

# The Role of Agency in Mitigating Expropriation: Firm-level Evidence from Contract Renegotiations

Catherine Thomas and Yongxiang Wang

**PRELIMINARY. PLEASE DO NOT CITE.**

May 29, 2009

**Abstract**

Firm-level bargaining outcomes of contract renegotiations between the bureaucrat CEOs of Chinese state controlled firms and minority shareholders prompted by an exogenous policy shock in China in 2005 reveal that poorer quality local bureaucracies are less likely to expropriate. Minority shareholders appear more able to avoid being expropriated when the bureaucrat CEO is open to economic capture. Bureaucrat CEOs are shown to respond to private benefits in the bargaining game and their responsiveness to private benefits is greater when the local government – i.e. their employer – is low quality. The findings suggest that agency problems within the public sector restrain government’s ability to exercise unilateral power. Since government inefficiency is known to be correlated with government corruption, this effect can serve to mitigate the negative relationship between poor quality vertical institutions and economic outcomes.

## 1 Introduction

Economic outcomes are known to be affected by institutional quality. Acemoglu and Johnson (2005), and Cull and Xu (2005) emphasize the role played by vertical institutions – the extent to which property rights are protected from expropriation. They argue that protection against expropriation positively affects economic development since it is not possible for private individuals to circumvent unilateral government power. Despite the appeal of this argument, and some empirical and anecdotal evidence at the microeconomic level, there is limited empirical evidence about the relationship between economic growth and risk of expropriation, a fact that Svensson (2005) finds puzzling. For example, Mauro (1995) finds that while corruption – which he shows is highly positively associated with expropriation risk – is negatively associated with economic growth, the result is not particularly robust to the inclusion of relevant controls.<sup>1</sup>

---

<sup>1</sup>The cross-country measure of constraints on the executive used by Acemoglu and Johnson (2005) is highly positively correlated with Transparency International’s 2000 national corruption index. The correlation coefficient is 0.58, which is higher in general than the adjusted R-squared results in the cross-country regressions in Acemoglu and Johnson (2005).

These papers treat government as a monolithic entity, whereas the public sector is generally made up of many policy makers and policy implementors who may each incur private costs and benefits. Existing studies of government corruption focus on the interaction between the government and ordinary citizens; however, once we allow for agency within the government, corruption has at least one other possible dimension. On the one hand, a corrupt government may expropriate its ordinary citizens as described in Acemoglu and Johnson (2005). On the other hand, policy implementors within a corrupt government may act according to private incentives. These two effects could, in theory, offset each other in terms of impact on ordinary citizens. For example, the private sector may persuade government agents to accept bribes for not fully implementing an expropriating government policy.

We hypothesize in this paper that individual agents employed by a corrupt government are relatively more likely or more able to allow private costs and benefits to influence their behavior. Many papers analyze the negative effects of corruption on the economy.<sup>2</sup> The theory of organizations, however, has paid limited attention to the internal organization of government (Tirole, 1994). Political scientists have described how corruption within a government can help mitigate the impact of a government whose actions might otherwise have negative consequences. Leff (1964), Huntington (1968), and De Soto (1989) make this "efficient corruption" argument, however, to the best of our knowledge, empirical evidence has not yet been documented.

This paper finds evidence of agency between the policy makers and the policy implementors managing state controlled listed firms in China. It suggests that internal agency can help mitigate the harmful effects of vertical expropriative power. In 2005, state controlled listed firms were exposed to an exogenous policy shock encouraging the conversion of nontradable shares to tradable shares.<sup>3</sup> As the controlling shareholder, the local government held a majority proportion of nontradable shares while tradable shares were held by private parties. For a large majority of firms, the owners together agreed to a contract renegotiation whereby the owners of tradables were compensated for the supply shock with some fraction of nontradables shares.<sup>4,5</sup> The terms under which conversion occurred were determined at the firm level as the outcome of a bargaining game. The outcome of the game is the compensation ratio, defined as the number of nontradables shares offered in

---

<sup>2</sup>See Rose-Ackerman (1978, 1999), Bardhan (1997), Svensson (2005), and Banerjee et al. (2009) for surveys.

<sup>3</sup>This policy shock is often referred to as ownership reform or split share structure reform (Li et al., 2008).

<sup>4</sup>Since tradable shares generally accounted for only 40% of all shares, holders of tradable shares are minority shareholders. We use the terms minority shareholders and tradable shareholders interchangeably throughout this paper.

<sup>5</sup>Nontradables accounted for an average of around 60% of outstanding shares. Hence, their conversion to tradable shares meant a large supply shock to the value of the original tradable shares.

compensation divided by the number of previously tradable shares. For example, if there were 70 nontradable shares and 30 tradable shares in a listed firm and the compensation ratio was set at 0.3, which is around the average level, then nontradables shareholders would give  $30 \times 0.3 = 9$  shares to the owners of the formerly tradable shares. Thus, after this bargaining, the owners of the formerly nontradable shares could begin to sell their remaining 61 shares in the stock market, while the former minority shareholders will now own 39 tradable shares. The government bureaucrat CEO of the firm played a critical role in the bargaining game, acting as the agent of the local government.

We use firm-level data recording variation in the compensation ratio across cities with differing institutional quality. In contrast to studies that investigate the relationship between macroeconomic variables like economic growth and institutional variables at the country level, the institutional variables studied here are exogenous with respect to the dependent variables of interest. Furthermore, this reform is itself a macroeconomic shock affecting all listed firms. Thus, this empirical context provides an ideal setting for examining whether there is a causal relationship between institutional quality and an economic outcome.

We hypothesize that the outcomes in state controlled firms are likely to be influenced by the quality of property rights institutions since the compensation ratio measures minority shareholder expropriation.<sup>6</sup> However, we also hypothesize that the extent to which expropriation takes place is influenced by the coherence of the bureaucrat CEO's actions with the government's interests. The possibility of agency comes about because, while observable, the bargaining outcome is not perfectly verifiable ex post since the state cannot judge the extent to which the agreed compensation ratio is appropriate.

An initial analysis of variation in the compensation ratio, controlling for firm level factors such as the proportion of nontraded shares at the policy announcement, reveals that the compensation ratio was actually higher for state controlled firms than for privately controlled firms. Given the opportunity to expropriate minority shareholders, it appears local governments were less likely to do so on average than were private firms.

State controlled firms are dispersed across different cities. Various studies, such as the World Bank 2006 report on China, assess the quality of different types of institutions at the city level within China. North (1981) makes the theoretical distinction, and Acemoglu and Johnson (2005) the empirical distinction, between institutions related to contracting (horizontal institutions) and

---

<sup>6</sup>Outcomes between tradable and nontradable shareholders in state controlled firms are relatively more likely to be influenced by the quality of property rights institutions, since the bargaining takes place between the government and the private sector. The outcomes in privately controlled listed firms are relatively more likely to be related to the quality of contracting institutions between private individuals.

those designed to safeguard property rights (vertical institutions). Since the latter are intended to measure the degree to which minority shareholders are expropriated we expect lower quality vertical institutions to be associated with a lower compensation ratio. The data reveal that the relationship goes the other way. We find that a World Bank measure of government efficiency – the firm expenditures on travel and entertainment, serving as a conduit for informal payments to officials – are positively associated with the firm-level compensation ratio for state controlled firms. That is, we actually see less expropriation of minority shareholders precisely in the geographic areas where vertical institutions are lower quality.

This puzzle is resolved by demonstrating that entertainment costs are positively related to the extent of economic capture and agency within the bureaucracy. When the CEO faces private incentives to bargain well on behalf of the state because he personally owns nontradable shares, then the positive association between measures of government corruption and the compensation ratio is much diminished. CEO salary has been said to measure the extent to which CEOs are open to economic capture (Svensson, 2005).<sup>7</sup> When the firm is located in a city with high entertainment costs, lower paid CEOs are more likely to agree to a high compensation ratio, acting in the interests of the minority shareholders rather than their employer.

Event studies suggest that the stock markets draw similar inferences from firm-level variation in CEO private benefits and city-level entertainment costs for the value of tradable shares. Three different events relating to the reform are shown to significantly affect tradables returns. At the time the policy was announced, high levels of CEO nontradable shareholdings were associated with abnormal negative returns. When the details about the bargaining process were announced, revealing the role of the state bureaucrat, the extent of CEO nontradable shareholding was associated with further declines in tradables returns. The third event of interest is the firm-level announcement of the specific details of the policy reform. Small positive abnormal returns were experienced for firms located in cities with higher entertainment costs around this event.

Li, Feng and Jiang (2006) describe how institutional entrepreneurs generate positive spillovers in an economy by finding ways to circumvent existing institutional barriers and hence shape de facto institutions. They do not however discuss explicitly whether institutional entrepreneurs in China pay bribes to the government officials to avoid bad policies or unreasonable regulations. Cai et al. (2005), in contrast, describe the World Bank’s entertainment cost index as including a

---

<sup>7</sup>The CEO salary measure used in this paper is actually total CEO compensation. We employ the term salary rather than compensation to clarify the distinction between the outcome variable of interest, the compensation ratio, and CEO compensation, a key independent variable.

combination of "grease money" for better government services and "protection money" to guard against expropriation. They find that this index is negatively correlated with firm performance. The negative relationship is however less pronounced in cities where firms receive lower quality government service. This is consistent with our hypothesis that bureaucrat agency coexists with corrupt governments. Entertainment costs facilitate state bureaucrat capture when institutions are low quality, allowing firms to achieve relatively high performance in these regions.

Our findings suggest that the ease of economic capture of bureaucrat CEOs facing private incentives is negatively associated with measures of vertical institutions quality. Since corruption is generally positively associated with poor property rights protection (Mauro, 1995), the risk of expropriation is highest precisely where it is most likely that individual agents are corruptible. Acemoglu and Johnson (2005) infer that the quality of vertical institutions affects economic outcomes because government power is absolute. We infer from our results that agency within corrupt governments can help mitigate this asymmetric distribution of power. In doing so, we offer some empirical support for the "efficient corruption" hypothesis proposed by Leff (1964) explaining why poor quality institutions and economic growth need not be mutually exclusive.

Section 2 describes the background to the ownership reform and the process of reform. Section 3 describes the data used in the study and outlines the empirical strategy. Section 4 motivates the agency problem in the context of the bargaining game played by the owners of nontradable and tradable shares of state controlled firms. Section 5 presents the results and section 6 describes some robustness tests. Section 7 concludes.

## **2 The Policy Shock**

The purpose of this section is to present a parsimonious summary of the relevant background to ownership reform and how the policy was implemented in state controlled firms.

### **2.1 Background to the reform**

Many of China's state owned firms were partially privatized through share issue privatizations starting in 1990 when its two securities markets were set up in Shanghai and Shenzhen. The share structure consisted of both tradable and nontradable shares, and nontradable shares had the same voting and cash flow rights as tradables. The government (including local governments and central government) typically maintained very substantial – usually majority – holdings in most firms. For

the most part, government shares of these publicly listed firms were nontradable due mostly to ideological considerations. Trading restrictions were also applied to a subset of shares in privately controlled listed firms which had appeared in the late 1990s. Thus before April 29, 2005, when the specific nationwide reform studied here began, the controlling shareholder's shares in privately controlled listed firms were also nontradables.

At the time of this reform, nontradables accounted for an average of 62% of all firms' outstanding shares, while for the subset of state controlled firms it was almost the same number. This nontradability was asserted to have multiple negative effects on corporate governance and firm value, see Wu (2004) for a book-length description. The central government had attempted to reform ownership in 2001 but the reform was cancelled in 2002 since it was felt that the supply shock of allowing the sale of formerly nontraded shares would destabilize Chinese stock markets. (See Calomiris et al. (2009) for an empirical analysis of these policy changes).

## 2.2 The policy announcements

Figure 1 resembles the first figure in Li et al. (2008) and summarizes the sequence of key events studied in this paper. There are three main announcements of interest.

First, on April 29, 2005, the CSRC (the Chinese equivalent of the SEC) announced the "Notice of the China Securities Regulatory Commission on Piloting the Share-trading Reform of Listed Companies"<sup>8</sup> which stated that the sale of nontradable shares would be permitted in the future subject to the agreement of tradable shareholders. The CSRC did not actually announce a general government policy – rather, each individual firm was responsible for its ownership reform. The most important signal from this announcement was that nontradables shareholders would have to compensate tradable shareholders for the right to sell their nontradable shares into the stock market. Throughout the privatization process, the financial contract between nontradables and tradables shareholders specified that the former could not sell their shares into the stock market so this bargaining game constituted a contract renegotiation between the two groups. Thus this policy initiated the nationwide bargaining game between nontradable and tradable shareholders in all listed firms. It became common knowledge that the CEO and Chairman of the firm would bargain with tradable shareholders about the firm-level details, since they actually managed the firm. The exact role of each participant in the bargaining game (senior management, tradable shareholders, board of directors, regulation agencies, financial intermediations) remained unclear. This date is

---

<sup>8</sup><http://www.lawinfochina.com/law/displayModeTwo.asp?ID=4160&DB=1&keyword=>

defined as Event 1 in our study.

Second, on September 4, 2005, the CSRC issued the “Measures for the Administration of the Share-trading Reform of Listed Companies”.<sup>9</sup> Compared to the announcement on April 29, this announcement made relatively detailed requirements of listed firms’ ownership reform: the bargaining/reform procedure, principals governing setting up the reform plan, information disclosure of important news during this reform, and the role of financial intermediaries. At this time, the role of senior managers became much clearer since 37 firms had successfully carried out their reforms by this date, the details of which were publicized in the financial media. In addition, the potential agency problem within the public sector had been revealed by this date: market investors could analyze the outcomes for the firms that had completed their reform. Furthermore, this announcement made it very clear that senior managers were the main players in the bargaining game on behalf of nontradable shareholders. This date is defined as Event 2 in our study.

These two announcements were viewed by market participants in China as the two milestone policy announcements governing the nationwide reform among listed firms. As is generally the case for other macroeconomic policies in China, these policy announcements were unexpected by the market and there was no lobbying during this process, as described in Calomiris et al. (2009). In our study of the tradable stock price reaction to these events, we use two-day and one-day windows centered on the announcement dates themselves.

The third event studied in this paper is the firm-level announcement of the revision of reform plans. It is not possible to conduct an event study for a firm’s initial announcement of its reform plan since there was no trading at the announcement (or for days afterwards), as shown in Figure 1. Thus we look at the revision of the reform plan which is the first date on which we can investigate how market investors responded to the reform at the firm level. At the firm level, the reform plans are very likely to have been leaked during the long negotiation process since many economic agents were involved: law firms, investment banks, nontradable shareholders, management teams. To allow for this, we use [-15,1] and [-1,1] day windows to calculate abnormal event returns.

### 3 Data and empirical strategy

The firm-level compensation ratio data, CEO and chairman of board of directors’ holdings of nontradable and tradeable shares, top 10 (if any) nontradable shareholders’ shareholdings, top 10 tradable shareholder’s shareholdings and the proportion of total nontradable shares over outstand-

---

<sup>9</sup><http://www.lawinfochina.com/law/display.asp?db=1&id=4552&keyword=>

ing shares of the firm all come from each listed firm’s reform plan document.<sup>10,11</sup> Wind Information Corporation, a Shanghai-based provider of financial data for listed firms in China also provides some information on this nationwide reform, permitting a check of data accuracy. Data on CEO turnover after the reforms took place was also taken from WIND. Stock return data, ROA, the log of sales, the proportion of independent directors and senior managers’ compensation was gathered from the Corporate Governance database and the Financial Statements Database at CSMAR maintained by the Guo Tai An Information Technology Company (GTA) located in Shenzhen City.<sup>12</sup>

The compensation ratio is the main dependent variable of interest.<sup>13</sup> The denominator is the number of total shares that are tradable before the policy reform. The numerator is the number of total shares that were granted to the owners of tradable shares to compensate them for the supply side shock to the value of the shares they owned. State controlled firms make up 71.7% of our total sample. Summary statistics for the compensation ratio – along with the independent variables of interest and controls – for all firms, then for all state firms, and then for all state firms for which we could match city-level variables, are given in Table 1, panel A. There are 1086 firms that had passed the reform with a compensation ratio by July 18, 2007.<sup>14</sup> The mean compensation ratio was 0.305, the standard deviation 0.078. Among state controlled firms, the mean was 0.311 and the standard deviation was 0.064. Among the state controlled firms located in one of the 120 cities for which corruption measures are available, the mean is 0.309 and the standard deviation was 0.068.

The independent variables of interest include firm-level and city-level variables. First, is a variable indicating state control. It is equal to 1 if the firm’s controlling shareholder is a state bureau, as disclosed in the firm’s annual report. This data was gathered from annual reports downloaded from the Shanghai and Shenzhen stock exchange websites for the year prior to firm reform.

---

<sup>10</sup>CEO holdings of nontradable shares should have different incentive effects from holdings of tradable shares. Thus we collected this information manually based on each listed firm’s annual reports and its reform plan document. Standard databases such as Chinese Listed Firms Corporate Governance Database at CSMAR do not contain this subtle disaggregation of ownership information. All firm-level financial variables are pre-reform data unless otherwise mentioned.

<sup>11</sup>These documents are available online at [gqfz.p5w.net](http://gqfz.p5w.net).

<sup>12</sup>Part of the Corporate Governance database is now available through WRDS at Wharton School.

<sup>13</sup>Although both CSMAR and WIND provide compensation ratio information in their databases, Haveman and Wang (2009) show that they are not consistently defined and so instead collect these values by hand from each listed firm’s reform document. These hand-collected measures are used in this paper. The sample mean and standard deviation are very similar to the sample taken from WIND used in Li et al. (2008), as shown in their table 1.

<sup>14</sup>These firms account for 88% of the 1238 firms that have passed their reforms. (The 1238 firms account for 94% of all the listed firms that underwent this reform). The other 12% (i.e. 152 firms) used different means of compensating tradable shareholders: offering call or put warrants, guaranteeing stock buy-backs at pre-set prices, or cancelling a fraction of non-tradable shares. Late-reforming firms (i.e. those reforming after July 18, 2007) excluded from our analysis either had complex ownership structures (B, H, or N shares in addition to A shares and non-tradable shares) or performed poorly (“Special Treatment” firms).

The city-level measure of entertainment costs is taken from a 2004 survey conducted by the World Bank (published in 2006). It is the average firm-level proportion of sales spent on entertainment and travel in each of 120 cities.<sup>15</sup> The survey notes, on pages 13 to 14, that these expenditures can serve as a conduit for informal payments to officials.

A set of firm-level and city-level control variables, thought to have independent effects on compensation ratio, are used throughout the analysis. Firm-level controls related specifically to the reform are the fraction of nontradable shares, the proportion of independent directors, the concentration of the top 10 owners of nontradable shares and the concentration of the top 10 owners of tradable shares. The fraction of nontradable shares in the firm is predicted to have a positive effect on the compensation ratio since it measures the magnitude of the supply shock on the price of tradable shares. The proportion of independent directors is also predicted to have a positive effect on the compensation ratio since independent directors are thought to safeguard the interests of the minority shareholders. The concentration levels of the top 10 owners of tradables (nontradables) could be positively or negatively associated with bargaining outcomes. A high concentration ratio means fewer individuals each face a larger incentive to increase (decrease) the compensation ratio. On the other hand, a high concentration ratio suggests there are a few key individuals open to side payments leading to a decreased (increased) compensation ratio. We control for these effects to focus on the additional effects of agency among nontradables shareholders.

Other firm-level controls include the log of firm sales to proxy for size and the return on assets to proxy for performance. Also included is the time between the initial policy reform announcement and the firm-level bargaining agreement.

City-level controls include the log of GDP per capita and the log of city population. This data comes from the CSMAR Regional Economy Database. These variables may be correlated with local government preferences in some way. City fixed effects are included in some specifications. Table 1, panel B, presents pairwise correlation coefficients between the independent variable of interest and control variable for all firms and for state controlled firms. The entertainment costs variable is negatively correlated with both the log of GDP per capita and the log of city population, but the correlation coefficients are relatively small.

---

<sup>15</sup>This report also provides a city-level "property rights index", however, this index is a general contracting index which doesn't distinguish between government expropriation risk and the quality of private contracting institutions as in Acemoglu and Johnson (2005). Cull and Xu (2005) find that a third variable in some World Bank surveys, "government help", is positively associated with firm reinvestment decisions. However, this variable is not available in the 2004 round of the survey. For cities surveyed in both rounds, we found that this variable is negatively correlated with our variable of interest, "entertainment costs". That is, the inverse of "government help" is positively correlated with the "entertainment costs" index discussed here.

In each empirical specification, the unit of analysis is the firm. We conduct ordinary least squares regressions, with standard errors clustered at either the 3-digit SIC industry code or at the city level, using the compensation ratio and returns in tradable shares as the dependent variables of interest. For the analysis of CEO turnover, we use probit analysis where the dependent variable is equal to 1 if the CEO loses his position in the year following the firm-level reform. Since the initial policy announcement is exogenous to any one firm, and arguably unexpected by all, we attribute causality to significant coefficients.

## 4 The bargaining game in state controlled firms

The relative quality of vertical and horizontal institutions affects the extent to which minorities shareholders in state controlled and privately controlled firms are expropriated in the bargaining game. If local governments are more able or more inclined to expropriate minorities than are private citizens, we expect to see lower compensation ratio outcomes in state controlled firms than in privately controlled firms. The data reveals exactly the opposite. As will be discussed in section 4, the compensation ratio is higher for state controlled firms, even within-city. Li et al. (2008) exploit this relationship as the basis for their assumption that bargaining power is weaker for state controlled firms. We investigate variation in the compensation ratio within state controlled firms and infer that the result is due in part to agency within local governments.

There are three parties represented in the bargaining game for state controlled firms: the local government which is the controlling nontradables shareholder, the group of minority shareholders, and the government employed bureaucrat CEO. Figure 2 maps out the structure of the bargaining process. We describe the role played by each party in turn.

The local government has multiple potential goals, and we refrain from taking a stand on what these are and how they are weighed in the government's objective function. Jones et al. (1999) and Megginson and Netter (2001) describe empirical evidence of the political economy motivation for share issue privatizations. Instead, we derive some comparative static predictions for the association between the compensation ratio and city level characteristics attempting to control for variation in government objective function.

First, in cities where local governments exercise unilateral power due to poor quality vertical institutions, we hypothesize that relatively more weight is attached in the objective function to revenue maximization. If the World Bank's measure of entertainment costs proxies for the (in-

verse) of the quality of vertical institutions, this effect predicts a negative relationship between entertainment costs and compensation ratio. On the other hand, if entertainment costs measures the extent to which local officials can be influenced as suggested in the World Bank report, and minority shareholders are engaged in this form of influence, then we expect a positive relationship between entertainment costs and the compensation ratio. The first empirical contribution of this paper is to establish the nature of this relationship. To attribute causality in these predictions, entertainment costs must be uncorrelated with other city-level factors that have an independent effect on the government's objective function. Since this is unlikely, we include various city level controls in our analysis to attempt to isolate the role played by entertainment costs. Entertainment costs are positively related to the compensation ratio, raising the question of whether government agents are open to economic capture by minority shareholders.

Minority shareholders are the second party in the game. This group is better off with a higher compensation ratio. Higher compensation ratios means minority shareholders are compensated to a greater extent for the supply shock arising from the ownership reform. It is possible that this group is also subject to internal agency. For example, key tradables shareholders may be open to side payments from nontradables shareholders. For the purposes of this paper, we include the concentration of ownership of the tradable shares as a control variable in this paper and focus on the agency within government.

The third party in the bargaining game – and the focus of this paper – is the bureaucrat CEO, who faces multiple private costs and benefits. He is employed to represent the interests of the local government. Our data contain information on different private costs and benefits accruing to the bureaucrat CEO in the game. Table 1A shows that CEO shareholding of either type of share is not strongly correlated with city-level entertainments costs, or with any other of the firm or city-level control variables. When he owns shares of either type, the private incentives faced by the bureaucrat CEO are clear. He benefits from a lower compensation ratio if he owns nontradable shares and from a higher compensation ratio if he owns tradable shares. The second empirical contribution of the paper is to establish that private benefits resulting from CEO shareholdings are related to the outcome of the game. The larger the share of CEO nontradables shareholding, the smaller the compensation ratio, strengthening the suggestion that there is agency within the local government.

The bureaucrat CEO also receives a salary from the local government and his performance may have implications for his career trajectory within the bureaucracy. The possibility of agency arises

in the first place because we might think it hard to assess CEO ability and/or his effort, or hold him accountable for either, from the level of the compensation ratio achieved. Nonetheless, the CEO's salary and career path may be somehow affected by his outcome.

Focusing first on compensation, a higher salaried CEO may be higher ability, or be willing to exert more effort on behalf of his employer, or be less open to economic capture from minorities because he wants to retain his position – an efficiency-wage type argument. In simplified terms, higher salaries may offset agents' incentives to shirk or accept side payments from minorities. Alternatively, a higher salary may reduce the extent to which CEOs can be captured due to a diminishing marginal utility of income theory. Data on the turnover rate of CEOs after the firm-level reform allows us to establish whether job retention (in the short term) is affected by the bargaining game outcome. The third empirical result in this paper is that CEO compensation is positively related to the compensation ratio. However, the likelihood of CEO turnover is not related to the compensation ratio.

Svensson (2005) asks whether higher public sector wages are the solution to internal government corruption, as predicted under certain conditions in Becker and Stigler (1974). If bureaucrat CEOs' actions are more skewed toward their own private interests relative to those of the state in cities where bribery is rife, we expect to see CEO salary having a particularly strong effect on compensation ratios in cities with high entertainment costs. We examine whether there is an interaction effect between salary and city-level entertainment costs. Are poorly paid bureaucrats more open to economic capture where bribing of officials is common-place? The final result of our empirical section establishes that the marginal effect of CEO salary on the compensation ratio is negative only within high entertainment cost cities. This finding has two important implications. It suggests that bureaucrats are more responsive to private interests when entertainment costs (which proxy for internal government corruption and bribery) are generally high. It also suggests that in cities where such bribery is widespread, CEOs are more open to economic capture when salaries are low. For these poorly paid CEOs, acting against the interests of the government may be welfare enhancing if the government's objective is minority expropriation.

## 5 Results

### 5.1 Compensation Ratio

Table 2 shows that the compensation ratio for state controlled firms is significantly higher than for privately controlled firms. Column 2 includes controls for characteristics of the firm: firm size (proxied with the log of sales) and firm performance (proxied with ROA). Column 3 also includes factors reflecting aspects of the bargaining game: the percentage of nontradable shares, the concentration ratio of the top 10 owners of nontradable and tradable shares, and the fraction of independent directors. Columns 4 and 5 add controls for city-level factors: the logs of GDP per capita and population, and then city fixed effects. In each specification, state controlled firms are shown to have a compensation ratio which is 2 to 3 percent higher than privately controlled firms.

As has been documented elsewhere (for example, Li et al. (2008)), high performing firms – here measured by ROA – have smaller compensation ratios. The length of time taken to pass the firm-level reform is negatively associated with the resulting compensation ratio. The proportion of firm shares that were formerly nontradable has a positive effect on the compensation ratio, reflecting the magnitude of the supply shock experienced by the tradables shareholders. The concentration of nontradable shares among the top 10 tradable shareholders is negatively associated with the compensation ratio.

Table 3 examines variation in the compensation ratio among state controlled firms. Including the same controls as in table 2, we see that the World Bank’s city-level measure of entertainment and travel costs is positively associated with the compensation ratio. When the proportion of sales spent on entertainments cost is one percentage point higher, the firm’s compensation ratio is 1.6 percent greater. The World Bank suggests these costs correlate negatively with local government efficiency.

The share of independent directors for the firm is positively associated with the compensation ratio for state controlled firms. Independent directors of state controlled firms are thought to represent the interest of the minority shareholders, and serve to monitor the activities of the controlling shareholder. It is interesting to note that the concentration of ownership among the top 10 tradable and nontradable shareholders are negatively and positively associated with the compensation ratio, respectively. This suggests that key individuals within each group are not willing or able to bargain for outcomes that favor the interests of each group.

We now investigate further whether the positive association between the compensation ratio and

entertainment costs is due to bureaucrat agency. As described in section 4, the bureaucrat CEOs differ across firms in their private benefits from the outcome of the firm-level bargaining game. Columns 2 to 4 of table 4 show that CEO nontradable shareholding leads to a lower compensation ratio, suggesting that state bureaucrats do act in their private interest in the bargaining game. Entertainment costs continue to have a positive and significant influence on compensation ratios while CEO tradables shareholdings have a positive but insignificant effect.<sup>16</sup>

Columns 1 of table 4 reveals the fact that higher salaried executives obtain lower compensation ratios. This could be because CEO salary is (a) positively correlated with ability or (b) positively correlated with the CEO's incentives to retain their position, or (c) negatively correlated with the CEO's receptiveness to economic capture. Columns 5 and 6 of table 4 offer evidence consistent with (b) or (c). The interaction of entertainment costs and CEO salary is negative and significant and the coefficient on CEO compensation is now positive and insignificant. This suggests that higher paid CEOs are representing the interests of their employer only in cities where governments are more corrupt. It is unlikely that bureaucrats in these cities are systematically higher ability.<sup>17</sup>

Bureaucrat CEO's behavior may be influenced by personal career concerns, as suggested in reason (b) given above for the relationship between CEO salary and outcome. The results of a probit analysis given in table 5 show that there is no significant relationship between the probability of CEO turnover in the year following the firm-level reform and the compensation ratio achieved. In column 5, we see that the coefficient on the relationship between compensation ratio and turnover is positive but not significant. We also note that the interaction between entertainments costs and compensation ratio is negative, so higher compensation ratios are less likely to lead to turnover in the most corrupt cities, but this coefficient is insignificant. These findings suggest that the ex post likelihood of retaining the CEO position is not closely related to the bargaining game outcome, although the threat of turnover may play a role in CEO behavior ex ante. Taken together, the results for CEO salary and turnover suggest that higher paid CEOs achieve lower compensation ratios because of reason (c), they are less open to economic capture by minorities.

---

<sup>16</sup>CEOs of listed firms in China generally hold a very small fraction of tradable shares. It is hence unsurprising to see that the effect of tradables held by CEOs on compensation ratio is not significant. CEOs of state-controlled firms hold very few tradable shares at least for two reasons. First, they may be wary of signalling an intention to carry out a management buy out. This would be frowned upon by the government which is concerned about protecting state assets. Second, they seek to above suspicion of insider trading. In section 6, we discuss the possibility that relatives of the bureaucrat CEO may, nonetheless, own tradable shares.

<sup>17</sup>Due to high levels of multicollinearity, it is not possible to run similar regressions including the interaction of CEO shareholdings and entertainment costs. A regression including entertainment cost interacted with CEO shareholdings, including the entertainment costs variable, but excluding the level of CEO shareholding, generates a negative and significant coefficient on the interaction term.

## 5.2 Event Studies

The event study analysis corroborates our interpretation of the results in the previous subsection. We analyze the response of returns in tradable shares to the three separate events described in section 2. The first event is the announcement made by the central government on April 29, 2005 about the policy reform. This outlined the reform process in relatively vague terms. While the details were unclear, it was understood that the group of nontradables shareholders and the group of tradables shareholders would have to bargain over an agreement. When the bureaucrat CEO faced private incentives to push for a lower compensation ratio because he owned nontradable shares, this fact is reflected in the response of tradable share prices to this announcement. Table 6 shows that traded shares showed abnormal negative returns over different windows centered on the announcement date when the state bureaucrat owned nontradable shares. We also note that CEO holdings of tradable shares affects returns positively, which is again consistent with the market anticipating the agency issue for CEOs implementing policy on behalf of local governments. There is no association between entertainment costs and changes in returns following this announcement, possibly due to the reason that market investors have no information about the internal conflicts within the local government at that time.

The second event took place on September 4, 2005 and was a central government announcement of more detailed reform plans. The response of traded shares of state controlled firms to this announcement is given in table 7. State controlled firms where the CEO owned nontradables experienced a further negative abnormal return in response to this announcement, although smaller in magnitude. Firms in cities with high entertainment costs showed a small but significant positive abnormal return at the same time. This could reflect how completed firm reforms have been gradually revealing the presence of agency conflicts within the public sector to market investors.

The firm-level announcement of the details of the revision of their own reforms led to further abnormal returns in the tradables shares. These announcements took place at different times after September 4, 2005. As seen in table 8, firms located in cities with a high entertainment cost index saw positive returns, although only significant at low levels. This confirms the idea that state bureaucrats in these cities were expected to bargain less well on behalf of the state owners.<sup>18</sup> These findings provide some support for bureaucrat agency. CEO shareholding of either nontradables or tradables is no longer associated with returns in this event. This suggests information regarding their

---

<sup>18</sup>It may also reflect how minority shareholders update their beliefs about the longer term benefits that will accrue to them due to agency within the public sector.

private interest from remuneration had already been fully incorporated into share prices following the first two events.

## 6 Robustness tests and alternative explanations

### 6.1 Corruption has no association with the compensation ratio in privately controlled firms.

The city-level entertainment costs index is used to proxy for the quality of the local government. We therefore expect it to be unrelated to the outcome of the policy bargaining game for privately controlled listed firms. In contrast, the compensation ratio agreed by owners and tradable and nontradables shares is the outcome of bargaining game between private individuals and is likely to be influenced by the quality of "horizontal institutions" (Acemoglu and Johnson, 2005) in the relevant city. Table 9 examines the city level factors associated with compensation ratios for privately controlled firms.

Columns 1 to 4 of table 9 confirm that the entertainment costs index is unrelated to the compensation ratio in privately controlled firms. In each case the relevant coefficient is negative and insignificant. If anything, then, more city-wide corruption leads to lower compensation ratios in privately controlled firms. Columns 2 to 4 show that CEO compensation and tradable shareholding is also generally negatively associated with the compensation ratio in private firms.<sup>19</sup> This finding serves to undermine the suggestion that there is some omitted variable correlated with both entertainment costs and CEO private interests across all firms which serves to explain our findings for state controlled firms. It also suggests that while there may certainly be agency problems at work in the bargaining game between private individuals (see Wang, 2009), they look very different than for state controlled firms.

The next five columns of table 9 examine the relationship between the quality of city-level contracting institutions and compensation ratios achieved in privately controlled firms. These measures of institutional quality are taken from the World Bank (2006) or from Cull and Xu (2005).<sup>20</sup> The

---

<sup>19</sup>We note that privately controlled listed firms are in general run by the controllers themselves. The main agency problem within privately controlled firms with high ownership concentration is the conflict of interest between the controlling shareholder and the minority shareholders. (See Morck et al (2005) for a survey). In privately controlled firms with very diversified ownership, the main agency problem is between the shareholders and the CEO. This difference means compensation may measure CEO private incentives with error in this sample.

<sup>20</sup>The 2004 World Bank survey includes a different set of indicators than in the 2003 World Bank survey used in Cull and Xu (2005).

quality of the courts is positively associated with the compensation ratio, suggesting more favorable outcomes for minority shareholders when local contracting institutions are higher quality.<sup>21</sup> Further when we replicate event study 1 for privately controlled firms, we find that this institutional variable has a significant positive effect on returns. This indicates that market investors expect to fare better from this reform when firms are located in a city with higher quality private contracting institutions.

Conversely, the quality of local contracting institutions for private individuals is predicted to have no association with the bargaining outcome in state controlled firms. The final column of table 9 shows that the compensation ratio for state controlled firms is unrelated to the court solving variable.

## **6.2 Other city-level factors are unrelated to variation in the compensation ratio**

Next we explore possible alternative explanations for the findings in section 4. It is possible that variation in local government objectives regarding the reform is correlated with variation in entertainment costs. We have included city-level population and GDP per capita in all the main regressions in case these variables are related to both the ideal compensation ratio from the point of view of the state and the measures of government corruption. The local government's objective function may also be affected by the relative importance of each state controlled firm to the local economy. We re-run all the specifications including the percentage of all firms that are privately controlled in the city as a control variable, using data from the same World Bank survey. Including this variable does not qualitatively change our main results.

A further concern is that internally corrupt governments may be more likely to agree to a high compensation ratio because of competition for capital among local governments (see Qian and Roland (1998) and Montinola et al. (1995) among many others) rather than because of bureaucrat agency. According to this theory, a more corrupt local government may want to signal to outside investors through this reform that it is going to treat them better in the near future.<sup>22</sup> We conduct additional tests to investigate this possibility. First, under this hypothesis, we expect that cities

---

<sup>21</sup>This is not inconsistent with Acemoglu and Johnson (2005) or Cull and Xu (2005). Private contracting institutions matters in our context mainly because this nationwide reform is a shock for all firms. Thus it is difficult for tradable shareholders in privately controlled firms to take any actions before this reform to buffer themselves against private expropriation.

<sup>22</sup>Theoretically this is very possible given the fiscal decentralization in China. Cai and Treisman (2006), however, find little empirical evidence of local government competition of this form.

with lower GDP growth in the past 5 years (or 3 years) should have a stronger incentive to set higher compensation ratios to attract more investment. We collect city-level GDP data from the CSMAR Regional Economy database and for each city calculate GDP growth in the past 5 years (and 3 years) before the reform. This variable has no effect (t-value equal -0.71) on the compensation ratio. We also interact GDP growth with entertainment costs. Under the local government competition hypothesis, we expect a negative effect of this interaction term on compensation ratio. However, the coefficient on this variable is not significantly different from zero (with a t-value -1.39).

We next examine the impact of the city-level fiscal deficit on compensation ratios. While a large fiscal deficit may create a short term incentive to expropriate, a less myopic local government with large fiscal deficit might have a much stronger incentive to set higher compensation ratios to attract outside investment so as to collect more taxes in the future. Again this city-level variable, defined as average fiscal deficits deflated by GDP of that city in the past 5 (or 3) years, has no effect on compensation ratio (t-value for 5 years = -1.24). We also look at the interaction term between the fiscal deficit and entertainment costs, and find that it has no impact on compensation ratio (t-value for 5 years = 0.31). Although these tests are unable to rule out the local government competition hypothesis, our empirical evidence regarding bureaucrat CEO private interests favors the agency within the public sector hypothesis.

A second alternative explanation for why an internally corrupt local government might nonetheless set a high compensation ratio is if they are behaving strategically in order to extract rents from investors via some other channels. This explanation, however, cannot explain why CEO remuneration-related variables should play any role in determining the compensation ratio. More importantly, tradable shareholders are free to leave the market at any time (compared to firms with large fixed assets located within the jurisdiction of a given local government), limiting other possible channels for minority shareholder expropriation.

A third alternative is that tradable shareholders in cities with poor quality vertical institutions may be more likely to be politically connected. For example, it may be that individual investors may be related to local government officials. If this is the case, the results shown in section 5 could reflect tunneling directly from the government to the agent's relatives. We have two comments about this hypothesis. First, tradable shareholders are very diversified. If government officials did seek to tunnel revenues to family members, it would be more effective for them to choose a different channel by which to do so such as providing insider information. Second, we may then expect that the interaction of individual ownership among top 10 tradable shareholders with entertainment

costs has a positive effect on compensation ratio, all else equal.<sup>23</sup> However, the coefficient on this interaction term is negative and also insignificant (t-value=-0.61).

### 6.3 The findings are robust to different estimation specifications

Our final set of robustness tests explore the choice of estimation methodology. We winsorize the main dependent variable – the compensation ratio – at both the 1% percentile and the 99% percentile to rule out the possibility that extreme observations drive our results. The results of these robustness tests, and others not presented in the accompanying tables, are available on request.

## 7 Conclusion

This paper examines firm-level outcomes of a bargaining game between local governments and private agents. An exogenous policy shock in 2005 encouraged state controlled listed Chinese firms to convert all nontradable shares to tradable shares. The bargaining game took place between owners of tradable and nontradable shares, and both parties had to agree to the terms of the reform. For state controlled firms, the largest owner of nontradable shares was the local government. The government bureaucrat employed by the state as CEO was responsible for representing the government’s interest in this game, hence representing the nontradable shareholders.

The main outcome of interest is the compensation ratio, designed to compensate owners of tradable shares for the supply shock to the value of their assets. All else equal, the nontradables shareholders preferred a lower compensation ratio whereas the tradables shareholders were better off with a higher compensation ratio. Our results show that compensation ratios were higher for state controlled firms than for privately controlled firms. Moreover, compensation ratios for state controlled firms located in cities with poor quality governments were significantly higher than for other state controlled firms. These local governments were actually less likely to expropriate minority shareholders in this contract renegotiation.

The bureaucrat CEO faces private costs and benefits associated with policy implementation. There is evidence that compensation ratios were lower when the CEO’s private incentives were aligned with the local government’s incentives. The relationship between private benefits and lower compensation ratios is particularly strong for firms in cities where bribery is common-place. This

---

<sup>23</sup>We look at individual ownership within the top 10 tradable shareholders because: the incentive for local government officials to set a high compensation ratio to benefit their relatives is reduced if their relatives’ holdings of tradable shares are very low; and second, we only observe individual ownership for the top 10 tradable shareholders.

suggests the bureaucrat CEO was more likely to act in his own interests when the local institutional environment was generally low quality. Evidence from event studies reinforces these findings. Minority shareholders expect to receive a lower compensation ratio, and hence experience negative abnormal returns, if the bureaucrat CEO faces private incentives to bargain harder for a lower compensation ratio. Controlling for CEO shareholdings, minority returns are positively affected by the key events of interest when the firm is located in a city where bribery is widespread. This suggests that minorities expect to be able to capture the bureaucrat in these settings.

Minority shareholders fare better in this reform when the firm is located in a city with high entertainment costs, that is, where internal government corruption implies bureaucrats are receptive to bribes. We infer that an internally corrupt government is less able to expropriate, even when it would like to do so, since its employees are more susceptible to agency. The owners of tradable shares could be described as institutional entrepreneurs (Li et al. (2006)). Expenditure on entertainment allows entrepreneurs to capture the bureaucrat when the bureaucrat is part of a corrupt institution. Acemoglu and Johnson (2005) suggest that poor quality vertical institutions are particularly harmful to economic outcomes since government power is absolute. Consistent with the hypothesis of "efficient corruption" put forward by Leff (1964), we show that mechanisms exist to mitigate the potentially negative economic effects of poor quality vertical institutions. In this empirical setting, absolute power corrupts absolutely in the sense that individual bureaucrats are more likely to pursue their own interest within a corrupt government.

## References

- [1] Acemoglu, Daron, and Simon Johnson. 2005. Unbundling Institutions. *Journal of Political Economy*, 113(5), 949-995.
- [2] Banerjee, Abhijit, Rema Hanna, and Sendhil Mullainathan. 2009. Corruption. MIT Economics Department Working Paper.
- [3] Bardhan, Pranab. 1997. Corruption and Development: A Review of Issues. *Journal of Economic Literature*, 35(3), 1320-1346.
- [4] Becker, Gary, and George Stigler. 1974. Law Enforcement, Malfeasance and the Compensation of Enforcers. *Journal of Legal Studies*, 3(1), 1-19.
- [5] Cai, Hongbin, Hangming Fang, and Lixin Colin Xu. 2005. Eat, Drink, Firms and Government. An Investigation of Corruption from Entertainment and Travel Costs of Chinese Firms. NBER Working Paper 11592.
- [6] Cai, Hongbin and Daniel Treisman. 2006. Did Decentralization Cause China's Economic Miracle?, *World Politics*, 58:505-535.
- [7] Calomiris, Charles, Raymond Fisman, and Yongxiang Wang. 2009. Profiting from government stakes in a common economy: Evidence from Chinese asset sales. Forthcoming, *Journal of Financial Economics*.
- [8] Cull, Robert, and Lixin Colin Xu. 2005. Institutions, ownership, and finance: the determinants of profit reinvestment among Chinese firms, *Journal of Financial Economics*, 77, 117-146.
- [9] De Soto, Hernando. 1989. *The Other Path*. New York: Harper and Row.
- [10] Fisman, Raymond, and Yongxiang Wang. 2009. The impact of corruption on state asset sales: Evidence from China. Columbia Business School Working paper.
- [11] Haveman, Heather and Yongxiang Wang. 2009. Going (more) public: Ownership Reform among Chinese Firms. Columbia Business School Working paper.
- [12] Huntington, Samuel P. 1968. *Political Order in Changing Societies*. New Haven: Yale University Press.

- [13] Jones, Steven L., William L. Megginson, Robert C. Nash and Jeffrey M. Netter, 1999. Share issue privatizations as financial means to political and economic ends. *Journal of Financial Economics*, 53(2), 217-253.
- [14] Leff, Nathaniel. 1964. Economic Development through Bureaucratic Corruption. *American Behavioral Scientist*, 8(3), 8-14.
- [15] Li, David Daokui, Junxin Feng, and Hongping Jiang. 2006. Institutional Entrepreneurs, *American Economic Review*, 96(2), 358-362.
- [16] Li, Kai, Tan Wang, Yan-leung Cheung, and Ping Jiang. 2008. Privatization and risk sharing: Evidence from the split share structure reform in China, University of British Columbia Working Paper.
- [17] Mauro, Paolo. 1995. Corruption and Growth. *The Quarterly Journal of Economics*, 110(3), 681-712.
- [18] Megginson, William L. and Jeffrey M. Netter. 2001. From State to Market: A Survey of Empirical Studies on Privatization. *Journal of Economic Literature*, 9(2), 321-389.
- [19] Montinola, Gabriella, Yingyi Qian, and Barry R. Weingast. 1995. Federalism, Chinese Style: The Political Basis for Economic Success. *World Politics*, October, 48(1), pp.50-81.
- [20] Morck, Randall, Daniel Wolfenzon, and Bernard Yeung. 2005. Corporate governance, economic entrenchment, and growth. *Journal of Economic Literature*. 43, 655-720.
- [21] North, Douglass. 1981. *Structure and Change in Economic History*. New York: Cambridge University Press
- [22] Qian, Yingyi and Gérard Roland. 1998. Federalism and the Soft Budget Constraint. *American Economic Review*, 88(5), pp.1143-62.
- [23] Rose-Ackerman, Susan. 1978. *Corruption: A Study in Political Economy*. Academic Press, State New York.
- [24] Rose-Ackerman, Susan. 1999. *Corruption and Government*. Cambridge University Press, Cambridge, UK.
- [25] Svensson, Jakob. 2005. Eight Questions about Corruption. *Journal of Economic Perspectives*, 19, 19-42.

- [26] Tirole, Jean. 1994. The Internal Organization of Government. *Oxford Economic Papers*, 46(1), 1-29.
- [27] Transparency International Corruption Index 2000. [http://www.transparency.org/policy\\_research/survey](http://www.transparency.org/policy_research/survey)
- [28] Wang, Yongxiang. 2009b. Agency, Bargain Structure and Bargain Outcome: Firm-level Evidence from Contract Renegotiations. Columbia Business School Working Paper.
- [29] World Bank. 2006. *China. Governance, Investment Climate, and Harmonious Society: Competitive Enhancements for 120 Cities in China*. Report No. 37759-CN.
- [30] Wu, Xiaoqiu. 2004. *China Capital Market: Ownership Split and Liquidity Reform (Zhongguo Ziben Shichang: Guquan Fenli He Liudongxing Biange)*. Renmin University Press, Beijing, China.

## Figure 1: The Event Tree

Announcement of the first reform plan  
(stock stops trading)



Announcement the revised reform plan  
(stock resumes trading)



Stock stops trading again. Ownership  
registration takes place, and then  
tradable shareholders vote.



Announcement of voting results and  
stock resumes trading.

# Figure 2: The Bargaining Game Structure for a State Controlled Firm

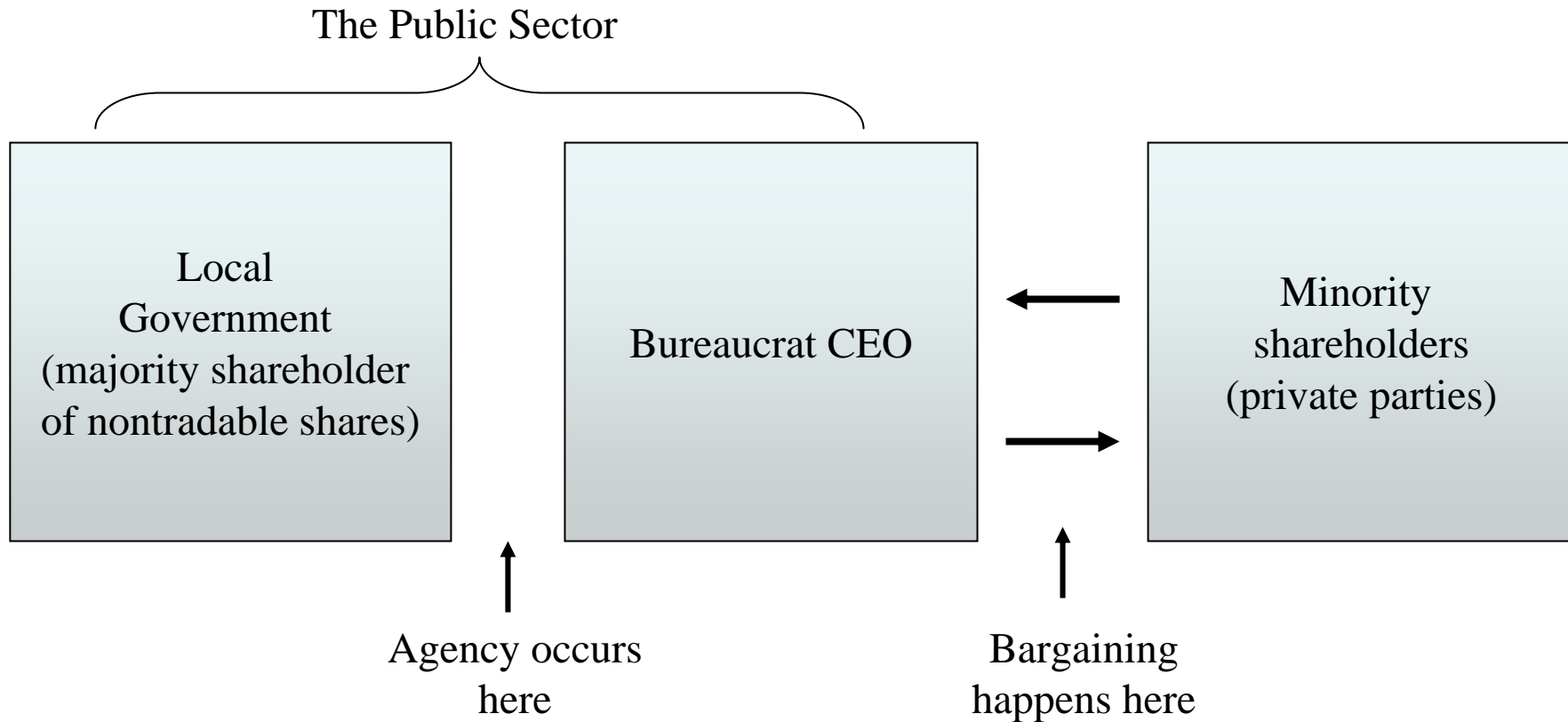


Table 1A - Summary Statistics

All Firms					
Variable	Mean	SD	Min	Max	Obs
CR	0.305	0.078	0.050	1.270	1086
Entertainment costs	1.164	0.457	0.300	2.400	911
CEO Salary*100	0.042	0.057	0.000	1.117	1058
CEO NT-shares*100	0.561	3.288	0.000	35.521	1067
CEO T-shares*100	0.005	0.025	0.000	0.490	1067
Ind-Directors	0.342	0.048	0.000	0.667	1072
Log(Sales)	20.609	1.326	13.609	27.407	1084
ROA	0.013	0.101	-1.459	0.707	1086
Nontradables	0.613	0.110	0.211	0.944	1085
Log(Time)	5.828	0.407	3.892	6.697	1086
Top10_NT	0.600	0.274	0.049	1.000	1086
Top10_T	0.006	0.030	0.000	0.786	1086
Log(GDP/Capita)	9.494	0.619	7.800	10.511	911
Log(Population)	6.491	0.646	4.840	7.927	911
State Dummy	0.717	0.451	0.000	1	1086

State-controlled Firms					
Variable	Mean	SD	Min	Max	Obs
CR	0.311	0.064	0.050	0.700	779
Entertainment costs	1.171	0.434	0.300	2.400	652
CEO Salary*100	0.036	0.043	0.000	0.597	761
CEO NT-shares*100	0.054	0.848	0.000	21.135	769
CEO T-shares*100	0.003	0.012	0.000	0.160	769
Ind-Directors	0.338	0.047	0.000	0.667	773
Log(Sales)	20.800	1.277	15.818	27.407	778
ROA	0.020	0.073	-0.433	0.707	779
Nontradables	0.614	0.108	0.211	0.944	778
Log(Time)	5.861	0.370	4.094	6.697	779
Top10_NT	0.649	0.273	0.094	1.000	779
Top10_T	0.006	0.034	0.000	0.786	779
Log(GDP/Capita)	9.479	0.626	7.800	10.511	652
Log(Population)	6.543	0.632	4.840	7.927	652
CAR[-1, 1]: Event 1	-0.046	0.054	-0.299	0.147	766
CAR[ 0, 1]: Event 1	-0.034	0.044	-0.199	0.169	766
CAR[-1, 1]: Event 2	0.004	0.036	-0.076	0.222	776
CAR[ 0, 1]: Event 2	-0.006	0.030	-0.071	0.202	776
CAR[-30,1]: Event 3	0.076	0.145	-0.483	0.656	777
CAR[-15,1]: Event 3	0.067	0.121	-0.415	0.533	777
CAR[-1, 1]: Event 3	0.047	0.089	-0.355	0.299	777

State-controlled Firms with matched World Bank city-level index					
Variable	Mean	SD	Min	Max	Obs
CR	0.309	0.068	0.050	0.700	653
Entertainment costs	1.171	0.434	0.300	2.400	651
CEO Salary*100	0.038	0.045	0.000	0.597	637
CEO NT-shares*100	0.063	0.924	0.000	21.135	646
CEO T-shares*100	0.003	0.011	0.000	0.160	646
Ind-Directors	0.338	0.047	0.083	0.667	648
Log(Sales)	20.843	1.272	16.916	27.407	651
ROA	0.020	0.075	-0.433	0.707	652
Nontradables	0.612	0.111	0.211	0.944	651
Log(Time)	5.865	0.354	4.585	6.644	652
Top10_NT	0.645	0.272	0.094	1.000	652
Top10_T	0.007	0.037	0.000	0.786	652
Log(GDP/Capita)	9.480	0.626	7.800	10.511	651
Log(Population)	6.544	0.632	4.840	7.927	651
CAR[-1, 1]: Event 1	-0.046	0.055	-0.299	0.147	644
CAR[ 0, 1]: Event 1	-0.034	0.045	-0.199	0.169	644
CAR[-1, 1]: Event 2	0.004	0.036	-0.076	0.222	650
CAR[ 0, 1]: Event 2	-0.006	0.030	-0.071	0.202	650
CAR[-30,1]: Event 3	0.076	0.148	-0.483	0.656	650
CAR[-15,1]: Event 3	0.066	0.123	-0.415	0.533	650
CAR[-1, 1]: Event 3	0.049	0.090	-0.236	0.299	650

Notes: CR is the compensation ratio, defined as the ratio of shares former tradable shareholders get for free from former nontradable shareholders over former total tradable shares; Entertainment costs is a city-level corruption/government expropriation index from World Bank (2006); CEO Salary is total cash and bonus senior managers get scaled by total assets; CEO NT-shares is the proportion of nontradable shares held by senior managers; CEO T-shares is the proportion of tradable shares held by senior managers; Ind-Directors is the proportion of independent directors among all directors; Log(Sales) is the log value of total sales before the reform for each firm; ROA is the ratio of net profits (after taxes) over total assets before the reform; Nontradables is the proportion of nontradable shares over total shares; Log(Time) is the log value of time the firm takes to complete its reform relative to April 29, 2005 when this nationwide reform was allowed by the central government; Top10\_NT is the ownership concentration of top 10 nontradable shareholders (if any) among nontradable shares; Top10\_T is the ownership concentration of top 10 tradable shareholders among all the tradable A-shares; Log(GDP/Capita) is the log value of GDP per capita of each city; Log(Population) is the log value of total population of each city; CARs are cumulative abnormal event returns over

**Table 1B - Summary Statistics, Pairwise Correlations**

**State-controlled Firms**

	Entertainment costs	CEO Compensation	CEO NT-shares	CEO T-shares	Ind-Directors	Log(Sales)	ROA	Nontradables	Log(Time)	Top10_NT	Top10_T	Log(GDP/Capita)
CEO Salary	-0.0316											
CEO NT-shares	-0.0071	0.0656										
CEO T-shares	-0.0926	0.0852	-0.0173									
Ind-Directors	-0.0791	0.0378	0.0036	0.0186								
Log(Sales)	-0.1106	-0.3547	-0.0535	-0.0034	0.0568							
ROA	-0.1019	-0.0357	0.0382	0.0018	0.0700	0.2535						
Nontradables	0.0544	0.0351	0.0478	-0.1259	0.0208	-0.0113	0.1265					
Log(Time)	0.0519	0.0879	-0.0756	-0.0775	-0.0664	-0.1546	-0.3102	-0.1185				
Top10_NT	-0.0447	-0.1525	-0.0791	-0.0023	0.0094	0.1952	-0.0129	-0.0679	-0.1798			
Top10_T	0.0340	-0.0077	0.0153	-0.0167	0.0095	0.0529	0.0481	-0.0346	0.0300	0.0227		
Log(GDP/Capita)	-0.1982	0.1133	0.0245	0.0031	0.1494	0.1556	0.1150	0.0104	-0.1558	-0.0190	-0.0170	
Log(Population)	-0.0178	0.0152	0.0112	-0.0250	0.0242	0.0759	0.0456	0.0995	-0.0761	0.0533	-0.0023	0.3054

**All Firms**

	Entertainment costs	CEO Compensation	CEO NT-shares	CEO T-shares	Ind-Directors	Log(Sales)	ROA	Nontradables	Log(Time)	Top10_NT	Top10_T	Log(GDP/Capita)
CEO Salary	-0.0531											
CEO NT-shares	-0.0318	0.1193										
CEO T-shares	-0.0161	-0.0005	-0.0322									
Ind-Directors	-0.0622	0.0819	0.0719	0.0031								
Log(Sales)	-0.0828	-0.3676	-0.053	0.0491	-0.0387							
ROA	-0.0712	-0.1252	0.0669	0.0157	-0.0279	0.3017						
Nontradables	0.0187	0.0961	0.1495	-0.1145	0.019	-0.0442	0.0883					
Log(Time)	0.0656	0.0206	-0.2821	-0.0373	-0.0695	-0.1126	-0.3326	-0.1779				
Top10_NT	-0.0199	-0.2179	-0.1937	0.0801	-0.0277	0.2603	0.0069	-0.1001	-0.0537			
Top10_T	0.0249	0.0023	0.0215	-0.0095	0.0039	0.0595	0.0471	-0.0266	0.0279	0.0206		
Log(GDP/Capita)	-0.2367	0.1446	0.0511	0.0142	0.1199	0.1134	0.0504	0.0079	-0.1297	-0.0211	-0.0204	
Log(Population)	-0.0668	-0.0137	-0.0153	-0.0027	0.0091	0.0904	0.0484	0.0878	-0.0247	0.0674	0.0077	0.2536

**Table 2 - Regressions of compensation ratio on the state-controlled indicator variable**

	Dependent Variable: CR				
	(1)	(2)	(3)	(4)	(5)
State-controlled	0.019*** (0.006)	0.032*** (0.007)	0.029*** (0.007)	0.026*** (0.008)	0.023*** (0.008)
ROA		-0.118** (0.047)	-0.128*** (0.043)	-0.162*** (0.049)	-0.159*** (0.049)
Log(Sales)		-0.004** (0.002)	-0.003 (0.002)	-0.001 (0.002)	-0.002 (0.003)
Log(Time)		-0.054*** (0.007)	-0.041*** (0.007)	-0.044*** (0.008)	-0.038*** (0.009)
Ind-directors			0.057 (0.053)	0.064 (0.061)	0.064 (0.067)
Nontradables			0.277*** (0.022)	0.271*** (0.024)	0.282*** (0.027)
Top10_NT			0.014 (0.011)	0.017 (0.012)	0.019 (0.015)
Top10_T			-0.195*** (0.054)	-0.185*** (0.049)	-0.167*** (0.046)
Log(GDP/Capita)				0.004 (0.004)	
Log(Population)				0.006* (0.003)	
Fixed Effects	No	No	Industry	Industry	Industry&City
Observations	1086	1084	1069	897	1060
R-squared	0.01	0.10	0.25	0.25	0.37

Notes: The dependent variable CR, compensation ratio, is the number of total shares given to tradables shareholders from the nontradables shareholders over all tradable A-shares before this compensation; State-controlled is a dummy variable indicating whether the listed firm is controlled by the state; ROA is the ratio of net profits over total assets in the previous year; Log(Sales) is the log value of total sales in the previous year; Log(Time) is the log value of reforming time at the firm level, where the ending point is the day when the firm passed its reform plan and the starting point is April 29, 2005; Log(GDP/Capita) is the log value of GDP per capita of each city; Log(Population) is the log value of total population of each city. Standard errors are in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 3 - Effects of entertainment costs on compensation ratio in state controlled firms**

	Dependent variable: CR		
	(1)	(2)	(3)
Entertainment costs	0.016*** (0.005)	0.016*** (0.005)	0.016*** (0.005)
Log(Sales)	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)
ROA	-0.204*** (0.061)	-0.204*** (0.068)	-0.204*** (0.062)
Ind-Directors	0.108** (0.054)	0.108** (0.051)	0.108* (0.059)
Log(Time)	-0.040*** (0.007)	-0.040*** (0.007)	-0.040*** (0.008)
Nontradables	0.243*** (0.026)	0.243*** (0.030)	0.243*** (0.027)
Top10_NT	0.019** (0.009)	0.019** (0.008)	0.019** (0.008)
Top10_T	-0.171*** (0.034)	-0.171*** (0.029)	-0.171*** (0.034)
Log(GDP/Capita)	0.003 (0.004)	0.003 (0.005)	0.003 (0.004)
Log(Population)	0.008* (0.004)	0.008* (0.005)	0.008* (0.004)
Clustering At Which Level	No	City	SIC-2
Industry Effect	Yes	Yes	Yes
Observations	647	647	647
R-squared	0.30	0.30	0.30

Notes: The dependent variable CR, compensation ratio, is the number of total shares given to tradables shareholders from the nontradables shareholders over all tradable A-shares before this compensation; Independent Directors is the ratio of independent directors over all the directors of the focal firm; Entertainment costs is a city-level index based on the survey by World Bank (2006), which reflects the general corruption atmosphere in the city where the focal firm is headquartered; ROA is the ratio of net profits over total assets in the previous year; Log(Sales) is the log value of total sales in the previous year; Log(Time) is the log value of reforming time at the firm level, where the ending point is the day when the firm passed its reform plan and the starting point is April 29, 2005. Nontradables is the percentage of non-tradable shares; Log(GDP/Capita) is the log value of GDP per capita of each city; Log(Population) is the log value of total population of each city. Standard errors are given in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1% .

**Table 4 - Regressions of compensation ratio on CEO compensation and entertainment costs in state controlled firms**

	Dependent Variable: CR					
	(1)	(2)	(3)	(4)	(5)	(6)
CEO Salary	-8.201*		-8.641**	-8.641*	10.061	10.061
	(4.708)		(4.267)	(4.607)	(10.126)	(8.861)
CEO nontradable shareholdings		-0.206**	-0.185**	-0.185*	-0.186**	-0.186*
		(0.099)	(0.080)	(0.093)	(0.079)	(0.095)
CEO tradable shareholdings		28.345	24.770	24.770	25.450	25.450
		(25.134)	(33.751)	(23.536)	(35.319)	(25.018)
Ind-Directors	0.105**	0.115**	0.113*	0.113**	0.114*	0.114**
	(0.052)	(0.050)	(0.058)	(0.050)	(0.057)	(0.050)
Entertainment costs	0.015***	0.016***	0.015***	0.015***	0.021***	0.021***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)
Entertainment costs *CEO Salary					-16.638*	-16.638*
					(9.005)	(9.683)
Log(Sales)	-0.000	0.000	-0.000	-0.000	-0.000	-0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Log(Time)	-0.042***	-0.039***	-0.040***	-0.040***	-0.040***	-0.040***
	(0.008)	(0.007)	(0.010)	(0.008)	(0.009)	(0.008)
ROA	-0.223***	-0.200***	-0.218***	-0.218***	-0.214***	-0.214***
	(0.066)	(0.068)	(0.062)	(0.067)	(0.062)	(0.067)
Nontradables	0.241***	0.244***	0.242***	0.242***	0.243***	0.243***
	(0.030)	(0.031)	(0.029)	(0.031)	(0.029)	(0.031)
Top10_NT	0.017**	0.020**	0.018**	0.018**	0.017**	0.017**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Top10_T	-0.170***	-0.170***	-0.170***	-0.170***	-0.174***	-0.174***
	(0.027)	(0.028)	(0.033)	(0.027)	(0.034)	(0.027)
Log(GDP/Capita)	0.003	0.003	0.003	0.003	0.002	0.002
	(0.005)	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)
Log(Population)	0.008*	0.008*	0.008*	0.008*	0.009*	0.009*
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
Clustering at which level	City	City	SIC-2	City	SIC-2	City
Observations	636	644	633	633	633	633
R-squared	0.30	0.30	0.30	0.30	0.30	0.30

Notes: The dependent variable CR, compensation ratio, is the number of total shares given to tradables shareholders from the nontradables shareholders over all tradable A-shares before this compensation; CEO Compensation is total cash and bonus senior managers get scaled by total assets; Independent Directors is the ratio of independent directors over all the directors of the focal firm; Entertainment costs is a city-level index based on the survey by World Bank, which reflects the general corruption atmosphere in the city where the focal firm is headquartered; ROA is the ratio of net profits over total assets in the previous year; Log(Sales) is the log value of total sales in the previous year; Log(Time) is the log value of reforming time at the firm level, where the ending point is the day when the firm passed its reform plan and the starting point is April 29, 2005. Nontradables is the percentage of non-tradable shares. Log(GDP/Capita) is the log value of GDP per capita of each city; Log(Population) is the log value of total population of each city. Standard errors are given in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\*

**Table 5 - Effects of compensation ratio on managerial turnover in state-controlled firms**

	Dependent variable: Turnover Dummy				
	(1)	(2)	(4)	(4)	(5)
Log(Sales)	-0.036 (0.024)	-0.036 (0.024)	-0.061** (0.030)	-0.038 (0.025)	-0.038 (0.025)
ROA	-1.121 (0.918)	-1.175 (0.923)	-1.374 (1.139)	-1.866* (1.028)	-1.873* (1.031)
Compensation Ratio		-0.338 (0.791)	-0.352 (0.941)	0.026 (0.832)	0.935 (0.638)
Entertainment costs				-0.013 (0.129)	0.234 (2.532)
Entertainment costs * Compensation Ratio					-0.787 (1.996)
Fixed Effect	Industry	Industry	Industry & City	Industry	Industry
Observations	728	728	530	612	612
Pseudo R2	0.03	0.03	0.09	0.03	0.03

Notes: Probit regressions. The dependent variable Turnover Dummy, is a dummy variable indicating whether there is any turnover of CEO or Chairman within one year after the firm's reform. Compensation ratio is the number of total shares given to tradables shareholders from the nontradables shareholders over all tradable A-shares before this compensation; Entertainment costs is a city-level index based on the survey by World Bank (2006), which reflects the general corruption atmosphere in the city where the focal firm is headquartered; ROA is the ratio of net profits over total assets for post-reform year; Log(Sales) is the log value of total sales for the post-reform year. Industry is defined at the SIC-2 level. Standard errors are given in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 6 - Event Study 1 (April 29, 2005)**

	CAR[-1,1]	CAR[-1,1]	CAR[0,1]	CAR[0,1]
	(1)	(2)	(3)	(4)
State controlled firms				
Entertainment costs	0.002 (0.005)	0.002 (0.003)	-0.001 (0.004)	-0.001 (0.003)
CEO nontradable shareholdings	-0.586*** (0.152)	-0.586*** (0.161)	-0.431*** (0.160)	-0.431*** (0.163)
CEO tradable shareholdings	24.085 (24.473)	24.085 (23.404)	38.918* (20.857)	38.918* (19.904)
CEO Salary	-2.801 (4.124)	-2.801 (3.303)	-0.726 (3.893)	-0.726 (4.267)
Log(Sales)	0.003 (0.002)	0.003 (0.002)	0.003* (0.002)	0.003* (0.002)
ROA	0.146*** (0.042)	0.146*** (0.038)	0.116*** (0.031)	0.116*** (0.029)
Ind-Directors	0.050 (0.052)	0.050 (0.044)	0.075* (0.041)	0.075** (0.036)
Nontradables	0.023 (0.020)	0.023 (0.021)	0.010 (0.017)	0.010 (0.019)
Top10_NT	0.010 (0.008)	0.010 (0.009)	0.005 (0.007)	0.005 (0.006)
Top10_T	0.078*** (0.027)	0.078*** (0.029)	0.071** (0.031)	0.071** (0.032)
Log(GDP/Capita)	0.000 (0.004)	0.000 (0.003)	0.002 (0.003)	0.002 (0.002)
Log(Population)	0.001 (0.004)	0.001 (0.003)	0.002 (0.003)	0.002 (0.002)
Clustering at Which level	No	City	No	City
Industry Effect	Yes	Yes	Yes	Yes
Observations	631	631	631	631
R-squared	0.13	0.13	0.11	0.11

Notes: The dependent variable CARs are abnormal event returns around the first policy announcement (April 29, 2005) when the central government allowed this nationwide reform; CEO Compensation is total cash and bonus senior managers get scaled by total assets; Independent Directors is the ratio of independent directors over all the directors of the focal firm; Entertainment costs is a city-level index based on the survey by World Bank, which reflects the general corruption atmosphere in the city where the focal firm is headquartered; ROA is the ratio of net profits over total assets in the previous year; Log(Sales) is the log value of total sales in the previous year; Log(Time) is the log value of reforming time at the firm level, where the ending point is the day when the firm passed its reform plan and the starting point is April 29, 2005. Nontradables is the percentage of non-tradable shares. Log(GDP/Capita) is the log value of GDP per capita of each city; Log(Population) is the log value of total population of each city. Standard errors are given in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 7 - Event Study 2 (Sep 04, 2005)**

	CAR[-1,1]	CAR[-1,1]	CAR[0,1]	CAR[0,1]
	(1)	(2)	(3)	(4)
	State controlled firms			
Entertainment costs	0.006*	0.006**	0.005*	0.005*
	(0.003)	(0.003)	(0.003)	(0.003)
CEO nontradable shareholdings	-0.118*	-0.118**	-0.126**	-0.126**
	(0.063)	(0.058)	(0.059)	(0.055)
CEO tradable shareholdings	2.757	2.757	-3.710	-3.710
	(15.420)	(13.729)	(17.763)	(16.293)
CEO Salary	-1.108	-1.108	-3.113	-3.113
	(2.756)	(3.072)	(2.434)	(2.494)
Log(Sales)	-0.002*	-0.002**	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
ROA	-0.057*	-0.057**	-0.027	-0.027*
	(0.029)	(0.028)	(0.018)	(0.015)
Ind-Directors	-0.007	-0.007	0.003	0.003
	(0.029)	(0.022)	(0.024)	(0.020)
Nontradables	-0.002	-0.002	-0.002	-0.002
	(0.013)	(0.010)	(0.010)	(0.009)
Top10_NT	-0.006	-0.006	-0.003	-0.003
	(0.005)	(0.006)	(0.004)	(0.005)
Top10_T	0.197***	0.197***	0.178**	0.178**
	(0.066)	(0.066)	(0.071)	(0.070)
Log(GDP/Capita)	0.004*	0.004*	0.004**	0.004**
	(0.002)	(0.002)	(0.002)	(0.002)
Log(Population)	0.007***	0.007***	0.005***	0.005**
	(0.002)	(0.002)	(0.002)	(0.002)
Clustering at Which level	No	City	No	City
Industry Effect	Yes	Yes	Yes	Yes
Observations	632	632	632	632
R-squared	0.12	0.12	0.14	0.14

Notes: The dependent variable CARs are abnormal event returns around the second milestone policy announcement (September 4, 2005) when the central government described the detailed rules governing the bargaining process; CEO Compensation is total cash and bonus senior managers get scaled by total assets; Independent Directors is the ratio of independent directors over all the directors of the focal firm; Entertainment costs is a city-level index based on the survey by World Bank, which reflects the general corruption atmosphere in the city where the focal firm is headquartered; ROA is the ratio of net profits over total assets in the previous year; Log(Sales) is the log value of total sales in the previous year; Log(Time) is the log value of reforming time at the firm level, where the ending point is the day when the firm passed its reform plan and the starting point is April 29, 2005. Nontradables is the percentage of non-tradable shares. Log(GDP/Capita) is the log value of GDP per capita of each city; Log(Population) is the log value of total population of each city. Standard errors are given in parentheses. \* significant at 1

**Table 8 - Event Study 3 (Revision of reform plan at the firm level)**

	CAR[-15,1]	CAR[-15,1]	CAR[-1,1]	CAR[-1,1]
	(1)	(2)	(3)	(4)
State controlled firms				
Entertainment costs (%)	0.015 (0.012)	0.015* (0.008)	0.011 (0.008)	0.011 (0.007)
CEO nontradable shareholdings	0.172 (0.125)	0.172 (0.108)	0.144 (0.156)	0.144 (0.128)
CEO tradable shareholdings	-9.599 (45.533)	-9.599 (43.235)	-47.477 (30.188)	-47.477 (33.815)
CEO Salary	-5.372 (12.757)	-5.372 (11.930)	-8.123 (7.501)	-8.123 (5.859)
Log(Sales)	-0.001 (0.004)	-0.001 (0.005)	-0.003 (0.003)	-0.003 (0.003)
ROA	-0.053 (0.101)	-0.053 (0.108)	-0.018 (0.060)	-0.018 (0.079)
Ind-Directors	-0.045 (0.109)	-0.045 (0.124)	-0.037 (0.084)	-0.037 (0.092)
Nontradables	0.008 (0.045)	0.008 (0.044)	0.026 (0.034)	0.026 (0.041)
Log(Time)	0.037** (0.016)	0.037*** (0.013)	0.042*** (0.011)	0.042*** (0.013)
Top10_NT	0.016 (0.020)	0.016 (0.020)	0.008 (0.014)	0.008 (0.014)
Top10_T	0.198 (0.139)	0.198 (0.135)	0.069 (0.068)	0.069 (0.067)
Log(GDP/Capita)	-0.009 (0.010)	-0.009 (0.007)	-0.001 (0.007)	-0.001 (0.005)
Log(Population)	-0.011 (0.010)	-0.011 (0.007)	-0.000 (0.006)	-0.000 (0.004)
Clustering at city level	No	Yes	No	Yes
Industry Effect	Yes			
Observations	631	631	631	631
R-squared	0.04	0.04	0.06	0.06

Notes: The dependent variable CARs are abnormal event returns around announcements of revised reform plan by each listed firm; CEO Compensation is total cash and bonus senior managers get scaled by total assets; Independent Directors is the ratio of independent directors over all the directors of the focal firm; Entertainment costs is a city-level index based on the survey by World Bank, which reflects the general corruption atmosphere in the city where the focal firm is headquartered; ROA is the ratio of net profits over total assets in the previous year; Log(Sales) is the log value of total sales in the previous year; Log(Time) is the log value of reforming time at the firm level, where the ending point is the day when the firm passed its reform plan and the starting point is April 29, 2005. Nontradables is the percentage of non-tradable shares. Log(GDP/Capita) is the log value of GDP per capita of each city; Log(Population) is the log value of total population of each city. Standard errors are given in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 9 - Robustness Checks**

	Dependent variable: CR								
	(1)*	(2)*	(3)*	(4)*	(5)	(6)	(7)	(8)	(9)
Entertainment costs (%)	-0.024 (0.018)	-0.023 (0.019)	-0.023 (0.019)	-0.022 (0.019)					
CEO Salary		-0.585 (12.786)		0.085 (12.777)					
CEO nontradable shareholdings			0.010 (0.100)	0.012 (0.101)					
CEO tradable shareholdings			-10.636* (6.040)	-9.794 (5.942)					
Court solving (%)					0.661** (0.291)			0.721*** (0.227)	-0.036 (0.033)
Legal Protection of Contract						0.124 (0.206)		-0.017 (0.124)	-0.039** (0.015)
Using formal Contract							0.159 (0.251)	0.307 (0.177)	0.000 (0.040)
Log(Sales)	-0.004 (0.005)	-0.004 (0.006)	-0.003 (0.006)	-0.003 (0.006)	-0.015 (0.013)	-0.014 (0.010)	-0.015 (0.010)	-0.015 (0.013)	0.002 (0.005)
ROA	-0.099 (0.093)	-0.108 (0.092)	-0.099 (0.093)	-0.106 (0.092)	-0.193* (0.093)	-0.164 (0.105)	-0.159 (0.117)	-0.213** (0.095)	-0.200** (0.078)
Log(Time)	-0.042*** (0.014)	-0.042*** (0.014)	-0.042** (0.016)	-0.042** (0.016)	-0.012 (0.028)	-0.009 (0.026)	-0.011 (0.025)	-0.014 (0.028)	-0.049*** (0.013)
Nontradables	0.325*** (0.051)	0.322*** (0.049)	0.323*** (0.051)	0.320*** (0.050)	0.334** (0.120)	0.424** (0.182)	0.425** (0.171)	0.309** (0.108)	0.277*** (0.072)
Top10_NT	0.014 (0.033)	0.011 (0.033)	0.018 (0.039)	0.016 (0.038)	0.076 (0.121)	0.081 (0.128)	0.086 (0.134)	0.088 (0.125)	0.023 (0.016)
Top10_T	-0.622 (0.384)	-0.644 (0.390)	-0.623 (0.406)	-0.647 (0.412)	-1.094 (0.687)	-1.223 (0.892)	-0.965 (0.742)	-0.812 (0.663)	-0.137*** (0.021)
Sample	Private	Private	Private	Private	Private	Private	Private	Private	State
Industry Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	250	249	249	248	71	71	71	71	179
R-squared	0.24	0.24	0.24	0.24	0.35	0.25	0.25	0.36	0.36

Notes: The dependent variable CR, compensation ratio, is the number of total shares given to tradables shareholders from the nontradables shareholders over all tradable A-shares before this compensation; Entertainment costs is a city-level index based on the survey by World Bank (2006), which reflects the general corruption atmosphere in the city where the focal firm is headquartered; CEO Compensation is total cash and bonus senior managers get scaled by total assets; "Confidence in courts" is from the World Bank 120-city survey, so includes more observations; Court Solving, "Legal Protection of Contract" and "Using formal Contract" are all from Cull and Xu (JFE), which is based on a smaller-scale survey in China. ROA is the ratio of net profits over total assets in the previous year; Log(Sales) is the log value of total sales in the previous year; Log(Time) is the log value of reforming time at the firm level, where the ending point is the day when the firm passed its reform plan and the starting point is April 29, 2005. Nontradables is the percentage of non-tradable shares. Standard errors, given in parentheses, are clustered at the city level.\* significant at 10%; \*\* signi

\*Also includes the share of independent directors (positive but insignificant)