Finally, we note it is difficult to know whether our results extend to other settings. In particular, we believe our findings are most relevant for assessing the prospective impacts of strict voter identification laws in states that already have some identification requirements. Thus, our results are likely less relevant for states like California, which have no identification requirement. Still, we argue that the states most likely to pass strict voter identification laws are those that have already enacted some form of identification requirement. As a result, we believe focusing on the states in our sample—states that have weak identification requirements already—generates results that are most relevant for public policy.

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Figure 1: Implementation of state voter identification laws from 2002 to 2018



Source: History of Voter ID Laws as compiled by the National Conference of State Legislatures (NCSL)

Notes: The above graph has been generated by the authors based on the historical changes in voter ID laws across states according to the National Conference of State Legislatures (NCSL). A strict voter ID law is one which allows voters without a valid ID to cast provisional ballots, but such a ballot produce *if the voters produce the necessary ID* within a specific period of time. A non-strict voter ID law is one which allows voters without a valid ID to cast provisional ballots and allows such *ballots to be counted under provisions other than requiring the voter to produce an ID*, such as signing a sworn affidavit of identity.

Table 1: Race-level statistics on votes cast with and without identification

State	(1)	(2)	(3)	(4)
	Local Elections Florida	State/National Elections		
Years	2008-2012	2004-2016	2004-2016	2012-2016
Number of races	858	1,132	1,084	445
Number of votes cast per race	55,342	707,621	406,923	422,962
Win margin (as a percent of votes cast)	23%	35%	30%	29%
Best estimate of votes cast w/o ID (assumes 10.3% of Florida provisional ballots were due to a lack of ID) ^a	15 (45)	132 (348)	964 (2,953)	1,025 (3,157)
Best estimate of percent votes cast w/o ID (assumes 10.3% of Florida provisional ballots were due to a lack of ID) ^a	0.03%	0.016%	0.30%	0.31%
Estimated upper bound for votes cast w/o ID (conservatively assumes 40% Florida provisional ballots were w/o ID) ^b	57 (176)	513 (1350.4)	964 (2,953)	1,025 (3,157)
Estimated upper bound for percent votes cast w/o ID (conservatively assumes 40% Florida provisional ballots were w/o ID) ^b	0.10%	0.064%	0.30%	0.31%

Notes: Local election data from Florida are from Duval, Hillsborough, Pinellas, Marion, Orange, Putnam, Miami Dade, St. Johns, and Suwannee counties and include primary and general elections (See Appendix Table A1 for details). State and national election data include only general elections. All votes cast without an ID in Michigan are cast via affidavit and are the only votes cast by affidavit. We only observe the number of affidavits in Michigan for the 2012-2016 elections; for previous Michigan elections, we assume the proportion of votes by affidavit was the same as in 2012. Votes cast without an ID in Florida are provisional ballots, the signature on which is matched to the signature at registration for the ballot to be counted.

^a We obtained provisional ballot reports from five of the six largest counties in Florida across general elections from 2008 to 2018 that list reasons for casting provisional ballots (See Appendix Table A2 for details). According to these reports, 10.3% (weighted average across elections and counties) of the provisional ballots were cast due to the lack of an ID. Consequently, we use 10.3% as our best estimate of the proportion of provisional votes cast without ID in Florida.

^b The maximum share of provisional ballots cast without ID in a county in an election was 37%. Thus, for calculating upper bounds, we conservatively assume that 40% of provisional votes cast in Florida were due to the lack of an ID.

Table 2: Effect of strict voter ID laws on turnout and election outcomes in local races

	Local Elections
State	Florida
Election Years	2008-2012
Number of races	858
Number of votes cast per race	55,342
<hr/>	
<u>Panel 1 (extremely conservative) - Assume 100% of votes cast without an ID for the winner are eliminated</u>	
Mean number of votes eliminated	32
Mean percent of votes eliminated	0.058%
Number of races potentially affected	3
Percent races potentially affected	0.35%
<hr/>	
<u>Panel 2 (very conservative) - Assume 50% of votes cast without an ID for the winner are eliminated</u>	
Mean number of votes eliminated	16
Mean percent of votes eliminated	0.029%
Number of races potentially affected	2
Percent races potentially affected	0.23%
<hr/>	
<u>Panel 3 (moderately conservative) - Assume 25% of votes cast without an ID for the winner are eliminated</u>	
Mean number of votes eliminated	8
Mean percent of votes eliminated	0.014%
Number of races potentially affected	2
Percent races potentially affected	0.23%
<hr/>	
<u>Panel 4 (conservative) - Assume 25% of votes cast without an ID for both winner and runner-up are eliminated</u>	
Mean number of votes eliminated	13
Mean percent of votes eliminated	0.024%
Number of races potentially affected	2
Percent races potentially affected	0.23%

Notes: Data include 426 primary and 432 general election races. In all panels, we observe the exact number of provisional ballots cast for each candidate. We conservatively assume that 40% of provisional ballots were due to the lack of an ID, which is significantly higher than the average 10.3% observed in the provisional ballot reports from different counties. In panels 1 to 4, we make assumptions about the proportion of votes cast without ID for the winner and runner-up that would be eliminated under a strict photo ID law, with panel 1 showing the most extreme case. Thus, panel 1 shows the upper bound of the effects of a stricter law on election outcomes.

Table 3: Effect of strict voter ID laws on turnout and election outcomes in state and national races

	(1)	(2)	(3)
	State/National Elections		
State	Florida	Michigan	Michigan
Election Years	2004-2016	2004 - 2016	2012 - 2016
Number of races	1,132	1084	445
Number of votes cast per race	707,621	406,923	422,962
<u>Panel 1 (extremely conservative) - Assume 60% of votes cast without an ID are for the winner, and all are eliminated</u>			
Mean number of votes eliminated	308	578	614
Mean percent of votes eliminated	0.038%	0.18%	0.19%
Number of races potentially affected	1	6	4
Percent races potentially affected	0.09%	0.55%	0.90%
<u>Panel 2 (very conservative) - Assume 60% of votes cast without an ID are for the winner, and 50% are eliminated</u>			
Mean number of votes eliminated	154	289	307
Mean percent of votes eliminated	0.019%	0.09%	0.09%
Number of races potentially affected	0	4	2
Percent races potentially affected	0.00%	0.37%	0.45%
<u>Panel 3 (moderately conservative) - Assume 60% of votes cast without an ID are for the winner, and 25% are eliminated</u>			
Mean number of votes eliminated	77	145	154
Mean percent of votes eliminated	0.010%	0.05%	0.05%
Number of races potentially affected	0	1	1
Percent races potentially affected	0.00%	0.09%	0.22%
<u>Panel 4 (conservative) - Assume 60% and 40% of votes cast without an ID are for the winner and runner-up respectively, and 25% of all such votes are eliminated</u>			
Mean number of votes eliminated	129	241	256
Mean percent of votes eliminated	0.016%	0.08%	0.08%
Number of races potentially affected	0	0	0
Percent races potentially affected	0.00%	0.00%	0.00%

Notes: We make the following assumptions in this table: 1) In all panels we assume 60 percent of votes cast without an ID are cast for the winner since 58 percent of provisional ballots were cast for the winner in our candidate-level local election data. 2) In column 1 for Florida in all the panels, we conservatively assume that 40% of provisional ballots were due to the lack of an ID, which is much higher than the average 10.3% observed in the provisional ballot reports from different counties. 3) Since we only observe the number of affidavits in Michigan for the elections from 2012 to 2016, for previous Michigan elections in column 2 we assume that the proportion of affidavit votes by county were the same as in 2012. 4) In panels 1 to 4, we make assumptions about the share of votes cast without ID for the winner and runner-up and the proportion of those votes that would be eliminated under a strict photo ID law, with panel 1 showing the most extreme case. Thus, panel 1 shows the upper bound of the effects of a stricter law on election outcomes.

Table 4: Effect of strict voter ID laws on election outcomes in presidential races from 1996 to 2016

Table 4a: State-level presidential election results that could be overturned

Year	State	Total votes	Win margin (votes)	Win margin (percentage)	Changed to	Electoral votes
2016	Michigan	4,799,284	10704	0.223	Clinton	16
2008	Missouri	2,925,205	3903	0.133	Obama	10
2000	Florida	5,963,110	537	0.009	Gore	29
2000	New Mexico	598,605	366	0.061	Bush	5
2000	Wisconsin	2,598,607	5708	0.220	Bush	11

Notes: This table shows the state-level outcomes in presidential races from 1996 to 2016 where the margin of victory was less than 0.234% of total votes. Assuming that about 0.39% votes were cast without ID (as in Michigan in 2016), that 60% of them were for the winner (0.234% vote share), and that all of them would be eliminated (most extreme assumption in Table 3) via either prevention of fraud or voter disenfranchisement, these states would have flipped. The last two columns provide details of the new hypothetical winner and the number of electoral college votes they would gain.

Table 4b: Overall Effect on the Presidential race

Year	Candidate	Actual Electoral College Votes	Electoral college flip states			Changed Electoral college votes	Outcome change
2016	Clinton	232	MI			248	No
	Trump	306	16			290	
2008	Obama	365	MO			375	No
	McCain	173	10			163	
2000	Bush	271	FL	NM	WI	258	Yes
	Gore	266	-29	5	11	279	

Notes: This table shows the effect of potential changes in state-level outcomes on the presidential race using data from 1996 to 2016. For the election years with narrow state-level victories, we show the actual number of electoral college votes received, the changes at the state level, and the overall change in votes. Since 270 electoral college votes are necessary to win, we find that only the 2000 election could potentially have a different outcome under our most extreme assumption.

APPENDIX

Table A1: Availability of candidate-level ballot data from Florida counties

County	Election Years			Total
	2008	2010	2012	
Duval	38	19	38	95
Hillsborough	78	34	54	166
Marion	-	13	26	39
Miami Dade	-	-	240	240
Orange	-	14	45	59
Pinellas	103	20	63	186
Putnam	-	2	28	30
St Johns	-	-	29	29
Suwannee	-	-	14	14
Total	219	102	537	858

Notes: Each cell in this table represents the number of races for which we were able to extract data for that county for that year.

Table A2: Sources of provisional ballot reports from Florida

County	Election Year	Provisional ballots counted	Counted provisional ballots cast without id	Percentage of counted provisional ballots cast without ID	Weighted averages by election year
Duval	2008	1377	126	9.2%	8.14%
Miami-Dade		1203	52	4.3%	
Orange		503	73	14.5%	
Duval	2010	3368	119	3.5%	4.85%
Orange		138	51	37.0%	
Duval	2012	4460	570	12.8%	10.65%
Orange		1625	78	4.8%	
Orange	2014	139	14	10.1%	10%
Broward	2016	466	32	6.9%	18.74%
Miami-Dade		744	106	14.2%	
Orange		103	37	35.9%	
Palm Beach		667	196	29.4%	
Broward	2018	246	23	9.3%	17.82%
Orange		71	14	19.7%	
Palm Beach		553	118	21.3%	
Total		15663	1609	10.3%	

Notes: We obtained provisional ballot reports from five of the six largest counties in Florida for an assortment of years to discern the proportion of provisional ballots that are cast due to the lack of required ID. This table shows the number of provisional ballots that were counted and the subset of them that were cast because of the lack of ID. Weighted averages for each election year are shown in the last column. The last row shows the weighted average across all counties and election years in our data.

Figure A1: Affidavit ballot used in Michigan

**AFFIDAVIT OF VOTER NOT IN POSSESSION
OF PICTURE IDENTIFICATION**

I, _____ hereby affirm that I reside at
(Print Name)

(Present Street Address)

I further affirm that I am not in possession of a driver's license, a state-issued personal identification card or any other acceptable form of picture identification and wish to register to vote or vote.

By signing this affidavit, I swear that the statements made above are true.

SIGNATURE OF VOTER: **X** _____

Penalty: Making a false statement in this affidavit is perjury, punishable by a fine up to \$1,000.00 or imprisonment for up to 5 years, or both.

To be completed by Election Official/Inspector

Sworn and subscribed to before me this _____ day of _____,
I certify that the elector named above has completed the above affidavit in my presence.

X _____
Signature of Election Official/Inspector

NOTE: This document should be retained with the voter registration form, absent voter ballot application, or application to vote depending on the transaction conducted that required picture identification.