Evidence of Voter Fraud and the Impact that Regulations to Reduce Fraud have on Voter Participation Rates

John R. Lott, Jr. [1]
University of Maryland Foundation
University of Maryland
College Park, Maryland 20742

July 29, 2006
Revised
October 10, 2007

Abstract

The results provide some evidence of vote fraud and that regulations that prevent fraud can actually increase the voter participation rate. It is hard to see any evidence that voting regulations differentially harm either minorities, the elderly, or the poor. While this study examines a broad range of voting regulations, it is still too early to evaluate any possible impact of mandatory photo IDs on U.S. elections. What can be said is that the non-photo ID regulations that are already in place have not had the negative impacts that opponents predicted. The evidence provided here also found that campaign finance regulations generally reduced voter turnout.

JEL codes: D73, D72

Introduction

Regulations to ensure the integrity of the voting process can reduce voter participation rates by making it more costly for people to vote. But to the extent that the regulations increase people's confidence that their votes will be properly counted, these regulations can actually encourage more people to vote. The trade-offs are everywhere. For example, absentee ballots make voting much more convenient, increasing the rate at which people vote, but some view them as "notorious" sources of voter fraud.[2,3] Although there has been some bi-partisan support for stricter registration and ID requirements (e.g., the Carter-Baker commission),[4] Democrats are concerned that stricter rules will discourage voters, while Republicans think that stricter rules are needed to ensure confidence in the voting process.[5] At the time of this writing, vigorous court battles are being waged in states from Arizona, Georgia, Indiana, and Missouri over exactly what is the impact of voter IDs.[6]

Almost 100 countries require that voters present a photo ID in order to vote.[7] Many directly tie voter registration with provision of an ID and only allow an ID that is specifically issued for voting.[8] Some countries either do not allow or greatly restrict absentee ballots.[9]

For example, all voters in Mexico must present voter IDs that include not only a photo but also a thumbprint. The IDs themselves are essentially counterfeit-proof, with special holographic images, imbedded security codes, and a magnetic strip with still more security information. As an extra precaution, voters' fingers are dipped in indelible ink to prevent people from voting multiple times.

Mexican voters cannot register by mail; they have to personally go to their registration office and fill out forms for their voter ID. When a voter card is ready three months later, it is not mailed to the voter as it is in the U.S. Rather, the voter must make a

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[2] Editorial, "Voter Suppression in Missouri," New York Times, August 10, 2006.

[3] The fraud itself can increase turnout as any "brought" votes are more easily checked and thus worth more. For example, past research found that when states introduced secret ballots during the 1882 to 1950 there was an 8 to 12 percent drop in turnout (Lott and Kenny, 1999, p. 1196). Without the ability to determine how people had voted, there was not the same return to paying them to vote.

[4] A survey done for John Fund (2004, p. 5) by Rasmussen Research indicates that 82 percent of all Americans, including 75 percent of Democrats, agree with the statement that "people should be required to show a driver's license or some other form of photo ID before they are allowed to vote."

[5] Democrats have also been concerned that the choice of voting machines will cause votes for some offices not to be recorded. This does not apply to our general election results since, as I will explain later, the data used here is generally the total number of voters turning out and not the number of votes recorded in a particular race. For a discussion of the literature see Lott (2003 and 2005).

[6] David Lieb, "Missouri Voter ID Law Latest in National Test Cases," Associated Press, August 20, 2006 (http://www.belleville.com/mld/belleville/news/state/15320528.htm) and Reuters, "Supreme Court Allows Arizona Voter ID Law," Reuters News Wire, October 20, 2006 (http://www.washingtonpost.com/wp-dyn/content/article/2006/10/20/AR2006102001203.html).

[7] Building Confidence in U.S. Elections, p. 5.

[8] Ibid.

[9] For example, as a result of fraud in their 1988 Presidential election, absentee ballots were not allowed in Mexico until 2006 (see Associated Press, "Mexican Senate approves mail-in absentee ballots for Mexicans living abroad," AZcentral.com, April 28, 2005 (http://www.azcentral.com/specials/special03/articles/0428mexicovote-ON.html).

second trip to a registration office to pick it up.   The 2006 election was the first since the 1991 reforms in which absentee ballots were available, but only for voters who requested a ballot at least six months prior to the election.[10]

In the U.S. during 2006, three states -- Georgia, Indiana and Missouri -- have adopted regulations requiring that a photo ID be presented before a person is allowed to vote. Other states are considering following suit, generating heated debate and court cases. Some claim that such a requirement would prevent "many people" from voting,[11] but the evidence so far is scant. The primary evidence presented measures the portions of the population who do not possess driver's licenses (Overton, 2006 and Pawasarat, 2005). The National Commission on Electoral Reform (2001, p. 77) claims that about 92 percent of the voting age population have driver's licenses and that other photo IDs -- such as student IDs, military IDs, employee IDs, and passports – "probably" only increases this percentage "slightly." Yet, this provides only a very crude measure of whether photo ID requirements will prevent people from voting. Some people without driver's licenses will not vote even when there are no photo ID requirements and others will go out to get a photo ID in order to vote. Just because an individual does not have a photo ID at some point in time (when they may not have any reason to have such an ID), does not imply that they will not get one when they have a good reason to do so.

A better measure of how difficult it is to meet the ID requirement is the percent of registered voters who have driver's licenses (Brace, 2005). But even this measure ignores that people can adjust their behavior and that some of those who currently do not have a photo ID might acquire one once it is required. Others have pointed out that even these estimates are unnecessarily alarmist because the lists of registered voters have not been updated to remove people who have died or moved away, and the statistics thus exaggerate the number of voters who are listed by motor vehicle bureaus as not currently having driver's licenses (Bensen, 2005).

There is also the question of the disparate impact on different groups. Would minorities or the elderly, people who are said to be less able to bear the costs of getting photo IDs, be particularly discouraged? The courts, the media, and Democratic governors who have vetoed photo ID requirements have raised concerns over this impact.[12] Again, the existing evidence involves either comparing the percent of adults with photo IDs or the percent of registered voters with driver's licenses.

There is some evidence from other countries, such as Mexico, that strict anti-fraud regulations have actually been associated with increases in voter turnout.[13] Nevertheless, it

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[10] The United Kingdom faced claims of widespread vote fraud from "postal votes" during the 2005 election. Zoe Hughes, "Reform call after postal votes row," The Journal (Newcastle, UK), May 21, 2005, p. 4.

[11] Editorial, "Voter Suppression in Missouri," New York Times, August 10, 2006.

[12] Wisconsin Democratic Governor Jim Doyle vetoed attempts at requiring photo IDs for voting three times and argued that "an ID requirement would keep poor people and the elderly who lack identification from the polls" (Associated Press, "Rule allow votes without license," The Capital Times (Madison, Wisconsin, August 5, 2006 http://www.madison.com/tct/mad/topstories//index.php?ntid=93713). See also Editorial, "Judge Blocks Requirement in Georgia for Voter ID," New York Times, July 8, 2006.

[13] Since the 1991 election reforms in Mexico, there have been three presidential and four congressional elections. In the three presidential elections since the 1991 reforms, 68 percent of eligible citizens have voted, compared to only 59 percent in the three elections prior to the rule changes. However, there is only a very

is difficult to measure the effect of mandatory photo IDs in the United States for a simple reason: there has been only one primary election in just one state, Indiana, during which a photo ID requirement was in place. The Georgia and Missouri mandatory photo ID laws have not yet gone into effect. Florida, Hawaii, Louisiana, Oklahoma, and South Carolina all had non-mandatory photo ID laws by 2004, with South Dakota joining the group by 2006. In these states, voters are asked to present a photo IDs, but if the voter does not have a photo ID, he or she is still allowed to voter if they meet one of a wide range or requirements such as providing non-photo IDs or signing a pledge that the voter is who they say that they are. It remains to be seen whether the mere threat of asking for a photo ID has any effect on voting behavior. So far no one has investigated the impact of these or other laws on voting participation rates.

Similar concerns have been raised about regulations requiring non-photo IDs. For example, Tova Andrea Wang with The Century Foundation notes that "for those who do not have the kinds of up-to-date non-photo ID necessary—and many minority and urban voters, for example those who live in multiple family dwellings, simply will not—getting identification from the government will present costs and burdens for voters who simply want to exercise their constitutional right to vote."[14]

The general question remains as to the extent to which other restrictions might affect voter participation rate and whether the impacts are different across different groups of voters. In the following sections, I will briefly discuss how to test how voting regulations affect turnout and then provide some empirical evidence.

Voter IDs on Voter Participation Rates

Ensuring integrity of the voting process can either increase or decrease voter participation rates. Eliminating fraud may appear to reduce the voter participation rate simply because there will be fewer "false" votes.

These distinct theories regarding potential impact are as follows:

1) **The Discouraging Voter Hypothesis:** This hypothesis sets forth the possible explanation that, with little or no fraud to eliminate, the regulations discourage legitimate voters from voting. This hypothesis predicts that, to the extent that regulations have any effect, they will reduce the number of people who vote. Critics of stricter regulations argue that minorities, the elderly, and the poor are most affected.
2) **The Eliminating Fraud Hypothesis:** This hypothesis sets forth the possible explanation that, if there is indeed substantial fraud and the regulations eliminate it,

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trivial increase for congressional elections. Comparing the four congressional elections prior to the reforms with the four afterwards produces only a one percent increase from 56 to 57 percent. See Klesner (2003) for the turnout data up through the 2003 elections.

[14] Tova Andrea Wang, "ID and Voting Rights," The Century Foundation, August 29, 2005 (http://www.tcf.org/list.asp?type=TN&pubid=1084). Maria Cardona, a spokeswoman for the Democratic National Committee, is quoted as saying that "ballot security and preventing voter fraud are just code words for voter intimidation and suppression" (Fund, 2004, p. 3).

the measured voter participation rate will decline even though actual lawful participation levels are not truly affected. Votes that shouldn't have been recorded will now no longer be recorded and voter participation will appear to decline.

3) **The Ensuring Integrity Hypothesis:** This hypothesis sets forth the possible explanation that greater confidence that the election is fair and that votes will be counted accurately encourages additional voter participation.[15] (Similarly, if the regulations reduce confidence, depending on the extent of the drop in participation suggested by the two previous hypotheses, this hypothesis of greater participation may be true even if overall voter participation declines.)

Any or all of these effects may be occurring at the same time. The difficult task becomes determining how to disentangle the possible effects that voting regulations can have. Both the Discouraging Voter and Eliminating Fraud hypotheses predict that to the extent that voting regulations have any effect, they will reduce the voter participation rate. While the Ensuring Integrity hypothesis may exist even if voter participation declines after the regulations are enacted, it is the only hypothesis that can explain increased voter participation.

Obviously, the simplest test is whether different voting regulations alter voter participation rates. However, as just noted, this test can only disentangle the hypotheses if voter participation increases.

There are two other possible ways of analyzing the data. The first is determining whether there are systematic differences in who is affected by the voting regulations. Even if the total voting participation rate does not show a statistically significant change, it is possible that certain groups -- such as minorities, the elderly or the poor -- face declines in participation rates and it is possible that such declines will occur systematically. In other words, do African-Americans face reductions in voter participation or is it particular random segments of African-Americans that appear to be more related to randomness than to any type of systematic discrimination.

The second and more powerful test is to examine what happens to voter participation rates in those geographic areas where voter fraud is claimed to be occurring. If the laws have a much bigger impact in areas where fraud is said to be occurring, that would provide evidence for the Eliminating Fraud and/or Ensuring Integrity hypotheses. The point would be that the laws per se were not discouraging African-Americans or the elderly or the poor from participating, but that the change in participation in high fraud areas indicate that any drop was primarily due to eliminating fraudulent votes rather than the general impact of the voting regulations on certain types of citizens.

Over the 1996 to 2006 period studied here, there are a range of different regulations that

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[15] Sherry Swirsky, co-chair of Philadelphia Mayor Ed Rendell's Election Reform Task Force, noted in 1993 that "[But] the obsessive concern with fraud is what depresses voter turnout and registration in Philadelphia. It contributes to this ultimately destructive view that 'My vote doesn't matter, the whole system is corrupt.' The *Inquirer* has done a grave disservice to democracy and to this city. They have exaggerated the pervasiveness of fraud in elections." Scott Farmelant, "Dead Men Can Vote: Voting Fraud is alive and well in Philadelphia," Philadelphia City Paper, October 12-19, 2005 (http://www.citypaper.net/articles/101295/article009.shtml).

can affect the cost of voting: photo IDs, non-photo IDs, same day registration, registration by mail, pre-election day in-poll voting, absentee ballot obtained without requiring an excuse, whether there is a closed primary, provisional ballots, and voting by mail (see Table 1).[16],[17] During the period there were particularly large changes in the number of states with non-photo IDs, absentee ballots with no excuses, provisional ballots, and pre-election day in poll voting. The existing ID requirements, while not as strict as the mandatory photo IDs recently enacted by Georgia, Indiana and Missouri, may still make it more difficult for some people to vote. Only Indiana's rules had gone into effect during the time period studied here so it was simply not possible to test mandatory rules.

Other reforms, such as same day voter registration, absentee ballots without an excuse, and voting by mail, make it easier for people to vote and should increase voter participation rates but they may also make fraud easier. Same day voter registration makes it more difficult to accurately determine whether people are who they claim to be. Both Democrats and Republicans agree that the problems of vote fraud involved with absentee ballots and vote-by-mail are due to the difficulties in monitoring who ordered ballots and filled them out.[18] Election results have been overturned as a result of this type of fraud.[19] The New York Times has editorialized that "If the Legislature really wanted to deter fraud, it would have focused its efforts on absentee ballots, which are a notorious source of election fraud . . . ."[20] Even Democratic legislators have complained about fraudulent absentee ballots being used against them in Democratic primaries: "The problem I had seen was where these vote harvesters would go to old folks homes and bring empty ballots -- and vote for the actual voter . . . ."[21]

Likewise, provisional ballots also make voting easier; in theory, they allow a voter, who

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[16] John Fund (2004) has an extensive discussion about the fraud issues involved with each of these different types of regulations.

   Motor Voter is not listed here because it was already adopted nationally prior to the 1996 general election. The timing for these laws were primarily obtained from the Republican National Committee's "Summary of State Voting Laws and Procedures" from November 1996 to July 2006. Electionline.org's Election Reform: What's Changed, What Hasn't and Why 2000-2006 (February 2006). Information on in-person absentee voting was obtained from a Nexis/Lexis search.

[17] A range of other types of regulations have also been previously examined for their impact on voter turnout including poll taxes, literacy tests, secret ballots, and woman's suffrage (Filer, Kenny, and Morton, 1991; Husted and Kenny, 1997; and Lott and Kenny, 1999).

[18] Signatures are required on these mail-in ballots, but as the bi-partisan National Commission on Election Reform noted "for practical reasons, most states do not routinely check signatures either on applications or on returned ballots, just as most states do not verify signatures or require proof of identity at the polls."

[19] "In 1993, a federal judge had to overturn a special state Senate election in which Democratic precinct workers had gone door to door with absentee ballot forms and "helped" voters fill them out." John Fund, "The Voter Integrity Project:

How to stop fraud and suppression? Ashcroft showed the way in 2002."

*Tuesday, September 30, 2003 (*http://www.opinionjournal.com/diary/?id=110004084).

[20] Editorial, "Voter Suppression in Missouri," New York Times, August 10, 2006.

[21] Polly Ross Hughes, "Texas Vote Fraud Law Under Fire," San Antonio Express-News, September 17, 2006 (posted on web)

(http://www.mysanantonio.com/news/metro/stories/MYSA091806.01B.voterfraud.2c76b68.html). Examples of this type of vote fraud are contained in Glenn R. Simpson and Evan Perez, "'Brokers' Exploit Absentee Voters; Elderly are Top Targets for Fraud," Wall Street Journal, December 19, 2000.

has been the victim of some type of bureaucratic error (where their registration information has been misplaced) to be allowed to vote. Yet, there is the potential for fraud, when provisional ballots are issued to people for voting outside the precinct where they are registered and the possibility of voting in many different precincts. Some, such as John Fund (2004), claims, "We might have a Florida-style dispute spilling into the courts in several states where the presidential race is close, with one side calling for all provisional ballots to be tabulated ('Count Every Vote') and the other demanding that the law be scrupulously observed."

Again, just as with IDs, all these other rules could either increase or decrease voter participation. For example, lax absentee ballot rules can make it easier for some people to vote, but they can also increase fraud and thus discourage others from participating.

Other factors that determine voter participation rates include the closeness of races, the presence of initiatives and major races on the ballot, and income and demographic characteristics (e.g., Cox and Munger, 1989; Matsusaka, 1992 and 1993; and Gerber and Green, 2002).[22] The closer the races and thus the greater the interest in races, the more likely people will be to participate. For the general election data, data has been collected on the absolute percentage point differential between the top two finishers of that state's presidential race as well as for any gubernatorial or U.S. senatorial races. The Initiative and Referendum Institute's Initiatives Database is used to identify the number and types of initiatives that have appeared on general and primary election ballots from 1996 through 2004. Twenty-five different types of initiatives are identified ranging from those on abortion to Veteran's Affairs.[23]

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[22] This paper uses Matsusaka's distinction between initiatives and legislative measures. While I only have data on the initiatives on the ballot, presumably legislative measures matter also, though Matsusaka (1992) finds that initiatives are much more important in explaining voter turnout than are legislative measures. Matsusaka states that an "initiative" is a proposed law or constitutional amendment that has been put on the ballot by citizen petition. By contrast, a "legislative measure" or "legislative referendum" or "legislative proposition" is a proposed law or constitutional amendment that has been put on the ballot by the legislature.

The only variable that I did not follow Cox and Munger specification and use was campaign spending. In part I did this because they were examining turnout for only congressional races in a non-presidential election year. It is not clear how one would distribute presidential campaign spending across counties, especially since presidential campaigns target their expenditures. Given that I am using county level turnout data, similar concerns exist for gubernatorial and senate campaign expenditures. I hope that the margin of victory that I am using for presidential, gubernatorial, and US Senate campaigns as well as county fixed effects will pick up much of what these expenditures would measure. This is partly true if only because the level of expenditures is related to the margin of victory.

[23] The source of the information related to the Voting Age Population and general elections is the master election files of Polidata (www.polidata.org). Polidata compiles election-related information from state and local election officials around the country, year-by-year, on an ongoing basis, but only for general elections. This information includes registration and turnout statistics when available and election results by party, by office, by state and bycounty. In cases in which the election officials do not collect, compile or report the actual number of voters who requested ballots, the turnout is determined by the partisan race in the state that generated the highest number of votes. In a handful of cases this turnout may be the result of non-statewide races, such as those for the U.S. House or the State Legislature. There are several projections and estimates for the Voting Age Population, some released before an election and some released long after the election year. The Voting Age Population numbers used here are estimates based upon methodology developed by Polidata reflecting annual state-level estimates of the population released by the Bureau of the Census.

County level data on per capita income were obtained from the Regional Economic Information System (REIS). Nominal values were converted to real values by using the Consumer Price Index. State level

The Evidence

The data here constitute county level data for general and primary elections. The general election data goes from 1996 to 2004. For the primary election, the data represents the time period from July 1996 to July 2006 for the Republican and Democratic primaries. However, the data does not go back to 1996 for all states because this analysis relies on primary data supplied by state Secretaries of State. Because of this limit on primary data, most of the estimates here will focus on the general election data.

How did these voter regulation impact voter participation rates? As a first crude measure, I only considered states that had changed their laws over time and compare how the participation rates changed when the laws changed (Table 2). Obviously this simple comparison ignores that many other factors are simultaneously changing. The analysis compares data from a single over time. The simple mean voter participation rates, with and without photo IDs, indicate that adopting photo IDs produced a drop in voter participation of 1.5 percentage points, a statistically insignificant change. On the other hand, a similar breakdown for non-photo IDs, absentee ballots with no excuses, provisional ballots, pre-election day in-poll voting, same day registration, registration by mail, and voting by mail all show statistically significant increases in voter participation rates. These other changes are much larger and indicate an increase of at least 4 percentage points. For registration by mail, an increase of 11.5 percentage points. (The raw means for all the data are shown in the appendix.)

Table 3 provides the first regression estimates. They are constructed to account for all the different types of voting regulations mentioned earlier: the closeness of presidential, gubernatorial, and U.S. Senate races, geographic and demographic differences. the number and types of voter initiatives, as well as national changes over time in voter participation rates. Six specifications are reported: three each examining the voter participation rate and the natural log of the voter participation rate. While all the estimates account for geographic and year fixed effects, the estimates report different combination of the other control variables. Specifications (1) and (4) examine only the ID requirements as well as the margin of victory for the presidential, gubernatorial, and U.S. Senate races. Specifications (2) and (5) include all the other variables except for information on the topics of individual initiatives. Finally, because of Matsusaka's (1992) evidence -- that the impact of initiatives on voter turnout vary dramatically with the issues that the initiative deals with -- specifications (3) and (6) include all dummy variables indicating the type of initiative being voted on. The regressions were run using ordinary least squares with clustering of counties by state and robust standard errors.

The results indicate only minimal support for the notion that IDs -- whether photo IDs with substitution or non-photo IDs -- reduce voting participation rates. Indeed, most voting regulations, in the vast majority of estimates, seem to have no statistically significant effects. In only one of the six specifications does requiring non-photo IDs imply a statistically significant effect. In that one case, specification (4) with the most minimal use of control variables, non-photo IDs are associated with a 3.9 percent reduction in voting

unemployment rates were obtained from the Bureau of Labor Statistics. Poverty rate data was obtained from U.S. Department of Commerce.

rates. Accounting for all the other factors in specification (6), drives this estimate down to about 2.2 percent.

Of the other voting regulations considered, only one - pre-election day voting - is consistently and significantly related to decreased voting rates. It implies about a 1.5 to 1.8 percentage point reduction in voting participation as the result of the law. This result is consistent with the Ensuring Integrity Hypothesis. The Discouraging Voter or Eliminating Fraud Hypotheses would imply that pre-election day voting should increase voting participation rates, either because the cost of voting has been reduced or because there is more fraud. The Ensuring Integrity Hypothesis can explain the drop in voting rates because increased fraud discourages others voting. Only one of the voting regulations considered implies a statistically significant impact and that is only for one specification. In that one specification, same day registration implies a 2.4 percentage point increase in voting rates, and that result is consistent with all three hypotheses.

Presidential election margins are the most instructive of any of the races in explaining voter turnouts. Among the initiatives, topics on abortion, animal rights, campaign finance, education, labor reform, and taxes get voters the most excited. By contrast, initiatives on business regulations almost put people to sleep, reducing voter participation by 12 percentage points. Hispanics vote at about a half of a percentage point lower rate than whites. In addition, much more of the adjusted-R^2 is explained when the simple percentage rate voter participation rate is used.

A few other specifications were also tried. For example, I included state specific time trends and squared values for the winning margins in presidential, gubernatorial, and senate races.[24] The results showed little change from those already presented. Because Florida from the 2000 election on and Ohio in 2004 have been singled out as either preventing or discouraging people from voting, a simple dummy variable was included for those state general elections. However, the coefficient was not statistically significant and actually positive (indicating that those states had slightly higher turnout during those elections, the opposite from what others have claimed).[25]

I also tried using data that I had available up until 2002 on most campaign finance regulations. Proponents of campaign finance regulations worry that the perception of corruption created by campaign donations discourage people from voting.[26] If so, campaign finance regulations should increase voter participation rates. Yet, the results imply that the regulations reduce voter turnout and their inclusion does not change the

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[24] See for example Cox and Munger (1989) for analogous specifications involving squared winning margins. I did also try including total county population (given that county size remains constant this will measure density as done by Cox and Munger) as well as the state poverty rate, but including these variables in specifications 3 and 6 did not cause any of the voting regulations to change from being significant to not significant nor cause the reverse to happen. The state level poverty rate will again be discussed later.

[25] For these types of claims regarding Florida and Ohio see Art Levine, "Salon's Shameful Six," Salon.com, August 15, 2006 (http://www.salon.com/news/feature/2006/08/15/states/index.html).

[26] Allan Cigler (2004) notes that "But the breakdown of the existing system of campaign finance regulation started to attract the attention of a number of additional interests, particularly foundations and think tanks disturbed by voter cynicism and concerned with the lack of voter participation in elections and the erosion of civic responsibility generally. Enhancing democracy through the lessening of the impact of money in politics was typically the goal of these organizations."

estimated effects of voting regulations on voter participation shown in specifications (3) and (6) (see Table 4). [27] Limits on corporate donations to gubernatorial campaigns, political action committees, or political parties as well as limits on total gubernatorial campaign expenditures all reduce voter participation rates. Limits on these types of campaign expenditures by individuals are very highly correlated with the limits on corporations and unions and drop out of the specifications. Only limits on union donations to political parties are associated with high voter participation rates. Given previous analysis that implies that campaign finance regulations lower the rate at which incumbents are defeated, increase their win margins, and decrease the number of candidates running for office (Lott, 2006), it is not particularly surprising that these regulations also discourage people from voting. [28]

Finally, the dummy variables for photo IDs and non-photo IDs are replaced with trends for before and after these laws. Past research has shown that the changes in the cost of voting will only gradually change the voter participation (Lott and Kenny, 1999). Because of this looking at simply the before and after average voter participation rates can be quite misleading. For example, suppose that the voter participation rate was rising before IDs were required and falling afterwards and that these before and after changes were perfectly symmetrical. If that were the case, the simple dummy variables used earlier that measure the before and after averages would imply no change in voting participation rates even though voting participation rates fell after the laws were enacted as either the Discouraging Voter or Eliminating Fraud Hypotheses predicted. In fact, redoing specifications 3 and 6 in Table 3 imply that voter participation rates were falling before photo IDs were adopted and rising afterwards and that voter participation rates were falling both before and after non-photo IDs were adopted. [29] However, in neither case were the before and after trends statistically significantly different from each other. [30] This test clearly shows that the marginally significant drop in the natural log of voter participation after non-photo IDs are adopted is merely a continuation of a pre-existing trend.

Tables 5 and 6 attempt to see whether the different voter regulations have a differential impact across African-Americans, Hispanics and whites. Table 5 shows the coefficient estimates for percentage of the voting age population represented by each of the races interacted with the various voting regulations. Table 6 examines whether the coefficients

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[27] See Lott (2006) for a detailed discussion of this data. Using these variables reduces the sample size by 23 percent so they are included separately and were not included in the regressions reported in Table 3.

[28] Matsusaka (1993), Matsusaka and Palda (1993), and Cox and Munger (1989) have recognized that the impact of campaign finance laws on how competitive races are could either increase or decrease turnout. See also Milyo (1997) and Primo and Milyo (2006).

[29] The before trend is the absolute number of elections prior to the law (e.g., 4 elections before, 3 elections before, etc.). Similarly, the absolute number of elections after the law (e.g., 1st election after the law, 2nd election after the law, etc.). For specification 3 from Table 3, the coefficient for the before Photo ID trend is .0087 (t-statistic = 2.15) and for the after Photo ID trend is .0052 (t-statistic =0.76). For specification 6 from Table 3, the coefficient for the before Photo ID trend is .0087 (t-statistic = 2.15) and for the after Photo ID trend is .0052 (t-statistic =0.76). See Lott (2000, Chp. 9) for a discussion of why these before and after trends are preferable to looking at the before and after averages.

[30] For specification 3 from Table 3, the F-test for Photo IDs (Photo ID Trend Before Law = - Photo ID Trend After Law) is 0.00 (Prob > F = 0.9837) and Photo IDs (Photo ID Trend Before Law = - Photo ID Trend After Law) is 2.39 (Prob > F = 0.1225). For specification 6 from Table 3, the F-test for Photo IDs (Photo ID Trend Before Law = - Photo ID Trend After Law) is 0.69 (Prob > F = 0.4056) and Photo IDs (Photo ID Trend Before Law = - Photo ID Trend After Law) is 0.52 (Prob > F = 0.4718).

for any particular regulation are statistically different between the different races. With two exceptions, it is very difficult to see any differential impact across these racial groups. Voting by mail increases African-Americans' voting rates relative to whites and lowers Hispanics' voting rates relative to whites. Absentee ballots also increase the voting rate of African-Americans relative to Hispanics. But none of the other voting regulations impacts these different races differently.

Table 7 tries a similar breakdown by voter age and again it is difficult to see many significant differences between different age groups. The F-tests shown in the last column compare age groups from 20 to 29, 30 to 39, 40 to 49, and 50 to 64 year olds with the estimates for 65 to 99 year olds. In all these estimates only the differences between 50 to 64 year olds and 65 to 99 year olds are significantly different from each other and that is true for non-photo IDs, absentee ballots without an excuse, provisional ballots, and pre-election day in-poll voting or in-person absentee voting regulations. But all these results are much more indicative of 50 to 64 year olds being different from any of the other age groups than it is an indication that 65 to 99 year olds are adversely affected. There is no evidence that any of these voting regulations impact those over 65 years of age in a manner that differs from the impact on voters from 20 to 50 years of age.

Figures 1 and 2 are a result of a regression that breaks down the estimates by both race, age and gender. The regression that generated these figures corresponded to specification (3) in Table 3 that interacts those factors with just photo ID requirements. Again it is hard to see these regulations as differentially harming either the elderly, African-Americans, Hispanics, or women. In Figure 1, the one standout estimate is African-American females 50 to 64 years of age, a group that shows a big drop in their share of the voting age population from photo IDs. But this contrasts sharply with African-American females who are 40 to 49 and 65 to 99 years of age. It does not appear that there is anything systematic about being either African-American, female or elderly that causes one to be adversely impacted by photo IDs. The estimates in Figure 2 similarly show a random pattern by race and age. Interestingly in this case it is white males between 65 and 99 who appear to be most adversely affected by photo IDs.

Figures 1 and 2 can be redone for other voting regulations, but whether it is same day registration, pre-election day in poll voting/in person absentee voting, or voting by mail, it is very difficult to observe systematic differences by race, age, or gender.

To test whether poor people are impacted differently from others by these different voting regulations, I tried interacting the voting regulations shown in specification (3) from Table 3 first by county income and then separately by state level poverty rates. In none of these cases were these coefficients statistically significant. This implies that none of the voting regulations either adversely affected or improved poor people's voter participation rates.

Separating out the different hypotheses

The American Center for Voting Rights provides what appears to be the only comprehensive national list of voter fraud "hot spots." Their 2005 report lists six major "hot spots": Cuyahoga County, Ohio; St. Clair County, Illinois; St. Louis County, Missouri; Philadelphia, Pennsylvania; King County, Washington; and Milwaukee County, Wisconsin. If anti-fraud regulations only reduce turnout in counties with high level of

fraud but not in the other counties in the country, it would be hard to argue that the anti-fraud regulations generally significantly raise the cost of non-fraudulent voters to vote. The impact of anti-fraud regulations in high fraud counties allows one to differentiate Eliminating Fraud and Ensuring Integrity hypotheses, while the changes in voter turnout in counties without much fraud, should help identify the Discouraging Voter hypothesis.

Again I started with specification (3) in Table 3 but added in variables that interacted the voting regulations with a dummy variable equaling 1 for these six counties. Table 8, Section A reports just the coefficients from this regression for these interactions and each of the voting regulations by themselves.

As shown earlier, ID requirements have no significant impact on voting participation rates when all the counties for which they are imposed are examined. However, most telling, non-photo IDs increased voting participation in the "hot spots," supporting the Ensuring Integrity hypothesis. Neither of the other theories can explain why requiring IDs increases voter participation. The same also holds true for increasing the length of the registration deadline; it, too, increases voter turnout despite making voting more difficult. The results for pre-election day in-poll voting also imply that vote fraud is occurring. In general, pre-election day in-poll voting is associated with reduced turnout, consistent with the Ensuring Integrity hypothesis. The fact that turnout increases in the fraud "hot spots" when pre-election day in-polling is allowed implies that the "hot spots" are exploiting this rule for vote fraud.

Ironically, while Republicans have been the ones pushing hardest for the new regulations, it appears as if the Democrats might actually be the ones who gain the most. These fraud "hot spots" that experience the biggest increase in turnout tend to be heavily Democratic.

These results shed some light on the possible endogeniety of these voting regulations. In particular, whether the adoption of these regulations occurs because of anticipated changes in voter participation rates. This endogeniety is not an obvious concern as there is no effect on average when voter regulations are adopted (the effect only appears in those counties identified as "hot spots"). To get the result that the IDs are associated with a higher voter turnout rate because of fraud, one would have to believe that the legislation was passed because legislators anticipated even more fraud to be occurring in the future. Yet, news discussions about adopting an ID requirement raise concerns about fraud, but they do not point to expectations of fraud getting even worse. More importantly, these are statewide laws where the effect is only observed in one county and it is necessary to believe that the expected change in turnout in just one county drove the adoption of the state law. In addition, most of the states with these regulations did not even have a "hot spot."[31]

Replacing the non-photo ID variable interacted with the county fraud hot spot dummy with the before and after trends times the fraud dummy produced strong and statistically significant results. The results show that the voting participation rate was falling by .8%

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[31] Nor is it obvious that these state level regulations should have been adopted because of anticipated voter turnout changes in just one county in the state, just these "hot spot" counties. In addition, a regression that replaced the dummy for the "hot spot" counties with a dummy for the states containing these "hot spots" did not show statistically significant relationships.

(t-statistic = 0.62) each election prior to the law and rising by a statistically significantly 4.3% (t-statistic = 1.81) per election after it. The F-statistic for the difference in trends was 6.47 (Prob > F = 0.011).

Table 8, Section B takes these interactions one step further and interacts these voting regulations interacted with the "hot spots" dummy with first the closeness of the gubernatorial and then the closeness of the senate elections. Presumably if fraud is to occur, it will most likely occur in these "hot spots" when there are close elections. These results make it possible to disentangle the Discouraging Voter and Eliminating Fraud hypotheses as a negative coefficient just in fraud "hot spots" with close elections seems only consistent with the Eliminating Fraud hypothesis since it is not clear why there should only be a relative drop voting rates in hot spots with close races if the Discouraging Vote hypothesis was correct.

These new interactions show support for both the Eliminating Fraud and Ensuring Integrity hypotheses. Most voting regulations affect turnout in hot spots when closer gubernatorial or senate elections. For senate elections, non-photo IDs, provisional ballots, pre-election day in-poll, the length of registration deadlines, and same day registration are all associated with statistically significant and imply the possibility of fraud. For gubernatorial elections, the statistically significant results for absentee ballots with no excuses, provisional ballots, and the registration deadline are also only consistent with the Ensuring Integrity hypothesis. The coefficient for non-photo IDs is also only consistent with the Eliminating Fraud hypothesis, but the estimate is not statistically significant.

What is most interesting with the results in sections A and B is that as one looks more closely at areas where fraud is most likely to occur more and more of the coefficients become statistically significant and the size of the t-statistics become fairly large. When looking at all counties, only one coefficient is statistically significant. When looking at "hot spots" three of the six coefficients are statistically significant. When looking at "hot spots" and accounting for the tightness of the race, eleven of the fourteen coefficients are statistically significant at least at the 10 percent and seven are statistically significant at least at the 1 percent level.

Table 9 provides some simple estimates for U.S. Senate primaries by party.[32] The sample here was only a third of the size of the general election estimates. Overall, Democratic primary turnout rates seem to be much more affected by voting regulations than do Republican turnout rates. However, the only results that are related to fraud involve provisional ballots. Both specifications for the Democratic primary produce coefficients that imply the Ensuring Integrity Hypothesis: despite the lower cost of voting from provisional ballots, there is a statistically significant 4.4 percentage point drop in the voting rate. For Republicans the coefficients are of the opposite sign and statistically significant. Thus, the results do not allow us to disentangle the alternative hypotheses.

Finally, it is doubtful that there will be as much fraud in the primaries as in the general election. This is likely if only because fraudulent voting against members of one's own

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[32] The county level on votes by U.S. Senate race was obtained by going online at the different Secretary of State websites (http://www.nass.org/sos/sosflags.html). Some states only had this data available back to 2000 and others did not have the data available by race at the county level.

party is more likely to expose the methods publicly.[33] To test this, I again included another set of variables that interacted the voting regulations with counties that were identified as being "hot spots" of fraud. Possibly because of the fewer number of observations, it was only possible to test the interaction for non-photo IDs, but that interaction was never statistically significant, thus indicating that there was no fraud occurring in either the Democratic or Republican senate primaries.

Conclusion

There is some evidence of vote fraud. Regulations meant to prevent fraud can actually increase the voter participation rate. It is hard to see any evidence that voting regulations differentially harm minorities, the elderly, or the poor. While this study examines a broad range of voting regulations, it is still too early to evaluate any possible impact of mandatory photo IDs on U.S. elections. What can be said is that the non-photo ID regulations that are already in place have not had the negative impacts that opponents predicted.

One particularly valuable finding is that voting regulations have a different impact on turnout in counties where fraud is alleged to be rampant. These results indicate that while these voting regulations have little impact on turnout generally, certain regulations do significantly impact turnout in these so-called "hot spots."

Contrary to the claims that campaign finance regulations will encourage voter participation by reducing the perception of political corruption, campaign finance regulations reduced voter participation rates.

Following other recent work showing that campaign finance regulations entrench incumbents, reduce the number of candidates running for office, and increase win margins (all factors associated with less exciting campaigns), these results find that campaign finance regulations usually reduce voter turnout.

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[33] I would like to thank Ryan Lott for mentioning this point to me.

References

American Center for Voting Rights Legislative Fund, "Vote Fraud, Intimidation, and Suppression in the 2004 Presidential Election," American Center for Voting Rights Legislative Fund, Washington, DC, August 2, 2005.

Associated Press, "Primary systems used in the 50 states," Associated Press, June 26, 2000.

Bensen, Clark H., "Indiana Voter Identification Requirement," Polidata – Political Data Analysis, October 2005.

Brace, Kimball W., "Report of the Matching of Voter Registration and Driver's License Files in Indiana Democratic Party et al. v. Todd Rokitz et al.," Electronic Data Services, September 2005.

Commission on Federal Election Reform, **Building Confidence in U.S. Elections**, American University, September 2005.

Cox, Gary and Michael C. Munger, "Closeness, Expenditures, and turnout in the 1982 US House Elections," *American Political Science Review*, vol. 83 (1989): 217-231.

Cigler, Allan J., "Enron, a perceived crisis in public confidence, and the Bipartisan Campaign Reform Act of 2002," *The Review of Policy Research*, March 1, 2004, Vol. 21, p. 233.

Filer, John E.; Lawrence W. Kenny; and Rebecca B. Morton, "Voting Laws, Educational Policies, and Minority Turnout," *Journal of Law and Economics*, Vol. 34 (October 1991): 371-393.

Fund, John, "Stealing Elections: How Voter Fraud Threatens Our Democracy," Encounter Books: New York, New York, (2004).

Husted, Thomas A., and Lawrence W. Kenny, "The Effect of the Expansion of the Voting Franchise on the Size of Government," *Journal of Political Economy*, Vol. 105 (February 1997): 54-82.

Klesner, Joseph L., "The Not-So-New Electoral Landscape in Mexico," Working Paper, Department of Political Science, Kenyon College, September 15-16, 2003.

Lott, John R., Jr., and Lawrence W. Kenny, "Did Women's Suffrage Change the Size and Scope of Government," *Journal of Political Economy*, 107 (December 1999): 1163-1198.

Lott, John R., Jr., "Nonvoted Ballots and Discrimination in Florida," *Journal of Legal Studies* 32 (January 2003): 181-220.

Lott, John R., Jr., "Campaign Finance Reform and Electoral Competition," ***Public Choice***, forthcoming 2006.

Man, Anthony, "Lines, Accusations Put All Sides on Edge," ***Sun-Sentinel*** (Fort Lauderdale, Fl.), November 2, 2004, p. 1A.

Matsusaka, John G., "Election Closeness and Voter Turnout: Evidence from California Ballot Propositions," ***Public Choice***, Vol. 76 (1993): 313-334.

Matsusaka, John G., "Economics of Direct Legislation," ***Quarterly Journal of Economics***, Vol. 107, no. 2 (May 1992): 541-571.

Matsusaka, John G. and Filip Palda, "The Downsian Voter Meets the Ecological Fallacy," ***Public Choice***, Vol. 76 (1993): 855-878.

Milyo, Jeffrey, "The economics of campaign finance," ***Public Choice***, Vol. 93 (1997): 245-270.

National Commission on Electoral Reform, "To Assure Pride and Confidence in the Electoral Process," Miller Center of Public Affairs, University of Virginia and the Century Foundation, August 2001.

Overton, Spencer, "Voter Identification," ***Michigan Law Review***, December 2006: forthcoming.

Pawasarat, John, "The Driver License Status of the Voting Age Population in Wisconsin," Employment and Training Institute, University of Wisconsin-Milwaukee, June 2005.

Primo, David M. and Jeffrey Milyo, "Campaign Finance Laws and Political Efficacy: Evidence from the States," ***Election Law Journal***, Vol. 5 (2006).

Republican National Committee, "Summary of State Voting Laws and Procedures," compiled by Republican National Committee: Washington D.C. (volumes released every two years from 1996 to 2006).

Steitzer, Stephenie, "Bill would let all vote in primaries," ***Cincinnati Enquirer***, January 24, 2002, p. 1B.

Zorn, Eric, "Polling Place Privacy Pared in Primary," ***Chicago Tribune***, March 17, 1998, p. 1.

Table 1: Number of States with Different Voting Regulations from 1996 to July 2006						
Regulation	Year					
Voting Regulation	1996	1998	2000	2002	2004	2006
Photo ID (Substitutes allowed, the one exception was Indiana in 2006, which did not allow substitutes)	1	2	4	4	6	8
Non-photo ID	15	14	10	25	44	45
Absentee Ballot with No Excuse	10	14	21	21	24	27
Provisional Ballot	29	29	26	36	44	46
Pre-election day in poll voting/in-person absentee voting	8	10	31	31	34	36
Closed Primary	21	19	22	29	30	24
Vote by mail*	0	0	1	1	1	2
Same day registration	3	3	4	4	4	6
Registration by mail	46	46	46	46	49	50
Registration Deadline in Days	22.94	23.45	23.49	23.00	22.75	22.31

* Thirty-four of Washington State's counties will have an all-mail primary election in 2006, but it is after the period studied in this paper. "In the counties with operational poll sites for the public at large, which include King, Kittitas, Klickitat, Island, and Pierce, an estimated 67 percent of the electorate will still cast a mail ballot." US State News, "Office of Secretary of State Warns: Be cautious with your primary ballots – splitting tickets to cost votes," US State News (Olympia, Washington), August 29, 2006.

Table 2: The Average Voter Turnout Rate for States that Change Their Regulations: Comparing When Their Voting Regulations are and are Not in Effect (Examining General Elections from 1996 to 2004)

	Average Voter Turnout Rate During Those Elections that the Regulation is not in Effect	Average Voter Turnout Rate During Those Elections that the Regulation is in Effect	Absolute t-test statistic for whether these Averages are Different from Each Other
Photo ID (Substitutes allowed)	55.31%	53.79%	1.6154
Non-photo ID	51.85%	54.77%	7.5818***
Non-photo ID (Assuming that Photo ID rules are not in effect during the years that Non-photo IDs are not in Effect)	51.92%	54.77%	7.0487***
Absentee Ballot with No Excuse	50.17%	54.53%	10.5333***
Provisional Ballot	49.08%	53.65%	12.9118***
Pre-election day in poll voting/in-person absentee voting	50.14%	47.89%	3.8565***
Same day registration	51.07%	59.89%	7.3496****
Registration by mail	50.74%	62.11%	13.8353***
Vote by Mail	55.21%	61.32%	3.7454***

*** F-statistic statistically significant at the 1 percent level.
** F-statistic statistically significant at the 5 percent level.
* F-statistic statistically significant at the 10 percent level.

Table 3: Explaining the Percent of the Voting Age Population that Voted in General Elections from 1996 to 2004 (The various control variables are listed below, though the results for the county and year fixed effects are not reported. Ordinary least squares was used Absolute t-statistics are shown in parentheses using clustering by state with robust standard errors.)

	Endogenous Variables					
	Voting Rate			Ln(Voting Rate)		
Control Variables	(1)	(2)	(3)	(4)	(5)	(6)
Photo ID (Substitutes allowed)	-0.012 (0.6)	-0.0009 (0.1)	0.0020 (0.2)	-0.0407 (0.9)	-0.0195 (0.5)	-0.0164 (0.4)
Non-photo ID	-0.011(1.50)	-0.010 (1.3)	-0.0050 (0.6)	-0.039 (2.0)	-0.034 (1.62)	-0.0215 (1.0)
Absentee Ballot with No Excuse		0.0015 (0.2)	-0.0002 (0.0)		0.0063 (0.4)	-0.0003 (0.0)
Provisional Ballot		0.0081 (1.4)	0.0076 (1.2)		0.0139 (0.9)	0.0120 (0.7)
Pre-election day in poll voting/in-person absentee voting		-0.0183 (2.4)	-0.0145 (1.7)		-0.0520 (2.8)	-0.0453 (2.2)
Closed Primary		-0.005 (0.8)	-0.0036 (0.5)		-0.0037 (0.2)	0.0047 (0.2)
Vote by mail		0.0167 (1.7)	-0.0145 (0.4)		0.0107 (0.4)	-0.0803 (0.9)
Same day registration		0.0244 (2.0)	0.0221 (1.6)		-0.0004 (0.0)	-0.0093 (0.2)
Registration by mail		-0.002 (0.1)	0.0122 (0.5)		-0.0333 (1.2)	0.0143 (0.3)
Registration Deadline in Days		-0.0003 (0.3)	-0.0005 (0.5)		-0.0006 (0.3)	-0.0013 (0.5)
Number of Initiatives		0.0002 (0.1)	-0.0054 (1.7)		-0.0022 (0.5)	-0.0195 (2.0)
Real Per Capita Income		-8.60E-07 (0.4)	-9.84E-09 (0.0)		-5.30E-06 (1.3)	-3.68E-06 (1.1)
State unemployment rate		-0.0010 (0.2)	0.0003 (0.1)		-0.0067 (0.6)	0.0000 (0.0)
Margin in Presidential Race in State	-0.0011 (2.2)	-0.0010 (2.1)	-0.001 (1.8)	-0.0022 (1.6)	-0.0020 (1.6)	-0.0023 (1.5)
Margin in Gubernatorial Race	-0.0005 (1.6)	-0.0004 (1.3)	-0.0005 (1.7)	-0.0012 (1.2)	-0.0012 (1.3)	-0.0015 (1.4)
Margin in Senate Race	-0.0001(1.0)	-0.0001(0.8)	-0.0001 (0.7)	-0.0001(0.3)	-0.0001 (0.2)	-0.0001 (0.3)
Initiatives by Subject						
Abortion			0.0552 (1.7)			0.1702 (2.3)
Administration of Gov			0.0090 (0.5)			0.0433 (0.9)
Alien Rights			-0.0088 (0.5)			0.0269 (0.7)
Animal Rights			0.0295 (2.6)			0.0922 (3.0)
Bonds			-0.0039 (0.1)			0.0283 (0.3)
Business Regulations			-0.1202 (3.3)			-0.2925 (3.1)
Campaign Finance			0.0205 (1.7)			0.0559 (1.7)
Civil Rights			-0.0031 (0.2)			-0.0120 (0.4)
Death Penalty			(dropped)			(dropped)
Drug policy			0.0082 (0.3)			0.0258 (0.6)
Education			0.0244 (2.0)			0.0589 (1.8)
Election Reform			0.0234 (1.9)			0.0523 (1.3)
Environmental			0.0090 (0.9)			0.0315 (1.3)
Gaming			-0.0045 (0.3)			0.0030 (0.1)
Gun regulation			-0.0465 (1.6)			-0.0970 (1.2)
Health/medical			-0.0035 (0.3)			0.0250 (0.7)
Housing			(dropped)			(dropped)
Initiatives and Referendum Reform			-0.0018 (0.1)			-0.0142 (0.4)
Labor Reform			0.1890 (2.6)			0.4700 (2.6)
Legal Reform			0.0094 (0.5)			0.0502 (0.9)
Taxes			0.0649 (2.2)			0.1233 (1.8)

Term Limits			0.0475 (1.5)			0.0563 (0.6)
Tort Reform			0.0339 (1.6)			0.1570 (2.5)
Utility Regulations			0.0115 (0.6)			0.0287 (0.6)
Veterans Affairs			0.0072 (0.7)			0.0189 (0.8)
% population 10 to 19		0.3865 (1.6)	0.1826 (2.3)		1.0608 (1.9)	0.4018 (2.0)
% population 20 to 29		-0.0745 (0.4)	-0.1375 (1.7)		-0.4571 (1.0)	-0.3354 (1.6)
% population 30 to 39		-0.2022 (0.6)	-0.0409 (1.5)		-0.3992 (0.6)	-0.0836 (1.3)
% population 40 to 49		0.2875 (0.8)	-0.0098 (0.5)		0.9769 (1.4)	-0.0149 (0.3)
% population 50 to 64		0.2997 (1.3)	0.5242 (2.5)		0.2354 (0.5)	0.7475 (1.6)
% population 65 to 99		0.1799 (0.8)	0.3475 (1.4)		0.4590 (1.1)	0.7881 (1.7)
% population Black		-0.0057 (1.9)	-0.0033 (1.1)		-0.0166 (2.2)	-0.0117 (1.5)
% population White		-0.0027 (1.1)	-0.0006 (0.2)		-0.0108 (1.7)	-0.0065 (1.0)
% population Hispanic		-0.0081 (5.4)	-0.0075 (5.4)		-0.0189 (6.1)	-0.0185 (6.0)
% population male		-0.2717 (1.2)	-0.3864 (1.7)		-0.5616 (1.2)	-0.7971 (1.8)
Adj R-squared	.8719	.8828	.8890	0.7958	0.8118	0.8189
F-statistic	117.45	260.55	13852387	75.89	164.02	7429623.34
Number of Observations	16028	14962	14962	16028	14962	14962
Fixed County and Year Effects	Yes	Yes	Yes	Yes	Yes	Yes

Table 4: Including information on Campaign Finance Regulations Over General Elections from 1996 to 2002 (The regressions follow specifications (3) and (6) in Table 2 with the inclusion of the various campaign finance regulations reported below. All the variables reported below are dummy variables for whether the laws are in effect. A detailed discussion of these laws is provided in Lott (2006). The other coefficients shown in specifications (3) and (6) are not reported. Absolute t-statistics are shown in parentheses using clustering by state with robust standard errors.)

	Voting Rate		Ln(Voting Rate)	
	Coefficient	Absolute t-statistic	Coefficient	Absolute t-statistic
Photo ID (Substitutes allowed)	0.0170	0.41	0.0414	0.35
Non-photo ID	-0.0028	0.2	-0.0012	0.03
Absentee Ballot with No Excuse	-0.0002	0.02	0.0107	0.51
Provisional Ballot	0.0084	0.99	0.0124	0.56
Pre-election day in poll voting/in-person absentee voting	-0.0112	0.95	-0.0460	1.7
Closed Primary	-0.0051	0.42	-0.0039	0.12
Vote by mail	-0.0510	0.78	-0.0641	0.35
Same day registration	0.0837	3.17	0.1539	2.04
Registration by mail	(dropped)		(dropped)	
Registration Deadline in Days	-0.0004	0.2	-0.0024	0.34
Limits on Individual Donations to Gubernatorial Races	0.0168	0.86	0.0443	0.81
Limits on Corporate Donations to Gubernatorial Races	-0.0409	2.96	-0.0778	2.23
Limits on Union Donations to Gubernatorial Races	-0.0191	1.84	-0.0396	1.48
Limits on Individual Political Action Committee Donations to Gubernatorial Races	(dropped)		(dropped)	
Limits on Corporate Political Action Committee Donations to Gubernatorial Races	-0.0611	2.48	-0.1398	2.14
Limits on Union Political Action Committee Donations to Gubernatorial Races	(dropped)		(dropped)	
Limits on Individual Donations to Political Parties	(dropped)		(dropped)	
Limits on Corporate Donations to Political Parties	-0.0220	0.98	-0.1560	2.25
Limits on Union Donations to Political Parties	0.0558	4.56	0.1971	5.61
Campaign Expenditure Limits on Gubernatorial Races	-0.0786	2.76	-0.1987	2.35
Adj R-squared	0.8803		0.8064	
F-statistic	180253.79		8040.31	
Number of Observations	11630		11630	
Fixed County and Year Effects	Yes		Yes	

Table 5: Do the voting regulations impact different racial groups differently: Interacting racial composition of the electorate with the different voting regulations using the specification in Table 2, column 1 (Absolute t-statistics are shown in parentheses using clustering by state with robust standard errors)		
Percent of the Voting Age Population that is African-American times the following regulations	Coefficient	t-statistics
Photo ID (Substitutes allowed)	0.0010	1.22
Non-photo ID	-0.0002	0.93
Absentee Ballot with No Excuse	0.0009	1.74
Provisional Ballot	0.0009	1.46
Pre-election day in poll voting/in-person absentee voting	-0.0008	1.16
Closed Primary	0.0001	0.21
Vote by mail	0.0077	5
Same day registration	0.0024	1.74
Registration by mail	-0.0003	0.24
Registration Deadline in Days	-0.0001	0.99
Percent of the Voting Age Population that is Hispanic times the following regulations		
Photo ID (Substitutes allowed)	-0.0014	0.99
Non-photo ID	0.0007	0.63
Absentee Ballot with No Excuse	-0.0015	1.3
Provisional Ballot	0.0000	0.04
Pre-election day in poll voting	0.0003	0.29
Closed Primary	0.0001	0.14
Vote by mail	-0.0020	2.56
Same day registration	-0.0034	1.35
Registration by mail	0.0001	0.87
Registration Deadline in Days	-0.0097	1.43
Percent of the Voting Age Population that is White times the following regulations		
Photo ID (Substitutes allowed)	0.0000	0.2
Non-photo ID	-0.0001	0.43
Absentee Ballot with No Excuse	0.0000	0.02
Provisional Ballot	0.0000	0.08
Pre-election day in poll voting	-0.0001	0.83
Closed Primary	-0.0001	1.3
Vote by mail	0.0011	2.3
Same day registration	0.0003	1.54
Registration by mail	0.0005	1.59
Registration Deadline in Days	0.0000	0.09

Table 6: Comparing the Differential Impact of the Shares of the Population that are Black, Hispanic and White and Voting Regulations: Interacting the Population Shares of Different Racial Groups and Voting Regulations (absolute t-statistics are shown in parentheses using clustering by state with robust standard errors)

	Differences between interacting the percent of the voting age population that is African-American and separately the percent of the voting age population that is white with the different voting regulations		Differences between interacting the percent of the voting age population that is Hispanic and separately the percent of the voting age population that is white with the different voting regulations		Differences between interacting the percent of the voting age population that is African-American and separately the percent of the voting age population that is Hispanic with the different voting regulations	
	Coefficient for African-Americans – the coefficient for whites	F-statistic for difference in coefficients for African-Americans and whites	Coefficient for Hispanics – the coefficient for whites	F-statistic for difference in coefficients for Hispanics and whites	Coefficient for African-Americans – the coefficient for Hispanics	F-statistic for difference in coefficients for African-Americans and Hispanics
Photo ID (Substitutes allowed)	0.0010	1.47	-0.0014	0.77	0.0024	2.25
Non-photo IDs	-0.0002	0.51	0.0007	0.43	-0.0009	0.63
Absentee Ballot with No Excuse	0.0009	2.48	-0.0015	1.51	0.0023	3.73*
Provisional Ballot	0.0009	1.91	0.00005741	0	0.0009	0.38
Pre-election day in poll voting/in-person absentee voting	-0.0007	1.03	0.0003	0.14	-0.0010	0.76
Closed Primary	0.0002	0.28	0.0003	0.08	-0.0001	0
Vote by mail	0.0066	20.75***	-0.0031	12.17***	0.0098	34.06***
Same day registration	0.0021	2.41	-0.0037	2.06	0.0059	2.77
Registration by mail	-0.0008	0.43	-0.0004	2.16	-0.0004	1.91
Registration Deadline in Days	-0.00006	0.9	-0.0097	0.74	0.0097	1.54

*** F-statistic statistically significant at the 1 percent level.
** F-statistic statistically significant at the 5 percent level.
* F-statistic statistically significant at the 10 percent level.

Type of Voting Regulation	Percent of the Population	Coefficient	Absolute t-statistic	F-test comparing the coefficient for the 65 to 99 year old group with the other age groups
Photo ID (Substitutes allowed)	20 to 29 Years of Age	-0.162	0.79	0.37
	30 to 39 Years of Age	0.417	0.81	0.78
	40 to 49 Years of Age	0.123	0.23	0.08
	50 to 64 Years of Age	-0.189	0.51	0.08
	65 to 99 of Age	-0.032	0.15	
Non-photo ID Required	20 to 29 Years of Age	-0.074	0.46	0.26
	30 to 39 Years of Age	-0.334	1.21	1.35
	40 to 49 Years of Age	0.987	1.53	2.13
	50 to 64 Years of Age	-0.672	1.88	2.86*
	65 to 99 of Age	0.015	0.12	
Absentee Ballot with No Excuse	20 to 29 Years of Age	0.112	0.86	2.27
	30 to 39 Years of Age	-0.011	0.04	1.22
	40 to 49 Years of Age	0.211	0.5	0.17
	50 to 64 Years of Age	-0.631	1.86	5.07**
	65 to 99 of Age	0.377	2.6	
Provisional Ballot	20 to 29 Years of Age	0.105	0.85	2.50
	30 to 39 Years of Age	0.162	0.42	2.69
	40 to 49 Years of Age	-0.639	1.55	0.44
	50 to 64 Years of Age	0.657	2.11	4.28**
	65 to 99 of Age	-0.314	1.69	
Pre-election day in-poll voting	20 to 29 Years of Age	-0.007	0.08	1.99
	30 to 39 Years of Age	-0.318	0.83	0.00
	40 to 49 Years of Age	-0.130	0.28	0.13
	50 to 64 Years of Age	0.625	1.95	4.54**
	65 to 99 of Age	-0.324	1.89	
Closed Primary	20 to 29 Years of Age	-0.148	0.66	0.20
	30 to 39 Years of Age	-0.049	0.09	0.15
	40 to 49 Years of Age	0.453	0.95	1.62
	50 to 64 Years of Age	(dropped)		
	65 to 99 of Age	-0.258	1.51	
Vote by mail	20 to 29 Years of Age	-0.069	0.21	0.34
	30 to 39 Years of Age	0.057	0.12	0.28
	40 to 49 Years of Age	0.879	1.24	0.31
	50 to 64 Years of Age	-0.682	0.74	0.47
	65 to 99 of Age	0.417	0.56	
Same day registration	20 to 29 Years of Age	-0.083	0.16	1.16
	30 to 39 Years of Age	-1.086	1.66	2.70
	40 to 49 Years of Age	0.254	0.34	0.49
	50 to 64 Years of Age	0.227	0.24	0.82
	65 to 99 of Age	1.188	1.31	
Registration by mail	20 to 29 Years of Age	-0.234	0.99	0.72
	30 to 39 Years of Age	0.266	0.49	0.04
	40 to 49 Years of Age	0.038	0.05	0.03
	50 to 64 Years of Age	-0.013	0.02	0.04
	65 to 99 of Age	0.157	0.51	
Registration Deadline in Days	20 to 29 Years of Age	0.002	0.16	0.00
	30 to 39 Years of Age	-0.002	0.14	0.06
	40 to 49 Years of Age	-0.007	0.32	0.16

Table 7: Comparing the Differential Impact of the Shares of the Population by Age and Voting Regulations: Interacting the Population Shares of Different Racial Groups and Voting Regulations (absolute t-statistics are shown in parentheses using clustering by state with robust standard errors)

	50 to 64 Years of Age	0.001	0.08	0.00
	65 to 99 of Age	0.002	0.16	

*** F-statistic statistically significant at the 1 percent level.
** F-statistic statistically significant at the 5 percent level.
* F-statistic statistically significant at the 10 percent level.

Figure 1: The Change in Voting Participation Rates from the Adoption of Photo IDs by Race for Women
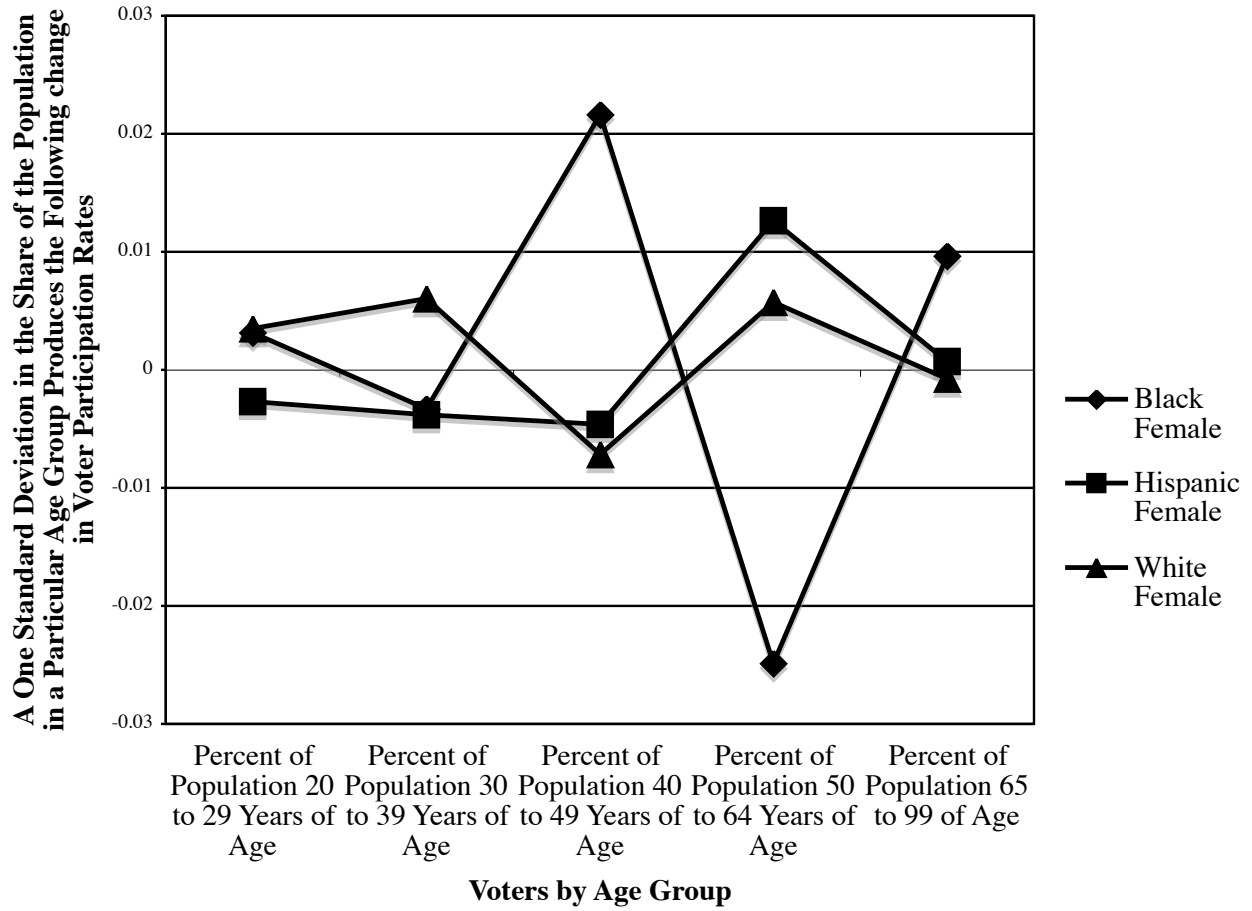
Figure 2: The Change in Voting Participation Rates from the Adoption of Photo IDs by Race for Men
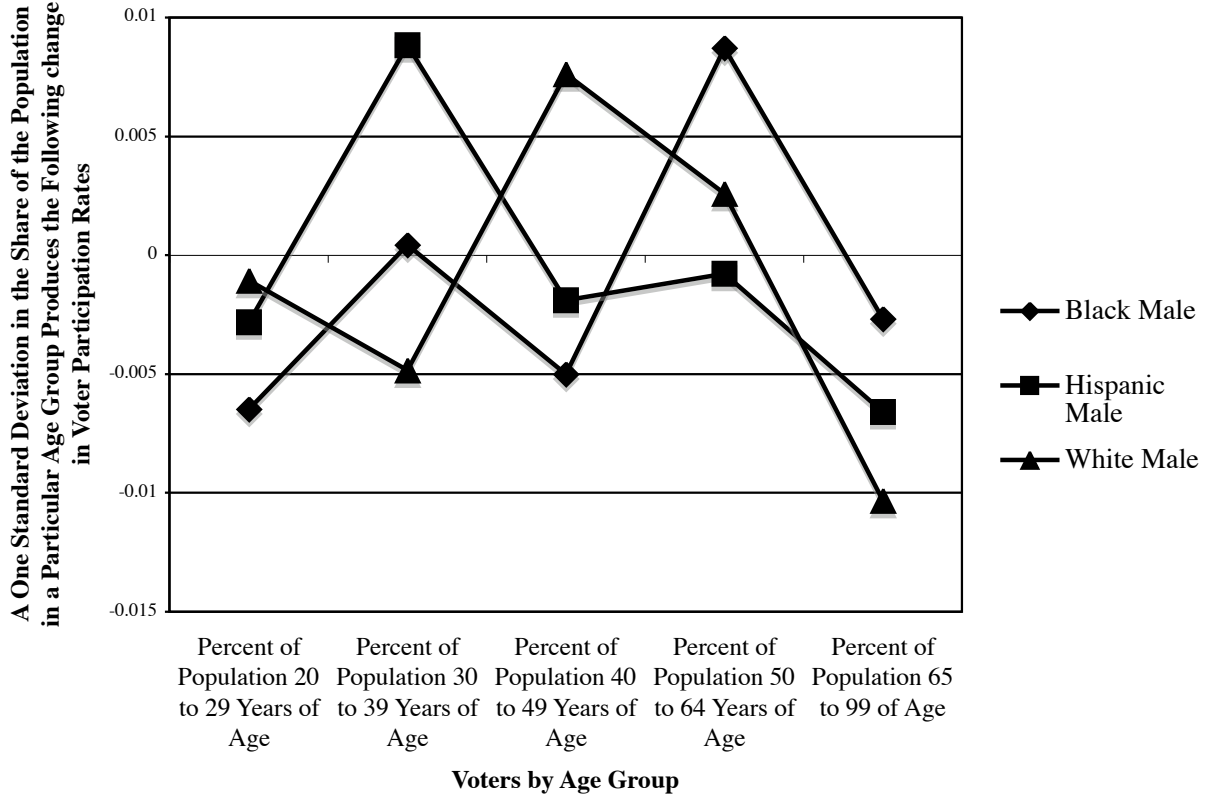
Table 8: Separating Out the Discouraging Voter and Eliminating Fraud Hypotheses: Examining Whether the Six "Hot Spots" Counties Identified by the American Center for Voting Rights Have the Most Fraud. The Voting Regulations are interacted with the six "Hot Spots" Using Specification 3 in Table 2. (The six "hot spots" are Cuyahoga County, Ohio; St. Clair County, Illinois; St. Louis County, Missouri; Philadelphia, Pennsylvania; King County, Washington; and Milwaukee County, Wisconsin. Absolute t-statistics are shown in parentheses using clustering by state with robust standard errors.)

A) Interacting Voting Regulations with Fraud "Hot Spots" – These coefficients are from one regression

Voting Regulations that can Effect Fraud	Impact of Voting Regulations in "Hot Spots"		Impact of Voting Regulations for All Counties	
	Coefficient	Absolute t-statistic	Coefficient	Absolute t-statistic
Photo ID (Substitutes allowed)	Dropped		0.002	0.17
Non-photo ID Required	0.031	1.95*	-0.005	0.61
Absentee Ballot with No Excuse	0.003	0.2	0.0002	0.03
Provisional Ballot	0.006	0.4	0.008	1.14
Pre-election day in poll voting/in-person absentee voting	0.033	2.26**	-0.014	1.73*
Closed Primary			-0.004	0.46
Vote by mail	Dropped		-0.014	0.39
Same day registration	-0.005	0.28	0.022	1.57
Registration by mail	Dropped		0.012	0.52
Registration Deadline in Days	0.022	2.03**	-0.001	0.54
Adj R-squared	0.8890			
F-statistic	120907.07			
Number of Observations	14962			
Fixed County and Year Effects	Yes			

B) Interacting Voting Regulations with Fraud "Hot Spots" as well as Interacting with the Closeness of the Gubernatorial and Senate Races (Closeness is measured by the negative value of the difference the share of the votes between the top two candidates)

Voting Regulations that can Effect Fraud	Impact of Voting Regulations in "Hot Spots" Interacted with Closeness of Senate Races		Impact of Voting Regulations in "Hot Spots" Interacted with Closeness of Gubernatorial Races		Impact of Voting Regulations for All Counties	
	Coefficient	Absolute t-statistic	Coef.	Absolute t-statistic	Coef.	Abs. t-statistic
Photo ID (Substitutes allowed)	Dropped		Dropped		0.0021	0.17
Non-photo ID Required	-0.0023	3.98***	-0.0017	0.78	-0.0051	0.61
Absentee Ballot with No Excuse	-0.0012	1.12	-0.0055	3.58***	-0.0002	0.02
Provisional Ballot	-0.0030	1.69*	0.0026	1.83*	0.0076	1.16
Pre-election day in poll voting/in-person absentee voting	0.0026	3.75***	0.0064	1.88*	-0.0145	1.73*
Closed Primary					-0.0035	0.44
Vote by mail	Dropped		Dropped		-0.0145	0.4
Same day registration	-0.0046	2.28**	0.0237	6.48***	0.0221	1.58
Registration by mail	-0.0008	0.28	-0.0025	2.91***	0.0124	0.52
Registration Deadline in Days	0.0001	1.71*	0.0001	1.67*	-0.0005	0.54
Adj R-squared	0.8891					
F-statistic	600520.5					
Number of Observations	14962					
Fixed County and Year Effects	Yes					

*** t-statistic statistically significant at the 1 percent level for a two-tailed t-test.
** t-statistic statistically significant at the 5 percent level for a two-tailed t-test.
* t-statistic statistically significant at the 10 percent level for a two-tailed t-test.

	Vote Difference in Democratic Senate Primaries		Vote Difference in Republican Senate Primaries		ln(Vote Difference in Democratic Senate Primaries)		ln(Vote Difference in Republican Senate Primaries)	
Table 9: Estimating the Impact of Voting Regulations on Voter Turnout in US Senate Primaries from 1996 to July 15, 2006 (Using specifications 2 and 4 in Table 2. Absolute t-statisics are reported.)								
	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic
Photo ID (Substitutes allowed)	-0.007	0.13	-0.037	0.42	-0.125	0.37	0.639	0.71
Non-photo ID Required	-0.022	0.73	-0.038	1.6	-0.298	1.06	-0.638	2.22
Absentee Ballot with No Excuse	-0.027	1.59	-0.017	0.59	-0.330	1.89	-0.052	0.14
Provisional Ballot	-0.044	2.69	0.014	0.54	-0.265	1.78	0.467	1.87
Pre-election day in poll voting	0.000	0.01	-0.017	0.77	-0.139	0.65	-0.074	0.23
Closed Primary	-0.093	2.05	-0.013	0.51	-0.631	2.32	-0.213	0.72
Vote by mail	0.006	0.19	-0.009	0.23	0.274	1.49	0.137	0.34
Same day registration	(dropped)		(dropped)		(dropped)		(dropped)	
Registration by mail	-0.005	0.1	-0.102	3.33	0.157	0.57	-0.929	2.18
Registration Deadline in Days	0.001	0.61	0.003	0.72	0.013	0.91	-0.028	0.82
Adj R2	0.8070		0.8172		0.8357		0.8349	
F-statistics	550.84		542.38		155.62		1221.33	
Number of Observations	4807		4517		4803		4508	

Data Appendix			
Variable	Number of Observations	Mean	Standard Deviation
Voter Turnout Rate	17428	0.5000424	0.1353909
Margin in Presidential Race in State	17428	6.461738	9.33715
Margin in Gubernatorial Race	17428	6.400746	11.24475
Margin in Senate Race	17428	12.88982	17.49234
Photo ID (Substitutes allowed)	16028	0.0505366	0.2190562
Non-photo ID	16028	0.4842151	0.4997664
Absentee Ballot with No Excuse	15782	0.3056647	0.460703
Provisional Ballot	15689	0.7011919	0.4577501
Pre-election day in poll voting/in-person absentee voting	17428	0.4666628	0.4989017
Closed Primary	15660	0.3690294	0.4825573
Vote by mail	16028	0.0067382	0.0818121
Same day registration	16028	0.0560893	0.2301014
Registration by mail	16028	0.9332418	0.2496105
Registration Deadline in Days	16028	24.0544	7.722113
Number of Initiatives	17428	0.9427932	2.186753
Real Per Capita Income	16937	13311	3453.604
State unemployment rate	17428	4.756009	1.139538
State poverty rate	17270	12.63536	3.50314
Types of Initiatives			
Abortion	17428	0.0093528	0.0962591
Administration of Gov	17428	0.0299518	0.1704593
Alien Rights	17428	0.0008607	0.0293256
Animal Rights	17428	0.0617397	0.2406891
Bonds	17428	0.003328	0.0575942
Business Regulations	17428	0.0063691	0.0795541
Campaign Finance	17428	0.0383291	0.1919951
Civil Rights	17428	0.0442392	0.2056319
Death Penalty	17428	0.003328	0.0575942
Drug policy	17428	0.0404521	0.1970228
Education	17428	0.0461327	0.2097784
Election Reform	17428	0.0262796	0.15997
Environmental	17428	0.0591577	0.2359263
Gaming	17428	0.0652972	0.2470567
Gun regulation	17428	0.0055658	0.0743982
Health/medical	17428	0.0527312	0.2235028
Initiatives and Referendum Reform	17428	0.0184186	0.1344635
Judicial Reform	17428	0.0020656	0.0454037
Labor Reform	17428	0.0379275	0.1910264
Legal Reform	17428	0.0245582	0.1547787
Taxes	17428	0.0743631	0.2623684
Term Limits	17428	0.0576658	0.2331171
Tort Reform	17428	0.0071724	0.084388
Transportation	17428	0.0038444	0.0618856
Utility Regulations	17428	0.007115	0.0840522
Veterans Affairs	17428	0.0030411	0.0550637
Demographics			
% population 10 to 19	17345	0.1489322	0.0197387
% population 20 to 29	17345	0.1213164	0.0341395
% population 30 to 39	17345	0.1388913	0.0212235
% population 40 to 49	17345	0.1492473	0.0173433
% population 50 to 64	17345	0.1597476	0.0253207
% population 65 to 99	17345	0.1471236	0.0407621
% population Black	17333	8.036701	12.63859
% population White	17333	78.76029	13.17825

% population Hispanic	17345	4.681539	9.453796
% population male	17345	0.4254129	0.0315461
Total population by county	58148	93918	29443
Campaign Finance Regulations			
Limits on Individual Donations to Gubernatorial Races	13545	0.5963824	0.4906406
Limits on Corporate Donations to Gubernatorial Races	13545	1.724695	1.251119
Limits on Union Donations to Gubernatorial Races	13545	1.301292	1.128532
Limits on Individual Political Action Committee Donations to Gubernatorial Races	13545	0.560945	0.4962901
Limits on Corporate Political Action Committee Donations to Gubernatorial Races	13545	0.5663344	0.4955985
Limits on Union Political Action Committee Donations to Gubernatorial Races	13545	0.5663344	0.4955985
Limits on Individual Donations to Political Parties	13902	0.2593871	0.4383141
Limits on Corporate Donations to Political Parties	13902	0.2376636	0.4256673
Limits on Union Donations to Political Parties	13902	0.2517623	0.434041
Campaign Expenditure Limits on Gubernatorial Races	13902	0.0845921	0.2782838