The influence of political risk on municipal managers' compensation agreements

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ABSTRACT

This study explores determinants of *contracted* severance packages for municipal managers. Results indicate that managers exposed to greater political risk are offered significantly more *contracted* severance pay. Moreover, the significantly positive relation between *contracted* severance and the threat of recall elections only exists in certain municipalities, i.e., those in states with no restrictions on recall grounds. Finally, findings also suggest that municipalities with more expected agency problems between managers and citizens offer significantly greater *contracted* severance pay.

Keywords: severance pay; efficient contracting; political Risk; rent extraction; municipal managers

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1. INTRODUCTION

In this paper, we examine contracted, or *ex ante*, annual compensation and severance promised to Chief Administrative Officers (hereafter "CAOs" or "municipal managers") in the municipal sector. Specifically, we focus on how the risk of involuntary termination impacts the design of compensation packages offered to municipal managers. Municipal managers are professional managers appointed by elected officials (i.e., council members and mayors) to oversee the daily operations.

The risk of involuntary termination faced by municipal managers plays a significant role in the design of their compensation packages. Early work in labor economics examines efficient contracting schemes used to compensate workers for bearing the risk of involuntary termination, specifically focusing on severance (e.g., Mortensen 1978; Booth and Chatterji 1989; Inderst and Mueller 2005). One way to compensate workers is by offering *contracted* agreements, i.e., contracted compensation, to insure workers against a loss in human capital value due to involuntary termination. Such insurance reduces a worker's entrenchment (Inderst and Mueller 2005) and/or induces the worker to make specific human capital investments (e.g., firm-specific job skills) that would be lost upon separation from the job (Mortensen 1978; Booth and Chatterji 1989).[1]

The municipal sector offers an interesting setting in which to test the insurance function. Although employees in other sectors (e.g., non-profit and corporate organizations) similarly face

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[1] Theories focusing on corporate CEOs, as opposed to labor economics theories focusing on workers, typically examine providing CEOs with incentives to invest in risky investments and disclose bad-news etc., which is not directly applicable to the municipal setting.

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the risk of involuntary termination, the government setting is unique because of the exogenous risk imposed by observable, measurable election cycles. Specifically, elected officials are subject to periodic political elections, and the turnover of elected officials often leads to a corresponding involuntary termination of municipal managers. When voters remove elected officials from office, newly elected officials typically replace municipal managers to facilitate a change in policy (Renner and Desantis 1994; Blodgett 1998). To highlight the political nature of the risk of involuntary termination faced by municipal managers, we denote such risk as "political risk" and focus on political risk imposed by voters through elections.

Since such insurance function should be more important when a worker faces a high risk of involuntary termination, our first hypothesis predicts that municipal managers subject to greater political risk contract for higher levels of compensation. Prior research shoes that severance is an efficient way to induce firm-specific investment in human capital and is positively related to environmental uncertainty. Consequently, the second hypothesis focuses on the specific use of severance as insurance for the risk of involuntary termination.

The municipal setting is prone to agency problems because citizens do not typically monitor municipal finances (Zimmerman 1977). When severance contracts are set up to provide optimal incentives, municipal managers might extract rents from citizens through generous and guaranteed severance payouts. In our third hypothesis, we predict that contracted severance is higher in municipalities with more agency problems.

Primary findings imply evidence of rent extraction in both annual compensation and severance contracts. Additionally, we find that managers facing greater political risk (i.e., employed by municipalities where voters are more likely to recall elected officials) contract to receive significantly higher severance pay only. Moreover, additional analyses suggest that the

likelihood of recalls affects severance contracts to a greater extent in states with less restrictive recall laws. Some states possess laws that confine citizen recall attempts to situations where malfeasance is alleged, while other states impose no such restrictions. We anticipate that recalls are less costly for voters in states without restrictive recall laws, and thus easier to bring to a vote. Consistent with this expectation, we find that the positive relation between contracted severance and the threat of voter recall only exists in states that impose no restrictions on grounds for filing recalls. We also find evidence consistent with rent extraction. Contracted salary and severance are significantly positively related to the excess cash holdings of the municipality.

Our study contributes to the literature on compensation and severance contracts as well as the literature on contracting in government settings. First, we investigate the relations between contracted compensation and severance and exogenous risk of involuntary termination (i.e., political risk) and find strong support that managers are compensated, via severance, for such risk, consistent with predictions from theoretical research on severance compensation. It is difficult to measure exogenous risk in the corporate setor, because firm-level risk measures are likely endogenous to CEO actions. Consequently, contemporaneous studies on severance contracts of corporate CEOs yield mixed results (Rusticus 2006; Rau and Xu, 2010).[2]

Our evidence is also consistent with municipal managers extracting rents through severance contracts. This finding helps assess whether governments are fulfilling their stewardship responsibility, one of the primary roles of governmental financial reporting

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[2]Rusticus (2006) find that severance is significantly positively related to stock-return volatility in only some specifications. Rau and Xu (2011) find that new CEOs' severance is negatively related to takeover probability, but incumbent CEOs' severance is positively related to the year-on-year change in takeover probability. Additional studies on severance focus on payouts, or ex post severance, to laid-off workers (for example, Kodrzycki 1998) and exiting corporate CEOs (Yermack 2006). However, examining ex post severance for managers that have left their jobs introduces a selection problem.

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standards (GASB 2006). Finally, the government sector comprised 20% of gross domestic product in March 2002 (U.S. Census), yet the compensation practices within this sector are largely unstudied. To our knowledge, our study is the first to conduct a broad analysis of severance pay in the governmental sector.

The remainder of the study is organized as follows. Section 2 discusses institutional background and theories of severance, and develops three hypotheses. Section 3 discusses sample selection and research design, with the results presented in Section 4. Section 5 presents additional analyses, and Section 6 concludes the paper.

2. HYPOTHESIS DEVELOPMENT

Political Risk Hypotheses

Municipal managers are responsible for the day-to-day operations of the municipality, including department and staff monitoring and typically, budgetary oversight. Elected officials (council members and mayors) typically hire and dismiss municipal managers, who serve at the will of elected officials, similar to a CEO serving at the will of the corporate boards of directors. Additionally, elected officials set manager compensation and benefits, including base salary, bonus and severance pay packages. The majority of municipal managers work under employment contracts that specify salaries and other benefits, and most undergo annual reviews, according to surveys by the International City/Country Management Association (ICMA).

Because municipal managers serve at the will of elected officials, their employment is affected by the political uncertainty arising from elections. The risk of dismissal faced by municipal managers during elections exceeds that faced by CEOs during shareholder elections. In public companies, the incumbent board nominates directors, not shareholders. Although

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proxy contests do occur, they are rare and expensive. Additionally, public company directors "do not currently face any meaningful risks of being replaced via the ballot box," because most director elections are not contested (Bebchuk 2003, p. 1; Cai et al. 2009).

In contrast, voters directly nominate candidates for municipal elections, and more than 90% of municipal elections are contested. Given this, incumbent officials face significant turnover risk. Elected official turnovers put municipal managers' jobs at risk as newly elected officials often appoint new municipal managers to facilitate a change in policy (Renner and DeSantis 1994; Blodgett 1998). Municipal managers might be dismissed, despite high performance, simply by affiliation with the losing party. Thus, in many situations, the termination of municipal managers' employment does not correlate with the managers' performance. Municipalities with higher voter activism tend to experience greater elected official turnovers, resulting in more *political risk* imposed on the manager. We expect municipal managers to contract for higher compensation (e.g., salary, bonus, and/or severance) in these municipalities. Our first hypothesis, stated in alternative form, follows.

H1: Municipal managers' contracted annual compensation increases with political risk

Severance pay specifically compensates the municipal manager for the risk of involuntary termination. Theoretical research shows that severance is an efficient contracting mechanism to induce firm-specific investment in human capital (Mortensen 1978; booth and Chatterji 1989; Suedekum and Ruehmann 2003). Empirical research confirms that severance pay is positively related to uncertainty of the firm's environment (Inderst and Mueller 2005; Rusticus 2006). To induce investment in firm-specific human capital, the firm should share the investment cost with the worker and compensate the worker for his/her firm-specific human

capital investment in the event of involuntary termination.[3] Thus, severance serves as insurance

for the employee's investment in firm-specific human capital and any subsequent loss of human

capital value that results from involuntary termination.

For severance contracts to operate effectively as insurance, severance pay should

positively correlate with the expected human capital loss in the event of involuntary termination.

Forced turnovers are costly and typically result in a significant reduction in human capital (Topel

1991), future short-term income (Fee and Hadlock 2004), and future long-term income (Ruhm

1990). Taken together, we expect a positive relationship between severance and involuntary

termination risk beyond the managers' control, i.e., *political risk* in the municipal sector.[4] This

leads to our second hypothesis.

H2: Municipal managers' contracted severance increases with political risk.

Rent Extraction Hypothesis

Although severance contracts are written to provide optimal incentives, municipal

managers might extract rents from citizens through these contracts. Citizens are not traditionally

strong monitors. Consequently, agency problems likely exist in governments to a larger extent

(Zimmerman 1977). These arguments imply higher *contracted* severance of municipal managers

in cities with more severe agency problems. Although it is unclear why municipal managers

would constrain themselves to using explicit contract terms at all, if explicit severance contracts

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[3] For example, Mortensen (1978) finds a relationship between severance and the uncertainty of the arrival of alternative job opportunities. Booth and Chatterji (1989) find that severance is positively related to the uncertainty in the return of firm-specific human capital investment when such uncertainty is related to the risk of involuntary termination. Finally, Suedekum and Ruehmann (2003) theoretically show that severance pay provides job security and consequently, fosters firm-specific investments in human capital.

[4] Recent theoretical studies in financial economics model the role of severance contracts in inducing specific actions from corporate CEOs, including investment in firm-specific human capital (Almazan and Suarez 2003), bad news disclosure (Inderst and Mueller 2005; Laux 2005), and making high-risk investments (Ju, Leland and Senbet 2002). Berkovitch, Israel and Spiegel (2000) model the scenario that the board is uncertain about the quality of the CEO. Severance contracts help the board provide an optimal replacement rule. Setting in most of these models, however, are not directly applicable to municipal managers. However, common among severance theories in labor economics and financial economics is the insurance function of severance contracts, whereby severance insures against a manager's human capital loss in the event of involuntary termination.

are already set up for efficient contracting, it is plausible that municipal managers take advantage of such contractual arrangements to extract rents. We state our second hypothesis in the alternative form.

> *H3: Municipal managers' contracted severance is greater in cities with more severe agency problems between municipal managers and citizens.*

3. SAMPLE & RESEARCH DESIGN

3.1. Sample

Detailed municipal manager severance data are available through private surveys provided by the ICMA. ICMA survey data are commonly used in the economics literature; survey response rates are typically high (i.e., 52% for 2002 salary data). We use three ICMA surveys: (1) *the Salary surveys*, which provide CAO annual base salaries; (2) the 2000 and 2002 *State of the Profession – Fringe Benefits surveys*, which contain annual data on CAOs' bonus and severance packages, as well as manager characteristics such as age, tenure, and level of education; and (3) the 2001 *Municipal Form of Government survey*, which provides data for our political risk measures. Municipal characteristics such as population and deficits are from the U.S. Census Bureau's *Annual Survey of Governments*.

Table 1 details the sample selection. We begin with an initial sample of 5,135 city-year observations from the *State of the Profession – Fringe Benefits surveys*. Note that this sample is confined to 2000 and 2002 because the surveys are only available for these two years. We delete 112 observations due to missing manager characteristics and 136 observations due to missing census data. We further exclude 762 observations with missing data for the political risk measures (see details below) and 1,703 observations with missing data in the Census database.

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Our final sample consists of 2,422 municipality-year observations, representing 1,629 unique municipalities over two sample years, 2000 and 2002.[5]

3.2. Compensation Measures

Our tests focus on three major components of municipal managers' compensation packages: salary, bonus, and severance (Table 2, Panel A).

3.2.1. Salary and bonus

The mean (median) CAO base salary is $80,180 ($75,472). Ideally, bonuses are measured using eligibility and the actual dollar amounts awarded. However, while ICMA data identify whether municipal managers receive bonuses, it does not disclose the dollar amounts. We use an indicator variable (*Bonus*) set to 1 if a municipal manager receives a bonus, and 0 otherwise; 23% receive a bonus in our sample.

3.2.2. Contracted Severance

Municipal managers' *contracted* severance pay usually is not specified as a single number in their employment contracts. Rather, the contracts stipulate both the maximum and minimum severance pay offered, defined as the number of weeks' salary as well as the service period required to earn severance. In our sample, 78% of managers are eligible for severance (*Severance*).

In addition to measuring the existence of severance, we also capture unicipal managers' expected severance in weeks of salary (*Severance weeks*), calculated as follows.[6] *Severance weeks* is set to zero for managers without severance contracts. We then assess a manager's

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[5] Note that 793/870 municipalities appear in both sample years. All inferences are qualitatively similar if we only include one observation per municipality.

[6] We express severance in terms of weeks, rather than dollars, of salary because the dollar amount reflects both the magnitude of severance as well as differences in salary levels (Rusticus 2006). Thus, specifications would not discern between determinants of salary and determinants of severance. Inferences of our test results are the same if we substitute the dollar amount of severance.

eligibility for severance. Specifically, if the manager's current job tenure falls below the weeks of service required to be eligible for minimum severance, we use the minimum severance. If the manager's tenure is between the numbers of weeks of service required to be eligible for minimum and maximum severance, we use the average of the minimum and maximum severance. If the manager's tenure exceeds the service requirement for maximum severance, we use the maximum severance. Note that our results are robust to using either the minimum severance or the maximum severance instead. Based on this constructed measure, the mean (median) of *contracted severance in weeks* is 19 (16) weeks of salary for the sample.[7]

3.3. Political Risk Proxies

Political risk captures the municipal manager's likelihood of involuntary termination due to political reasons. We focus on voters' ability to directly remove elected officials, which in turn imposes termination risk on city managers. For example, newly elected officials may signal a change in the city's strategic direction by selecting a new municipal manager.[8] Consequently, we measure political risk by the likelihood of elected official turnover, using two types of elections: regularly scheduled elections held at the end of office terms and recall elections.

Incumbent election loss

We expect cities with a recent history of voting incumbents out of office to impose greater risk of involuntary termination on municipal managers. Incumbents running for reelection enjoy a considerable advantage over opponents because they are rarely voted out of office (e.g. Moe 2005). Consequently, when incumbents lose elections, it sends a strong signal that voters are willing and able to make substantive changes. Following prior literature (e.g.

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[7] In 1,939 observations, the minimum and maximum severance weeks are identical.

[8] For example, Blodgett (1998) documents a significantly higher number of involuntary terminations of city managers following Texas city council elections. Renner and DeSantis (1994) find greater turnover of municipal managers when incumbent council members lose reelection.

Evans and Patton 1983; Baber et al. 2013), we focus on council election turnover because many cities do not hold separate mayoral elections.[9] We capture the likelihood of incumbent council member turnover (*% incumbent lost*) as the number of incumbents losing reelection divided by the number of incumbents running for reelection. Higher percentages indicate a higher likelihood of council turnover.

Recall election measures

Some municipal charters include provisions that authorize voters to remove (or recall) elected officials through a direct vote prior to the expiration of the official's term. Cities with recall provisions subject elected officials to an ongoing threat of recalls, imposing greater political risk on municipal managers. Accordingly, *Recall provision* is an indicator variable set to one for municipalities with recall provisions; 62% of our sample contains recall provisions.

Although recall provisions offer the opportunity for voters to remove elected officials, recall attempts do not occur frequently. Higher risk might be faced by managers in municipalities with underlying voter discontent *and* high voter activism. We expect recent recall attempts to capture heightened political risk for these cities. *Recall attempts* is an indicator variable set to one if a recall attempt against elected officials occurred during the 1996-2000 period (Baber et al. 2013). Voters in 8% of our observations actually experience a recall attempt.

Two final points about our political risk measures are perhaps worth noting. First, our sample contains both new and continuing municipal managers. We assume that continuing managers renegotiate compensation contracts each year, and hence contracts reflect the most up-

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[9] ICMA provides information on reelections of incumbent council members, but not mayors. However, municipal councils are vitally important in the appointment of municipal managers. Out of our sample, mayors alone appoint municipal managers in only 3% observations; in the remaining 97% of the sample, municipal managers are appointed either by councils alone or jointly by councils and mayors. As a result, we expect that council member turnovers effectively capture the threat of involuntary termination facing municipal managers.

to-date political risk at the time of contract renegotiation.[10] Thus, the political risk measures calculated over the 1996-2000 period should be relevant for all managers. Second, due to data constraints, our political risk measures are municipality-specific and do not vary for each year of a manager's tenure.

3.4. Rent Extraction Proxies

Prior research suggests that some municipalities experience agency problems between municipal managers and citizens (e.g. Gore 2009). We include two measures that proxy for such agency problems. Our first measure is excess cash holdings, constructed as the five-year average total municipal cash holdings deflated by population. Moreover, states mitigate agency issues at the municipal level via monitoring mechanisms. If municipal managers extract rents through compensation packages, we expect municipal managers at municipalities facing greater state monitoring to receive lower salary and benefits.[11] We measure state monitoring (*state monitoring*) as the percentage of total municipal revenue received from state sources.

3.5. Control Variables

Recent studies find that observable manager-specific traits are associated with important corporate policy differences; these studies suggest such traits reflect managers' individual abilities and quality. Ge et al. (2008) find CFOs with undergraduate degrees exhibit more aggressive financial reporting strategies, while Bamber et al. (2008) find managers possessing MBAs reveal more conservative disclosure styles. We include manager degree (*degree*) to control for manager quality and ability; it is an indicator variable equal to one if the manager has

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[10] We consider whether contracts are renegotiated for continuing municipal managers in Table x.
[11] Prior research in the private sector measures agency issues via a measure of excess compensation. Untabulated results employ two-stage least squares to measure excess salary and examine whether excess salary relates to annual compensation and severance. The results indicate that managers who receive excess salary have significantly higher *contracted* salary and severance pay, consistent with rent extraction. In addition, because excess salary can also measure manager talent, we test (and find) that excess salaries are positively associated with inefficient municipalities, using a measure of administrative overhead. Because the two-staged analysis results in a smaller, different sample, we do not tabulate the results for consistency.

either an undergraduate or a graduate degree. Managers with greater job responsibilities should receive higher compensation. *CAO appoint* is an indicator set to one if a municipal manager appoints all department heads (e.g., the fire chief, police chief, and transportation director), and zero otherwise.

To control for additional manager-specific characteristics, we include current job tenure (*tenure*), the length of prior government experience (*prior government experience*) and manager age (*age*).[12] We measure *tenure* as the log of 1 plus the number of years the manager is in the current position; *prior government experience* as the log of 1 plus the number of years the manager is employed in government positions prior to the current position; and *age* as the manager's age category, where 1=ages<30, 2=ages 31-35,...10=ages>70.

A municipality's performance potentially affects manager compensation. We control for performance by including an indicator variable (*deficit*) set to one if the municipality has a deficit in the current or prior four years, where deficit positions are measured by an excess of expenditures over revenues (Baber and Gore 2008; Zhang 2009). We also include municipal size (*population*), measured by the log of population, as larger municipalities typically offer managers higher compensation packages (Gore 2009).

We include two state-level measures to control for major economic indicators, using data from the Bureau of Economic Analysis (BEA). *State per capita income* controls for general economic health and the cost of living; *Gov comp as % of State GDP*, calculated as the percentage of local government employee compensation in state GDP, considers the amount of local government compensation in each state.

3.6. Empirical Model for Hypothesis Tests

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[12] Note that we include prior government experience and current job tenure separately rather than total government experience. Untabulated specifications that include total government industry experience rather than prior government experience and tenure do not change the qualitative implications.

We estimate contracted compensation for municipal managers in following regression:

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\begin{aligned}
\textit{Contracted Compensation} = {} & b_0 + b_1(\textit{recall provision}) + b_2(\textit{recall attempts}) \\
& + b_3(\%\_\textit{incumbent}\_\textit{lost}) + b_4(\textit{cash}) + b_5(\textit{state monitoring}) \\
& + b_6(\deg\textit{ree}) + b_7(\textit{CAO}\_\textit{appo}\,\text{int}) + b_8(\textit{tenure}) + b_9(\textit{prior gov} \exp\textit{erience}) \\
& + b_{10}(\textit{age}) + b_{11}\left(\textit{deficit}\right) + b_{12}\left(\textit{population}\right) + b_{13}(\textit{state per capita income}) \\
& + b_{14}(\textit{GOV compensation as}\ \%\ \textit{of state GDP}) + \varepsilon,
\end{aligned}
$$

(1)

The dependent variable, *Contracted Compensation*, is alternatively each of the following

four variables: (A) *salary*, (B) *bonus*, (C) *severance*, or (D) *severance weeks*. When the

dependent variable is a continuous variable, i.e., either *salary* or *severance weeks*, we estimate

the regression with an OLS model. When the dependent variable is an indicator variable, i.e.,

bonus or *severance*, we estimate the equation with a Probit model.[13] We cluster standard errors

on state to correct for inflation in standard errors caused by including multiple observations per

state.[14]

4. RESULTS

4.1. Descriptive Statistics

Table 2 displays summary statistics for the variables in equation (1). Municipal managers

spend an average of 7 years at the current job (*tenure*), work 12 years in government before the

current job (*prior government experience*), and are an average of 49 years old. In addition, 91%

of municipal managers have undergraduate or graduate degrees. Cities included in our sample

vary greatly in population; the smallest city has a population of 140, while that largest has over 1

million residents. In our sample, 48% of municipal managers appoint department heads. State

personal per capita income ranges from a minimum of $22,173 in West Virginia to $43,234 in

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[13] We analyze *severance weeks* in an OLS rather than aTobit model. *Severance weeks* cannot assume a negative value and thus, is not censored. The observed zero values are due to the decision not to offer severance, not censoring.

[14] We cluster standard errors on state rather than on city because the sample contains multiple observations for each state, while at most two observations per city.

Connecticut. As a share of state GDP, local government compensation of employees is highest in Mississippi (7.69%) and lowest in Delaware (2.46%).

Among the three political risk measures, *recall provision* reflects city-level provisions, while the other two, *recall attempts* and *% incumbent lost*, capture actual voter activities. Approximately 62% of observations have recall provisions, while only 8% have recall attempts; on average 16% of incumbents lost reelection bids.

Table 2, Panel B presents the Pearson correlation coefficients. Note that the univariate correlation between *recall provision* and the dependent variables are all significant (although the relationship with *severance* is opposite the prediction). The relationship between a municipality's excess cash (state monitoring) and salary and severance weeks is positive (negative) and significant, consistent with rent extraction. Finally, *between log(state per capital income)* and *Gov Comp as % of State GDP* is -0.22, suggesting that local government wage bills tend to be a higher percentage of GDP in lower-income states.

4.2. Contracted Annual Compensation

Table 3 presents results from estimating equation (1) for annual compensation (salary and bonus). Columns 1 and 2 display results for the full sample, while columns 3 and 4 show results for the subset of observations that also have severance data, to aid in comparison with Table 4. Coefficient estimates for the three political risk measures are not statistically significant, which suggests that municipal managers are not compensated for political risk through their annual salaries (columns 1 and 3) or bonus (columns 2 and 4) compensation (H1). However, both proxies for rent extraction are significantly associated with municipal manager salaries (H3). That is, managers are paid greater salaries when municipalities carry higher cash holdings, and conversely, are paid less when more state monitoring is present.

With respect to control variables, several manager characteristics are associated with annual compensation. Managers with degrees, longer tenure, and more prior government experience are paid relatively larger salaries and are more likely to receive a bonus. Manager job responsibility (*CAO appoint*) is only associated with salary compensation, however, and older managers are less likely to receive bonuses. Wealthier states (*State per capita income*) and states where local government has a greater impact (*Gov compensation as % of state GDP*) pay managers more salaries; these characteristics do not impact the likelihood of offering a bonus.

4.3. *Likelihood and Magnitude of Contracted Severance*

Evidence for our second hypothesis, on the relation between political risk and the existence and magnitude of severance pay, is presented in Table 4, Panel A. Columns 1 and 2 display results for the full sample, while columns 3 and 4 show results for the reduced sample, where data are available for both severance and annual compensation. The results imply that political risk is associated with both a higher likelihood and a higher magnitude of contracted severance. The estimated coefficients for *Recall provision* and *Recall attempts* are 0.232 ($p < 0.05$) and 0.338 ($p < 0.001$) for *severance weeks* and 0.220 ($p < 0.01$) and 0.283 ($p < 0.10$) for the likelihood of severance (similar results are found for analyses on the reduced sample. The results imply that greater *contracted* severance pay is offered in cities with provisions that allow voters to recall elected officials and in cities where voters recently filed recall petitions against council members or mayors. In contrast, for cities in which a higher percentage of incumbents lost their re-election bids (*% incumbent lost*), the likelihood and magnitude of severance pay is offered only for the reduced sample in columns 3 and 4. Overall, our evidence suggests that municipal managers facing greater political risk in the form of citizens' ability and willingness to

recall elected officials contract for higher severance pay. On the other hand, the risk imposed by regular council election turnover does not consistently influence contracted severance.

With respect to the rent extraction hypothesis (H3), we find that greater cash holdings are associated with greater contracted severance pay, with coefficients of 0.204 and 0.187 in columns 1 and 2, respectively, with p-values < 0.01, two-tailed. The impact of state monitoring on *contracted* severance is mixed, however, with significantly less severance pay offered for the reduced sample in columns 3 and 4, but not for the full sample in columns 1 and 2.

In addition to the main variables of interest, managers with more prior government experience are more likely to receive severance and are more likely to receive higher levels of severance. However, manager age and severance are significantly negatively related.

Panels B and C of Table 4 provide similar evidence. Here, severance is modeled in two stages, which implicitly assumes that the decision to offer severance is separate from the amount offered. The first stage is a Probit selection model of municipalities' decisions to provide severance contracts to municipal managers. The second stage employs an OLS model of the magnitude of *contracted* severance, given the decision to grant severance.

For severance contracts to operate as insurance against human capital loss in the event of involuntary termination, contracted severance should increase with *expected* human capital loss in such event. This loss varies with both the likelihood of involuntary termination (i.e., political risk) and the dollar amount of the human capital loss given the termination of employment (i.e., the loss amount). In modeling the contracted severance in two separate stages, we reflect the possibility that the likelihood of involuntary termination influences the likelihood of offering severance, i.e., the first-stage model, but does not affect the loss amount (modeled in the second stage).

We select an instrumental variable that theoretically affects the loss amount, but not the likelihood of involuntary termination. [15] Specifically, we include a measure of manager job responsibility (*CAO appoint*) in the second-stage model of the magnitude of severance, and exclude it from the first-stage model. Municipal managers responsible for appointing department heads play significant roles in implementing municipal policies. To shift the course of a municipality, newly elected officials might replace city managers with more influence; in other words, greater responsibilities render managers more susceptible to involuntary terminations following elected official turnover. Managers with more responsibilities are typically those that are more accomplished and have the potential to lose more value. As a result, we expect municipalities to grant greater amounts of contracted severance pay to these managers to compensate for the potential loss.

Panels B and C of Table 4 reports results for the full and reduced samples, respectively. We find that political risk affects the likelihood of severance contracts and the magnitude of contracted severance. Specifically, in the first-stage for the full (reduced) sample, the marginal effects of 0.05 (0.06) and 0.06 (0.10) on the recall-related political risk measures indicate that the likelihood of the manager receiving a severance contract increases by 5% (6%) and 6% (10%) with the presence of recall provisions and recall attempt, respectively. In the second stage analysis, political risk variables of recall provision and recall attempts are significantly associated with the number of weeks of severance awarded. In addition to political risk, both the likelihood and magnitude of severance are positively associated with excess cash holdings and prior government experience. Finally, while the attainment of a degree and the manager's age

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[15] We conduct a sensitivity test that uses a different instrumental variable in the first-stage probit model, the existence of a formal employment contract. Managers with formal employment contracts are more likely to receive a severance contract, but the existence of a formal employment contract should not affect the magnitude of severance. Our inferences are the same with this alternative instrumental variable.

affect the likelihood of a manager being offered severance, the manager's tenure is related to the magnitude of the severance. For the most part, these results indicate that similar factors are considered in deciding whether to offer severance and how much to offer.

In the severance regressions, we also find that *age* and *prior government experience* impact severance. Specifically, we find that younger managers or managers possessing longer prior government experience contract more for severance. Rusticus (2006), Yermack (2006) and Rau and Xu (2010) suggest that younger managers face a longer horizon to earn income, and thus suffer greater loss in their future wage potential and reputation if involuntarily terminated.[16] Our finding of a negative relation between *contracted* severance pay and age is consistent with the use of severance to insure against human capital loss. However, age is also related with other manager attributes, e.g., risk aversion, so this is not unequivocal evidence for the insurance function. Individuals possess a variety of skills that contribute to their human capital value, but are not easily measured. Industry experience can reflect also reflect human capital value. Neal (1995) finds that workers' wages reflect compensation for industry-specific skills. Because industry-specific knowledge and expertise does not readily transfer to alternate job settings, workers who switch industries following termination suffer significantly greater wage losses than those who remain within the same industry (Neal 1995; Jacobsen et al. 1993). Our evidence is consistent with municipal managers more heavily invested in industry-specific human capital standing to lose more from dismissal, so they are compensated both a higher likelihood and a higher magnitude severance pay. However, aside from being consistent with providing insurance against human capital loss, our evidence can also suggest that longer-serving bureaucrats are

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[16] Yermack (2006) finds that higher severance is paid to CEOs further away from retirement. In this paper, we do not use *age* as a hypothesis variable. Though younger managers have a longer horizon, they likely have accumulated lower specific human capital to be lost upon involuntary termination. Which effect dominates is an empirical question.

better connected and hence have more power to negotiate for better terms of the employment contracts.[17]

5. Additional analyses

5.1. Influence of State Laws over Recalls

We next consider whether our results are influenced by state laws that affect citizens' ability to recall elected officials. In particular, ten states (Alaska, Florida, Georgia, Kansas, Minnesota, Missouri, Montana, New Mexico, South Dakota, and Washington) restrict the grounds for filing recall petitions to rare occasions involving wrongdoing by elected officials.[18] The remaining states impose no restrictions on the ability of voters to file recalls. Because there is a reduced likelihood for municipal managers to be recalled in states that restrict recalls, we expect lower political risk for municipal managers in these states. We test whether the positive relation between *contracted* severance pay and our two recall measures (*recall provision* and *recall attempts*) is driven by the subset of municipalities without restrictive state laws.

We partition our two recall measures between states with restrictive recall laws (*recall provision – restrictive state laws; recall attempts – restrictive state laws*) and states without restrictions (*recall provision – no state laws; recall attempts – no state laws*). Results are presented in Table 5. We find that the relation between *contracted* severance and *recall provision* is significantly positive only for states that do not impose restrictions on filing recall petitions. The evidence is similar for *recall attempts*. Our findings suggest that recalls pose a

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[17] Note that the *prior government experience* measure is not analogous to an inside CEO. A municipal manager with experience in the local government management profession can be an outsider to the municipality; his experience might be in a different municipality.

[18] For example, Florida Statutes Section 100.361 stipulates: "The grounds for removal of elected municipal officials shall, for the purposes of this act, be limited to the following and must be contained in the petition: (1) Malfeasance; (2) Misfeasance; (3) Neglect of duty; (4) Drunkenness; (5) Incompetence; (6) Permanent inability to perform official duties; and (7) Conviction of a felony involving moral turpitude." Except for the "incompetence" category, which can be construed broadly, other categories reflect egregious, criminal or medical, rather than political, reasons for recall. Provisions in the other nine states are similar.

greater threat to city managers in states that do not impose restrictions on citizens' ability to file recall petitions, and this increased risk is reflected in contracted severance.

5.2. Renegotiation of Severance Contracts for Continuing Managers

Results in Table 4 are based on a sample that includes both new and continuing municipal managers. In combining these managers, we implicitly assume that continuing managers' severance contracts are renegotiated to reflect the most up-to-date political risk, as measured over the 1996-2000 period. As a sensitivity analysis, we investigate whether contract renegotiation exists for continuing municipal managers.

We are subject to some data limitations in conducting this test. Because *Municipal Form of Government survey* is only conducted every five years, we can measure political risk only for two five-year periods, 1991-1995 and 1996-2000. Second, the data contain *contracted* severance for only two sample years, 2000 and 2002. Consequently, we focus on the group of continuing municipal managers that are hired during the 1991-1995 period. We test whether these managers' current *contracted* severance pay is related to political risk in the more recent period (i.e., 1996-2000) or in the period when they were hired (i.e., 1991-1995). We find that political risk in the two periods is uncorrelated (untabulated). Conseqauently, if severance contracts are renegotiated, it should reflect more recent political risk.

Results are reported in Table 6. Municipal managers are partitioned into three groups: (A) managers hired during the 1996-2000 period; (B) managers hired during the 1991-1995 period; and (C) those hired prior to 1991. We focus on group B. For this group, we find some evidence of contract renegotiation. Specifically, current *contracted* severance is significantly positively related to *recall attempts* during the recent 1996-2000 period, at *p*-value <0.05, two-tailed (see Column 3) and significantly related to earlier voter activities (i.e. *recall attempts*) in

the 1991-1995 period when managers were hired (Column 2). Oddly, estimated coefficients on *recall provision* are only significantly positive in Column 3. Renegotiation of contracted severance for continuing managers, if it exists, should not affect the relation between *contracted* severance and *recall provisions*. This evidence suggests that the contract is updated to reflect recent recall attempts, but it does not eliminate information about older recall attempts.

Table 6 also presents the results on manager groups A and C for completeness. For newly hired managers, i.e., group A, *contracted* severance is significantly related to recent recalls, as expected (Column 1). For managers hired before 1991, i.e., group C, *contracted* severance is not related to the voter activity in any time period (Columns 4 and 5). The lack of stronger evidence of renegotiation for Group B, as well as the lack of evidence of *contracted* severance reflecting political risk for group C, is probably due to the lower quality of the empirical political risk measures for continuing managers than for new managers. By definition, continuing managers in our sample already have survived past elected official turnovers, possibly because of their superior performance. As a result, they are less likely to be dismissed due to voter activity in the future than newly hired managers, so the two empirical measures based on election activities (i.e., *recall attempts* and *% incumbent lost*) may not adequately capture political risk for these managers as well as for newly hired managers.

6. CONCLUSION

We explore determinants of *contracted* severance packages of municipal managers who are appointed by elected officials to oversee daily operations of municipalities. Our evidence suggests that severance contracts serve as part of efficient contracting, in that they compensate municipal managers for political risk, i.e., the extent to which municipal managers' employment

is threatened by political uncertainty. We measure political risk by the likelihood of elected official turnovers at both regularly scheduled elections and recall elections. Moreover, we find that the positive relation between *contracted* severance and the likelihood of recall elections only exist in states without restrictions on recall grounds. Overall, our evidence supports the belief that the risk of involuntary termination is related to severance. Our findings are also generally consistent with rent extraction, as indicated by a significantly positive relation between *contracted* severance and salary and excess cash, our proxy for agency issues.

Our study contributes to the literature on annual compensation and severance contracts as well as the literature on contracting in government settings. First, our evidence, i.e., that severance contracts compensate managers for an exogenous risk of involuntary termination (political risk), supports predictions from labor economics models (e.g., Mortensen 1978). It is difficult to test this relation in other nonprofit sectors or the corporate sector. We also find evidence consistent with municipal managers extracting rents through annual compensation and severance contracts. This finding helps assess whether governments are fulfilling their stewardship responsibility, one of the primary roles of governmental financial reporting standards (GASB 2006). To our knowledge, our study is the first to conduct a broad analysis of severance pay in the governmental sector. The study is subject to limitations, however. The data are limited to municipalities who report Census data for at least five years, as well as to those who respond to ICMA surveys. However, the use of ICMA data also affords richer tests, because compensation data are not disclosed in municipal financial reports, unlike their corporate and nonprofit counterparts.

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TABLE 1   Sample Selection

Total observations in State of the Profession – Fringe Benefits database for 2000 and 2002	5,135
Less observations with missing municipal manager characteristics	-112
	5,023
Less observations with missing Census data	-136
	4,887
Less observations with missing data on political risk	-762
	4,125
Less observations with missing cash data in Census database	-1,703
Final sample	*2,422*

TABLE 2 Descriptive Statistics

Panel A. Descriptive statistics for manager compensation and severance [n = 2,422]

Variable	Mean	Standard deviation	Median	Minimum	25th percentile	75th percentile	Maximum
Salary	80,179.54	29,939.00	75,472.00	15.590.00	59,000.00	96,836.00	263,027.00
Severance	0.78	0.39	1	0	1	1	1
Bonus	0.23	0.41	0.00	0.00	0.00	0.00	1.00
Severance weeks	18.70	17.91	16.00	0.00	0.00	26.00	130.00
Recall provisions	0.62	0.48	1	0	1	1	1
Recall attempts	0.08	0.26	0	0	0	0	0
% incumbent lost	0.16	0.29	0	0	0	0.25	1
Cash	24917.58	75059.72	7684	24	3000	20395	1288648.8
State monitoring	0.18	0.09	0.15	0.04	0.12	0.28	0.04
Degree	0.91	0.29	1	1	1	1	1
CAO-appoint	0.48	0.49	0	0	0	1	1
Tenure	7.23	6.23	5.00	0.75	2.00	10.00	36.00
Prior government experience(unlogged)	11.58	8.35	11.00	0.00	5.00	18.00	45.00
Age	49.01	8.49	48.00	28.00	43.00	53.00	73.00
Deficit	0.07	0.25	0.00	0.00	0.00	0.00	1.00
Population (unlogged)	33839.91	89113.76	13246	140	5883	31771	1953631
State per capita income (unlogged)	30589.97	3449.13	29797.25	22,173.00	28506.00	33404.00	43,234.00
Gov Comp as % of State GDP	6.45%	0.59%	5.49%	2.46%	5.10%	5.68%	7.69%

Variable Definition:

Compensation Measures
Salary = the municipal manager's salary in dollars;
Bonus = dummy variable indicating whether the managers has ever received bonus in the current position;
Severance = dummy variable indicating whether a municipal manager is eligible for severance pay;
Severance weeks = the number of weeks of expected severance pay. It equals the minimum severance if a manager's current job tenure falls below the weeks of service required to be eligible for minimum severance; it e equals the average of the minimum and maximum severance, if a manager's tenure is between the weeks of service required to be eligible for minimum and maximum severance; it equals the maximum severance, if a manager's tenure already exceeds the service requirement for maximum severance. If a municipal manager is not eligible for contracted severance pay, we set *contracted* severance to zero;
Political Risk Measures)
Recall provision = dummy variable indicating whether the city has a provision that allows voter to recall elected officials;
Recall attempts = dummy variable indicating whether voters initiated any recall attempts against any council members or the mayor during the 1996-2000 period.
% incumbent lost = the ratio of the number of incumbents losing the reelections to the number of incumbents running for reelections;
Rent Extraction Measures
Cash = average of local 5-year-end cash holding
State monitoring = revenue received from the state as a percentage of total municipal revenue;

Degree = dummy variable indicating whether the manager has an undergraduate or graduate degree;

CAO-appoint = dummy variable indicating whether the municipal manager has the authority to appoint all of the department heads;

Tenure = log(1 + the number of years the manager is the CAO);

Prior government experience = log(1 + the number of years the manager is employed in government positions prior to the current tenure as CAO);

Age = the manager's age category, where 1=ages <30, 2=ages 31-35,...10=ages>70;

Deficit = dummy variable indicating whether the municipality has a deficit in the current or prior four years;

Population = log(population);

State per capita income = log (state-level per capita personal income);

Gov Comp as % of State GDP = local government employee compensation as a share of state GDP.

Panel B. Pearson correlation coefficients [n = 2,422]

	salary	bonus	sever	sevwek	recall	recalled	lncuml	cash	stmon	degree	caoap	tenure	preten	age	loss	pop	stperPI	lgdpp
salary	1																	
bonus	-0.14***	1																
sever	0.21***	-0.07***	1															
sevwek	0.42***	-0.12***	0.61***	1														
recall	0.06**	0.01	0.08***	0.10***	1													
recalled	0.0001	0.02	0.05**	0.07***	0.14***	1												
incuml	0.01	0.005	0.03	0.0002	0.01	0.04**	1											
cash	0.51***	-0.01	0.07***	0.16***	0.08***	-0.01	-0.002	1										
stmon	-0.17***	0.003	-0.02	-0.08***	-0.01	0.01	-0.05***	-0.10***	1									
degree	0.22***	-0.06***	0.23***	0.20***	0.02	0.03	0.007	0.07***	0.007	1								
caoap	0.23***	-0.02	0.15***	0.12***	0.04**	0.003	0.05**	0.03	-0.17***	0.09***	1							
tenur	0.16***	-0.16***	-0.12***	-0.02	-0.11***	-0.06***	-0.04**	-0.004	0.003	-0.06***	0.032	1						
preten	0.37***	-0.002	0.19***	0.22***	0.10***	0.05***	0.02	0.20***	-0.09***	0.08***	0.15***	-0.24***	1					
age	0.27***	-0.005	-0.11***	0.006	0.08***	0.02	0.02	0.11***	-0.10***	-0.12***	0.05**	0.32***	0.34***	1				
loss	-0.10***	0.02	-0.08***	-0.09***	0.02	0.01	-0.002	-0.06***	-0.03	-0.05**	-0.04**	-0.01	-0.05**	0.02	1			
pop	0.50***	0.005	0.05**	0.13***	0.08***	-0.007	-0.03	0.85***	-0.13***	0.07***	0.01	-0.03	0.20***	0.11***	-0.06**	1		
stperPI	0.29***	-0.04*	0.03	0.07***	0.005	-0.05**	-0.02	0.05**	0.16***	0.08***	-0.03	0.04**	0.10***	0.05**	-0.05***	0.01	1	
lgdpp	0.06**	0.032	-0.002	0.057**	0.01	0.04**	0.003	0.02	0.07***	0.002	0.07***	-0.05**	0.05**	-0.006	-0.01	-0.02	-0.22***	1

*, **, *** indicate significance at *p* <.10, .05, and 0.01, two-tailed.

**TABLE 3   Relation between political risk and components of municipal managers'
annual compensation packages**

The full sample, reflected in columns (1) and (2), includes 2,422 city-year observations in years 2000 and 2002; this sample is smaller for the salary regression due to missing salary observations. Columns (3) and (4) reflect the 996 city-year observations remaining after missing observations for all dependent variables are deleted. *t*-statistics (*z*-statistics) corresponding to OLS (probit) regressions are reported in parentheses. In all regressions, we cluster on states to correct for the inflation in standard errors due to multiple observations from the same state. Two-tailed *p*-value less than 0.10, 0.05, and 0.01 are indicated by *, **, and *** respectively. Year dummies are included, but the coefficient estimates are not reported. All variables are defined in Table 2.

VARIABLES	(1) Log(salary)	(2) Bonus (indicator)	(3) Log(salary)	(4) Bonus (indicator)
Recall provision	0.002	0.046	0.001	0.055
	(0.98)	(0.54)	(0.31)	(0.33)
Recall attempts	0.001	-0.056	0.002	-0.203
	(0.69)	(0.23)	(0.70)	(1.21)
%-_incumbent-lost	-0.002	0.012	-0.002	-0.022
	(-1.38)	(0.01)	(-1.44)	(0.02)
cash	0.010***	-0.027	0.009***	0.007
	(12.92)	(0.58)	(8.53)	(0.02)
State monitoring	-0.026**	-0.092	-0.026**	0.209
	(-2.67)	(0.08)	(-2.41)	(0.18)
Degree	0.007***	0.202***	0.008***	0.204*
	(5.16)	(8.93)	(5.93)	(3.74)
CAO-appoint	0.004***	-0.003	0.003**	-0.062
	(3.17)	(0.15)	(2.26)	(0.44)
Tenure	0.006***	0.005***	0.005***	0.492***
	(7.06)	(99.39)	(5.27)	(45.00)
Prior Gov.Experience	0.004***	0.004***	0.004***	0.149**
	(5.77)	(10.83)	(5.57)	(6.51)
age	0.001	-0.001***	0.001	-0.078**
	(1.47)	(16.76)	(1.67)	(5.01)
Deficit	-0.000	-0.058	-0.000	-0.059
	(-0.03)	(0.22)	(-0.15)	(0.09)
Population	0.008***	0.078*	0.009***	0.020
	(9.17)	(3.08)	(8.40)	(0.08)
State per capita income	0.049***	-0.050	0.047***	-0.411
	(3.84)	(0.03)	(3.27)	(0.73)
Gov Comp as % of state GDP	0.001**	-0.007	0.001**	-0.008
	(2.13)	(1.78)	(2.10)	(0.88)
Observations	1,693	2,422	996	996
R-squared				
Pseudo R-squared	0.722	0.056	0.752	0.060

TABLE 4   Relation between political risk, the likelihood of receiving severance, and the magnitude of severance

In both regressions, cluster on states to correct for the inflation in standard errors due to multiple observations from the same state. Two-tailed *p*-value less than 0.10, 0.05, and 0.01 are indicated by [*], [**], and [***] respectively. Year dummy is included, but the coefficient estimate is not reported. All variables are defined in Table 2.

Panel A: The relation between severance and political risk

The full sample, reflected in columns (1) and (2), includes 2,422 city-year observations in years 2000 and 2002 less any obervations with missing severance data. Columns (3) and (4) reflect the 996 city-year observations remaining after missing observations for all dependent variables are deleted.

VARIABLES	(1) Log(1+contracted severance)	(2) Severance (indicator)	(3) Log(1+contracted severance)	(4) Severance (indicator)
Recall provision	0.232**	0.220***	0.226**	0.248**
	(2.38)	(8.36)	(2.27)	(5.96)
Recall attempts	0.338***	0.283*	0.438***	0.438**
	(2.88)	(3.35)	(3.36)	(4.61)
%-_incumbent-lost	0.062	0.103	0.230***	0.347*
	(0.81)	(0.63)	(2.89)	(3.39)
Cash	0.204***	0.187***	0.206***	0.188***
	(4.30)	(19.03)	(3.64)	(10.55)
State monitoring	-0.282	-0.347	-0.949*	-1.118**
	(-0.69)	(0.76)	(-1.96)	(4.68)
Degree	0.618***	0.576***	0.589***	0.662***
	(6.44)	(56.32)	(5.68)	(41.82)
CAO-appoint	0.251***	0.291***	0.239**	0.288***
	(3.68)	(14.47)	(2.64)	(8.13)
Tenure	0.039	-0.046	0.083	0.014
	(0.79)	(0.73)	(1.35)	(0.04)
Prior Gov.Experience	0.275***	0.230***	0.286***	0.232***
	(6.44)	(37.04)	(5.78)	(21.07)
Age	-0.148***	-0.129***	-0.146***	-0.161***
	(-5.76)	(26.98)	(-4.64)	(21.87)
Deficit	-0.190	-0.149	-0.232	-0.215
	(-1.42)	(1.27)	(-1.53)	(1.32)
Population	0.014	-0.031	0.005	-0.023
	(0.26)	(0.33)	(0.07)	(0.10)
State per capita income	0.517	0.380	0.290	0.107
	(1.06)	(1.03)	(0.51)	(0.04)
Gov Comp as % of state GDP	0.014*	0.012*	0.012	0.009
	(1.71)	(3.23)	(1.21)	(1.05)
Observations	1,480	2,041	996	996
R-squared				
Pseudo R-squared	0.261	0.221	0.244	0.188

Panel B:

The sample reflects the 2,422 city-year observations less any missing observations for all dependent variables are deleted. The first-stage probit model is run using the full sample, and *z*-statistics are reported in parentheses. We run the second-stage OLS model only using observations with non-zero *contracted* severance, and report the *t*-statistics in parentheses.

VARIABLES	(1) Severance (indicator)	Marginal	(2) Log(1+contracted severance)
Recall provision	0.219***	**0.05**	0.081*
	(8.40)		(1.99)
Recall attempts	0.281*	**0.06**	0.174**
	(3.33)		(2.27)
%-_incumbent-lost	0.117	0.02	-0.023
	(0.82)		(-0.48)
cash	0.194***	**0.04**	0.087***
	(20.57)		(3.43)
State monitoring	-0.568	-0.12	-0.273
	(2.07)		(-0.95)
Degree	0.582***	**0.12**	0.104
	(57.99)		(1.50)
CAO-appoint			-0.005
			(-0.13)
Tenure	-0.029	0.01	0.071**
	(0.29)		(2.66)
Prior Gov.Experience	0.250***	0.05	0.071**
	(45.14)		(2.66)
age	-0.133***	-0.03	-0.026
	(28.74)		(-1.23)
Deficit	-0.141	-0.03	-0.123
	(1.13)		(-1.50)
Population	-0.030	-0.01	0.028
	(0.29)		(0.97)
State per capita income	0.328	0.07	0.315
	(0.77)		(1.36)
Gov Comp as % of state GDP	0.014**	0.01	0.007
	(4.99)		(1.26)
Inverse Mills Ratio			0.150
			(0.54)
Observations	2,041		1,480
R-squared			
Pseudo R-squared	0.213		0.261

Panel C: Two stage model to determine the likelihood and magnitude of severance

The sample reflects the 996 city-year observations remaining after missing observations for all dependent variables are deleted. The first-stage probit model is run using the full sample, and *z*-statistics are reported in parentheses. We run the second-stage OLS model only using observations with non-zero *contracted* severance, and report the *t*-statistics in parentheses.

VARIABLES	(1) *Severance (indicator)*	*Marginal*	(2) *Log(1+contracted severance)*
Recall provision	0.234**	**0.06**	0.097*
	(5.41)		(1.74)
Recall attempts	0.436**	**0.10**	0.250**
	(4.58)		(2.41)
%-_incumbent-lost	0.353*	0.09	0.070
	(3.57)		(0.99)
cash	0.194***	**0.05**	0.117***
	(11.31)		(3.28)
State monitoring	-1.300**	**-0.35**	-0.433
	(6.44)		(-1.61)
Degree	0.673***	**0.18**	0.149
	(43.64)		(1.30)
CAO-appoint			0.018
			(0.32)
Tenure	0.038	0.01	0.110***
	(0.27)		(3.16)
Prior Gov.Experience	0.250***	0.07	0.160***
	(25.02)		(2.83)
age	-0.163***	-0.04	-0.047
	(22.66)		(-1.48)
Deficit	-0.206	-0.05	-0.128
	(1.21)		(-1.21)
Population	-0.017	-0.01	0.024
	(0.06)		(0.56)
State per capita income	0.026	0.01	0.256
	(0.00)		(0.84)
Gov Comp as % of state GDP	0.010	0.01	0.007
	(1.37)		(1.07)
Inverse Mills Ratio			0.405
			(1.12)
Observations	996		765
R-squared			
Pseudo R-squared	0.180		0.146

TABLE 5   Influence of State Laws over Recalls

Column 1shows OLS regression results for the reduced sample of 996 city-year observations; column 2 estimates the likelihood of severance in a probit model; column 3 estimates the magnitude of severance, given the decision to grant severance, in an OLS model. *z*-statistics (*t*-statistics) corresponding to the probit (OLS) model are reported in parentheses, using robust standard errors clustered on state. Two-tailed *p*-value less than 0.10, 0.05, and 0.01 are indicated by *, **, and *** respectively. *Restrictive state laws* (*no state laws*) are indicator variables for states that restrict (do not restrict) citizens' ability to recall elected officials. All other variables are defined in Table 2.

VARIABLES	(1) Log(1+contracted severance)	(2) Severance (indicator)	Marginal	(3) Log(1+contracted severance)
Recall provision*no state laws	0.271**	0.280**	**0.07**	0.148**
	(2.594)	(5.55)		(2.13)
Recall provision*restrictive state laws	0.106	0.222	0.06	-0.047
	(0.644)	(1.94)		(-0.52)
Recall attempts*no state laws	0.396**	0.546*	**0.10**	0.162
	(2.519)	(3.63)		(1.27)
Recall attempts*restrictive state laws	0.185	0.081	0.02	0.258
	(1.065)	(0.04)		(1.13)
%-_incumbent-lost	0.248***	0.355*	**0.09**	0.096
	(2.997)	(3.59)		(1.48)
cash	0.197***	0.184***	**0.05**	0.116***
	(3.484)	(10.07)		(3.52)
State monitoring	-1.273**	-1.586***	-0.43	-0.708**
	(-2.612)	(8.36)		(-2.26)
Degree	0.583***	0.663***	0.18	0.177*
	(5.535)	(42.03)		(1.71)
CAO-appoint	0.217**			0.011**
	(2.268)			(0.20)
Tenure	0.075	0.035	0.01	0.102***
	(1.292)	(0.24)		(2.99)
Prior Gov.Experience	0.287***	0.253***	0.07	0.169***
	(5.820)	(25.76)		(3.47)
age	-0.139***	-0.157***	-0.04	-0.048*
	(-4.487)	(21.39)		(-1.80)
Deficit	-0.221	-0.188	-0.05	-0.132
	(-1.413)	(1.01)		(-1.32)
Population	0.020	-0.003	-0.00	0.032
	(0.252)	(0.00)		(0.74)
State per capita income	0.096	-0.109	-0.03	0.121
	(0.170)	(0.04)		(0.45)
Gov Comp as % of state GDP	0.007	0.006	0.00	0.005
	(0.693)	(0.39)		(0.75)
Inverse Mills Ratio				0.51
				(1.58)
Observations	996	996		765
R-squared				
Pseudo R-squared	0.241	0.182		0.127

TABLE 6　　Renegotiation

We partition municipal managers into three groups: (a) managers who are hired during the 1996-2006 period; (b) managers who are hired during the 1991-1995 period; and (c) managers who are hired prior to 1991. We run equation (1) separately for each group using *recall attempts* and *% incumbent lost* for the 1996-2000 period. We also rerun the equation for subsamples (b) and (c) using *recall attempts* and *% incumbent lost* for the 1991-1996 period. Coefficient estimates are all from OLS regressions. *t*-statistics are reported in parentheses, based on robust standard errors adjusted for clustering on states to correct for the inflation in standard errors due to multiple observations from the same state. Two-tailed *p*-value less than 0.10, 0.05, and 0.01 are indicated by [*], [**], and [***] respectively. All other variables are defined in Table 2.

VARIABLES	(1) Log(1+contracted severance) 1996-2000	(2) Log(1+contracted severance) 1991-1995	(3) Log(1+contracted severance) 1991-1995	(4) Log(1+contracted severance) Before 1991	(5) Log(1+contracted severance) Before 1991
Recall provision	0.131	0.148	0.800***	0.360	0.216
	(0.783)	(0.754)	(3.581)	(1.615)	(1.058)
Recall attempts96-00	0.448**		0.576**	0.231	
	(2.610)		(2.791)	(1.040)	
%-_incumbent-lost96-00	0.146		0.268	0.147	
	(0.911)		(1.179)	(0.941)	
Recall attempts91-95		0.862***			0.281
		(3.314)			(0.826)
%-_incumbent-lost91-95		0.440			0.213
		(1.233)			(0.484)
cash	0.207**	0.189	0.242**	0.343**	0.266**
	(2.633)	(1.447)	(2.144)	(2.738)	(2.252)
State monitoring	-0.092	-1.723*	-0.350	-2.436*	-2.566**
	(-0.197)	(-1.761)	(-0.338)	(-1.722)	(-2.554)
Degree	0.662***	0.644*	0.772**	0.217	0.425*
	(3.747)	(1.955)	(2.089)	(0.595)	(1.906)
CAO-apponit	0.403***	-0.037	0.058	0.103	0.175
	(3.165)	(-0.138)	(0.244)	(0.362)	(0.968)
Tenure	0.266	1.356	-0.074	1.571***	0.665*
	(1.015)	(1.100)	(-0.056)	(3.611)	(1.844)
Prior Gov.Experience	0.406***	0.281**	0.382**	0.461*	0.093
	(6.258)	(2.133)	(2.352)	(1.882)	(0.810)
age	-0.154***	-0.124*	-0.021	-0.287***	-0.212*
	(-4.145)	(-1.750)	(-0.201)	(-3.348)	(-1.997)
Deficit	-0.192	0.102	0.032	-0.980**	-0.443
	(-0.941)	(0.228)	(0.078)	(-2.165)	(-1.268)
Population	-0.099	0.091	0.200	-0.262	0.032
	(-0.866)	(0.780)	(1.155)	(-1.573)	(0.209)
State per capita income	0.197	0.588	1.224	2.869**	1.280
	(0.228)	(0.752)	(0.971)	(2.100)	(1.420)
Observations	475	185	165	326	311
R-squared	0.291	0.296	0.522	0.359	0.244