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“The Influence of Elections on the Accounting Choices of Governmental Entities”

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The Influence of Elections on the Accounting Choices of Governmental Entities

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Abstract

This paper investigates whether gubernatorial elections affect state governments’ accounting choices. We identify an account, the compensated liability account, which provides incumbent gubernatorial candidates with flexibility for manipulation. We find that in an election year, the liability associated with compensated absences is systematically lower, especially for states with strict budget restrictions. The abnormally lower accumulation of compensated absences, however, is curbed by more independent state auditors. We further find that when the election is competitive, this accounting discretion is associated with favorable election outcomes. Overall the results suggest that state governments manipulate accounting numbers to present a healthier financial picture in an election year and such manipulation does increase the prospects of a positive election outcome.
1. Introduction

This paper investigates whether political events affect accounting choices made by U.S. states in the preparation of their annual financial statements. Historically, when incumbents run for reelection, the fiscal performance of the governmental entity during their term is often an important part of the election platform. Incumbents in charge during economic downturns are often blamed, while incumbents in charge during periods of prosperity often claim credit. A recent article by Brender (2003) suggests that these claims influence the outcomes of elections. He studies whether fiscal performance influences the outcome of election results in Israel during the 1990’s, and finds that in the late 1990’s fiscal performance did affect the outcome of mayoral elections in Israel. These results raise an interesting issue; do incumbents manage the outputs of the governmental financial reporting system to influence the outcome of elections?

To answer this question, we focus on gubernatorial general elections during the period 2000-2008. We collect state level financial data and search through the financial reports to identify an account in which the accounting standards provide gubernatorial candidates with sufficient flexibility to allow for manipulation. Since states follow non-for-profit accounting, there are no profit and loss statements thus we instead focus on state deficits and attempt to identify an account which will impact this difference.

While there are a variety of potential candidate accounts, the account we ultimately focus on is the liability associated with compensated absences. We believe that focusing on one account, and in particular the liability for compensated absences, has several advantages. First, by focusing on one account, we can develop a model of that account, and obtain a less noisy measure of the extent to which an entity has engaged in earnings management (see McNichols and Wilson 1988 for a similar discussion in the context of provision for bad debts). This is not to
suggest that manipulation is not simultaneously occurring in other accounts and in fact we believe it is likely to be quite the contrary. Rather, by focusing on one account, we can develop a less noisy measure and provide a lower bound on the extent of manipulation that likely occurs. Moreover, the accounting standards for compensated absences provide governmental entities with significant discretion. Concentrating on compensated absences allows us to detect earnings management more easily and therefore, increases the power of the tests.

Based on these arguments, we develop a measure of the extent to which the liability for compensated absences has been manipulated by modeling the change in the account as a function of the change in payrolls for the state’s full-time employees. The model is motivated by Government Accounting Standards Board (GASB) Statement No. 16, which indicates that the primary input in the calculation of the liability associated with compensated absences is the salary rate of the state’s employees at the balance sheet date. Thus, we model the change in the compensated absences account as a function of the change in state payrolls. We view the residuals from the regression as reflecting states’ discretion and use them as our measure for the “discretionary” portion of the change in compensated absences liability. Our primary hypothesis is that the discretionary component of the liability associated with compensated absences will be smaller (more negative) in the fiscal year immediately prior to an election.

We also conjecture that states with strict budget restrictions have even stronger incentives to manipulate accounting numbers because they would be reluctant to cut spending or increase taxes in an election year to meet the budget requirement. Moreover, we expect the manipulation to be smaller for states with more independent state audit agencies.¹ For most states, state auditors conduct audits of the state’s annual reports. Even if they do not audit the annual report

¹ Different states have different names for their state audit agencies. For example, for Alabama the audit agency is called Department of Examiners of Public Accounts. For Indiana, it is called State Board of Accounts. For brevity, we will henceforth collectively call these agencies state auditors.
(such as Delaware), state auditors are still responsible for evaluating the state’s fiscal accountability. We use whether state auditors are elected by citizens or appointed by state governments as a proxy for auditor independence. We argue that state auditors who are appointed are more likely to afford the state government more discretion and thus conduct lower quality audits. Finally, since compensated absences are a form of employee benefits, we investigate whether union coverage affects the manipulation of the account. We expect that for states with strong unions, the governments are less likely to manipulate the account in an election year because unions have large influence on the election outcome.

To provide evidence on these hypotheses, we obtain information on the liability associated with compensated absences, state payrolls, elections, auditors, and union representation and other control variables from several public data sources (detailed below) over the period 2000-2008. In terms of our model of “normal” accruals, we find that the coefficient on the change in payrolls is statistically significant and positively associated with the change in compensated absences. In addition, the change in payrolls explains much of the variation in the change in compensated absences. The strong results suggest that the change in full time state employee payrolls is a reasonable control for determining the normal level of the change in compensated absences.

As to our primary analysis, we find that the discretionary component of the change in compensated absences is smaller in the fiscal year right before a gubernatorial election. This is consistent with state government accumulating a smaller compensated absence liability before an election to present a healthier financial look of the state. We also find that the manipulation on compensated absences liability is concentrated on states with stricter balanced-budget requirements. For states with more restrictive budget requirements, they face higher pressure to
close any budget gaps. Since reducing spending and increasing taxes are unfavorable means to close the gap right before an election, these states have even stronger incentives to use accounting schemes. Moreover, we find that more independent state auditors can curb such accounting manipulation. We do not find union coverage has any influence.

We further investigate whether the manipulation of compensated absences is associated with favorable election outcomes. We conduct the test at the candidate level and find that when the election is competitive, the proportion of votes secured by the incumbent or the incumbent party’s candidate increases as the discretionary change of compensated absences decreases. For example, when we measure the competitiveness of the election using whether the final outcome is close among candidates, we find that a decrease in discretionary change in compensated absences from the 75th percentile to the 25th percentile is associated with a 1.24% increase in votes obtained. This result suggests that managing accounting numbers may be an effective way in securing votes when candidates face tight competition.

The paper closely relates to two streams of literature. The first investigates accounting choices in state and local governments. Zimmerman (1977) proposes possible economic reasons for the diverse municipal accounting practices in the 1970s. Evans and Patton (1983) identify economic incentives that lead to cities voluntarily providing high quality accounting by participating in the Certificate of Conformance Program from the Municipal Finance Officers Association. Baber (1983), Baber and Sen (1984), and Ingram (1984) argue that the demand for monitoring is the main factor that shapes the cross-sectional variations in public sector accounting and auditing practices. However, Evans and Patton (1987) provide counter evidence that rather than monitoring, signaling is the main economic reason causing the diversity of governmental financial reporting quality. Most papers in this literature are early papers and focus
on the general accounting practices of the governments. Our paper adds to the literature by focusing on the political incentives to manipulate accounting numbers and by employing a more recent sample period and pinpointing to a specific account, compensated absences, through which state governments have more opportunities to exercise accounting discretion.

The second stream of research examines accounting choices and political costs. Watts and Zimmerman (1978) argue that large firms are more visible and hence, more subject to adverse political actions, such as anti-trust litigation, taxes, and obligations to unions. To reduce political costs, these firms may select accounting procedures to minimize reported earnings. Jones (1991) examines firms’ accounting choices during import relief investigations. She finds that firms manage earnings downward to increase the likelihood of obtaining import relief from the government. Ramanna and Roychowdhury (2010) find outsourcing firms with ties to candidates in the 2004 Congressional elections use income decreasing accruals in the periods immediately preceding the election. They argue the evidence is consistent with the hypothesis that corporate donors manage earnings downward to avoid negative political scrutiny over outsourcing for their affiliated candidates. Our study is closely related to Ramanna and Roychowdhury (2010) in that we also investigate whether accounting choices are made to sway the outcome of elections. By studying the accounting choices made in the public sector, we add another dimension to the literature on assessing the connection between political process and accounting.

In conclusion, our paper offers an important next step in both the broad accounting choice literature, and more specifically, in the political cost hypothesis within this literature. The literature on accounting choices largely focuses on private sector enterprises and only early studies examine public sector organizations. We extend this literature by using a more recent
sample of governmental entities and identifying factors likely to affect state governments’
accounting choices. We also extend the political cost hypothesis to state governments and
provide evidence suggesting that election process directly links to a state’s accounting choices.

The rest of this paper is organized as follows: Section 2 provides background information
on the financial reporting process governmental entities face, and the accounting for
compensated absences. Section 3 develops hypotheses. Section 4 describes the data and the
model of the discretionary component of compensated absences. Section 5 and Section 6 test the
relation between gubernatorial election and discretionary change in compensated absences.
Section 7 concludes the paper.

2. Background

2.1 Financial reporting process for state governments

Established in 1984, the Government Accounting Standards Board (GASB) is the
primary authority for setting financial reporting standards for governmental entities, including
states, cities, towns, villages, school districts, and public utilities. GASB’s first concepts
Statement, Objectives of Financial Reporting, sets the foundation of governmental financial
reporting in the United States. The Statement states that “Financial reports are used primarily to
compare actual financial results with the legally adopted budget; to assess financial condition
and results of operations; to assist in determining compliance with finance-related laws, rules,
and regulations; and to assist in evaluating efficiency and effectiveness.” (GASB, 1987)
Therefore, governmental accounting emphasizes accountability, such as the compliance with the
laws and legislative fiscal goals, rather than profitability.
Since the goal of a state government is not making a profit, the difference between revenues and expenditures during a fiscal year is called a surplus or a deficit (rather than a profit or a loss). When a state has a significant surplus, it may consider cutting taxes or increasing state spending. When a state has a large deficit, it may need to cut spending or raise taxes to restore fiscal balance (since most states are legally prohibited from issuing debt to cover any budget gaps.)

State governments report their operating results annually in a Consolidated Annual Financial Report (CAFR). Per GASB Statement No. 34, state governments are required to provide government-wide financial statements. Government-wide financial statements view the state as a single unified entity, similar to a private sector company, and display a broad overview of the state’s financial conditions. The government-wide statements are prepared using full accrual of accounting and provide both short-term and long-term financial information. Government-wide statements consist of the statement of activities and the statement of net assets. The statement of activities shows how net assets changed during the fiscal year; and the statement of net assets reports all financial and capital resources of the state after accounting for its liabilities. It is from these financial statements that we obtain information on the liability associated with compensated absences.

2.2. Accounting rules for compensated absences

The liability associated with compensated absences represents the dollar value of the rights that employees can convert unused vacation time, unused sick time, or unused other leave

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2 Statement 34 also requires state governments to provide fund statements in their CAFRs. Fund statements report the operating results of three fund groups—governmental, proprietary, and fiduciary. Proprietary and fiduciary funds are prepared using full accrual accounting, while governmental fund financial statements have a short-term focus and are prepared using modified accrual basis of accounting.
time into monetary benefits upon employment separation. In the non-for-profit sector, GASB Statement No. 16, Accounting for Compensated Absences, provides guidance for state and local governments on how to account for compensated absences. The types of compensated absences covered by GASB 16 include: vacation leave, sick leave, sabbatical leave, and any other compensatory leaves. The Statement, however, offers a number of avenues for accounting discretion. For example, a state government is required to report a liability for vacation leave earned by employees if the vacation leave is related to employee services already rendered; and if the eventual payments to the employees are considered probable. The amount of accrued vacation leave liability is based on the salary costs when the expected payments are made. The payments, however, may be made as soon as in the subsequent fiscal year, or as late as upon employment termination or retirement. It is also possible that the benefits lapse and the state does not need to make any payments. Moreover, the state also has to accrue non-vested vacation leave earned by new employees that is expected to vest.

Thus, to account for the liability for vacation leave, the state has to predict the timing of the future payments associated with compensated absences, the expected salary costs at the payment dates, the probability that the benefits will not lapse, and the expectation that the new employees will complete the probationary period and will become eligible to use the leave they have earned. All these estimations give state governments opportunities to exercise discretion.

GASB 16 also requires that state governments report a liability for unused sick leave to be paid at employment termination.³ To estimate the liability for sick leave, a state government can use either the termination payments method or the vesting method. Under the termination payments method, a state government accrues the liability for sick leave payments “only to the

³ GASB Statement 16 does not require the accrual of sick leave liabilities for potential sick leave because of illness or other medical related reasons. This is because such potential payments are contingent upon a future event that is beyond the control of both the employer and the employee.
extent it is probable that the employer will compensate the employees for the benefits through cash payments conditioned on the employees' termination or retirement.” Alternatively, under the vesting method, a state government estimates the liability for sick leave payouts for “those employees who currently are eligible to receive termination payments as well as other employees who are expected to become eligible in the future to receive such payments.” Therefore, depending on the accounting option the state selects, the reported sick leave liability depends on several estimations, including: the probability that the governmental entity will compensate employees for benefits through cash payments; the probability that current ineligible employees will become eligible to receive payments at termination; the likelihood that the employees who are eligible to receive payments will eventually receive those payments (rather than use accumulated leave, accumulate too much leave, waive payments in exchange for other consideration, etc.).

Finally, the accrued liability for sabbatical leave “depends on whether the compensation during the sabbatical is for service during the period of the leave or instead for past service” and is estimated based on the “probability that the employer will compensate employees for the benefits through paid time off or some other means.” So factors affecting liability for sabbatical leave estimation include the timing of the service used to account for the leave, the likelihood of the payments, and the forms of the payments.

In summary, substantial discretion is granted to the users of Statement 16 because the standards in the Statement do not provide an explicit mandate regarding the determination of the liability estimate. Moreover, since managers have discretion over the nature of the leave, the state has additional discretion as to whether the leave time actually qualifies as a compensated absence. In practice, the calculation for the account can become very complicated because of the
large employee size of the state governments. Oftentimes only a small sub-sample of the state’s employees is used to estimate the liability. This gives states another layer of discretion as to who they choose to form the estimation sample.

3. Hypothesis Development

We expect the presence of a gubernatorial general election to affect a state government’s discretionary accounting choices. State governors are accountable for their states’ economic performance and public scrutiny is especially intense during a gubernatorial election year. The electoral fate of the incumbent governor (or in cases where the incumbent does not run, the nominee of the incumbent governor’s party) is likely to be influenced by the state’s financial performance in the year leading up to the election. Moreover, since cutting spending and raising taxes are unfavorable means to close deficit gaps in an election year, governors facing budget shortfalls are likely to resort to more aggressive accounting manipulation. Therefore, we expect that a gubernatorial election provides the incumbent governor an incentive to make accounting choices that would imply an overall healthy financial condition of the state.

We further hypothesize that the extent to which an incumbent governor employs accounting discretion in a gubernatorial election year is conditioned by other important factors of the economic environment. The first factor is the state’s budget flexibility. Unlike the federal government, most states are constitutionally prohibited from running deficits. All states except Vermont have balanced budget restrictions that curtail the use of deficit spending. The requirement to maintain a balanced budget varies in stringency from state to state. For states with weak restrictions, they can still use other fiscal techniques to run deficits or carry deficits forward to future fiscal years. For states with rigorous budget restrictions, however, they are
forced to cut expenditures, increase taxes, or employ accounting practices to ensure expenditures do not exceed revenues. This cross-state heterogeneity in balanced-budget rules provides an important basis for our empirical analysis.

Poterba (1994) finds that state spending cuts and tax increases are significantly less likely in gubernatorial election years. If during election years, the incumbent governor faces restrictive balance budget requirements, but is reluctant to use visible spending cuts or tax increases to correct a deficit, he will need to rely more on cosmetic accounting changes to lower the likelihood of a deficit or to reduce the reported deficit. We expect that states with more restrictive balance budget requirements are more likely to adopt favorable accounting choices to avoid deficits in a gubernatorial election year.

The second factor is the state auditor's independence. Federal law requires states to conduct annual audits of their financial statements and internal control systems. States vary considerably in how they select their auditors. The position may be independently elected, appointed by the legislature, appointed by the governor, or jointly appointed. Hence, personnel who conduct the audit may be independent, or may be employees of the state who report directly to the governor or to the legislature. We conjecture that auditors who are directly elected by citizens are more independent and are more likely to offer higher audit quality. Compared to appointed auditors, the elected auditors are more likely to hinder the incumbent governor’s adoption of favorable accounting treatment during an election year.

So far we have predicted that great cross-sectional variation may exist in the degree to which a governor uses cosmetic accounting practices in an election year. Besides the degree of manipulation, we argue that a state’s union involvement will affect the specific account the governor chooses to manipulate. For a state with a strong union tie, it is less likely that the
governor will reduce expenditures related to state-paid employees, such as compensated absences. We expect the union’s effect on accounting choices to be especially large in an election year. Unions have regularly endorsed candidates for elective offices and encouraged organized workers and their families to vote for the endorsed candidates. The influence of unions on governor’s races is so large that 14 states have banned unions from contributing money to candidates. In an election year when the incumbent is looking for creative accounting to improve the state’s financial look, it is more likely he seeks out accounts which will not affect employee benefits if most of the state employees participate in a union.

Our hypothesis that state governments manipulating accounting numbers in an election year rests on the implicit assumption that at least some voters are unable or unwilling to undo completely the effects of accounting manipulation. Since the manipulation is not costless (e.g., it may be detrimental to the incumbent’s reputation if he got caught), the hypothesis further suggests that state governments must have received some benefits from the manipulation. The most obvious and observable benefit is a favorable election outcome. A positive association between accounting manipulation and favorable election outcomes implies that managing accounting numbers is an effective way for the incumbent (or the incumbent’s party) to win the election.

We predict that a positive relation exists between accounting manipulation and favorable election outcomes, and that this relationship should be the strongest when the competition of the election is high. When the level of competition is low and the incumbent has great prospects to win the election, he has less need to manipulate accounting to increase his vote share. Similarly, when the probability of winning the election is slim, the incumbent also has less incentive to

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window dress the numbers because he is likely to lose regardless. In contrast, when the level of competition is high, even minor changes may have a major impact on election results; therefore the incumbent has the greatest incentive to manage accounting numbers in order to maintain the governorship.

Although window dressing accounting changes might help the governor to paint a rosy picture of the state’s financial condition, such accounting schemes do not address the underlying real problems. For example, they have no effects on reducing unemployment rates, improving public facility, or lowering crime rates. If voters ultimately care about solving these real life problems, they would not cast their votes because of a better financial statement. Thus, the null hypothesis (of no economic consequences) predicts that discretionary accounting choices are not associated with the election outcomes.

4. Modeling the Discretionary Accounting Choices Related to Compensated Absences

4.1 Research design

To test our hypotheses, we focus on the accounting choices states make when recognizing the liability associated with compensated absences. As discussed in Section 2, when recognizing compensated absences, a state can exercise discretion not only through the choice of estimates for a given accounting method, but also through the accounting method choices (e.g., for sick leave, the state can choose either termination payments method or vesting method). Focusing on an account that is easy to be manipulated increases our power in detecting any discretion. In addition, by concentrating on one account, we are able to develop a model of that account and

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5 Prior research has analyzed compensated absences in terms of managerial discretion (Balsam et al., 1995), the effect of changes in accounting method (Chewning et al, 1989; Elliott and Philbrick, 1990), and with regard to regulated industries (Khurana and Louder, 1994; Louder et al., 1996). We examine compensated absences in governmental accounting which offers a different institutional setting, and different incentives.
obtain a more accurate measure of accounting management. Both of these factors are crucial to the power of our tests.

By studying only one account, we also reduce the comprehensiveness of our study (McNichols and Wilson, 1988). We suggest that manipulations associated with compensated absences are likely to be one portion of the total manipulation in the financial statements. If we fail to find results, this does not allow us to conclude that there are not other potentially large accounting manipulations. Similarly, if we do find results, we believe that our study will provide a lower bound on the extent of the manipulation, as other accounts are also likely to be manipulated, but we do not provide any evidence to support this assertion. We recognize that there are tradeoffs associated with this choice, but we ultimately choose to focus on compensated absences and reduce the comprehensiveness of our approach in favor of a more accurate measure and powerful test. (In addition, this analysis involves a lot of hand collected data, so a more comprehensive design also would greatly increase our data collection task).

We only consider compensated absences related to the primary state government (i.e., compensated absences reported under governmental activities and business-type activities) and exclude those related to component units. Component units are organizations legally separate from the state government (e.g., universities and quasi-independent entities). Since component units have separate governance and are legally different entities from the state government, we conjecture that the state governments are unlikely to have the same incentives and ability to manage the accounting numbers associated with these units. Including component units would also reduce comparability across states. The nature of component units varies drastically across states and it is difficult to gather detailed data on the precise composition of component units in
each state. Therefore, comparing state operations becomes difficult if component units are included in the analysis.

The annual change in compensated absences is determined by the newly accrued compensated absences and the current year payouts. Specifically,

\[
\text{Beginning Compensated Absences} + \text{Current year newly accrued Compensated Absences} - \text{Current year payouts} = \text{Ending Compensated Absences}
\]

The potential manipulation comes from the newly accrued amount and ideally this is the amount we should focus on to construct our discretionary model. However, not every state government provides detailed information on the current year accrued amount and the annual payoffs. Even for the governments that do break out the changes in the account, the governmental and component units are often lumped together in this disclosure. Thus, we construct the model by estimating the discretionary component of the annual change in compensated absences.

We expect compensated absences to be associated with state employees’ current payrolls. GASB 16 states that “…the compensated absences liability generally to be measured using the pay or salary rates in effect at the balance sheet date…” Thus, the higher the pay, the more the state needs to accrue compensated absences and the change in compensated absences should be positively associated with the change in the employee payrolls.\(^6\)

\[
\Delta CA_{i,t} = \beta_0 + \beta_1 \Delta FTPayroll_{i,t} + \epsilon_{i,t} \text{.................................}(1)
\]

\(\Delta CA\) is the annual change in primary government compensated absences scaled by beginning of the year primary government total assets. \(\Delta FTPayroll\) is the annual change in average base monthly pay for full-time state employees scaled by beginning of the year primary government total assets. We focus on full-time employees because part-time employees usually are not

\(^6\) Indeed, the correlation between the annual change in compensated absences and the change in full-time employee payrolls is 79%, significant at 1% level.
eligible for compensated absences. We scale both compensated absences and full-time employee payrolls by the government’s total assets to control for heteroscedasticity in the error term.

We estimate equation (1) by pooling all data available up to current year $t$. We estimate the model in this way to mimic what a statistical procedure would have predicted with the information available in the current year. The residual from the regression is the estimate for state $i$’s discretionary $\Delta CA$ in year $t$.

4.2 Sample description

Our sample period covers the fiscal years beginning in 2000 through 2008. We use several public data sources to construct the sample. We collect state governments’ accounting data from each state’s Comprehensive Annual Financial Report (CAFR). We obtain the reports from each state government’s website. A few states do not provide a full time series CAFRs (e.g., Arizona’s General Accounting Office publishes CAFR starting from 2002). These states have shorter sample periods. We collect state employment data from the U.S. Census Bureau Census of Government Employment and state employee union membership data from unionstats.gsu.edu which compiled the data from the Current Population Survey. We collect state Gross Domestic Product data from Bureau of Economic Analysis.

We collect election data from CNN’s America Votes Election Coverage. We cross checked the information on incumbent party and the percentage of votes using U.S. Census Bureau’s 2010 Statistical Abstract for Elections. We collect campaign spending data from Jensen and Beyle’s (2003) updated Gubernatorial Campaign Finance Data Project. The database

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7 Some state governments may provide certain amount of compensated absences to permanent (as opposed to temporary or contract) part-time employees, but at a different rate from to full-time employees. The data, however, on the payrolls of permanent part-time employees are unavailable from the U.S. Census Bureau.
provides information on the total campaign expenditures of each major party candidate. Data availability and the use of changes (rather than levels) in compensated absences reduce the final sample to 359 state-year observations. Of the 359 observations, 92 are gubernatorial election years and 267 are non-election years.

For the 92 election state-year observations, all the states’ fiscal year ends are prior to the general election. Specifically, all the 92 gubernatorial elections are held in November and only 2 observations have a fiscal year end in March; all the rest observations have fiscal year ends in June. The fact that the states’ fiscal year ends prior to the election ensures that any accounting manipulation is observable to voters at the election.

4.3 Estimation results

Table 1 Panel A reports descriptive information on the variables used in estimating the discretionary component of the change in compensated absences. The average compensated absences are $335 million dollars and account for 1.13% of a state’s total assets. When scaling by a state’s total liabilities, compensated absences on average account for 3.02% and with the maximum of 14.64%. When considering these statistics, it is important to note that a large portion (most of the time around 50%) of a state’s liability comes from its long-term debt, such as bonds and notes payable, which is not easy to manipulate. If we instead scale the liability for compensated absences by total liabilities after excluding bonds,8 not surprisingly we find that the percentage of compensated liability doubles. That is, compensated absences on average account for 6.03% of a state’s non-bond related liabilities and with a maximum of 17%.

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8 The bonds we exclude are General Obligation Bonds, Revenue Bonds, and Other Bonds that were listed as direct obligations of the primary government entity.
We find that compensated absences on average are decreasing during the sample period. The average change in compensated absences scaled by total assets is -0.02%. The average monthly payrolls for full time state employees are $298 million dollars, which is on average 1.09% of the state’s total assets. We also find payrolls decreasing during sample period. The average annual change in full-time employee monthly payrolls is -0.03% which is of similar magnitude as the change in compensated absences.

Table 1 Panel B reports the results of equation (1). Recall that we run equation (1) using all the data available up to the current year. So for 2001 we use observations in 2001 only (n=36) and for 2002 we use observations in 2001 and 2002 (n=72). As expected, the change in full time employees’ payrolls explains most of the variation in the change in compensated absences. Except for 2001, which we only have 36 observations, the R-squared of the model is very high, ranging from 0.62 to 0.70. The coefficient on $\Delta FT Payroll$ is always statistically significant at least at 5% level and it stabilizes around 0.92 and 0.93 once we have over 100 observations. The stability of the coefficient is expected. Compared to private sector entities, it is much more difficult for state governments to change the amount of benefits (of which compensated absences is a major component) provided to government employees and particularly to existing government employees who are members of a union. The coefficient has a mean value of 0.871, suggesting that a 1 dollar increase in the change in monthly full-time employee payrolls is associated with an 87 cent increase in the annual change in compensated absences. The strength of the results is reassuring in that change in full-time employee payrolls is a reasonable control for the factors determining change in compensated absences and that the residuals are reasonable estimates for the discretionary components of $\Delta CA$. 

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5 Gubernatorial election and discretionary change in compensated absences

5.1 Research design

We hypothesize that a state’s accounting decisions are affected by its desire to influence the prospects of a gubernatorial election. In an election year, a state government has incentives to improve the financial look of the state by either increasing assets or decreasing liabilities which result in smaller budget deficits. We predict that the change in compensated absences liability is abnormally small in an election year. Moreover, the abnormal change in compensated absences is conditional on the state’s budget restrictiveness, audit quality, and level of unionization. Our main regression model takes the form:

\[ \text{Discretionary \ \Delta CA} = \beta_0 + \beta_1 \text{GovElection} \\
+ \beta_2 \text{GovElection} \times \text{LooseBudget} + \beta_3 \text{GovElection} \times \text{AuditorElect} + \beta_4 \text{GovElection} \times \text{UnionMember} \\
+ \beta_5 \text{LooseBudget} + \beta_6 \text{AuditorElect} + \beta_7 \text{UnionMember} + \epsilon \] 

(2)

Since our panel dataset is unbalanced, we compute heteroskedasticity-consistent standard errors for our estimates. We further cluster standard errors by state to correct for possible correlations across observations of a given state (Rogers, 1993; Petersen, 2009). Appendix I lists detailed variable definitions.

We expect that the discretionary component of the change in compensated absences is smaller in the fiscal year right before a gubernatorial election and hence, a negative \( \beta_1 \). We further expect the accounting manipulation on compensated absences would be mitigated by a loose budget restriction, high audit quality, and state employees’ union connection. We expect the coefficients on the interaction terms \( \text{GovElection} \times \text{LooseBudget} \), \( \text{GovElection} \times \text{AuditorElect} \), and \( \text{GovElection} \times \text{UnionMember} \) to be positive (i.e., \( \beta_2, \beta_3, \text{and} \ \beta_4 \) all > 0).

States with more restrictive budget requirements should have even greater incentives to employ creative accounting because they do not want to cut spending or increase taxes right
before an election. In contrast, the reliance on cosmetic accounting treatment is less important for states with less restrict budget requirements. We follow Hou and Smith’s (2006) framework for state budget and identify five most restrictive budgetary rules:

1. There is an explicit limit regarding the amount of debt that the state may accumulate. Without this restriction, the state government can simply take on additional short-term debt during a budgetary cycle and use the borrowing to pass a balanced budget.9
2. The governor is required to sign a balanced budget bill. Without this restriction, it is possible for the governor to submit a balanced budget, have the legislature pass the balanced budget, and then have the final budget unbalanced by including deficit spending.
3. The state has limitations regarding supplementary appropriations. Supplementary appropriations are expenditures which tend to occur after the passage of the final budget. A state lacking this restriction can pass a balanced budget, and then employ supplementary appropriations to result in an unbalanced budget.
4. Explicit restrictions that prevent deficit spending within a specific budgetary cycle.
5. The budget must be balanced at the end of a fiscal year (or biennium), so that no deficits can be carried over to the next budgetary cycle.

We define a state as having a loose budget restriction (i.e., $\text{LooseBudget} = 1$) if it does not have any of the above anti-deficit rules. We regard a state auditor to have higher independence and to conduct higher quality audits if the auditor is elected, rather than appointed (i.e., $\text{AuditorElect} = 1$). Finally, we define a state as being under large influence of the union (i.e., $\text{UnionMember} = 1$) if the state employees’ union participation rate is above the sample median.

### 5.2 Univariate results

The bottom three rows of Table 1 Panel A provide descriptive information on discretionary $\Delta\text{CA}$. We find that the (scaled) average discretionary $\Delta\text{CA}$ is -0.25. When we separate the sample into gubernatorial election years (N = 92) and non-gubernatorial election years...
years (N = 267), we find that the discretionary ΔCA is, on average, lower in the election years than in the non-election years (-0.72 versus -0.09, \textit{p-value} < 0.01). In fact, discretionary ΔCA in election years has smaller minimum, first quartile, third quartile, and maximum values than discretionary ΔCA in non-election years. All these results suggest that states in gubernatorial election years abnormally accrue less to the compensated absences account. The smaller accrual of compensated absences leads to smaller increases in state liabilities and expenditures which in turn improve the state’s financial outlook.

In Figure 1 we plot the discretionary component of ΔCA over the years (-1, +3) where year \( t = 0 \) is the fiscal year right before the election.\(^{10}\) Since all the states have fiscal year ends in the same calendar year as the election, \( t = 0 \) is also the election year. Figure 1 shows that there is a dip in the discretionary component of ΔCA during the election year. Discretionary ΔCA picks up in the following years after the election and reaches back to the pre-election level in year \( t+3 \). The reversal of the discretionary ΔCA is consistent with the interpretation that state governments are acting opportunistically by temporarily accruing less compensated absences right before an election. Since they cannot maintain the low level of the accrual forever, discretionary ΔCA eventually reverses.

Overall Figure 1 provides support for the hypothesis that state governments opportunistically accrue less compensated absences before a gubernatorial election. Their opportunistic ability is constrained by the fact that discretionary accounting changes are difficult to use over any prolonged period and hence, discretionary ΔCA would eventually reverse in the following years.

\(^{10}\) Vermont and New Hampshire hold gubernatorial election every 2 years. So we plot their discretionary component of ΔCA over (-1, +1).
5.3 Regression results

Table 2 Panel A reports descriptive statistics on the variables in the analysis of gubernatorial election and discretionary ΔCA. We have 359 state-year observations in the final analysis and 25% of them have a gubernatorial election in the year. On average 13% of the observations have loose budget restrictions and 38% of them have elected auditors. The average union participation rate among state employees is 34% and the median value is 30%.

Table 2 Panel B presents Pearson correlations. The only significant correlation is a negative correlation of -0.143 between \textit{GovElection} and \textit{Discretionary ΔCA}. The rest of correlations fall between ±0.10 and are all not significant, which suggests that the variables included in the multiple regression capture distinct state attributes.

Table 3 Panel A presents the regression results of equation (2) with different specifications. The first specification reinforces our preliminary findings in Table 1 and Figure 1 that the discretionary accrual of compensated absences is abnormally small in a gubernatorial election year. Comparing the significant negative coefficient (-0.624, \textit{t}-statistic of -2.50) on \textit{GovElection} with the intercept, the result suggests that \textit{Discretionary ΔCA} decreases almost 7 times in an election year relative to a non-election year.

In the second specification, we test whether the incentives for accounting management depend on the state’s budget restrictions by including \textit{LooseBudget} and \textit{GovElection} \textit{x LooseBudget} as explanatory variables. In specification (2), the coefficient on \textit{GovElection} is still negatively significant and with an even larger magnitude (-0.806, \textit{t}-statistic of -2.89), suggesting that states with tight budget restrictions have an even larger decrease in \textit{Discretionary ΔCA} during election years. The positive coefficient on the interaction term \textit{GovElection} \textit{x LooseBudget} (1.327, \textit{t}-statistic of 3.92) implies that the decrease in \textit{Discretionary ΔCA} in an
election year is mitigated if the state has a loose budget restriction. In fact for states with loose budget restrictions, their Discretionary ΔCA actually increases in an election year. The sum of the coefficients on GovElection and GovElection x LooseBudget is 0.521, which is statistically different from 0 (p-value = 0.01). The finding in specification (2) is consistent with the interpretation that since during election years states are less likely to cut spending or increase taxes, states with strict anti-deficit provisions are under more pressure to meet the budget and thus, have even stronger incentives to manage accounting numbers.

In specification (3), we investigate whether union participation affects the extent to which state governments manipulate compensated absences in an election year. We find no such evidence as indicated by a non-significant coefficient on the interaction term GovElection x UnionMember. In specification (4) we test whether independent auditors hinder state government’s accounting manipulation in an election year. While the coefficient on GovElection is still negative and significant, the coefficient on the interaction term GovElection x AuditorElect is positive and significant (0.852, t-statistic of 1.93). Moreover the sum of the coefficients on GovElection and GovElection x AuditorElect is not statistically different from 0 (p-value = 0.68). This result suggests that more independent state auditors can curtail accounting manipulation from the state government in an election year. For these states, there is no evidence of manipulation in compensated absences before a gubernatorial election. Finally, we include all the variables in specification (5) and the basic inferences do not change.

The finding in Table 3 Panel A shows that the manipulation in compensated absences comes from states facing stringent balanced budget requirements. In Table 3 Panel B, we rerun the main test separately for states with loose budget restrictions (8 states, 48 observations) and for those with strict budget restrictions (42 states, 311 observations). Specification (1) shows that
the discretionary change in compensated absences for states with loose budget requirements does not differ between years with and without an election. The coefficient on \textit{GovElection} is insignificant (0.084, \textit{t-statistic} of 1.57). Interestingly the coefficient on \textit{GovElection} \times \textit{UnionMember} is positive and significant (0.835, \textit{t-statistic} of 6.05), indicating that for states with flexible budgets, if most of their employees participate in the union, they tend to increase the accrual of compensated absences in the year immediately before an election. Finally the insignificance of the coefficient on \textit{GovElection} \times \textit{AuditorElect} (-0.051, \textit{t-statistic} of -0.23) is expected, given that we do not find any manipulation in these states. Specification (2) reruns the test using states with strict budget requirements. The results are similar to Panel A specification (5). The magnitudes of the coefficients on \textit{GovElection} and \textit{GovElection} \times \textit{AuditorElect} increase, confirming that our earlier finding is driven by strict budgetary states.

Overall Table 3 shows that to improve the financial outlook, states make accounting choices to accumulate less compensated absences prior to a gubernatorial election. The decrease in the accumulation of compensated absences is most significant if the state has tight statutory rules that make it more difficult to run deficits. The accounting manipulation can be mitigated if the state’s auditor is elected by the citizens rather than appointed by the governor or legislature. We do not find any evidence that state employees’ union participation curbs states’ cosmetic accounting choices on compensated absences.

5.4 Robustness checks and additional analyses

Table 4 performs several additional analyses on the cross-sectional determinants of \textit{Discretionary ΔCA}. Since our results are driven by states with strict balanced budget requirements, the analyses focus on such states. The first specification tests whether the
accounting manipulation differs when the incumbent stands for a reelection. The incentives for the incumbent to manipulate accounting numbers may be larger if he himself enters the race and his election fate is at stake. We separate GovElection into two variables: GovElection_Incumbent GovElection_Non-incumbent, depending on whether the incumbent runs for the election. We find that the coefficients on GovElection_Incumbent and GovElection_Non-incumbent are both negative and significant (-1.109, t-statistic of -2.24 and -1.255, t-statistic of -2.30). Moreover, the magnitudes of the coefficients do not differ from each other (p-value = 0.81). The result suggests that the distinction between incumbent and non-incumbent is not associated with the extent of the manipulation.

Specification (2) investigates whether the extent of accounting manipulation differs across parties. We disaggregate GovElection into GovElection_Rep, GovElection_Dem, and GovElection_Indep based on the governor’s party affiliations. We find that the estimates on GovElection_Rep, GovElection_Dem, and GovElection_Indep are all negative and significant. Furthermore, we cannot reject the null hypothesis of no difference in discretionary change in compensated absences across parties (p-value = 0.58). The result suggests that governor party affiliations do not affect the extent of accounting manipulation before an election.

Specification (3) uses whether or not the state has a right-to-work law as an alternative proxy for union strength. A right-to-work law prohibits employers from firing employees for failing to pay union dues. The law protects employees’ right to decide whether or not to join a union. Unions in states without such a law are often viewed as more powerful, because they can force employees to unionize. There are 28 states that do not enforce right-to-work statues. We denote NoRTW which equals 1 if the state does not have a right-to-work law, 0 otherwise. Using NoRTW to proxy for union strength still provides no support for unions deterring manipulation in
compensated absences liability. The coefficient on \( \text{GovElection} \times \text{NoRTW} \) has little statistical significance (0.071, \( t \)-statistic of 0.14).

Specification (4) considers the independence of the CFAR preparer. State governments’ financial statements are often prepared and audited by different government divisions. For example, in Alaska, the Division of Finance prepares the financial statements, while the Division of Legislative Audit performs the audit. We expect states with more independent CFAR preparers to be less likely to have biased financial statements. Similar to state auditors, we conjecture that the preparers are more likely to be independent and free from political pressure if they are elected, rather than appointed. Nine states have elected preparers.\(^{11}\) \( \text{PreparerElect} \) equals 1 if the state’s CFAR preparer is elected directly by voters, 0 otherwise. In contrast to independent state auditors, we do not find mitigating effect from independent state preparers. Although the coefficient on \( \text{GovElection} \times \text{PreparerElect} \) is positive, it is insignificant (0.520, \( t \)-statistic of 1.06).\(^{12}\)

Specification (5) explores whether the extent of the accounting manipulation depends on the state economy. When the state has a prosperous economy, the governor may not need to rely on cosmetic accounting to secure the election. We use the change in a state’s real Gross Domestic Product (\( \text{ChgGDP} \)) to capture a state’s economy prospects. Consistent with the expectation, the coefficient on \( \text{GovElection} \times \text{ChgGDP} \) is positive and significant (0.033, \( t \)-statistic of 2.02), suggesting that the smaller accrual in compensated absences is mitigated if the

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\(^{11}\) The nine states are: Connecticut, Florida, Illinois, Indiana, Maryland, Nevada, New York, Texas, and Wyoming. Florida is a special case. Florida’s Department of Financial Service is ultimately responsible for the preparation of the financial statements. The Department was created in a merger in 2002 and the Chief Financial Officer is determined by election. Pre-2002 the information on the preparer is not entirely clear, but it appears that the preparation function used to be performed by an agency which reported to a cabinet level department of the governor. So for Florida, we classify its CFAR preparer as independent after 2003 and not independent before 2002.

\(^{12}\) An alternative way to capture the independence of CFAR auditors and prepares is to consider whether the auditors and prepares belong to the same political party as the governors. This approach, however, is hard to implement. While the information on the party of the governor is easy to obtain, the information on the party of the state auditors and prepares is often not available.
state has a growing economy in the year leading up to the election. However, the economic significance of this variable is small. Moving $ChgGDP$ from the 25th percentile ($828 million) to the 75th percentile ($4.49 billion) only increases $Discretionary \Delta CA$ by 0.000118. This increase is about 14% of $Discretionary \Delta CA$ in an election year for states with strict balanced-budget requirements.\(^{13}\)

6. Election outcomes and discretionary changes in compensated absences

6.1 Research design

After documenting state governments manipulate compensated absences prior to a gubernatorial election, we examine whether the manipulation is associated with a favorable election outcome. We use the percentage of votes ($Vote \%$) the candidate receives to measure the election outcome. We predict that a positive relation between manipulation in compensated absences and a favorable election outcome is most likely to exist when the competition among candidates is high.

We use two measures to capture the competitiveness of the election. The first measure is an ex post measure and is based on whether the outcome of the election is close. We define $CloseOutcome=1$ if the percentage of votes obtained by the winning candidate in the general election is between 50% and 55%. Our second measure is an ex ante measure and is based on reported campaign expenditures. We argue that candidates are likely to spend more money during a campaign when they face higher competition. We define $ExpensiveCampaign=1$ if the campaign expenditure is in the top decile of the sample. We pick the 90th percentile as the cutoff because the distribution of the campaign spending is highly skewed. Campaign spending has a

\(^{13}\) States facing strict budgetary restrictions have a mean $Discretionary \Delta CA$ of -0.00083 in an election year. 
\[ \frac{0.000118}{0.00083} = 14\% \]
mean of $8,678,467 and a median of $4,519,681. Its third quartile is $10,755,880 and the value doubles at the 90th percentile to $20,696,046.

To analyze how discretionary changes in compensated absences affect election outcomes, we estimate a regression equation of the form:

\[
\text{Vote\%} = \beta_0 + \beta_1 \text{Discretionary \Delta CA} + \beta_2 \text{Discretrionary \Delta CA*HighCompetition} + \beta_3 \text{HighCompetition} + \gamma \text{Controls} + \epsilon \tag{3}
\]

where HighCompetition is either CloseOutcome or ExpensiveCampaign. If a smaller accrual of compensated absences in an election year leads to a favorable election outcome, we would expect a negative coefficient on Discretionary \(\Delta CA\) (i.e., \(\beta_1 < 0\)). If the association between the manipulation of compensated absences and a favorable election outcome is stronger for more competitive elections, we would expect a negative coefficient on the interaction term Discretionary \(\Delta CA\) x HighCompetition (i.e., \(\beta_2 < 0\)).

Equation (3) is run on the candidate level, so we include several candidate specific controls, including whether the candidate is the current governor, the candidate’s campaign spending, and its party affiliation.

6.2 Results

Table 5 reports the regression results of equation (3). We have 92 state-election years. In the first specification, we do not find any association between Discretionary\(\Delta CA\) and the candidate’s share of votes, suggesting that, on average, managing accounting numbers by accruing less compensated absences does not lead to more votes. In the second specification, we include CloseOutcome and Discretionary\(\Delta CA\) x CloseOutcome to investigate whether managing compensated absences downward makes a difference when the election outcomes are close. We have 15 observations where CloseOutcome\(=1\). While the coefficient on Discretionary \(\Delta CA\) is
still insignificant, the coefficient on $\text{Discretionary}\Delta CA \times \text{CloseOutcome}$ is negative and significant ($-1.783$, $t$-statistic of $-2.10$). Moreover, the sum of the coefficients on $\text{Discretionary}\Delta CA$ and $\text{Discretionary}\Delta CA \times \text{CloseOutcome}$ is negative and significantly different from zero ($p$-value = 0.02). The result is consistent with smaller discretionary accruals of changes in compensated absences being associated with a higher proportion of votes received only when final election outcome is close.

In terms of economic significance, moving $\text{Discretionary}\Delta CA$ from the $75^{\text{th}}$ to the $25^{\text{th}}$ percentile is associated with an increase in the percentage of votes from $50.89\%$ to $52.13\%$ for candidates whose final votes fall between $50\%$ and $55\%$. However, we need to interpret this result with caution. The paper only investigates one discretionary accounting choice and the account is easy to manipulate. States who exercise discretion on compensated absences liability are most likely to simultaneously exercise discretion on other accounts, which we do not capture in the model. If the omitted variables can affect election outcomes, their effects will be picked up by $\text{Discretionary}\Delta CA$. Thus, we may overstate the economic importance of the effect of discretionary change in compensated absences on the candidates’ vote share.

In the third specification, we use campaign spending to proxy for election competitiveness. Consistent with specification (2), we find a negative and statistically significant coefficient on $\text{Discretionary}\Delta CA \times \text{ExpensiveCampaign}$ ($-8.492$, $t$-statistic of $-2.67$). The sum of the coefficients on the main effect $\text{Discretionary}\Delta CA$ and the interaction term $\text{Discretionary}\Delta CA \times \text{ExpensiveCampaign}$ is again negative and significant ($p$-value = 0.01).

Turning to the control variables, the incumbent dummy is positive and significant across all specifications. The magnitude of the coefficient suggests that being a current governor increases the percentage of votes by at least $10\%$. We find a negative and significant coefficient
on log(CampaignExpenditure). Using campaign expenditure as a proxy for election competitiveness, the result is consistent with incumbent party candidates receiving smaller vote shares when they face more competitive elections. We do not find any association between the candidate’s party affiliation and the proportion of votes obtained.

Since the analysis in Section 5 indicates that it is the 42 states with more stringent balanced budget requirements that show evidence of accounting manipulation, in an untabulated analysis we focus our test on these 42 states. We exclude 13 observations that belong to states with loose budgetary restrictions and use the remaining 79 observations. The results become slightly stronger. For example, the coefficient on DiscretionaryΔCA x CloseOutcome decreases from -1.783 in Table 5 to -1.856 (t-statistic of -1.98). This suggests that moving Discretionary ΔCA from the 75th to the 25th percentile increases the vote percentage by 1.45% for candidates whose final votes fall between 50% and 55%. The coefficient on DiscretionaryΔCA x ExpensiveCampaign also decreases from -8.492 in Table 5 to -11.462.

Collectively, the results in Table 5 suggest that when the competition is high, lower discretionary changes in compensated absences are associated with greater vote shares for the incumbent party’s candidates. The results are robust to both an ex post and ex ante measures for competition.14

7. Conclusion

14 We are unable to identify whether Discretionary ΔCA can lead to a final win in the election when the competition is high. This is because all the candidates with CloseOutcome=1 or ExpensiveCampaign=1 win the election. When running a logistic regression of whether the candidates win the election on Discretionary ΔCA and the control variables, we do not find the coefficient on Discretionary ΔCA significant (untabulated).
This paper investigates whether state governments manage accounting numbers to influence the prospects of gubernatorial elections. We examine state governments’ accounting choices on compensated absences in an election year and find that state governments discretionarily accumulate less compensated absences liability, especially if the government is under strict budgetary restrictions. The accounting manipulation, however, can be curbed by more independent state auditors. We further find that the downward management of compensated absences is associated with favorable election outcomes for candidates facing high competition.

The paper contributes to the accounting choice literature by studying how political process affects U.S. states in the preparation of annual financial statements. While other studies have investigated accounting choice for state and local governments (e.g., Evans and Patton 1983; Baber 1983; Baber and Sen 1984), this paper is the first attempt to identify a specific account (compensated absences) that is easy to be manipulated and show that its discretionary nature is evident in an election year. The result that independent state auditors can mitigate state government’s accounting manipulation has policy implications.

We believe our paper opens a fertile research area on the role of political events in governmental accounting. Other accounting techniques states may adopt to influence election results include altering pension actuarial assumptions, or changing accounts receivable and payable policies. Studying these accounting practices can provide new evidence on the effects of politics on accounting decisions.
References


Appendix I

AuditorElect = dummy variable which equals 1 if the state auditor is elected by the citizens, 0 otherwise;

CA = primary government compensated absences scaled by the beginning of the year primary government total assets;

ChgGDP = change in the state’s real Gross Domestic Product (in billions);

Close Outcome = dummy variable which equals 1 if the candidate’s vote percentage in the general election is between 50% and 55%, 0 otherwise;

Discretionary ΔCA = the discretionary component of the annual change in primary government compensated absences scaled by the beginning of the year primary government total assets;

Expensive Campaign = dummy variable which equals 1 if the candidate campaign spending is in above the 90th percentile of the sample, 0 otherwise;

FTPayroll = average base monthly pay for full-time state employees

GovElection = dummy variable which equals 1 if a gubernatorial election occurs during the year, 0 otherwise;

GovElection_Dem = dummy variable which equals 1 if the gubernatorial candidate is a Democrat, 0 otherwise;

GovElection_Incumbent = dummy variable which equals 1 if the incumbent runs for reelection in a gubernatorial race, 0 otherwise;

GovElection_Indep = dummy variable which equals 1 if the gubernatorial candidate is not a Republican nor a Democrat, 0 otherwise;

GovElection_Non-incumbent = dummy variable which equals 1 if the incumbent does not run for reelection in a gubernatorial race, 0 otherwise;

GovElection_Rep = dummy variable which equals 1 if the gubernatorial candidate is a Republican, 0 otherwise;

Incumbent = dummy variable which equals 1 if the candidate for the governor election is the current governor, 0 otherwise;

log(CampaignExpenditure) = natural log of the candidate’s campaign spending;

LooseBudget = dummy variable which equals 1 if the state does not have any balanced budget restriction out of 5 restrictive rules, 0 otherwise;

NoRTW = dummy variable which equals 1 if the state does not have a right-to-work law, 0 otherwise;
PartyAffiliation = equals 2 if the candidate is Independent, 1 if Republican, 0 if Democrat;

PreparerElect = dummy variable which equals 1 if the preparer of the CAFR is elected directly by voters, 0 if the preparer is appointed by the governor or if the preparer is confirmed by the legislature, but reports to the governor;

TA = primary government total assets;

TL = primary government total liabilities;

UnionMember = dummy variable which equals 1 if the percentage of state government employees belonging to a labor union is greater than the sample median, 0 otherwise;

Union Membership = the proportion of state employees participating in an union.
Figure 1: Compensated Absences around Elections

This figure graphs discretionary changes in compensated absences around a gubernatorial election year ($t=0$).

#Discretionary $\Delta$CA is scaled by multiplying 1000
Table 1: Discretionary Change in Compensated Absences

Panel A reports descriptive statistics on the variables used in estimating the discretionary component of changes in compensated absences. Panel B reports the regression results of equation (1):

\[ \Delta CA_{it} = \beta_0 + \beta_1 \Delta FTPayroll_{it} + \epsilon_{it} \]  (1)

*, **, and *** indicate significance at the 10%, 5%, and 1% level respectively (two tailed).

### Panel A: Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Q1</th>
<th>Q3</th>
<th>Max</th>
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<tbody>
<tr>
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<td>335541</td>
<td>197181</td>
<td>410884</td>
<td>28406</td>
<td>113482</td>
<td>418136</td>
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<td>0.01137</td>
<td>0.01001</td>
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<td>0.00185</td>
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<td>0.03473</td>
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<tr>
<td>( \Delta CA ) (scaled by TA)</td>
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<td>-0.00008</td>
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<td>-0.02614</td>
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<tr>
<td>( \Delta FTPayroll ) (scaled by TA)</td>
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<td>-0.00032</td>
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<td>Discretionary ( \Delta CA \times 1000 )</td>
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<td>-15.78</td>
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### Panel B: Regression results for estimating discretionary component of changes in compensated absences

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<td></td>
<td>[2.91]**</td>
<td>[1.22]</td>
<td>[1.26]</td>
<td>[1.34]</td>
<td>[1.64]</td>
<td>[1.48]</td>
<td>[1.18]</td>
<td>[0.83]</td>
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<td>( \Delta FTPayroll )</td>
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<td>0.933</td>
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<td>0.70</td>
<td>0.68</td>
<td>0.67</td>
<td>0.66</td>
<td>0.62</td>
</tr>
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</table>
Table 2: Descriptive Statistics

Panel A reports descriptive statistics on variables used in the analysis of gubernatorial election and discretionary change in compensated absences. Panel B reports Pearson correlations among the variables. *, **, and *** indicate significance at the 10%, 5%, and 1% level respectively (two tailed).

Panel A: Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Dev.</th>
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Panel B: Pearson correlation

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<th>LooseBudget</th>
<th>Union Membership</th>
<th>AuditorElect</th>
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<td>-0.061</td>
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<tr>
<td>GovElection</td>
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<td>0.027</td>
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<tr>
<td>LooseBudget</td>
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<td>0.064</td>
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<tr>
<td>Union Membership</td>
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Table 3: Regression Analysis of Gubernatorial Election and Discretionary Change in Compensated Absences

This table reports regression results of equation (2):

\[
\text{Discretionary } \Delta CA = \beta_0 + \beta_1 \text{GovElection} + \beta_2 \text{GovElection} \times \text{LooseBudget} + \beta_3 \text{GovElection} \times \text{AuditorElect} + \beta_4 \text{GovElection} \times \text{UnionMember} + \beta_5 \text{LooseBudget} + \beta_6 \text{AuditorElect} + \beta_7 \text{UnionMember} + \epsilon \tag{2}
\]

Panel A reports the main regression results. Panel B reports the regression results based on whether the state has strict balanced budget requirements. *, **, and *** indicate significance at the 10%, 5%, and 1% level respectively (two tailed).

### Panel A: Main regression

<table>
<thead>
<tr>
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<td>Predicated Sign</td>
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<td>GovElection x UnionMember</td>
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<td>GovElection x AuditorElect</td>
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<td>0.774</td>
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<tr>
<td>[t-value]</td>
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<td>[1.85]*</td>
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### Panel B: Distinguish between states with loose and states with strict budgetary requirements

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<tr>
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<tr>
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<td>[1.57]</td>
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<tr>
<td></td>
<td>[6.05]***</td>
<td>[0.19]</td>
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<tr>
<td>GovElection x AuditorElect</td>
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<td>Adjusted R-squared</td>
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<td>0.03</td>
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</table>
Table 4: Additional Analyses on Discretionary Change in Compensated Absences

This table reports results of additional analyses of equation (2):

\[
\text{Discretionary } \Delta CA = \beta_0 + \beta_1 \text{GovElection} +\beta_2 \text{GovElection} \times \text{LooseBudget} + \beta_3 \text{GovElection} \times \text{AuditorElect} + \beta_4 \text{GovElection} \times \text{UnionMember} + \beta_5 \text{LooseBudget} + \beta_6 \text{AuditorElect} + \beta_7 \text{UnionMember} + \epsilon \tag{2}
\]

Observations are from states with strict balanced budget requirements. *, **, and *** indicate significance at the 10%, 5%, and 1% level respectively (two tailed).

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<tr>
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<th>(1) [t-value]</th>
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<th>(2) [t-value]</th>
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<th>(3) [t-value]</th>
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<td>0.074</td>
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<tr>
<td>Adjusted R-squared</td>
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<td>0.02</td>
<td></td>
<td>Adjusted R-squared</td>
<td>0.03</td>
</tr>
</tbody>
</table>
Table 5: Regression Analysis of Gubernatorial Election Outcome and Discretionary Changes in Compensated Absences

This table reports regression results of equation (3):

\[ \text{Vote\%} = \beta_0 + \beta_1 \text{Discretionary } \Delta CA + \beta_2 \text{Discretionary } \Delta CA \ast \text{HighCompetition} \\
+ \beta_3 \text{HighCompetition} + \gamma \text{Controls} + \epsilon \]  

\[ (3) \]

*, **, and *** indicate significance at the 10%, 5%, and 1% level respectively (two tailed).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Predicted Sign</th>
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<th>(2)</th>
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</tr>
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<td>Coefficient</td>
</tr>
<tr>
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<td>[t-value]</td>
<td>[t-value]</td>
<td>[t-value]</td>
</tr>
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</table>

### Notes
- Discretionary $\Delta CA$ is scaled by multiplying 1000.