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The Voter Initiative and the Power of the Governor: Evidence from Campaign Expenditures

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Abstract

Although a great deal of research examines the impact of the voter initiative process on the state legislature, the consequences for the state executive branch have been largely ignored. The voter initiative process provides the governor with a method to circumvent the legislature, which may increase the power of the governor in theory. However, it also provides citizens with a means to bypass the traditional lawmaking process and avoid the governor's veto. This may reduce the power of the governor and lead to policies farther from the preferences of the governor. This study examines the impact of the voter initiative process on the power of the state governor by estimating total election cycle spending. Campaign expenditures are expected to reflect any sustained gain or loss in power due to the availability of the voter initiative process. The results indicate that gubernatorial campaign expenditures are significantly lower in states in which the voter initiative process is available. This finding suggests that state governors sustain a loss in political power when the voter initiative is available. Additionally, the findings imply that individuals may employ the voter initiative process as a substitute for gubernatorial support.

JEL Codes: H1, H7

Keywords: Voter Initiative, Direct Democracy, Campaign Finance

The Voter Initiative and the Power of the Governor: Evidence from Campaign Expenditures

1 Introduction

The resurgence of the use of the voter initiative process in the U.S. at the state level in the past few decades has resulted in renewed interest in voter initiative research. A significant proportion of the literature has been devoted to the debate concerning the primary beneficiaries of the voter initiative process. The focus of the debate centers largely on whether special interest groups or the median voter benefit most from the availability of the voter initiative. While the state legislature is generally considered to relinquish decision making authority when the voter initiative is available, there has been little investigation into the impact of the voter initiative process on the state executive branch.

Matsusaka (2008) explores the effects of the voter initiative on the relative policy influence of the median voter, legislative branch, and executive branch in states in the U.S. He uses a simple model that employs single-peaked preferences to examine policy outcomes. The voter initiative process provides an additional avenue by which constituents and other interested parties can influence policy. The model shows that the legislative branch does cede decision making authority to voters when the voter initiative process is available. However, the impact of the voter initiative process on the executive branch is less clear. Although the voter initiative affords the governor the opportunity to bypass the legislature and propose laws through a direct vote, it also allows the general public to propose laws that can avoid the governor's veto. While the voter initiative process is a clear substitute for the legislature and weakens the political power of state legislators, the impact of the voter initiative on the relative political power of the governor and the extent to which the voter initiative process serves as a substitute for gubernatorial support is uncertain.

The empirical literature indicates that campaign spending is higher for offices with more power, suggesting that we can employ the amount of campaign spending as a proxy for the power of office.[1] Crain and Tollison (1977), Crain, Tollison, Deaton, and Tollison (1977) and Gifford and Santoni (1978) find that campaign funding increases as the size of the public resources controlled increases. Additionally, Abrams (1981) shows that other measures of the ability to influence policy such as the power to appoint officials and finance with debt increase campaign

[1] In addition to political influence and political resources, the ambitions of the individual politician may also impact campaign expenditures (Schlesinger, 1966). Therefore, a candidate and his donors may spend money on a campaign in order to continue climbing the political ladder. However, research has shown that political influence and resources have significant effects on campaign expenditures.

spending. Lott (2000) finds that increasing public budgets are the primary cause of increasing campaign expenditures. Furthermore, candidates receive greater campaign contributions when budgets are larger according to Palda (1992). Finally, Artés and Viñuela (2007) find that greater appointment power leads to higher campaign expenditures. While many factors influence campaign spending, it is expected that candidates and their campaign contributors will spend more money to gain election to a position that provides a stronger influence over policy other things constant. If the availability of the voter initiative process alters the power of a political position, campaign expenditures should reflect the sustained gain or loss of political power accordingly.

This paper evaluates the effect of the voter initiative process on the political power of the executive branch by examining campaign expenditures in state gubernatorial elections. A higher level of campaign spending in voter initiative states would suggest that the voter initiative process enhances the political power of the state governor while lower campaign spending would imply that the political power of the state governor is weakened by the voter initiative process. Total election cycle spending is estimated for candidates for state gubernatorial seats. The analysis finds that campaign spending in gubernatorial contests is significantly lower in voter initiative states. These results suggest that the voter initiative process reduces the political power of the state governor.

Section 2 outlines the theory behind the impact of the voter initiative process on the executive branch while section 3 discusses the empirical specification for the estimation of state gubernatorial campaign expenditures. Section 4 examines the results, discusses the implications of the findings, and examines spending in federal Senate elections to check for unobserved state specific variables that may influence campaign expenditures. The final section concludes and offers suggestions for future research.

2 The Effect of the Voter Initiative on Relative Influence

The voter initiative is a form of direct democracy that allows groups and individual voters to propose statutes or constitutional amendments. Individuals can place laws or amendments on the ballot in states where the voter initiative is available, allowing voters to directly decide the outcome. In order to place a voter initiative on the ballot, a certain number of signatures must be collected to provide evidence of sufficient support for the measure. The signature requirement varies across states in which the voter initiative is available. Once the signature requirement is met, the policy proposal will appear on the ballot. The proposal is adopted if a majority of voters vote in favor of the proposal. Table 1 displays the states in which the voter initiative process is available, the signature requirements for each state, and the date in which the voter initiative was first adopted in the state. Mississippi is the only state to gain access to the voter initiative in the period of this analysis, from 1980 – 2002. Additionally, there are other differences regarding access to the voter initiative process and the ability of the state legislature to block successful voter initiative campaigns between states with voter initiative access. These differences are summarized by the indices included in Table 1.

[Table 1]

Much of the existing voter initiative literature has examined the beneficiaries of the voter initiative process and the corresponding loss of policy influence sustained by the legislature. Since the voter initiative allows voters to break the monopoly that the legislature holds on the creation of laws, it seems obvious that the legislature will in fact lose power relative to the voters when the voter initiative is available. However, the vast majority of the literature has yet to examine the impact of the voter initiative process on the role of the executive branch in law making.

In order to enact a new law in a state that does not have the voter initiative process, a bill must be introduced in the state House or Senate. After deliberation between the introduction and passage of a bill, numerous amendments may occur throughout the process. Once a bill is passed by both chambers, it then must be signed into law by the state governor. The governor may veto the bill, although the state legislature may be able to override the veto. The legislature and the governor are the two parties directly involved in the policymaking process in states that lack the voter initiative process. However, individuals and other interested parties can directly propose policy changes and bypass the traditional policy making process in voter initiative states. The availability of the voter initiative process can potentially alter the policymaking dynamic.

Matsusaka (2008) provides the first attempt to examine the effects of the voter initiative on the relative influence of the median voter, the legislature, and the executive branch. He uses a simple model similar to Gerber (1996) and Matsusaka and McCarty (2001) in which all actors have single-peaked preferences. The median voter's ideal policy preference (V), the legislature's ideal policy preferences (L), and the governor's ideal policy preference (G) are points along the real line. The policy (x) is a point on the real line. A game between the three participants determines the equilibrium policy (x*) along the real line.

This model follows typical convention and ignores the idea that voters play a role in the law making process by electing their government officials.[2] When this is the case, the median voter and the governor are excluded from the law making process in the absence of the voter initiative. In this case, the legislature is able to select their ideal policy preference ($x^* = L$).[3]

[Figure 1]

However, the median voter and the governor can directly affect a policy decision when the voter initiative is available. While there are several different scenarios and preference orders that may be considered, the evaluation of two potential situations displays the possible effects of the voter initiative on the relative influence of the three players. One possible situation is displayed in Figure 1(a). In this case, $L < V < G$. The availability of the voter initiative in this situation allows the voters or the governor to propose a policy that is better aligned with their preferences. If the status quo has been determined by the legislature ($x^* = L$), the voters will favor a voter initiative placing the policy closer to their true preference. This policy could be proposed by either the voters or the governor. The measure would be approved by voters if the voter initiative was placed on the ballot. Additionally, the legislature might preemptively enact legislation that voters prefer in order to avoid a voter initiative that could push policy farther from the preferences of the legislature.[4] When the situation in Figure 1 (a) exists, both voters and the governor stand to gain when the voter initiative process is available while the legislature loses decision making authority. Any policy that prevails can benefit the voter and the governor. At the very least, the voter initiative cannot harm either the voter or the governor in this situation.[5]

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[2] While the legislature and the governor are elected by the voters, Matsusaka (2005) notes that the preferences of the median voter in the state may not coincide with the preferences of the legislature as a whole. State legislators are elected in district elections and typically represent the median voter of the district. Gilligan and Matsusaka (2001), Bradbury and Crain (2001), and Baqir (2002) discuss this issue.

[3] This simple model ignores gubernatorial veto power. While the governors of all states except for North Carolina have some type of veto power, the passage of a voter initiative avoids the governor's veto powers.

[4] Gerber (1996, 1999) and Matsusaka and McCarty (2001) find that the threat of a voter initiative can cause the state legislature to enact legislation to avoid a less favorable outcome through the voter initiative process. Matsusaka (1995), Gerber and Hug (2001), Arceneaux (2002), and Randolph (2010) find that the indirect effect of the voter initiative has an impact on legislation and policy outcomes.

[5] The governor can still benefit in this situation with incomplete information (Gerber and Lupia, 1995; Matsusaka and McCarty, 2001). The voter can be harmed if incomplete information exists (Matsusaka, 2005).

However, a second scenario displayed in Figure 1 (b) can have different results. In this case, V < L < G. Once more, the availability of the voter initiative allows the voter the opportunity to choose a more ideal policy. Assuming that the status quo policy is determined by the legislature ($x^* = L$), voters will prefer a policy further to the left. Once again, the proposition of a voter initiative may lead to preemptive action by the legislature. If the voter initiative were to be placed on the ballot, voters would approve of the measure. However, in this situation, the new policy is farther from the preferred policy of the governor. Additionally, policies that are approved through voter initiatives are exempt from the governor's veto. While the legislature again loses influence to the voter in Figure 1 (b), the governor can also be harmed by the policy resulting from the voter initiative process. Finally, the voter should benefit from this situation and cannot be harmed at the very least.

According to this basic model, the voters are the one party that cannot be harmed by the presence of the voter initiative. The legislature cannot gain influence with the availability of the voter initiative process because they would have a monopoly on the production of legislation otherwise. The effect of the voter initiative on the executive branch remains rather ambiguous. The voter initiative can lead to a more favorable outcome for the governor when the policy preferences of the median voter are more aligned with the governor's preferences than the preferences of the legislature, e.g. Figure 1 (a). However, the voter initiative can lead to outcomes that are unfavorable to the governor when the preferences of the median voter are more aligned with those of the legislature, e.g. Figure 1 (b). Also, constituents and other parties can turn to the voter initiative process to accomplish political objectives instead of offering support for gubernatorial candidates.

While theory and observation can guide our analysis of the effects of the voter initiative on the relative power of the median voter, the legislature, and the governor, the question has yet to be investigated empirically. This paper examines this issue by estimating total election cycle spending by candidates for state gubernatorial offices. This affords the opportunity to examine the effects of the voter initiative on the value of a political seat through the eyes of candidates and their donors. If the availability of the voter initiative increases the influence of state governors, we would expect to find that candidates in voter initiative states spend more in election campaigns after controlling for other factors. However, the voter initiative process provides an alternative method by which constituents and other interested parties can accomplish political objectives. We would expect lower expenditures if individuals turn to the voter initiative process to accomplish political goals and the governor surrenders political power.

3 State Gubernatorial Election Cycle Spending

As mentioned previously, the voter initiative has an ambiguous effect on the power of the executive branch. Total per capita election cycle gubernatorial expenditures are estimated in order to examine the issue following a model of campaign expenditure estimates from Lott, Jr. (2000).[6] Descriptive statistics for the dependent variable are reported in Table 2. The average per capita election cycle expenditures for gubernatorial elections in all states is $2.68 (year 2000 dollars). Average expenditures are $2.28 in voter initiative states compared to $2.94 in states that lack the voter initiative process. The study accounts for a number of state specific and election specific factors in order to determine campaign spending. Gubernatorial campaign spending on a per capita basis is examined to control for state population within the dependent variable. Gierzynski and Breaux (1991) and Hogan and Hamm (1998) note that population is in fact one of the most important explanatory factors in campaign spending.

[Table 2]

Per capita state expenditures are the most important determinant of campaign spending according to Lott, Jr. (2000). He argues that this is due to the fact that state expenditures are the resources that candidates are vying to control. Per capita income and population are also included as independent variables. Lott, Jr. (2000) suggests that per capita income can control for changes in the desire and ability of constituents to contribute to campaigns while population controls for the scale effects of campaigning. A dummy variable is included to account for states that have split control of the state legislature. Contributors may be less willing to donate when the state legislature is dominated by opposite parties as Rogers (2005) finds that split control of the legislature at the state level decreases legislative production.

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[6] While candidates and their donors may spend money to gain election to a political office in order to progress toward more desirable political positions, other variables concerning political influence and political resources have significant explanatory power concerning campaign spending. The impact of the voter initiative process on gubernatorial campaign expenditures is significant in this study even though some candidates may simply aspire to greater political positions.

Governors in different states experience differing degrees of gubernatorial power. Two indices developed by Beyle (1998) are included in the analysis to measure the power of the governor to appoint offices and prepare the budget.[7] A dummy variable is also included to measure the impact of term limits on gubernatorial seats. States that impose limits on the amount of consecutive years in which the governor can serve are coded as term limit states while states without term limits are the excluded group. Palda (1992) provides evidence that gubernatorial power, when combined with government resources available, impacts campaign expenditures although individual measures of appointment, budget, and tenure power are insignificant.

Several variables are included to account for the conditions of the general election and the primary elections. A dummy variable is included to account for elections in which an incumbent is present. The presence of an incumbent in an election can have a drastic effect on the level of spending, given the advantages that incumbents enjoy over challengers.[8] Higher spending is expected in open seat elections because candidates lack the advantage of name recognition and support. A variable is also included to account for the number of candidates involved in the election. Candidates are expected to spend more when there are more challengers. It is also expected that closer races will involve higher levels of spending. Candidates will generally spend less if they perceive that they will win or lose by a large margin. This is measured with the post-election winning margin.[9] The three aforementioned variables are included for the general election, the Republican primary, and the Democratic primary.

Variables are also included to account for the lack of a challenger in both the Republican and Democratic primary elections. Candidates are expected to spend less when they do not have to compete in a primary election as

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[7] Beyle (1998) develops two scales in order to measure the governor's appointment power and the governor's budgetary power. Governor appointment power is measured by examining the governor's ability to appoint positions in public utilities, transportation, education, health, corrections, and welfare. The scale ranges from 0 when the legislature is able to select the position to 5 where the governor appoints the position without any approval (rounded to the nearest 0.5). Governor budgetary power is measured on a scale where 1 indicates that budget responsibilities are shared among elected officials and the legislature has an unlimited ability to change the budget and 5 indicates that the governor has full control of the budget and the legislature cannot alter the budget. Higher scores indicate a higher degree of power. The updated index is available online through the website listed in the references.

[8] Incumbents enjoy recognition and status benefits over challengers, allowing them access to greater finances. Open seat candidates are also well financed as they have a greater chance to win than challengers. Gierzynski and Breaux (1991) and Moncrief (1998) show that incumbents and open seat candidates spend more in elections in comparison to challengers.

[9] Previous research has found that greater degrees of competition are associated with higher campaign spending as donors are more willing to contribute in more competitive races (Thompson, Cassie, and Jewell, 1994). Candidates generally have an idea of the closeness of the election and spend accordingly. This follows Muth's (1961) rational expectations and is used in Kirchgässner and Meyer Zu Himmern (1997).

primary spending can contribute substantially to campaign expenditures (Breaux and Gierzynski, 1991). The percentage differences between the number of Republicans and Democrats in both the state senate and house are included. Previous research has found that the political composition of the chambers impacts legislative campaign expenditures (Stonecash, 1990; Hogan, 2000).

Campaign finance laws for gubernatorial elections vary by state as well. In order to account for differences between state campaign finance laws, this analysis employs the campaign finance law coding used in Primo, Milyo, and Groseclose (2006). The authors utilize three separate dummy variables to examine the existence of limitations on campaign contributions from organizations, limitations on campaign contributions from individuals, and the availability of public funding for candidates.[10] Previous research has found that campaign finance laws do not reduce the overall level of spending in gubernatorial elections (Bardwell, 2003).

In order to examine the effect of the voter initiative on campaign spending, a dummy variable is included for voter initiative states.[11] A list of these states is provided in Table 1. States in which the voter initiative process is unavailable are the excluded group.[12] Additionally, states in which the voter initiative process is available differ in the amount of signatures that are required in order to place a voter initiative on the ballot, which renders access to the voter initiative process different in various states.[13] Several techniques are employed to examine the impact of different signature requirements and other state differences regarding the voter initiative process. One method involves including the signature requirement as an independent variable with the voter initiative dummy variable.

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[10] While there are numerous ways to examine campaign finance law, Primo, Milyo, and Groseclose (2006) argue that the dummy variable approach best suits the analysis of campaign finance law as other issues (such as specific dollar limitations, enforcement of campaign finance law, and other differences between states) are difficult to measure and can be subjective in nature.

[11] While some recent research has argued that the voter initiative process is endogenous to historical factors in states (Marschall and Ruhil, 2005), others have argued that political landscapes have changed as the voter initiative process in most states was enacted prior to 1915 (Matsusaka, 1995). Matsusaka (2005) offers empirical evidence to the theoretical evidence against the endogeneity issue.

[12] Wyoming is not included as a voter initiative state because it has an extremely high signature requirement at 15%. Illinois is not included as a voter initiative state because it is the only state in which a proposal can only be used to alter the organization of the state legislature. This follows the logic of Matsusaka (2004). The inclusion of Wyoming and Illinois does not significantly alter the results.

[13] 24 states have a form of the voter initiative at the state level. The signature requirement varies from a low of 3% to a high of 15% (Initiative and Referendum Institute, 2010a). This difference in signature requirements results in substantial differences in the effects of the voter initiative process. It can be very difficult to collect the signatures required for states with high signature requirements.

Following Matsusaka (2004), the percentage signature requirement is included for states with the voter initiative while states that lack the voter initiative process receive a value of zero.

Additionally, other provisions that impact the ease of qualifying a voter initiative for the ballot and the ability of the state legislature to moderate the effects of a successful voter initiative campaign differ among the states. In order to further evaluate the effects of the voter initiative process, two other alternative measures of the voter initiative process are examined along with the voter initiative dummy variable. Bowler and Donovan (2004) introduce two indices to account for differences in voter initiative methods between states. The qualification difficulty index provides a rough measure of the complexity of qualifying a voter initiative proposal for the ballot. The qualification difficulty index ranges from zero to six based on the necessary requirements to qualify a proposal for a ballot. The authors suggest that higher values indicate a more accessible voter initiative process as it may be easier to place a proposal on the ballot. The legislative insulation index provides a rough measure of the extent to which the state legislature can mitigate the effects of a successful voter initiative. The legislative insulation index ranges from zero to nine. The authors suggest that legislatures in states with higher values have a lesser ability to block the effects of a successful voter initiative.[14] Table 1 displays the values of each of the Bowler and Donovan (2004) variables for voter initiative states.

In order to measure the likelihood of a voter initiative appearing on the ballot, the average number of voter initiatives that occur each two year election cycle from 1970 – 2002 is included with the voter initiative dummy variable in a final empirical specification. The average number of voter initiatives provides a measure of the frequency of voter initiative use (Tolbert, Grummel, and Smith, 2001; Bowler and Donovan, 2004).

Year dummy variables are included to account for time fixed effects. Clustered standard errors are employed at the state level as it is possible that interclass correlation may be an issue for gubernatorial expenditures within a state over time due to the panel nature of the data. Additionally, a second analysis includes regional dummy variables to account for any differences across regions in the U.S.[15] While there are states in each region of the U.S. that have access to the voter initiative process, the majority of the voter initiative states are in the West. Matsusaka

[14] Bowler and Donovan (2004) use the number of formal provisions required to place a voter initiative on the ballot in order to develop the qualification difficulty index. The number of provisions that restrict the ability of the legislature to alter the effects of a successful voter initiative is used to develop the legislative insulation index. Their indices have been reversed in this paper in order to simplify the interpretation of the indices. Bowler and Donovan (2004) find that reversing the indices do not alter the results.

[15] State fixed effects are not included in the analysis because the availability of the voter initiative process does not change from 1980 – 2002, with the exception of Mississippi in 1992.

(2000) explains that regional dummy variables help to ensure that voter initiative measures do not serve as a proxy for regional effects. There may also be other differences in campaign spending between regions in the U.S. Variables for the North, South, and West are included while the Midwest is the excluded region.[16]

The data cover all state gubernatorial elections from 1980 – 2002. The sources and descriptions for all data are listed in the Appendix. Alaska and Hawaii are excluded in the analysis as observations from both states are significant outliers and exhibit many different characteristics when compared to the other 48 states. Louisiana is also excluded from the analysis because of their open election format.[17] Furthermore, there are four extreme gubernatorial spending outliers that are far greater than three standard deviations from the mean for per capita gubernatorial campaign spending. These four outliers are excluded from the analysis in this paper.[18] Summary statistics for independent variables are presented in Table 2.

4 Regression Results and Discussion

The results for the analysis excluding regional dummy variables are presented in Table 3. Table 4 reports the results of the analysis including regional dummy variables. Column (a) shows the results with the voter initiative variable while column (b) displays results with the voter initiative variable along with the signature requirement. Columns (c), (d), and (e) include the voter initiative dummy variable with the qualification difficulty index, and the legislative insulation, and the average number of voter initiatives per two year election cycle index respectively.

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[16] Regional variables are constructed as follows: North (CT, MA, ME, NH, NJ, NY, PA, RI, VT), South (AL, AR, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV), Midwest (IA, ID, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI), and West (AZ, CA, CO, MT, NM, NV, OR, UT, WA, WY).

[17] Louisiana uses an open election format instead of the traditional primary and general election format used by other states. All candidates compete in an initial election regardless of party affiliation. If one candidate receives more than 50% of the vote, they are awarded the position of governor. Otherwise, a runoff election is held with the top two candidates from the initial election.

[18] Regressions including the four outliers were also performed. While the inclusion of the outliers does not change the primary results, the outliers do have a large impact on the magnitude of coefficients. The mean for per capita gubernatorial spending is $2.68 across all elections. Per capita spending in New Hampshire, 2002 was $14.21. Millionaire businessman Craig Benson spent a large amount of his own money in a year where a record number of voters participated. Per capita spending in West Virginia, 1980 was $13.66. This could be a data error as election winner Jay Rockefeller is reported as spending in excess of $11 million dollars for re-election. Per capita spending for South Dakota, 2002 was $12.22. This election was an upset victory for Mike Rounds in which a great deal of money was spent by other candidates in the primary and again in the general election. Finally, per capita spending was $11.49 in Rhode Island, 1990. Bruce Sundland (in his third attempt at the governor seat) spent a great deal of money to defeat incumbent Edward DiPrete.

[Table 3]

The results in column (a) of Table 3 indicate that spending in gubernatorial contests is approximately $0.48 lower in states in which the voter initiative process is available, significant at the five percent level. Additionally, the voter initiative variable is significant in column (b) at the ten percent level when the signature requirement is included in the analysis. The voter initiative variable in column (b) of Table 3 indicates that spending is reduced by $0.78 for states with the voter initiative. The signature requirement in column (b) is $0.04, although the coefficient is insignificant in the analysis. While we cannot confirm that spending in gubernatorial elections is reduced to a greater extent in voter initiative states with lower signature requirements, it does appear that the availability of the voter initiative process is associated with lower levels of campaign expenditures in gubernatorial contests.

Columns (c), (d), and (e) provide an analysis of the marginal impact of several differences in the voter initiative process and usage on gubernatorial campaign expenditures. In order to interpret the results, the voter initiative dummy variable and the included measures of the voter initiative process can be viewed as interaction terms. All states that lack the voter initiative process receive a value of zero for these independent variables. In column (c), the coefficient for the qualification difficulty index has the expected negative sign but is insignificant. We do not find evidence that spending is reduced as the number of formal provisions that must be satisfied to place a voter initiative on a ballot is reduced. However, a negative and significant value for the legislative insulation index is observed in column (d). The authors of the index suggest that the ability of the legislature to block the effects of a successful voter initiative campaign decrease as the index increases in this analysis. The coefficient of approximately negative $0.10 indicates that spending is reduced as the number of formal provisions that assist the state legislature in mitigating the impact of the voter initiative process declines. Column (e) of Table 3 shows a negative coefficient for the average number of voter initiatives that appear on the ballot each two year election cycle from 1970 – 2002, although the result is insignificant.

While column (d) provides some evidence that voter initiative processes that are less influenced by the state legislature may have a larger negative impact on spending, the results overall do not seem to suggest that differences in the voter initiative process have a large impact on gubernatorial campaign expenditures. The other measures of the voter initiative process may simply duplicate the voter initiative dummy variables as the voter initiative dummy variable is highly correlated with the other measures of the voter initiative process. While joint F-tests of the voter initiative dummy variable and the other variables are significant, these tests are not reliable when clustered standard errors are employed. Additionally, the factors employed in the indices are not necessarily additive or equally important in terms of influence on the voter initiative process.

The results in Table 4 duplicate the results from Table 3 for the voter initiative dummy variable in column (a). The voter initiative process has a significantly negative impact on per capita election cycle gubernatorial expenditures as indicated by these results when variables are included to account for regional differences across the U.S. Additionally, the results for the regressions including the voter initiative dummy variable with the signature requirement, the qualification difficulty index, the legislative insulation index, and the average number of voter initiatives are individually insignificant in the results. Once again, the likely cause of this observation is the high correlation between the voter initiative dummy variable and the other measures of the voter initiative. The measures of the differences in the voter initiative process between states have an insignificant impact on gubernatorial spending on the margin.

[Table 4]

4.1 Implications of the Voter Initiative Process

The results suggest that the availability of the voter initiative process weakens the relative political power of the executive branch. While the governor can employ or support the voter initiative process to accomplish goals in some cases, the voter initiative process can also lead to policies contrary to the preferences of the governor and avoid the governor's veto power. The significant negative coefficient on the voter initiative dummy variable implies that the sustained loss in power due to the voter initiative process seems to outweigh any benefits of the voter initiative process for the governor. Additionally, these results are consistent with a scenario in which constituents and other interested parties may choose to pursue some political goals through the voter initiative process as an alternative to supporting the governor. Rather than devoting resources to elect a specific gubernatorial candidate, interested parties in voter initiative states have the option to use the voter initiative process as a substitute method to accomplish their objectives.

4.2 Other Variables of Interest

Several other variables of importance are identified in the analysis. The analysis suggests that per capita state expenditures are a primary determinant of gubernatorial spending. Per capita gubernatorial spending increases by approximately $0.40 as per capita state expenditures increase by $1000 across all empirical specification, significant at the one percent level. The closeness of the general election is also highly significant as expected. As the winning margin in the general election increases by one percent, per capita gubernatorial spending decreases by approximately $0.03 across all empirical specification, significant at the one percent level. Campaign spending is also significantly higher when there is no challenger in the Republican primary and spending decreases slightly as the winning margin in the Republican primary increases. The presence of a Democratic incumbent significantly decreases spending as well. These results are consistent with the theory regarding campaign expenditures.[19]

There are other notable findings regarding insignificant variables as well. Somewhat surprisingly, gubernatorial appointment power and gubernatorial budgetary power are insignificant in all specifications. However, previous research has found these powers insignificant alone but significant when interacted with state resources and considered jointly (Palda, 1992). Additionally, campaign finance variables coded for the existence of limitations on individual campaign contributions, group campaign contributions, and public financing are insignificant in all specifications. Previous research suggests that campaign finance laws do not reduce the overall level of spending in gubernatorial contests, although campaign finance laws may reduce spending for incumbents relative to challengers (Bardwell, 2003).

4.3 Complementary Strategy: The Voter Initiative Process and Federal Senate Elections

While the findings in this study provide evidence that the voter initiative process impacts gubernatorial spending, it is important to provide a note of caution in the interpretation of the results. Due to the difficulty in devising an empirical strategy that controls for all possible factors that impact gubernatorial spending, we cannot ignore the possibility that spurious correlation could drive the inverse relationship between the availability of the voter initiative process and gubernatorial campaign expenditures.

In order to examine the potential spurious correlation between the availability of the voter initiative process and campaign expenditures, an additional regression analysis was performed examining the impact of the

[19] The results of this analysis are robust to any changes in the model employed. An analysis excluding the primary election independent variables was performed as an additional check. The primary results of the analysis persist.

availability of the voter initiative process on federal Senate elections. While federal senators are elected at the state level, the voter initiative process should not impact campaign expenditures in federal Senate elections as the senators serve at the federal level. If campaign expenditures in federal Senate elections are reduced by the availability of the voter initiative process, it is likely that spurious correlation exists between campaign expenditures and the voter initiative. On the other hand, we would expect the voter initiative process to have no significant impact on federal Senate campaign expenditures absent spurious correlation.

Following the theory and logic for the estimation of gubernatorial campaign expenditures, a final regression analysis examines total election cycle Senate expenditures per capita. Election winning margin, the number of candidates in the general election, the participation of an incumbent in the election, and state population in millions are included as independent variables.[20] All data for Senate elections were obtained through the Federal Election Commission's Campaign Finance Reports and Data while population data were obtained from *The Book of the States*. Independent variables are included to examine the voter initiative process as discussed in the gubernatorial analysis.

The results for the analysis of total election cycle Senate expenditures per capita are presented in Table 5. The coefficients on our voter initiative variables are positive and insignificant in specifications (a) through (e). The relationship between the availability of the voter initiative process and campaign expenditures does not persist in federal Senate elections. While we cannot completely rule out the possibility of spurious correlation, these results provide evidence against the notion. Additionally, winning margin and state population significantly impact per capita campaign expenditures in Senate elections.

[Table 5]

5 Conclusion

While previous literature has examined the loss of political power sustained by the state legislature when the voter initiative process is available, this analysis provides evidence that the availability of the voter initiative process decreases the political power of the state governor. Additionally, the findings in this analysis suggest that

[20] A number of the independent variables in the gubernatorial are either difficult or impossible to include in the Senate analysis. However, the results regarding the voter initiative variables are consistent regardless of the empirical specification.

constituents and interested parties may look to the voter initiative process as a substitute means to accomplish their political goals. Instead of providing campaign resources for a gubernatorial candidate, individuals in voter initiative states have the option to fund a voter initiative campaign.

While this study provides some insight into the relationship between the executive branch and the voter initiative process, further exploration of the topic is necessary to better understand the impact of the voter initiative process on the power of the governor and the circumstances under which the voter initiative process can help or harm the governor. Additionally, consistent with previous research, the results of this analysis imply that the voter initiative process is viewed as an important policy shaping tool by individuals and interested parties. Further research that allows us to better understand the individuals involved in the voter initiative process, the methods in which the voter initiative process is employed, and the potential benefits and drawbacks of the effects of the voter initiative process on policy outcomes seems a worthy endeavor.

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References

Abrams, B.A. (1981). Political Power and the Market for Governors. *Public Choice* 37, 521 – 529.

Arceneaux, Kevin. (2002). Direct Democracy and the Link between Public Opinion and State Abortion Policy. *State Politics and Policy Quarterly* 2, 372 – 385.

Artés, Joaquín and Enrique García Viñuela. (2007). Campaign Spending and Office-seeking Motivations: An Empirical Analysis. *Public Choice* 133, 41 – 55.

Bardwell, Kedron. (2003). Campaign Finance Laws and the Competition for Spending in Gubernatorial Elections. *Social Science Quarterly* 84 (4), 811 – 825.

Baqir, Reza. (2002). Districting and Government Overspending. *Journal of Political Economy* 110 (6), 1318 – 1354.

Beyle, Thad. (1998). Governors. In Gray, Hanson, and Jacob (Eds.), *Politics in the American States*, 7th ed. (pp. 191 – 231). Washington D.C.: Congressional Quarterly Press.

Beyle, Thad. *The Gubernatorial Campaign Finance Database*. http://www.unc.edu/~beyle/index.html. Accessed June 1, 2010.

The Book of the States. Various Years. Volumes 23 – 35. Lexington, KY. The Council of State Governments.

Bowler, Shaun and Todd Donovan. (2004). Measuring the Effect of Direct Democracy on State Policy: Not All Initiatives are Created Equal. *State Politics and Policy Quarterly* 4 (3), 345 – 363.

Bradbury, John Charles and W. Mark Crain. (2001). Legislative Organization and Government Spending: Cross Country Evidence. *Journal of Public Economics* 82, 309 – 325.

Breaux, David and Anthony Gierzynski. (1991). It's Money that Matters: Campaign Expenditures and State Legislative Primaries. *Legislative Studies Quarterly* 16: 429 – 43.

Congressional Research Service. Various years. *Campaign Finance Law.* Washington: National Clearinghouse on Election Administration.

Crain, W. Mark, T. Deaton, and D. Tollison. (1977). Legislators as Taxicabs: On the Value of Seats in the U.S. House of Representatives. *Economic Inquiry* 15 (2), 298 – 302.

Crain, W. Mark and D. Tollison. (1977). Attenuated Property Rights and the Market for Governors. *Journal of Law and Economics* 20 (1), 205 – 211.

Federal Election Commission. Various Years. Campaign Finance Reports and Data (Candidate Financial Summaries). http://www.fec.gov/finance/disclosure/ftpsum.shtml. Accessed June 1, 2010.

Gerber, Elisabeth R. (1996). Legislative Response to the Threat of Popular Initiatives. *American Journal of Political Science* 40 (1), 99 – 128.

Gerber, Elisabeth R. (1999). *The Populist Paradox: Interest Group Influence and the Promise of Direct Legislation*. Princeton, NJ: Princeton Press.

Gerber, Elisabeth R. and Arthur Lupia. (1995). Campaign Competition and Policy Responsiveness in Direct Legislation Elections. *Political Behavior* 17 (2), 287 – 306.

Gerber, Elisabeth R. and Simon Hug. (2001). Legislative Response to Direct Legislation. In M. Mendelsohn and A. Parkin (Eds.), *Referendum Democracy*. New York: Palgrave.

Gierzynski, Anthony and David Breaux. (1991). Money and Votes in State Legislative Elections. *Legislative Studies Quarterly* 16, 203 – 217.

Gifford, A. and G.J. Santoni. (1978). Politicians and Property Rights: An Analysis of the Relationship between Campaign Expenditures and Wage and Price Controls. *Public Choice* 33, 71 – 74.

Gilligan, Thomas W. and John G. Matsusaka. (2001). Fiscal Policy, Legislature Size, and Political Parties: Evidence from the First Half of the Twentieth Century. *National Tax Journal* 54, 383 – 401.

Hogan, Robert E. and Keith E. Hamm. (1998). The Costs of Representation in State Legislatures: Variations in District-Level Campaign Spending. In Joel A. Thompson and Gary F. Moncrief (Eds.), *Campaign Finance in State Legislative Elections*. (pp. 55 – 79) Washington D.C.: Congressional Quarterly Press.

Hogan, Robert E. (2000). The Costs of Representation in State Legislature: Explaining Variations in Campaign Spending. *Social Science Quarterly* 81 (4), 941 – 956.

Initiative and Referendum Institute at the University of Southern California. Comparison of Statewide Initiative Processes. http://www.iandrinstitute.org/New%20IRI%20Website%20Info/Drop%20Down%20Boxes/Requirements/A%20Comparison%20of%20Statewide%20I&R%20Processes.pdf. Accessed June 1, 2010a.

Initiative and Referendum Institute at the University of Southern California. Statewide Initiatives Since 1904. http://www.iandrinstitute.org/New%20IRI%20Website%20Info/Drop%20Down%20Boxes/Historical/Statewide%20Initiatives%201904-2000.pdf. Accessed June 1, 2010b.

Kirchgässner, Gebhard and Anne Meyer Zu Himmern. (1997). Expected Closeness and Turnout: An Empirical Analysis for the German General Elections, 1983 – 1994. *Public Choice* 91, 3 – 25.

Lott, Jr., John R. (2000). A Simple Explanation for Why Campaign Expenditures are Increasing: The Government is Getting Bigger. *Journal of Law and Economics* 43, 359 – 343.

Marschall, Melissa and Anirudh V.S. Ruhil. (2005). Fiscal Effects of the Voter Initiative Reconsidered: Addressing Endogeneity. *State Politics and Policy Quarterly* 5 (4), 327 – 355.

Matsusaka, John G. (1995). Fiscal Effects of the Voter Initiative: Evidence from the Last 30 Years. *Journal of Political Economy* 103, 619 – 650.

Matsusaka, John G. (2000). Fiscal Effects of the Voter Initiative in the First Half of the Twentieth Century. *Journal of Law and Economics* 43, 619 – 650.

Matsusaka, John G. (2004). *For the Many or the Few: The Initiative, Public Policy, and American Democracy.* Chicago, IL.: University of Chicago Press.

Matsusaka, John G. (2005). The Endogeneity of the Initiative: Comment on Marschall and Ruhill. *State Politics and Policy Quarterly* 5 (4), 356 – 363.

Matsusaka, John G. (2008). Direct Democracy and the Executive Branch. Shaun Bowler and Amihai Glazer (Eds.), *Direct Democracy's Impact on American Political Institutions.* (pp. 115 – 136) New York, NY: Palgrave Macmillan.

Matsusaka, John G. and Nolan M. McCarty. (2001). Political Resource Allocation: Benefits and Costs of Voter Initiatives. *Journal of Law, Economics, and Organization* 17, 413 – 438.

Moncrief, Gary F. (1998). Candidate Spending in State Legislative Races. In Joel A. Thompson and Gary F. Moncrief (Eds.), *Campaign Finance in State Legislative Elections* Washington D.C.: Congressional Quarterly Press.

Muth, J. (1961). Rational Expectations and the Theory of Price Movements. *Econometrica* 29, 315 – 335.

Palda, Filip. (1992). The Determinants of Campaign Spending: The Role of the Government Jackpot. *Economic Inquiry* 30, 627 – 638.

Primo, David M., Jeffrey Milyo, and Tim Groseclose. (2006). State Campaign Finance Reform, Competitiveness, and Party Advantage in Gubernatorial Elections. In Michael M. McDonald and John Samples (Eds.), *The Marketplace of Democracy: Electoral Competition and American Politics.* Washington D.C.: Brookings Institution Press.

Randolph, Gregory M. (2010). Measuring the Indirect Effect: Voter Initiatives and Legislative Production in the American States. *Public Finance Review* 38 (6): 762 – 786.

Rogers, James R. (2005). The Impact of Divided Government on Legislative Production. *Public Choice* 123 (1-2): 217 – 33.

Schlesinger, Jopseph A. (1966). *Ambition and Politics: Political Careers in the United States*. Chicago, IL. Rand-McNally and Co.

Statistical Abstract of the United States. http://www.census.gov/compendia/statab/past_years.html. Accessed June 1, 2010.

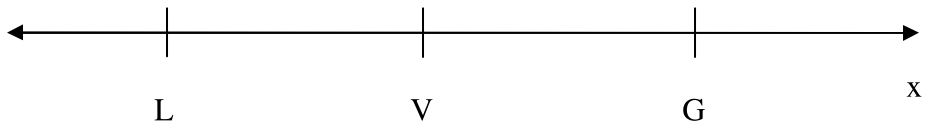
Stonecash, Jeffrey. (1990). Campaign Finance in New York Senate Elections. *Legislative Studies Quarterly* 15: 247 – 262.

Thompson, Joel A., William Cassie, and Malcolm E. Jewell. (1994). A Sacred Cow or Just a Lot of Bull? Party and PAC Money in State Legislative Elections. *Political Research Quarterly* 47: 223 – 37.

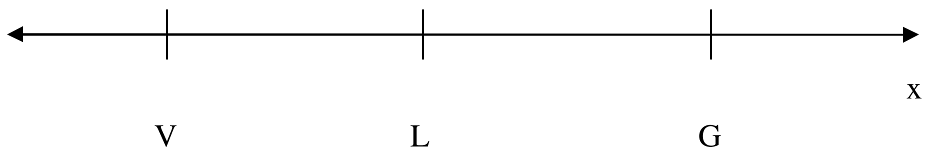
Tolbert, Caroline, John Grummel, and Daniel Smith. (2001). The Effects of Ballot Initiatives on Voter Turnout in the American States. *American Politics Research* 29 (6): 625 - 48.

Figure 1: The Effect of the Voter Initiative on the Relative Power of the Legislative Branch, the Executive Branch, and the Median Voter (Matsusaka, 2005)

(a)



(b)



Note: The median voter's ideal policy preference (V), the legislature's ideal policy preferences (L), and the governor's ideal policy preference (G) are points along the real line where policy (x) is a point on the real line.

Table 1: The Voter Initiative States

State (Date Initiative Process Adopted)[a]	Signature Requirement[b]	Qualification Difficulty Index[c]	Legislative Insulation Index[c]	Average Number of Voter Initiatives[d]
Alaska (1956)	10	4	2	2.00
Arizona (1912)	10	7	4	2.93
Arkansas (1910)	8	8	5	1.56
California (1911)	5	9	9	9.00
Colorado (1912)	5	7	6	5.13
Florida (1968)	8	5	3	1.31
Idaho (1912)	6	6	5	1.06
Illinois (1970)	8	5	3	0.06
Maine (1908)	10	2	3	2.00
Massachusetts (1918)	3.5	2	4	2.56
Michigan (1908)	8	7	5	1.94
Mississippi (1992)	12	3	2	0.50
Missouri (1908)	5	4	4	1.94
Montana (1906)	5	4	4	2.75
Nebraska (1912)	7	4	3	1.06
Nevada (1905)	10	5	3	1.62
North Dakota (1914)	2	7	6	2.44
Ohio (1912)	6	4	5	1.81
Oklahoma (1907)	8	6	4	1.13
Oregon (1902)	6	7	7	8.19
South Dakota (1898)	5	6	5	2.13
Utah (1900)	10	6	4	0.94
Washington (1912)	8	6	4	4.63
Wyoming (1968)	15	1	1	0.38

a. Voter initiative adoption dates are provided by the Initiative and Referendum Institute (2010a).

b. The signature requirement for statutes was included for all states with the exception of Florida and Mississippi. The signature requirement for constitutional amendments was used for Florida and Mississippi because they only allow constitutional amendments.

c. The indices are developed in Bowler and Donovan (2004). The qualification difficulty index ranges from 1 to 6 with the difficulty in qualifying a voter initiative for the ballot decreasing as the values increase. The legislative insulation index ranges from 1 to 9 with the insulation to the legislature decreasing as the values increase. States that lack the voter initiative process receive a value of 0.

d. The average number of voter initiatives is calculated as the average number of voter initiatives that appear on the ballot each two year election cycle from 1970 – 2002. Mississippi gained access to the voter initiative process in 1992. The average for Mississippi refers to years 1994 – 2002. The values are computed using data from the Initiative and Referendum Institute (2010b).

Table 2: Descriptive Statistics for Gubernatorial Spending Regressions

Variable	Average	Standard Deviation	Maximum Value	Minimum Value
Total Election Cycle Gubernatorial Expenditures Per Capita (All States)	$2.68	$1.61	$8.18	$0.21
Total Election Cycle Gubernatorial Expenditures Per Capita (Voter Initiative States)	$2.28	$1.32	$5.87	$0.50
Total Election Cycle Gubernatorial Expenditures Per Capita (Non-Voter Initiative States)	$2.94	$1.73	$8.18	$0.21
Per Capita State Expenditures	$3,214.65	$874.25	$5957.76	$1,311.79
Per Capita State Income	$23,576.47	$4,744.29	$40,650.30	$13,955.81
State Population (millions)	5.110	5.604	34.988	0.454
Number of Candidates in the General Election (> 5% of the vote)	2.12	0.36	4	1
Number of Candidates in the Republican Primary	2.21	1.11	8	1
Number of Candidates in the Democratic Primary	2.26	1.12	6	0
Winning Margin in the General Election	16.3%	14.4%	100%	0%
Winning Margin in the Republican Primary	52.6%	37.2%	100%	0%
Winning Margin in the Democratic Primary	51.4%	37.5%	100%	0%
Gubernatorial Appointment Power	3.11	1.08	5	0.5
Gubernatorial Budgetary Power	3.98	1.12	5	1.0

There are 294 total per capita election cycle gubernatorial expenditures observations from 1980 - 2002. Per capita state expenditures, per capita state income, and state population are from 1980 – 2002. All monetary amounts are in year 2000 dollars. These statistics exclude Alaska, Hawaii, and Louisiana. Additionally, four outliers (New Hampshire, 2002; West Virginia, 1980; South Dakota, 2002; and Rhode Island, 1990) are omitted.

Table 3: Total Election Cycle Gubernatorial Expenditures Per Capita

Independent Variable	Coefficient Estimates (standard errors in parenthesis)				
	(a)	(b)	(c)	(d)	(e)
Voter Initiative	-48.34** 22.56	-77.81* 47.22	1.09 55.48	5.27 32.52	-44.63 29.03
Signature Requirement	- - -	4.47 7.84	- - -	- - -	- - -
Qualification Difficulty Index	- - -	- - -	-11.72 11.37	- - -	- - -
Legislation Insulation Index	- - -	- - -	- - -	-10.39** 5.08	- - -
Average Initiative	- - -	- - -	- - -	- - -	-1.39 5.42
Per Capita Income (1000's)	-2.72 3.18	-2.38 3.39	-3.22 2.89	-3.83 3.11	-2.69 3.23
Per Capita State Expenditures (1000's)	42.17*** 11.36	44.12*** 11.39	43.50*** 11.51	41.41*** 11.13	42.80*** 11.75
Population (millions)	-1.69 1.91	-1.55 1.82	-1.30 1.83	-0.80 2.01	-1.55 1.90
Split Control State Legislature	4.63 17.76	2.33 16.99	5.91 17.49	6.33 17.52	3.97 17.62
Gubernatorial Appointment Power	-0.41 7.36	-0.77 7.20	0.38 7.46	0.67 7.19	-0.40 7.37
Gubernatorial Budgetary Power	1.86 10.67	2.09 10.45	3.18 10.45	4.37 10.63	1.90 10.65
Gubernatorial Term Limit	4.80 22.60	3.37 22.33	-1.97 22.24	-1.53 22.72	4.54 22.39
Percent Difference Senate	-0.10 0.63	-0.07 0.64	-0.08 0.68	-0.12 0.65	-0.09 0.65
Percent Difference House	0.75 0.65	0.74 0.64	0.81 0.68	0.88 0.67	0.74 0.67
General Incumbent	-12.66 22.36	-12.60 22.43	-13.77 22.67	-14.74 22.05	-12.90 22.23
General # of Candidates	1.92 21.89	-3.91 20.54	0.78 22.67	1.23 20.79	1.75 22.11
General Winning Margin	-2.91*** 0.51	-2.89*** 0.51	-2.97*** 0.52	-3.02*** 0.50	-2.91*** 0.51
Republican Incumbent	-18.08 23.85	-20.26 23.38	-17.25 24.18	-13.18 24.20	-18.21 23.88
No Republican Challenger	84.83*** 25.95	85.60*** 26.02	78.49*** 26.89	73.18*** 26.62	84.00*** 26.86
Republican # of Candidates	13.13 10.53	13.13 10.36	11.87 10.49	10.72 10.51	12.93 10.51
Republican Winning Margin	-1.64*** 0.27	-1.62*** 0.26	-1.60*** 0.27	-1.59*** 0.27	-1.64*** 0.27
Democratic Incumbent	-55.60** 22.52	-56.24** 22.22	-55.87** 22.62	-53.29** 22.63	-55.52** 22.49
No Democratic	4.31	6.81	5.57	3.89	3.97

Challenger	28.73	28.52	28.14	28.83	28.93
Democratic # of Candidates	14.29 10.58	14.25 10.50	14.89 10.34	14.93 10.29	14.23 10.62
Democratic Winning Margin	-0.32 0.40	-0.35 0.39	-0.30 0.40	-0.28 0.39	-0.32 0.40
Individual Contribution Limit	-22.50 24.89	-25.39 25.44	-22.11 24.72	-18.68 24.34	-22.35 24.78
Group Contribution Limit	2.39 28.61	4.91 28.21	-3.87 30.93	-7.97 28.92	1.22 29.34
Public Financing	11.65 21.18	9.86 21.53	8.29 22.11	5.01 21.65	11.54 21.31
Constant	314.14 116.66	307.67 118.32	329.42 112.13	352.92 114.54	312.50 118.34
R-Squared	0.495	0.496	0.498	0.501	0.495

Note: Dependent variable is per capita state election cycle spending in cents by all gubernatorial candidates for 1980 – 2002 (excludes AK, HI, and LA). Four outliers outside three standard deviations from the mean are omitted (New Hampshire, 2002; West Virginia, 1980; South Dakota, 2002; Rhode Island, 1990). Standard errors are noted in parenthesis. There are 294 observations. Asterisks indicate significance as follows: *** = 1%, ** = 5%, * = 10%. Year dummy variables are not reported. Clustered standard errors are employed. Adjusted R-squared is not reported for maximum likelihood estimation, but was approximately 0.405 for OLS estimation.

Table 4: Total Election Cycle Gubernatorial Expenditures Per Capita with Regions

Independent Variable	Coefficient Estimates (standard errors in parenthesis)				
	(a)	(b)	(c)	(d)	(e)
Voter Initiative	-32.89* 19.11	-45.61 47.40	-13.35 60.85	1.14 38.99	-27.60 29.91
Signature Requirement	- - -	1.96 7.48	- - -	- - -	- - -
Qualification Difficulty Index	- - -	- - -	-4.99 13.61	- - -	- - -
Legislation Insulation Index	- - -	- - -	- - -	-7.31 6.62	- - -
Average Initiative	- - -	- - -	- - -	- - -	-2.50 8.61
Per Capita Income (1000's)	-3.25 3.89	-3.14 4.05	-3.42 3.60	-3.72 3.64	-3.16 4.03
Per Capita State Expenditures (1000's)	41.06*** 13.94	42.44*** 13.30	41.24*** 13.79	39.45*** 13.23	40.97*** 13.90
Population (millions)	-2.30 2.05	-2.21 1.92	-2.10 1.89	-1.70 2.02	-2.07 1.92
Split Control State Legislature	5.34 19.77	3.99 18.45	6.08 20.26	7.43 19.95	4.81 19.05
Gubernatorial Appointment Power	1.20 6.90	1.03 6.82	1.36 6.98	1.80 6.80	1.04 6.74
Gubernatorial Budgetary Power	3.71 9.87	3.68 9.86	4.23 9.62	5.43 9.83	3.97 9.71
Gubernatorial Term Limit	-8.29 24.37	-8.33 24.34	-10.43 23.64	-12.05 23.85	-9.07 23.61
Percent Difference Senate	-0.35 0.65	-0.34 0.66	-0.31 0.68	-0.31 0.66	-0.31 0.69
Percent Difference House	0.59 0.62	0.60 0.62	0.63 0.63	0.69 0.65	0.55 0.66
General Incumbent	-13.58 21.78	-13.71 21.81	-13.78 21.88	-14.65 21.67	-13.45 21.95
General # of Candidates	-10.38 20.40	-12.74 19.37	-10.03 20.59	-8.53 20.50	-10.59 20.60
General Winning Margin	-2.90*** 0.51	-2.90*** 0.50	-2.93*** 0.53	-2.99*** 0.52	-2.91*** 0.51
Republican Incumbent	-14.09 24.12	-15.00 23.68	-14.23 24.27	-11.21 24.55	-14.92 24.14
No Republican Challenger	77.89*** 25.97	77.98*** 26.07	75.93*** 26.46	72.08*** 27.05	77.18*** 26.58
Republican # of Candidates	13.23 10.56	13.20 10.52	12.71 10.56	11.61 10.63	12.93 10.62
Republican Winning Margin	-1.63*** 0.28	-1.63*** 0.28	-1.61*** 0.28	-1.60*** 0.28	-1.63*** 0.28
Democratic Incumbent	-58.61** 22.60	-58.66** 22.50	-58.72** 22.55	-56.68** 22.63	-58.98** 22.78
No Democratic	6.88	7.95	7.19	6.18	6.12

Challenger	28.60	28.31	28.24	28.80	29.30
Democratic # of Candidates	16.09 10.31	16.01 10.25	16.24 10.18	16.35 10.14	16.01 10.38
Democratic Winning Margin	-0.33 0.40	-0.34 0.40	-0.32 0.40	-0.30 0.39	-0.32 0.40
Individual Contribution Limit	-34.78 26.52	-35.73 27.11	-33.79 26.28	-30.50 26.16	-34.50 26.38
Group Contribution Limit	1.06 28.91	1.50 29.00	-0.96 30.31	-3.99 29.03	0.46 28.74
Public Financing	17.68 21.42	16.56 21.86	15.95 22.92	12.85 22.85	17.74 21.61
North	61.69* 34.84	60.08* 35.04	57.86 38.04	52.49 38.43	62.29* 34.97
South	61.48* 33.35	59.39* 34.27	57.35 35.12	56.43* 32.98	61.36* 33.57
West	25.52 35.61	22.24 31.51	25.80 35.45	30.26 34.99	30.78 46.41
Constant	332.45 136.26	330.27 137.99	338.07 131.26	349.27 129.28	330.13 138.23
R-Squared	0.510	0.510	0.510	0.512	0.510

Note: Dependent variable is per capita state election cycle spending in cents by all gubernatorial candidates for 1980 – 2002 (excludes AK, HI, and LA). Four outliers outside three standard deviations from the mean are omitted (New Hampshire, 2002; West Virginia, 1980; South Dakota, 2002; Rhode Island, 1990). Standard errors are noted in parenthesis. There are 294 observations. Asterisks indicate significance as follows: *** = 1%, ** = 5%, * = 10%. Year dummy variables are not reported. Clustered standard errors are employed. Adjusted R-squared is not reported for maximum likelihood estimation, but was approximately 0.405 for OLS estimation.

Table 5: Total Election Cycle Senate Expenditures Per Capita

Independent Variable	Coefficient Estimates (standard errors in parenthesis)				
	(a)	(b)	(c)	(d)	(e)
Voter Initiative	20.15 32.27	131.24 80.80	12.34 54.02	-65.87 74.22	11.81 45.21
Signature Requirement	- - -	-16.03 10.65	- - -	- - -	- - -
Qualification Difficulty Index	- - -	- - -	1.47 9.61	- - -	- - -
Legislation Insulation Index	- - -	- - -	- - -	19.34 16.68	- - -
Average Initiative	- - -	- - -	- - -	- - -	2.96 13.15
Winning Margin	-5.09*** 0.61	-4.97*** 0.64	-5.08*** 0.61	-5.06*** 0.61	-5.08*** 0.62
Number of Candidates	0.34 2.10	0.45 2.12	0.32 2.11	0.20 2.06	0.19 2.06
Incumbent	-17.15 23.61	-16.54 23.64	-16.96 23.62	-16.22 24.01	-17.79 23.49
State Population (millions)	-16.42*** 3.89	-16.98*** 3.64	-16.52*** 3.79	-18.06*** 3.47	-16.68*** 3.59
Constant	471.59 55.55	470.53 54.65	471.90 55.20	477.41 52.49	474.51 53.88
R-Squared	0.343	0.357	0.343	0.351	0.343

Note: Dependent variable is per capita state election cycle spending in federal Senate elections for 1980 – 2002 (excludes AK and HI). Nine outliers outside three standard deviations from the mean are omitted for consistency with gubernatorial results, but the inclusion of the outliers does not change the results. Standard errors are noted in parenthesis. There are 379 observations. Asterisks indicate significance as follows: *** = 1%, ** = 5%, * = 10%. Year dummy variables are not reported. Clustered standard errors are employed. Adjusted R-squared is not reported for maximum likelihood estimation, but was approximately 0.314 for OLS estimation.

Appendix: Data Sources and Variable Definitions for Gubernatorial Analysis

Variable	Definition	Source
Voter Initiative	= 1 if the voter initiative process is available in the state	A
Qualification Difficulty Index	= 1 to 9; less difficult to qualify initiative for the ballot as the index increases	B
Legislative Insulation Index	= 1 to 6, more protection for the legislature as the index increases	B
Average # of Voter Initiatives	Average number of voter initiatives appearing on the ballot over each two year election cycle from 1970 - 2000	A
Per Capita State Expenditures (thousands)	State expenditures per capita for year	D
Gubernatorial Dependent Variable	Total election cycle gubernatorial spending per capita in dollars	C
Per Capita Income (thousands)	State income per capita in thousands	D
Per Capita State Expenditures (thousands)	State expenditures per capita in thousands	D
Population (millions)	State population in millions	D
Split Control State Legislature	= 1 if control of state legislative chambers is split by parties	F
Gubernatorial Appointment Power	= 1 to 5; gubernatorial appointment power increases as the index increases	C
Gubernatorial Budgetary Power	= 1 to 5; gubernatorial budgetary power increases as the index increases	C
Gubernatorial Term Limit	= 1 if the governor faces a maximum number of consecutive years as a term limit	E
Percent Difference Senate	Percentage difference between Republicans and Democrats in the upper chamber	F
Percent Difference House	Percentage difference between Republicans and Democrats in the lower chamber	F
General Incumbent	= 1 if there is an incumbent in the gubernatorial general election	G
General # of Candidates	Number of candidates in the gubernatorial general election	G
Total # of Candidates	Number of candidates in both primaries	G
General Winning Margin	Percentage winning margin in the gubernatorial general election	G
Republican Incumbent	= 1 if there is an incumbent in the gubernatorial Republican primary	G
No Republican Challenger	= 1 if there is no challenger in the gubernatorial Republican primary	G
Republican # of Candidates	Number of candidates in the gubernatorial Republican primary	G
Republican Wining Margin	Percentage winning margin in the gubernatorial Republican primary	G
Democratic Incumbent	= 1 if there is an incumbent in the gubernatorial Democratic primary	G
No Democratic Challenger	= 1 if there is no challenger in the gubernatorial Democratic primary	G
Democratic # of Candidates	Number of candidates in the gubernatorial Democratic primary	G
Democratic Wining Margin	Percentage winning margin in the gubernatorial Democratic primary	G
Individual Contribution Limit	= 1 if there are state restrictions on individual contributions to campaigns	H
Group Contribution Limit	= 1 if there are state restrictions on group contributions to campaigns	H
Public Financing	= 1 if public funding is available for campaigns	H

Sources:

A: Initiative and Referendum Institute (2010b)
B: Bowler and Donovan (2004)
C: Thad Beyle's Website
D: Statistical Abstract of the U.S., U.S. Census Bureau
E: The Book of the States
F: World Almanac and Book of Facts
G: Congressional Quarterly's Guide to U.S. Elections
H: Campaign Finance Law

Note: Data for the Senate analysis was obtained through the Federal Election Commission.