

Non-negotiable Shares, Controlling Shareholders, and Dividend Payments in China

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Abstract

China has some unique institutional features. For example, the shares of listed firms are segmented into negotiable and nonnegotiable. The controlling shareholders, usually connected to the government, hold nonnegotiable shares. We examine how these institutional features affected cash dividend payments in China during the period 1994-2006. We find that, despite China's unique institutional setups, conventional factors, especially profitability or the capability to pay, still play an important role in determining the dividend policy. Although controlling shareholders prefer cash dividends, they cannot force firms to pay or to pay more dividends when firms' earnings decline significantly. The propensity to pay and the payout ratio are not high compared to those of other countries. The 2001 CSRC stipulation requiring cash dividend payments does not benefit negotiable shareholders.

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1. Introduction

Despite the fact that China is the largest emerging economy with the fastest growing stock market and increasing global importance, studies on the dividend payments of Chinese firms are scant. We provide a clinical study on the determinants of dividend payments for listed firms in China during the period 1994-2006. In particular, we examine how institutional setups affect the propensity to pay and the payout ratio.

China has several unique institutional features. First, most listed firms in China came into being due to partial privatization, and the Chinese government is usually the largest co-investor or controlling shareholder in these firms (Sun and Tong, 2003).¹ Second, the government ownership is represented by various entities such as government agencies (the state asset management bureau at various levels), state asset holding/management companies, and state-owned enterprises (SOEs) (Chen et al., 2009). These representatives of the state may have their own interests to pursue. In addition, their incentive and effectiveness in monitoring management can be very different (Wang, 2007). Third, and more importantly, China had a unique share segmentation system during our sample period: the shares of listed firms had been segmented into two categories, negotiable and nonnegotiable (Li, Wang, Cheung, and Jiang, 2008).² The former was tradable on the stock market and mainly held by individual investors, while the latter was non-tradable and mainly held by the government (state shares) and other legal entities (legal person shares). Legal persons are often connected to the government in various ways. Fourth, negotiable shares, on average, only accounted for about one-third of the total shares during our sample period. Hence, negotiable shareholders were usually minority shareholders in a firm and would not be effective in monitoring management and the controlling shareholder. Finally, cash dividend payments have been required by the China Securities Regulatory Commission (CSRC) since 2001 as a precondition for listed firms to have rights issues. However, holders of nonnegotiable shares did not have much incentive to subscribe for rights issues, as the shares for which they subscribed would also be nonnegotiable. These unique institutional features should affect the cash dividend payment, and these effects may be different from those predicted in the traditional theory.

¹ The state is usually the largest shareholder. In about half of the listed companies, state ownership exceeds 50% of the total shares.

² The share segmentation reform finished in the period 2005-2006 allows the nonnegotiable state and legal person shares to become negotiable gradually after two years.

The existing literature indicates that the dividend payment is an outcome of the agency conflict between managers and shareholders (Jensen, 2000), as well as between controlling shareholders and outside shareholders (La Porta et al., 2000a). Cash dividends, to a certain extent, can help prevent managers and controlling shareholders from extracting private benefits at the expense of small, individual shareholders.³ However, this may not be the case in China. The share segmentation system creates conflicts of interests between negotiable and nonnegotiable shareholders. As nonnegotiable shareholders cannot realize capital gain in the market, maximizing stock prices would not benefit these shareholders. As controlling shareholders usually hold nonnegotiable shares, listed firms under their control are likely to carry out some policies to benefit nonnegotiable shareholders at the expense of negotiable shareholders. Since cash dividends may be the only legal cash flow that nonnegotiable shareholders could expect from listed firms, controlling shareholders would prefer to receive dividends, while negotiable shareholders would prefer to have capital gains which is also tax-free in China. Lee and Xiao (2007) even argue that, instead of reducing the agency problem, cash dividends actually serve as a means for controlling shareholders to expropriate minority shareholders in China.

On the other hand, the government, as the largest co-investor, may reduce the twin agency problem and provide something of a safety buffer for minority investors.⁴ This may be particularly important in China, as its economy has been in transition from central planning to a market mechanism. In such a setup, cash dividends may be a reasonable compensation to the large co-investor for their holding of nonnegotiable shares, as long as the dividends will not seriously impair future capital formation. In addition, the high state ownership brings with it many weaknesses associated with old SOEs. For example, state owners have non-economic objectives to pursue, and may divert the company resources for other uses at the expense of public shareholders (Megginson and Netter, 2001). Furthermore, unlike private/family controlling shareholders, the presence of state controlling shareholders may not reduce agency conflicts between shareholders and managers because state controlling shareholders do not have the right incentive and proper expertise to monitor managers. The representatives of controlling shareholders (many are politically appointed) serving on the board of directors may even collude with managers to embezzle state assets

³ See also Rozeff (1982), Easterbrook (1984), and Jensen (1986).

⁴ According to Stulz (2005), all investors risk expropriation by the state (the agency problem of state ruler discretion) and outside investors risk additional expropriation by those who control firms, be they managers or controlling shareholders (the agency problem of corporate insider discretion). The twin agency problem is country-specific, and depends on history, laws, location, and economic development. When the twin agency problem is serious, corporate insiders must co-invest more with outside investors in equilibrium.

and consume big perks (Lang, 2007). Hence, cash dividend payments in China may still play a role to reduce the agency problem between corporate insiders and outside public investors.

Taking the above into consideration, we first examine whether conventional determinants documented in the literature can still explain dividend payments in China. Particularly, we would like to determine whether profitability, investment opportunities, agency costs, and leverage are important determinants of cash dividends. We also want to assess whether Chinese firms pay excess dividends to cater to nonnegotiable shareholders.

Second, we examine whether China's share-segmentation system affects dividend payments. Specifically, we would like to determine whether the likelihood of paying cash dividends and payout ratios are positively associated with the percentage of nonnegotiable shares and the percentage of shares held by controlling shareholders. We will also examine whether dividend payments are more downside inflexible for firms with more powerful nonnegotiable controlling shareholders.

Third, we examine whether different types of controlling (nonnegotiable) shareholders (a business parent company, state asset bureau or state asset holding company, etc.) affect dividend payments differently, especially in relation to the downside flexibility of dividend payments. As mentioned earlier, controlling shareholders can be SOEs, legal persons, state asset management bureaus, or government holding companies. They all prefer cash dividends, but their degree of preference can differ. It is reasonable to expect that an SOE (or a legal person), as a business entity, will have more incentives to obtain benefits from its listed subsidiaries than a state asset management bureau or a state holding company. Thus, an SOE (or a legal person) may press its listed subsidiaries harder for cash dividends. However, it is also likely that an SOE (or legal person) will have more options than a state asset management bureau or a government holding company to benefit from its listed subsidiaries. For example, it may be much easier for an SOE to conduct related party transactions with its subsidiaries (Jian and Wong, forthcoming). Hence, it may depend less on cash dividends from its subsidiary.

Fourth, we examine whether the 2001 CSRC stipulations benefit negotiable shareholders. Some governments, in the name of protecting minority shareholders, have issued rules and regulations to encourage or even to force listed firms to pay cash dividends.⁵ CSRC, the government watchdog in the securities market, stipulated on March 28, 2001, that firms must

⁵ For example, The Company Act in Finland states that shareholders with 10% of all shares can demand a minority dividend, which is half of the profit of the fiscal year, but not more than 8% of the equity. Kinkki (2008) finds that such rules do help minority shareholders.

pay cash dividends continuously for three years before they would be allowed to have rights issues. However, it is not clear whether the stipulation is really beneficial to negotiable minority shareholders, as they may prefer capital gains rather than dividends.

Finally, we examine how negotiable shareholders react to dividend announcements. Due to share segmentation, market prices mainly reflect negotiable shareholders' view on stocks. It will be interesting to see how negotiable shareholders react to different types of dividend announcements (such as increases, decreases, or omissions) in good and bad situations, respectively.

Our study is related to, though distinct from, a number of existing research papers. First, there are many single country studies on dividend policy,⁶ but we focus on the dividend policy of privatized firms in China. Second, some research analyzes the determinants of cash dividends across countries. Von Eije and Megginson (2008) examine the evolution of dividend policy from 1989 to 2003 in 15 EU countries. They find that profitability, investment opportunities, and size are the main determinants for cash dividend payments in these countries. In their study of 24 countries, Chay and Suh (2005) find that, other than in the US, agency costs and investment opportunities are not important determinants of dividend payments; we focus on China and examine whether conventional factors are still the main determinants for cash dividends in this unique institutional setting. Third, Allen, Qian, and Qian (2005) find that Chinese firms tend to underpay dividends to their shareholders compared to firms in countries studied in La Porta et al. (2000b). They argue that this is due to weak internal and external governance mechanisms. However, Lee and Xiao (2007) argue that Chinese firms are forced to pay more cash dividends by controlling shareholders; hence, paying more dividends is a manifestation of weak internal and external governance mechanisms. Using a more comprehensive dataset, we try to assess whether Chinese firms pay too much or too little in cash dividends. Fourth, Lee and Xiao (2007) argue that in the unique environment in China, cash dividends may be used by controlling shareholders as a vehicle for tunneling rather than to alleviate agency problems. They focus on the period 1996-1999 and find that state dominant firms tend to pay more dividends soon after rights offerings. The dominant shareholders in these firms often give up subscription to rights offerings. By using the proceeds from rights issues to pay cash dividends, controlling shareholders effectively sell a portion of the nonnegotiable shares to minority shareholders at

⁶ See, for example, Bell and Jenkinson (2002), Bank, Cheffins, and Goergen (2004), Renneboog and Trojanowski (2006), Goergen, Renneboog, and Da Silva (2005), Gugler and Yurtoglu (2003), Baker, Mukherjee, and Paskelian (2006), Stacescu (2006), and Kinkki (2008).

a much higher price than they could obtain through government-approved share transfer. Using data from Hong Kong and mainland China, Cheng, Fung, and Leung (2009) find that firms in China with more nonnegotiable shares tend to pay more cash dividends. In this paper, we examine the relationship between seasoned offerings (including rights issues) and cash dividend payments more broadly, and for a much longer period. In addition, we examine whether different types of state ownership affect cash dividend payments differently. Furthermore, we assess how negotiable shareholders react to the 2001 CSRC stipulations concerning cash dividend payments and rights issues.

Overall, our findings indicate that the cash dividend decisions of Chinese firms are balanced with firms' earnings capacity, investment opportunities, agency problems, controlling shareholders' preferences, and the regulatory environment. Although we find that the proportion of nonnegotiable shares and the percentage of shares held by the controlling shareholder are positively associated with the likelihood of paying dividends and the payout ratio, there is no evidence that dominant owners use dividend payments to expropriate negotiable shareholders in any significant way. The propensity to pay and the payout ratio are not higher than those documented by Von Eije and Megginson (2008) in Europe and by Weston and Siu (2003) in the US. In addition, firms tend to pay no or less dividends when they incur loss or a significant decline in earnings, even if they are controlled by big nonnegotiable shareholders. Furthermore, the cash dividend payments do not differ significantly across firms with different types of controlling shareholders. Negotiable shareholders are mostly insensitive to dividend announcements across various scenarios, indicating that cash dividends neither hurt nor benefit minority negotiable shareholders in China.

Our paper contributes to the literature by providing a detailed clinical study on how state controlling shareholders and nonnegotiable shares affect cash dividend policy in China. It has both theoretical and practical implications. As long as there is a need for large co-investors to provide some insurance for outside investors, shares held by controlling shareholders will be less liquid, and controlling shareholders may still prefer cash dividends to some extent than public/minority shareholders. Hence, our findings on the relationship between the illiquidity of shares and dividend policy can have general implications beyond China. Finally, given the completion of share-segmentation reform in China, our findings can help to predict the dividend payment trend for Chinese firms in the next few years.

The next section provides more information on the institutional background. Section 3 develops testable hypotheses. Section 4 describes data and presents an overview of dividend

payments in China, while the formal test results are reported in sections 5 and 6. Section 7 concludes.

2. Institutional Background

China established its stock markets, the Shanghai Stock Exchange (SHSE) and the Shenzhen Stock exchange (SZSE), in 1990 and 1991, respectively. The Chinese government intends to use the stock market as leverage to restructure SOEs into modern corporations. The ratio of China's stock market capitalization to GDP increased from 4 percent in 1992 to about 100 percent in 2007, and investment accounts increased from under 5 million to more than 100 million in the same period. At the end of 2007, the number of listed firms was over 1500. Most of these firms are partially privatized SOEs.

Unlike the share issue privatization (SIP) in other countries, where the government sells the SOEs and pockets in the proceeds, the Chinese government allows SOEs to issue new shares in the stock market and retain the proceeds for their own use (Sun and Tong, 2003). The government and other legal entities that helped to establish or restructure the company in the process of SIP converted their contribution of existing assets (both tangible and intangible) into state shares and legal person shares, respectively. In most cases, the government is still the controlling shareholder of listed firms. State shares can be distributed across a few different government bodies or SOEs; hence, in most cases, the largest shareholder or controlling shareholder is a state agency, a state asset management/holding company, or an SOE. On average, the government owns about one-third of the total shares. Legal persons hold about 25 percent, and the rest are held by public (negotiable) shareholders. The strong presence of government ownership in these firms is partly due to the socialist ideology that holds that the state should retain control of many firms, and partly due to twin agency problems.⁷ Since there are not many big private investors in China, the government is usually the largest co-investor; this co-investment provides something of a safety buffer for defused public shareholders, especially when the state shares and legal person shares are not tradable in the market. However, the high percent of state ownership brings with it many weaknesses associated with old SOEs (Che and Qian, 1998; Lin, Cai, and Li, 1998).

Although all shares have the same voting power and cash flow rights, state and legal person shares are not negotiable in the stock market. However, with special government permission, state and legal person shares could be transferred among different state shareholders, including state asset management bureaus, state holding companies, other SOEs,

⁷ See footnote 4.

and legal persons. The transfer prices, according to Huang and Fung (2004), were only between 70 and 130 percent of the book value of these firms, which was much lower than the market price of the corresponding negotiable shares.

Since controlling shareholders cannot realize their capital gains in the stock market, maximizing stock prices may not benefit them. Instead, controlling shareholders may legally channel cash from the company by forcing it to pay high dividends. Although dividends are subject to income tax while capital gains are not, this should not prevent state and legal person shareholders from preferring cash dividends. In addition, given that nonnegotiable shares are usually based on the book value while the negotiable share price is determined in the market, and is much higher than the book value, for the same amount of dividend per share, the dividend yield for nonnegotiable shareholders should be much higher than that for the negotiable shareholders.

Due to the transition of the Chinese economy from central planning to market mechanism, most SOEs were heavily indebted and short of equity capital. In fact, the stock market is assumed to supply direct financing to SOEs without adding budgetary burden to the government and/or bad debt problems to China's banking system. Even after listing in the market, many firms are still hungry for equity capital, as most listed firms had rights issues within three years after listing. In the early years, firms tended to pay stock dividends. In fact, many firms only paid cash dividends to nonnegotiable shareholders, giving stock dividends to public shareholders. According to Yu and Cheng (2001), the cash dividends as a fraction of total dividends was under 40 percent until 1998, which suggests that the listed firms in China would like to retain more earnings. In 1994, the CSRC forbade such discriminative cash dividend paying practices, and urged all firms to pay cash dividends. In 1996, the CSRC disallowed firms setting rights issue subscription as a precondition for shareholders to receive cash dividends. In 2001, the CSRC further stipulated that firms could not have rights issues without continuously paying cash dividends in the previous three years.

The share segmentation reform started in 2005 and finished at the end of 2006. The essence of the reform is to allow the nonnegotiable state and legal person shares to be gradually negotiable after two years. At the end of 2008, about 50 percent of nonnegotiable shares become negotiable. However, only a fraction of these were traded in the market, as the CSRC only allows them enter into the market gradually. There were few IPOs and rights issues in the stock market during 2005~2006.

Another point worth emphasizing is the agency problem between controlling shareholders and managers. Supposedly, this should not be an acute problem, as the

controlling shareholder in China should be powerful enough to monitor managers. However, as a representative of the government, state controlling shareholders may be much less effective in monitoring managers than private/family controlling shareholders. Since government officials' compensation/promotion is not closely related to the performance of their controlled companies and negotiable shareholders are minorities, neither of them can monitor the management effectively. Managers have stronger incentives to consume perks, over-invest, and pay big bonuses to their subordinates rather than to pay dividends to shareholders. This may explain why the CSRC has pressed the firms to pay cash dividends, as paying out dividends reduces the free cash flow and makes managers less likely to take advantage of shareholders, whether they are negotiable or nonnegotiable shareholders.

Since state and legal person shares were based on the book value, while the rights issues were subscribed for at the market value, state and legal person shareholders did not have incentives to subscribe for rights issues as the shares they buy would also be nonnegotiable (see Cheung, Lam, and Tam, 2007). Instead of paying cash for the rights issues, many controlling shareholders contributed physical assets. In 1994, the CSRC required all large shareholders to refrain from giving up rights issues. In 1998, the CSRC relaxed the rule by requiring that large shareholders, at least, subscribe for 50 percent of their entitled rights issues. However, the CSRC toughened the requirement that rights issues must be subscribed using cash in 2001. In general, the regulatory environment is not favorable for controlling shareholders to sell their nonnegotiable shares via the combination of forgoing rights issues and receiving high dividend payments. Stock repurchases were not allowed in China during our sample period.

In short, the institutional settings in China have conflicting impacts on dividend payments. Managers may want to pay no or few dividends; controlling shareholders, most of them holding nonnegotiable shares, would like to receive dividends; and negotiable shareholders prefer capital gains over dividends.

3. Hypotheses

Since dividends are the main, if not the only, lawful income that nonnegotiable shareholders could expect from holding stock, they may press firms to pay and to pay more dividends. Specifically, we can formulate the following hypotheses:

H1a: The likelihood of paying dividends is positively related to the proportion of nonnegotiable shares (or the proportion of nonnegotiable shares held by the

controlling (largest) shareholder) in a firm.

H1b: The payout ratio is positively related to the proportion of nonnegotiable shares (or the proportion of nonnegotiable shares held by the controlling (largest) shareholder) in a firm.

Among controlling shareholders, a business parent (an SOE, legal person, or private entity) may be more likely to tunnel assets or cash from the company than a pure government parent (such as a state asset management/holding company or state asset bureau). This is because state assets are everybody's assets and, thus, nobody's assets, and the government may also prop their controlled firms from time to time for various reasons including non-economic reasons (Peng, Wei, and Yang, 2006), while business parents have more of their own interests to pursue. In addition, a business parent is likely to have more alternatives to tunnel from the listed firm under its control,⁸ and thus depend less on dividends. Hence, we infer that firms controlled by government agencies or government asset management or holding companies are more likely to issue or will issue more dividends than firms with a business parent. However, if tunneling could not be used to expropriate the minority shareholders in a significant manner, then a business parent would prefer dividends more than a pure government parent, as business parents are more money-oriented. We have formulated the following hypotheses:

H2a: Firms controlled by government agencies or asset management companies are more likely to pay dividends than firms controlled by a business parent (an SOE or legal person, etc.).

H2b: Firms controlled by government agencies or asset management/holding companies have higher payout ratios than firms controlled by a business parent company.

If we believe that business parents can tunnel easily, then we expect that the dividend payments are more downside inflexible for firms with the government as the controlling shareholder than those with a business parent, especially when firms incur losses or significant declines in earnings. Of course, we may see the opposite if tunneling cannot be used to expropriate the minority shareholders in a significant manner. Similarly, since nonnegotiable, controlling shareholders have a strong preference for cash dividends, we

⁸ See Cheung, Jing, Rau, and Stouraitis (2007) for a detailed discussion.

expect that the dividend payments will be more downside inflexible for firms with large controlling shareholders when firms incur losses or a significant drop in earnings. Therefore, we have formulated the following hypotheses:

- H3a: Given a large decline in earnings, firms with the government (excluding SOEs) as the controlling shareholder have a lower likelihood of omitting or reducing dividends than firms with a business parent company.
- H3b: Given a large decline in earnings, firms with a higher proportion of nonnegotiable shares (or more powerful controlling (nonnegotiable) shareholders) have a lower likelihood of omitting or reducing dividends.

Due to the share segmentation system, the market mainly reflects negotiable shareholders' expectations. This provides us with an opportunity to examine how negotiable shareholders view dividend omissions, decreases, and increases. If dividends are viewed as mainly catering to nonnegotiable shareholders, then an increase in dividends is bad news, or at least not good news, when firms incur losses or significant declines in earnings; in contrast, a decrease or omission of dividends may be expected, or even viewed as good news in such situations. On the other hand, if dividends are used to signal better earnings prospects or a reduction in agency costs, then an increase in dividends is good news, or at least should be expected when firms' profitability increases significantly. At the same time, a decrease or omission of dividends may be viewed as bad news. However, it is also possible that a decrease or omission will be good news to negotiable investors in such situations if they believe that the money will be used more productively by the firm and lead to more capital gains. Hence, we have formulated the following hypotheses:

- H4a: The market responds negatively (positively) to the announcement of an increase in dividends (a decrease in dividends or an omission of dividends) when the firm incurs a loss or has a large decline in earnings.
- H4b: The market responds positively (negatively) to the announcement of an increase in dividends (decrease in dividends or omission of dividends) when the firm becomes much more profitable.

On March 28, 2001, the CSRC stipulated that firms could not have rights issues without having continuously paid cash dividends in the previous three years. This stipulation is a bit

unusual, as the agency explanation for dividends argues that paying dividends can force firms to go to the market more often so as to reduce agency costs. This is obviously not the case in China, as the CSRC set dividend payments as a precondition for rights issues to prevent some firms from entering the market. One explanation for this is that many firms engage in earnings management to meet the ROE threshold set by CSRC for rights issues (Yu, Du, and Sun, 2006). Requiring continuous cash dividend payments in the previous three years can provide additional assurance to the investing public that the firms planning to have rights issues are in good shape. If this is the case, then the CSRC stipulation should benefit all shareholders, including negotiable shareholders. It is also possible that the stipulation is a sweetener for controlling shareholders only. As mentioned earlier, controlling shareholders do not have the incentive to subscribe rights issues; they prefer to receive cash dividends. The CSRC has come out with regulations to force controlling shareholders subscribe for at least 50 percent of their entitled rights issues and subscribe for rights issues with cash instead of contributing assets. Requiring firms to pay cash dividends before having rights issues may be a kind of compensation for controlling shareholders. In this case, the CSRC stipulation may not benefit negotiable shareholders. If the CSRC stipulation benefits negotiable shareholders, the stock price should increase, especially for firms that are profitable but only pay cash dividends infrequently. If the stipulation mainly caters to nonnegotiable shareholders, then the stock price should have no response or even a negative response. Our final hypothesis is as follow:

H5: The 2001 CSRC stipulation requiring cash dividend payments as a precondition for rights issues benefits negotiable shareholders, especially the shareholders of firms that are profitable but only pay cash dividends infrequently.

4. Data and Descriptive Statistics

Our sample consists of annual observations from 1994 to 2006 for all listed firms meeting the selection criteria. All financial and accounting data are obtained from the RESSET, Wind, and CSMAR Databases. Our sample period starts from 1994 because cash dividends were fixed and mandatory for many firms up to 1993, the year when the CSRC was established. Altogether, we have 12397 firm-year observations.

We first exclude firms listed in the Small-and-Medium Section of the SZSE (190 observations), as the listing requirements for these firms are different from those for the Mainboard. We then exclude firms with missing data (2872 observations). We also exclude

firms in the financial sector (58 observations). We further exclude firms with dual-listings of H-shares (274 observations), as the dividend payment of these firms may be affected by Hong Kong market practices.⁹ Finally, we exclude newly listed firms (871 observations), i.e., firms listed for less than one year. We do not exclude utility firms, as there is no particular regulation on dividend payments for utility firms in China.¹⁰ Table 1 details the sample selection process. Our final sample consists of 8132 observations.

[Insert Table 1 Here]

Following Fama and French (2001), all sample firms are classified into payers and nonpayers. Since our focus is on cash dividends, we ignore stock dividends. However, because all dividends, including stock dividends, are taxed at 20 percent, and the listed firms need to withhold the dividend tax, many firms pay cash dividends just to cover the tax payable induced by stock dividends. Following Lee and Xiao (2007), we classify a firm as a cash dividend payer as long as its cash payment per share is more than enough to cover the tax obligation by one fen (one-hundredth of a yuan). Table 2 shows the counts and percents of listed firms in payer and nonpayer groups over years from 1994 to 2006.

[Insert Table 2 Here]

The first three columns are the counts of the sample firms, new lists, and delisted firms, respectively. There have not been many delistings. In fact, no delisting occurred until 1999. There were few new lists in 2005 and 2006 due to the share-segmentation reform. The next four columns present payers and non-payers (which are further divided into previous payers and those that never paid) as a percentage of the whole sample (the first column). No obvious trend is observed, as the payers declined from 67 percent in 1994 to 25 percent in 1997 and 1998. In 1999, it was 28 percent. However, it jumped to 60 percent in 2000 and 2001, and fluctuated around 50 percent thereafter. Although payers mostly account for less than 60 percent of the total number of firms, the percent of payers in China is still much higher than that reported by Fama and French (2001) in the US during the 1990s; however, it is lower than those reported by Von Eije and Megginsen (2006) for European firms.¹¹ The column of “new lists that pay” shows the dividend payers of newly listed firms as a percentage of the total new listed firms. Except for the period 1996-1999, the majority of newly listed firms paid cash dividends within a year of their listing. In later years 100 percent of new lists pay

⁹ We do not exclude firms with B-shares as the listing requirement, and regulations are similar for both the A- and B-share markets. The results are qualitatively the same when firms with B-shares are further excluded.

¹⁰ The results do not change if we exclude utility firms (601 firm/year observations) from our sample.

¹¹ Dividend payers average 23.6 percent in 1993-1998 and 20.8 percent in 1999 for US firms and between 66 and 85 percent for European firms during the period 1994-2003.

cash dividends. This is inconsistent with the life-cycle argument of DeAngelo et al. (2006), who suggest that young and newly listed firms tend not to pay dividends; however, it is consistent with the privatization literature claiming that the first, partial privatization prompts firms to initiate dividend payments (Megginson, Nash, and Randenborgh, 1994; and D'Souza and Megginson, 1999). This may indicate that new lists try to signal their profitable outlook, want to pay something to their controlling shareholders, or plan to raise new equity in three years.

The next column shows the dividend premium, which is defined as the difference between the average market-to-book ratios of payers and non-payers. In general, the dividend premium tends to be negative. This suggests that payers are valued less than non-payers. In addition, there appears to be no positive co-movement between dividend premium and percentage of payers across years, which seems inconsistent with the catering theory put forward by Baker and Wurgler (2004). The catering theory claims that managers cater to investor demand for dividends. More firms pay dividends when the market value of dividend paying stocks is higher than that of non-dividend paying stocks, and vice versa. This may not apply to China in its original sense, as negotiable investors are the minority investors. Managers in China may not have the same incentive to cater to negotiable shareholders as their counterparts in the US. The last two columns in the table show the average payout ratios of all firms and payers, respectively. The overall payout ratio (d/E) during our sample period ranges from 7.5 percent to 49 percent for all firms and from 13 percent to 46 percent for payers. Although there is no clear trend, the payout ratio is generally higher in the later years than in the earlier years, and mostly in the range of 20 percent to 40 percent. This is much lower than the payout ratios reported by Von Eije and Megginsen (2006) for European firms, which are in the range of 40 percent to 60 percent, and by Weston and Siu (2003) for US firms, which are in the range of 60 percent to 81 percent during 1990-2001. According to DeAngelo, DeAngelo, and Skinner (2004), the high aggregate payout ratio in the US is due to the concentration of earnings and dividends among a relatively small number of corporations. One thing worth noting is that the aggregate payout ratio for payers is not much higher but often lower, than that for all firms in Table 2. This indicates that non-payers as a whole often have negative net income. The aggregate payout ratio suggests that the dividend payout is not excessive, and the capability to pay is probably the most important determinant for cash dividend payments in China.

To get a rough idea of who pays dividends and why they pay, we provide some descriptive statistics on firm characteristics. These characteristics may also affect the payout

ratio. Specifically, we compare whether profitability, investment opportunities, firm size, controlling shareholders, free cash flows, etc., are different between payers and non-payers.

Following Fama and French (2001), we use the ratio of aggregate earnings before interest to aggregate assets (E/A), and the ratio of aggregate common stock earnings to aggregate book equity (Y/BE), as proxies for profitability; the ratio of the aggregate market value to the aggregate book value of assets (V/A) as the proxy for investment opportunities; and aggregate assets (A) and the percentage of listed firms with the same or lower market capitalization (SEP) as proxies for size. We also use total liabilities over total assets (L/A) as a proxy for leverage. Debt can be a substitute for dividends in mitigating agency problems, as both debt and dividends can reduce free cash flows. In addition, debt covenants often contain restrictions on dividend payments. However, debt can also be used by the management to complement dividends in reducing free cash flows.

We use the proportion of nonnegotiable shares (Ntdshr) and the shareholding of the largest shareholder (No1) to measure the power of the nonnegotiable shareholders.¹² Following DeAngelo et al. (2006), we want to see whether retained earnings as a percentage of total equity in a firm (RtdE) affect dividend payment. DeAngelo et al. argue that matured and profitable firms have mostly retained earnings in their equity capital and tend to pay more cash dividends. Furthermore, we use three different proxies to measure potential agency problems: expense ratio (ExpR), which is the sum of administration expense and sales expense divided by total sales; other expenses ratio (Perk), which is the other cash flow in association with sales and operations divided by total assets; and the ratio of free cash flow divided by total sales (FCF). Chen and Wang (2007) suggest that ExpR and Perk can be used directly to capture the on-job consumption by managers in China. We use a dummy variable, SEO_{t-1} (or SEO_{t+1}), to indicate that a firm has seasoned equity offerings, including rights issues, in the previous (or next) year. According to Lee and Xiao (2007), controlling shareholders tend to raise funds through rights issues and then pay them out as dividends.

(Insert Table 3 here)

Table 3 presents the yearly mean and median (in parentheses) of all the above mentioned proxies for all sample firms, payers, and non-payers, respectively. To avoid the influence of big outliers on the means, we winsorize variables E/A, Y/BE, V/A, FCF, ExpR, and Perk at 1 percent and 99 percent. That is, if an observation falls in the lowest (highest) one percent of the distribution, its value is set equal to that at the 1 (99) percent level. Several observations

¹² In very few cases where the largest shareholders are negotiable shareholders, we let No1 equal to zero.

are worth noting. First, payers have higher mean and median profitability than non-payers in every year from 1994 to 2006, both in terms of E/A and Y/BE. The average difference in mean profitability between payers and non-payers for the whole sample period is about 4 percent in E/A and 11 percent in Y/BE. In addition, non-payers have negative mean E/A and Y/BE since 2004 and 2000, respectively. Second, payers are larger than non-payers in terms of total assets (A) and market capitalization (SEP) in all years, both in the mean and median values. On average, payers are about 70 percent larger than non-payers in terms of mean total assets. Third, in terms of investment opportunities, the difference between payers and non-payers is not consistent across years. The market-to-book value of assets (V/A) for payers is sometimes lower and sometimes higher than for non-payers, suggesting that payers may not necessarily have lower expected investment opportunities. Fourth, the mean retained earnings as a percentage of total equity (RtnE) is generally low for Chinese firms, in the range of 13.6 to 28 percent for payers and -19.6 to 14.2 percent for non-payers. The median RtnE shows a similar pattern. This may be explained by the fact that most listed firms are young and have not made much money. However, it seems consistent with DeAngelo, DeAngelo, and Stulz's conjecture that firms with more retained earnings are more likely to pay dividends. Fifth, payers have lower leverage than non-payers throughout our sample period. The difference in mean is about 8 percent on average. This suggests that debt may be a substitute for dividends, or that debt restricts the capacity for firms to pay dividends. Sixth, payers do have higher mean and median percentages of nonnegotiable shares (Ntdshr) and nonnegotiable controlling shareholders (No1) than non-payers, but the differences are usually within 7 percent on average for both proxies. This observation seems consistent with the view that the proportion of nonnegotiable shares is positively associated with the likelihood of paying dividends. Seventh, more payers raised money via seasoned equity offerings (including rights issues) than non-payers both the year before (SEO_{t-1}) since 1996 and the year after (SEO_{t+1}) in every year during our sample period. Thus, it is not clear whether payers are more likely to use proceeds raised in seasoned equity offerings to pay dividends, or whether they pay dividends in order to raise new equity in the market. Finally, payers incur fewer sales and administration expenses (ExpR) and spend less in perks (Perk) than non-payers. These observations seem to suggest that dividends do reduce on-job consumptions. However, payers have more free cash flows (FCF) than non-payers for most years.

Together, the descriptive statistics presented in Tables 2 and 3 suggest that payers are larger, more profitable, and have more retained earnings. Payers also have lower leverage and

consume fewer perks. These characteristics associated with payers are consistent with conventional dividend determinants documented in the existing literature. In addition, payers appear to be associated with higher percentages of nonnegotiable shareholdings and larger controlling shareholders, which is consistent with the conjecture that dividends may be paid to take care of nonnegotiable shareholders. The relationship between FCF and dividends is not clear.

[Insert Table 4 here]

Table 4 further presents the Pearson correlation matrix for the firm characteristics listed in Table 3. The highest correlation is between the two profitability proxies, E/A and Y/BE. The coefficient is about 0.8. RtnE has high correlation coefficients (in terms of absolute values) with E/A (0.5), Y/BE (0.7), L/A (-0.4), and ExpR (-0.46). ExpR also has high correlation coefficients with E/A (-0.54), Y/BE (-0.55), and Perk (0.49). Finally, the correlation coefficient between the two proxies for the power of nonnegotiable shareholders, Ntdshr and No1, is 0.5. All of these correlation coefficients are significant at the 1 percent level. The rest of the correlation coefficients are lower than 0.35, although most of them are significant. To avoid multicollinearity, we drop RtnE, ExpR, and Y/BE in the more formal regression analysis. In addition, we do not use Ntdshr and No1 in the same regression.

5. Determinants of Dividend Payments

In this section, we examine whether and how firm characteristics affect (1) propensity to pay, and (2) given the decision to pay, what the payout ratio is. Specifically, we test Hypotheses 1~3, developed in section 4, using pooled data and a TOBIT model, which is a succinct way to conduct such an analysis. Our baseline model consists of a selection equation and an OLS equation:

Decision (selection) equation:

$$\text{Prob}(Y_{it} > 0) = a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 \text{No1}_{it} (\text{or } \text{Ntdshr}_{it}) + a_8 \text{Perk}_{it} + a_9 \text{FCF}_{it} + \sum c_t YR_t + u_{it}; \quad Z_i = 1 \text{ if } Y_{it} > 0 \quad (1)$$

OLS regression equation:

$$E(P_i | Z_i = 1) = a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 \text{No1}_{it} (\text{or } \text{Ntdshr}_{it}) + a_8 \text{Perk}_{it} + a_9 \text{FCF}_{it} + a_{10} \lambda_{it} + \sum c_t YR_t + v_{it}, \quad (2)$$

The selection equation is a Probit model. Y_{it} is the amount of cash dividend paid in excess of the withholding tax by firm i in year t . Z_i is a binary variable that takes the value

of 1 if the cash dividend paid by firm i in year t is greater than the withholding tax, and zero otherwise. The OLS equation is a censored regression model, where P_i represents the payout ratio. The error terms u_{it} and v_{it} are assumed to be jointly normally distributed with zero means and correlation ρ . Heckman's two-step estimation procedure has λ_{it} , the inverse Mills ratio, generated in the Probit model in the first pass and then added into the OLS regression as the second pass to avoid biased estimation due to the omitted variable of the censored data. The coefficient of λ_{it} , i.e., a_{10} , equals the product of ρ and σ_v , the standard deviation of the residuals of the OLS regression (Greene, 2000, pp. 902-903). Both ρ and σ_v are estimated and reported in our regression output. The same independent variables are used in both the selection and OLS equations. It is reasonable to assume that the factors affecting the likelihood to pay would also affect the payout ratio.¹³ This Tobit setting has the advantage of allowing the same independent variable to have a different impact in the selection and OLS regression equations.

All independent variables were described in the previous section except for year dummies (YR_t). These dummies are included to capture possible year-specific effects. Following Fama and French (2001), SEP, V/A, and E/A are included in the model as the basic determinants of the dividend payment. Instead of total assets, the percentage of listed firms that have the same or smaller market capitalization (SEP) is used to measure firm size. This size measure is meant to neutralize the possible effect of growth in typical firm size through time. We expect large firms are more mature, with better access to financial markets and institutions; hence, they are more likely to pay dividends and to pay more dividends. V/A is the measure for growth opportunities. Based on the residual dividend theory, we expect that firms with higher growth opportunities will retain more earnings, and thus, pay fewer or no dividends. We also expect that more profitable firms (firms with higher E/A) have the capability to pay and to pay more dividends. Notice that, although larger firms tend to pay more dividends, their payout ratios are not necessarily higher. Similarly, it is possible that when E/A increases, the amount paid out increases but the payout ratio may decrease if earnings increase faster than the dividend amount.

In addition, we include L/A in the model. Leverage, as mentioned earlier, can be a substitute for dividends. In this case, we expect L/A to be negatively related to the likelihood to pay and the payout ratio. Alternatively, it is also possible that L/A can

¹³ Fama and French (1999) find that larger firms with fewer investment opportunities but higher profitability also have higher payout ratios. Rozeff (1982) finds that agency costs and leverage affect dividend payout ratios.

complement dividends to reduce free cash flows and thus reduce the agency problem. In that case, we expect that L/A to be positively associated with the likelihood to pay dividends and the dividend out ratio.

Lee and Xiao (2006) argue that by giving up the rights issue subscriptions and receiving cash dividends, controlling nonnegotiable shareholders effectively sell a portion of shares for cash. On the other hand, the CSRC stipulated in 2001 that cash dividend payment is a necessary condition for future rights issues. Hence, we include both the lag and lead of SEO in the model. If Lee and Xiao's argument is correct, then the likelihood of dividend payment and the payout ratio should be positively associated with SEO_{t-1} , especially before 2000. On the other hand, SEO_{t+1} should be positively associated with the likelihood of dividend payment, especially after 2000.

No1 and Ntdshr are alternative measures for the power of non-tradable shareholders. These are the key variables for testing H1a and H1b. If the likelihood of paying dividends and the payout ratio are positively associated with the proportion of nonnegotiable shares and the controlling ownership, then H1a and H1b are supported.

Finally, we include agency cost proxies in the model to test whether the dividend payment is used to reduce agency costs. Perk proxies for on-job consumption by managers. FCF is the cash flow available to spend at managers' discretion. If cash dividends are used to reduce agency costs, we expect that the likelihood of paying and the payout ratio will be negatively associated with Perk and FCF.

[Insert Table 5 here]

Table 5 reports the Tobit regression results.¹⁴ Panel A presents the estimates for the selection equation, while Panel B presents the estimates for the OLS regression. Depending on the alternative proxies for the power of the nonnegotiable shareholders included and whether SEO dummies are added in the regression, we have four different specifications (or models) in both Panels A and B.

In Model (1) of Panel A, all estimated coefficients except FCF are statistically significant at the one percent level. The estimated coefficients of SEP and E/A are positive, while the estimated coefficient of V/A is negative. These are very much consistent with the findings of Fama and French (2001) and Von Eije and Megginson (2008). The estimated coefficient for Ntrdshr is positive, indicating that the more nonnegotiable shares exist in a firm, the more likely it is that the firm would pay dividends. This is consistent with the

¹⁴ To save space, we have not reported the year dummies in the table.

argument that nonnegotiable shareholders prefer dividends because they cannot realize capital gains in the market. The estimated coefficient of FCF is insignificant, indicating that the traditional measure of agency cost is not related to the propensity to pay. This is also consistent with Lee and Xiao's (2007) finding. However, the alternative agency cost measure, Perk, is negative and significant, indicating that dividends reducing the consumption of perks. L/A is negatively associated with the likelihood to pay dividends, indicating that leverage is a substitute for dividends in reducing agency problems. Except for V/A, all of these findings confirm the statistics shown in Table 3. Although payers are not clearly associated with fewer investment opportunities in Table 3, they are negatively related to V/A in our Tobit setting when other variables are controlled.

Model (2) repeat Model (1) by replacing Ntdshr with No1. The results are almost identical to that of Model (1). No1 is positive and significant at the one percent level, indicating that the likelihood to pay dividends is positively associated with the percentage of shares owned by the largest (controlling) non-tradable shareholder. Models (3) and (4) repeat Models (1) and (2) but add in two dummy variables, SEO_{t-1} and SEO_{t+1} . We find that the coefficients for both dummies are positive. However, the coefficient for SEO_{t-1} is consistently insignificant, while the one for SEO_{t+1} is consistently significant at the one percent level across the two models. This suggests that likelihood of paying is not associated with the seasoned offering in the previous year, but is positively associated with that in the next year. The former is inconsistent with the argument that controlling shareholders use SEO proceeds to pay dividends, while the latter is consistent with the argument that firms pay dividends to facilitate future equity offerings in the market, which was also required by the CSRC in 2001. Lee and Xiao (2007) find that dividend payments are positively related to SEO_{t-1} . However, their sample period is only from 1996 to 1999. In fact, Lee and Xiao point out that the finding that controlling shareholders effectively sell a portion of their shares by taking in dividends but giving up rights issue subscriptions may only be relevant for the period 1996-1999. The estimated coefficients for all other variables in Models (3) and (4) are qualitatively the same as those in Models (1) and (2).

As mentioned above, although the same set of independent variables is included in the OLS regression as in the selection equation, the magnitude and even the sign of the estimated coefficients in the OLS regression can be different from those in the selection equation. However, we find that, as presented in Panel B, the sign and statistical significance of the estimated coefficients in the OLS regression are qualitatively the same as those in Panel A. These indicate that the determinants of the likelihood to pay dividends

are the similar to the determinants of the payout ratio. The only exception is that neither SEO_{t-1} nor SEO_{t+1} is significant in the OLS regressions, That is, payout ratio has nothing to do with the seasoned equity offering.

On the whole, Table 5 provides evidence that, despite the very different institutional setup, conventional factors such as size, profitability, investment opportunities, and leverage are still important determinants of the likelihood to pay dividends and the payout ratio in China. In addition, agency costs may still have an impact on dividend policy. More importantly, the likelihood to pay dividends, as well as the payout ratio, is positively related to the proportion of nonnegotiable shares (or the proportion of nonnegotiable shares held by the controlling (largest) shareholder) in a firm, which supports our H1a and H1b. This indicates that the special institutional features in China also play a role in dividend policy. However, several things are worth noting. First, we set the statistical significance at the 5 rather than the 10 percent level because our sample includes more than 7000 observations. Second, our Tobit regressions in Table 5 include only 7200 observations rather than the full 8132 because the data for Perk are only available from 1998 (see Table 3). Third, we have run regressions without Perk, and the results are very similar to those reported in Table 4. We also divide the whole sample period into two subsample periods with Perk omitted: from 1994 to 2000, and from 2001 to 2006. Again, the results are similar. In particular, the likelihood to pay is positively and significantly related to SEO_{t+1} but not to SEO_{t-1} , while the payout ratio is neither related to SEO_{t+1} nor to SEO_{t-1} .¹⁵

We test H2a and H2b by adding a GOV dummy to the baseline Tobit model:

Decision (selection) equation:

$$\begin{aligned} \text{Prob}(Y_{it}>0) = & a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 \text{No1}_{it}(\text{or} \\ & \text{Ntdshr}_{it}) + a_8 \text{GOV}_{it} + a_9 \text{Perk}_{it} + a_{10} \text{FCF}_{it} + \sum c_t \text{YR}_t + u_{it}, \\ & Z_i = 1 \text{ if } Y_{it} > 0 \end{aligned} \quad (3)$$

OLS regression equation:

$$\begin{aligned} E(P_i | Z_i = 1) = & a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 \text{No1}_{it}(\text{or} \\ & \text{Ntdshr}_{it}) + a_8 \text{GOV}_{it} + a_9 \text{Perk}_{it} + a_{10} \text{FCF}_{it} + a_{11} \lambda_{it} + \sum c_t \text{YR}_t + v_{it} \end{aligned} \quad (4)$$

where GOV is set to 1 if the controlling shareholder is a government agency, a government asset management company, or a government holding company, and zero if the controlling

¹⁵ We have also tried subsample periods 1994-2000 and 2001-2006; the results are qualitatively the same. These results are not reported to conserve space, but are available upon request.

shareholder is a business entity such as a state-owned company (SOE), a non-state owned company, etc. If the estimated coefficient for GOV is positive and significant in both the selection equation and the OLS equation, then our H2a and H2b that firms controlled by government agencies or asset management/holding companies are more likely to pay dividends and have higher payout ratios than firms controlled by a business parent company (an SOE or a legal person) are supported; if the estimated coefficient for GOV is negative and significant, then the opposite of H2a and H2b are supported; and if the estimated coefficient for GOV is insignificant, then the likelihood to pay and the payout ratio are not influenced by the identity of the controlling shareholder, be it a GOV or a business parent.

[Insert Table 6 here]

Table 6 presents the estimation results for Equations (3) and (4) in Panels A and B, respectively. The estimation results for all independent variables except GOV are similar to those reported in Table 5. However, the estimated coefficient for GOV is not statistically significant in any of the models in Panels A and B, indicating that the dividend payment behavior does not differ between the firms controlled by the government and other business parents. Hence, our H2a and H2b are not supported. These results suggest that the amount of nonnegotiable shares and the concentration of nonnegotiable shares are more important than the identity of the controlling shareholder in determining dividend payments.

We further modify our Tobit model to test H3a and H3b:

Decision (selection) equation:

$$\text{Prob}(Y_{it} > 0) = a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 D + a_8 \text{No1}_{it} (\text{or } \text{Ntdshr}_{it}) + a_9 \text{GOV}_{it} + a_{10} D * \text{No1}_{it} (\text{or } \text{Ntdshr}_{it}) + a_{11} D * \text{GOV}_{it} + a_{12} \text{FCF}_{it} + a_{13} \text{Perk}_{it} + \sum c_t YR_t + u_{it}, \quad Z_i = 1 \text{ if } Y_{it} > 0 \quad (5)$$

OLS regression equation:

$$E(P_i | Z_i = 1) = a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 D + a_8 \text{No1}_{it} (\text{or } \text{Ntdshr}_{it}) + a_9 \text{GOV}_{it} + a_{10} D * \text{No1}_{it} (\text{or } \text{Ntdshr}_{it}) + a_{11} D * \text{GOV}_{it} + a_{12} \text{FCF}_{it} + a_{13} \text{Perk}_{it} + a_{14} \lambda_{it} + \sum c_t YR_t + v_{it}, \quad (6)$$

where D is a dummy variable that is set to 1 if a firm's earnings drop more than 70 percent from its earnings in the previous year, and zero otherwise. The interactive terms D*No1, and D*Ntdshr are designed to capture the possible effect that more powerful nonnegotiable shareholders can force firms to pay (or pay more) dividends, even when earnings decrease

dramatically or turn negative. Similarly, the interactive term $D*GOV$ tests whether firms with GOV as the controlling shareholder have a lower likelihood of omitting or reducing dividends than firms with a business parent company. If the estimated coefficient for $D*GOV$ is positive and significant, then H3a is supported: government controlled firms are more likely to pay or to pay more dividends than firms controlled by business parents when earnings decrease significantly. If the estimated coefficient for $D*No1$ and $D*Ntdshr$ are positive and significant, then H3b is supported: firms with a higher proportion of nonnegotiable shares (or more powerful controlling (nonnegotiable) shareholders) have a lower likelihood of omitting or reducing dividends when earnings decrease significantly.

China has an investor warning system. If a firm has a negative net income for two consecutive years, the CSRC gives a special treatment (ST) to the shares of the company. The daily price limit for the ST firms is 5 percent. If a firm has consecutive losses for three years, it is further classified as a ST* firm, and faces delisting if it continues to lose money. The cash dividend payments are restricted for firms with ST and ST* status. Hence, we delete ST and ST* firms. This reduces the number of observations to 6920.

[Insert Table 7 here]

The testing results are reported in Table 7. Again, Panel A shows the results for the selection equation while Panel B represents OLS. Our focus is on D and interactive terms, as the estimates for all other variables are similar to those reported in Tables 5 and 6. The estimated coefficient for earnings declining dummy D is negative and statistically significant in all five specifications in Panel A, indicating that firms, in general, tend to omit dividends when earnings decrease sharply. However, the interactive dummies $D*No1$, $D*Ntdshr$, and $D*GOV$ are not statistically significant in Models (1), (2), and (3), respectively. Furthermore, neither are they statistically significant when both $D*No1$ and $D*GOV$ or both $D*Ntdshr$ and $D*GOV$ are included in Model (4) or (5). Thus, our H3a and H3b are not supported. Overall, this suggests that the ability to pay is still the most important determinant for the decision to pay or not to pay. Even though nonnegotiable shareholders prefer dividends, they do not have (or use their) power to force firms to pay dividends during the bad years. The OLS regression results are largely the same, except that D is only statistically significant at the 5 percent level in Model (3). As a robustness check, we also repeat the test with two alternative definitions for D. First, we set D to 1 if earnings drop more than 50 percent and zero otherwise. Second, we set D to 1 if earnings

drop more than 100 percent and zero otherwise. The results are qualitatively the same.¹⁶ These results are inconsistent with those reported by DeAngelo, DeAngelo, and Skinner (1992) for the US that firms omit or reduce their dividends only when earnings deteriorate on a permanent basis. On the other hand, they seem consistent with Goergen, Renneboog, and Silva's findings (2005) for Germany that firms are quite flexible in cutting or omitting dividends when they incur a temporary loss.

6. Market Responses to Dividend Announcements and the 2001 CSRC Stipulation

We use event studies to test H4a, H4b, and H5 in this section. To sharpen the test, we examine how investors (negotiable shareholders) react to dividend announcements in two extreme situations. First, we limit the observations to firms that have significant declines in earnings, i.e., firms with earnings that decreased by more than 70 percent from the previous year. Second, we limit the observations to firms with earnings that increased by more than 70 percent from the previous year. We choose 70 percent as a cutoff point here partly because it is consistent with our definition for D in Equations (5) and (6), and partly because there are not many firms increasing dividends when they have a substantial drop in earnings. In fact, no firm increased dividends when incurring losses during the entire period 1994-2006.

Specifically, we study how investors respond to dividend omissions, decreases, and increases in each situation. If cash dividends are mainly paid to cater to nonnegotiable shareholders, then an increase in dividends should be bad news, or at least not good news, in the first situation, while a dividend decrease or omission should be good news, or at least not bad news. On the other hand, if dividends are used to signal better earnings prospects or a reduction in agency costs, then an increase in dividends is good news, or at least not bad news, in the second situation, while a dividend decrease or omission may be bad news. However, a dividend decrease or omission in the second situation may also be good news to negotiable shareholders if it signals more profitable investment opportunities and, thus, more capital gains in the future.

All firms included in the test must also have stock return data available from 130 trading days before to 10 trading days after the dividend announcement date. For the whole period 1994-2006, there are 513 firms that meet the selection criteria in the first situation

¹⁶ The results are not reported to save space, but are available upon request. For general information, excluding ST and ST* firms, there are 1451 observations with earnings declining by more than 50%, 1153 observations by more than 70%, and 695 observations by more than 100%.

and 402 in the second. The standard market model and value-weighted market return are used to compute the cumulative abnormal return (CAR) in the relevant event windows: (-1, 1), (-3, 3), and (-10, 10). The estimation period is 120 days (-130, -11). The announcements are divided into three groups: dividend increase relative to the previous year (Div Inc), dividend decrease relative to the previous year (Div Dec), and dividend omission (Omi). Table 8 reports the testing results for the whole sample period (1994-2006), as well as for the two subsample periods (1994-2000 and 2001-2006).

[Insert Table 8 here]

For firms with a substantial drop in earnings, investors are unanimously insensitive to dividend announcements, whether firms announce an increase, a decrease, or an omission. CAR is statistically insignificant for all event windows in various sample periods. The insignificant CAR for the dividend decreasing and dividend omitting groups is understandable, as it is normal for firms to reduce or omit dividends in bad years when earnings decline dramatically or even turn negative. It is a bit surprising that CAR is not significantly negative for the dividend increasing group, as it is not reasonable to increase dividend payments in such a situation. Thus, H4a is not supported. The market does not respond negatively to the announcement of an increase in dividends when the firm incurs a loss or has a large decline in earnings. However, this is probably due to the small sample size. Notice that, for the whole sample period, only 19 out of 513 firms increased dividend payments. We do not report the results for the subsample periods, as there are only 9 observations in the period 1994-2000 and 10 in 2001-2006. This small sample size (less than 4 percent) actually suggests that profitability is still a major determinant for dividends.

For firms with a substantial increase in earnings, most firms (292 out of 402) increased their cash dividend payments, and not many firms (34 out of 402) omitted cash dividends. Again, this suggests that profitability is a major determinant for cash dividends. For the dividend increasing group, CAR is positive but insignificant for all three windows in the whole sample period. However, CAR is positive and significant for windows (-1, 1) and (-3, 3) in the first subsample period, and it is also positive and significant for the window (-10, 10) in the second subsample period. For the rest of the windows in the subsample periods, CAR is insignificant. Thus, the results suggest that negotiable shareholders view dividend increasing announcements in good years as normal or good news, which is partially consistent with the first part of H4b that the market responds positively to the announcement of an increase in dividends when the firm becomes much more profitable.

For the dividend decreasing group, instead of finding negative CAR, we find positive

and significant CAR for all event windows in the whole sample and the second subsample periods. The results for the first subsample are not reported as they are not meaningful due to the small sample size. CAR ranges from 2.3 percent to 4.8 percent, which are economically significant too. Therefore, negotiable shareholders view dividend decreases as good news when firms' profits increase dramatically. Even dividend omissions are not viewed by negotiable shareholders as bad news when firms' earnings increase greatly. CAR is positive and significant for window (-1, 1) in the whole sample, and window (-10, 10) for the second subsample; it is positive but insignificant for other windows. The results for the first period are not reported due to the small sample size. Hence, the second part of H4b, that the market responds negatively to the announcement of a decrease or omission in dividends when the firm becomes much more profitable, is not supported. Instead, the results indicate that negotiable shareholders prefer capital gains to dividends when firms are profitable.

On March 28, 2001, the CSRC stipulated that firms could not have rights issues without continuously paying cash dividends in the previous three years. If this stipulation really benefits negotiable shareholders, their share prices should increase, especially for firms that are profitable but pay cash dividends infrequently. If this mainly caters to nonnegotiable shareholders, then the share price should exhibit no response or even a negative response. We further test H5 that the 2001 CSRC stipulation benefits negotiable shareholders, especially shareholders of firms that are profitable but only pay cash dividends infrequently.

We restrict our sample to all profitable firms in 2000, with data available from 130 trading days before to 10 trading days after the announcement date, March 28, 2001. We only include profitable firms for two reasons. First, since the event is common to all firms, our sample will be the market if both profitable and non-profitable firms are included, which makes the market model non-useable. Second, the 2001 stipulation would have little impact on firms incapable of paying dividends. As documented earlier, more profitable firms are more capable of paying dividends than less profitable firms. We further restrict our sample to firms that had been continuously profitable for the past three years (1998-2000), but had omitted cash dividends at least twice, i.e., the firms capable of paying but that only paid infrequently.¹⁷ If the stipulation benefits negotiable shareholders, the positive impact would be most obviously shown up in this group. Again, the standard market model is used to compute CAR in the relevant event windows: (-1, 1), (-3, 3), and (-10, 10). The estimation

¹⁷ Dividends are usually paid only once a year in China.

period is 120 days (-130, -11).

[Insert Table 9 here]

Table 9 reports the event study results. There are 788 firms in the all profitable firms group, and 414 in the profitable but infrequently paying group. For all profitable firms, CAR is negative but only significant (at the 5 percent level) in the (-10, 10) window. For the profitable but rarely paying firms, CAR is unanimously insignificant in all three windows. Thus, H5 is not supported, and there is no evidence that the 2001 CSRC stipulation requiring three year cash dividend payments as a precondition for rights issues benefits negotiable shareholders.

For robustness checks, we tried alternative specifications for our event studies. First, we change the estimation window to 200 days, i.e., from -210 to -11. Second, we use equal-weighted market returns instead of value-weighted market returns in the market model. The results are qualitatively the same as those reported in Tables 8 and 9.¹⁸

7. Concluding Remarks

In this study, we examine determinants of the propensity to pay dividends and the payout ratio for listed firms in China's unique institutional setting during the period 1994-2006. Put together, we have come to the following conclusions. First, cash dividends are not used by nonnegotiable/controlling shareholders to expropriate minority/negotiable shareholders in any significant manner, although they do seem to be paid to cater to nonnegotiable/controlling shareholders to a certain extent. Profitability is still an important, if not the most important, determinant of the cash dividend payment decision. Nonnegotiable shareholders and/or large controlling shareholders are unable to force firms to pay or to pay more dividends during the years when firms' profit decline significantly. Second, firms with a business parent do not differ from firms with a pure government parent in their cash dividend payment behavior. Thus suggests that tunneling is not used by business parents to substitute for cash dividends. Third, negotiable shareholders do not suffer from cash dividend payments when firms perform poorly, but they respond positively to dividend decreases when firms perform very well; this indicates that negotiable shareholders do prefer capital gains to cash dividends. Fourth, cash dividends

¹⁸ The results are not reported, but are available upon request.

are not paid out from SEO proceeds raised in the previous year. Rather, dividends are paid to facilitate future seasoned equity offerings. Fifth, negotiable shareholders do not benefit from the CSRC cash dividend requirement for rights issues. On the whole, the cash dividend payment/payout decision of Chinese firms is balanced with conventional factors, China's share-segmentation system, and the ownership structure.

Our study not only provides useful insights into the dividend policy in China, but also helps to predict the future trend of dividend payments by Chinese firms. With the completion of the share-segmentation reform, all shares become tradable. Controlling shareholders should prefer cash dividends less than they did before. Hence, we expect that the percentage of payers and the payout ratio may decrease in the future. However, as long as the government is the largest co-investor, shares held by the controlling shareholder will still be less liquid than shares held by the general public. Therefore, controlling shareholders may still prefer more cash dividends than public/minority shareholders do. The relationship between the illiquidity of shares and dividend policy should have general implications beyond China.

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Table 1 Sample Selection

This table details the sample selection process. The population consists of all listed companies on the Shanghai Stock Exchange and Shenzhen Stock Exchange during the period 1994~2006. The observations are in terms of firm-year.

	Number of firm-year observations
Population	12397
Excluding:	
Firms listed in the SME sector	190
Observations with missing data items	2872
Firms in the financial industry	58
Firms with H-share listings	274
Sample including new lists	9003
New lists	871
Final Sample	8132

Table 2
Counts and Percents of Sample Firms in Different Cash Dividend Groups

This table presents, for each year from 1994 to 2006, the counts of all sample firms, new lists, and delisted firms. In addition, the table presents percentages of firms deciding to pay or not to pay dividends (Payers or Non-payers, respectively). The Non-payers are further categorized into firms that paid previously (Ex-payers) and firms that never paid (Never-pay). New Lists that Paid is the percent of new listed firms that paid dividends within one year of listing. Dividend Premium is defined as the difference between the average market-to-book ratios of Payers and Non-payers. Payout Ratio is total cash dividends issued by all firms divided by the total net income of all firms (or Payers).

Year	Sample Firms (Count)	New Lists (Count)	Delisted (Count)	Payers (%)	Non-payers (%)	Never-pay (%)	Ex-payer (%)	New Lists that Paid (%)	Dividend Premium (%)	Payout Ratio (%) (All)	Payout Ratio (%) (Payers)
1994	55	29	0	67.27	32.73	21.82	10.91	82.76	-13.35	12.01	13.43
1995	234	13	0	51.71	48.29	12.39	35.90	69.23	5.66	12.00	16.29
1996	228	165	0	30.26	69.74	12.28	57.46	23.64	3.77	7.45	14.39
1997	394	163	0	25.64	74.37	35.53	38.83	26.99	-6.04	24.18	43.09
1998	564	94	0	25.53	74.47	37.23	37.23	37.23	-24.42	20.79	46.57
1999	627	81	1	28.39	71.61	31.58	40.03	46.91	-39.98	21.03	40.18
2000	692	119	0	60.12	39.88	15.46	24.42	88.24	-49.01	32.24	36.75
2001	758	45	5	59.50	40.50	10.03	30.48	91.11	-47.92	39.72	36.24
2002	800	51	8	50.63	49.38	7.50	41.88	88.24	-53.57	42.83	39.33
2003	883	51	4	47.23	52.78	6.34	46.43	90.20	-41.29	33.99	34.05
2004	929	50	11	53.39	46.61	4.84	41.77	92.00	-35.98	40.96	36.59
2005	950	2	12	48.42	51.58	4.42	47.16	100.00	-41.97	49.52	40.64
2006	1018	8	12	50.00	50.00	4.72	45.29	100.00	-56.04	39.35	38.74

Table 3
Firm Attributes for Different Dividend Groupings

This table presents the mean and median (in parentheses) of firm attributes that are likely to affect the dividend payment for all sample firms (All firms), as well as for payers and non-payers (No-pay). E_t/A_t is the ratio of aggregate earnings before interest to aggregate assets, and Y_t/BE_t is the ratio of aggregate common stock earnings to aggregate book equity. They are the two proxies for profitability. V_t/A_t is the ratio of the aggregate market value to the aggregate book value of assets, which is the proxy for investment opportunities. Aggregate assets (A_t) and the percent of listed firms with the same or lower market capitalization (SEP_t) are proxies for firm size. Total liabilities over total assets (L_t/A_t) is a proxy for leverage. $RtdE_t$ is retained earnings as a percentage of total equity in a firm, which is a measure for the maturity of a firm. The proportion of nonnegotiable shares ($Ntdshr_t$) and the shareholding of the largest shareholder whose shares are non-tradable ($No1_t$) are proxies for the power of the nonnegotiable shareholders. $ExpR_t$ is the sum of administration expense and sales expense divided by total sales; $Perk_t$ is the other cash flow occurring in association with sales and operations divided by total sales; and FCF_t is the ratio of free cash flow divided by total sales. All three are proxies for agency costs. SEO_{t-1} (SEO_{t+1}) is a dummy variables which takes the value of 1 if the firm had seasoned equity offerings including rights issues in year t-1 (year t+1), and zero otherwise.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
$E_t/A_t(\%)$													
All firms	0.080 (0.074)	0.058 (0.057)	0.049 (0.052)	0.061 (0.067)	0.055 (0.065)	0.052 (0.060)	0.048 (0.053)	0.033 (0.043)	0.028 (0.038)	0.032 (0.037)	0.030 (0.036)	0.024 (0.034)	0.039 (0.038)
Payers	0.092 (0.084)	0.077 (0.074)	0.071 (0.061)	0.076 (0.071)	0.074 (0.074)	0.074 (0.069)	0.065 (0.061)	0.056 (0.051)	0.054 (0.049)	0.056 (0.050)	0.058 (0.052)	0.056 (0.051)	0.063 (0.054)
No-pay	0.055 (0.060)	0.037 (0.037)	0.039 (0.042)	0.056 (0.066)	0.049 (0.061)	0.044 (0.054)	0.022 (0.035)	0.000 (0.023)	0.001 (0.023)	0.009 (0.023)	-0.003 (0.021)	-0.006 (0.020)	0.014 (0.026)
$Y_t/BE_t(\%)$													
All firms	0.120 (0.113)	0.083 (0.082)	0.049 (0.078)	0.068 (0.101)	0.052 (0.101)	0.044 (0.088)	0.043 (0.075)	0.013 (0.058)	-0.003 (0.049)	0.021 (0.050)	0.001 (0.049)	-0.021 (0.041)	0.020 (0.053)
Payers	0.142 (0.130)	0.119 (0.112)	0.105 (0.100)	0.119 (0.104)	0.111 (0.109)	0.109 (0.105)	0.095 (0.090)	0.077 (0.070)	0.074 (0.066)	0.081 (0.073)	0.088 (0.075)	0.086 (0.073)	0.093 (0.079)
No-pay	0.074 (0.078)	0.044 (0.043)	0.025 (0.040)	0.051 (0.101)	0.032 (0.100)	0.018 (0.076)	-0.036 (0.032)	-0.081 (0.019)	-0.081 (0.015)	-0.033 (0.020)	-0.098 (0.014)	-0.121 (0.011)	-0.054 (0.021)
V_t/A_t													
All firms	1.327 (1.280)	1.443 (1.313)	1.932 (1.776)	2.567 (2.260)	2.509 (2.231)	2.735 (2.454)	3.575 (3.263)	2.659 (2.375)	2.107 (1.773)	1.688 (1.475)	1.376 (1.224)	1.143 (1.020)	1.460 (1.207)
Payers	1.313 (1.280)	1.483 (1.355)	2.043 (1.963)	2.591 (2.266)	2.423 (2.280)	2.536 (2.324)	3.466 (3.137)	2.553 (2.292)	2.013 (1.747)	1.673 (1.489)	1.385 (1.218)	1.188 (1.046)	1.523 (1.225)
No-pay	1.356 (1.277)	1.400 (1.268)	1.883 (1.715)	2.559 (2.254)	2.539 (2.229)	2.813 (2.507)	3.738 (3.432)	2.814 (2.488)	2.205 (1.818)	1.702 (1.448)	1.365 (1.227)	1.101 (0.994)	1.398 (1.176)

Table 3 (continued)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
A _t (RMB in Millions)													
All firms	1194 (850)	1151 (722)	1245 (789)	1125 (683)	1264 (844)	1456 (975)	1749 (1189)	1989 (1328)	2139 (1426)	2610 (1588)	2983 (1775)	3301 (1871)	3635 (1938)
Payers	1442 (1113)	1193 (768)	1439 (977)	1559 (1051)	1527 (1008)	1927 (1288)	1985 (1294)	2319 (1501)	2616 (1626)	3483 (2048)	3847 (2215)	4442 (2322)	5135 (2573)
No-pay	684 (680)	1106 (705)	1161 (677)	975 (620)	1174 (793)	1270 (886)	1392 (1034)	1503 (1116)	1651 (1230)	1829 (1308)	1992 (1303)	2229 (1418)	2134 (1375)
SEP _t (%)													
All firms	45.1 (45.7)	50.3 (50.6)	46.8 (45.0)	44.8 (42.3)	47.5 (45.9)	49.8 (50.4)	50.3 (50.3)	51.3 (51.7)	51.6 (52.8)	52.1 (52.8)	53.1 (54.8)	53.3 (54.2)	52.2 (52.8)
Payers	53.9 (61.5)	54.3 (56.6)	56.6 (58.0)	57.1 (57.8)	57.1 (61.1)	60.3 (62.0)	56.1 (58.1)	57.7 (60.5)	60.1 (64.2)	63.6 (68.9)	64.5 (68.4)	65.8 (69.6)	63.9 (68.4)
No-pay	27.1 (21.3)	46.0 (43.4)	42.5 (37.8)	40.5 (37.5)	44.2 (42.4)	45.7 (44.8)	41.6 (37.5)	41.8 (38.9)	42.9 (40.5)	41.7 (39.6)	40.1 (35.6)	41.6 (39.6)	40.4 (37.3)
RtdEt													
All firms	0.193 (0.201)	0.120 (0.107)	0.117 (0.137)	0.132 (0.172)	0.106 (0.186)	0.068 (0.171)	0.069 (0.164)	0.032 (0.130)	0.010 (0.136)	0.052 (0.167)	0.036 (0.171)	0.045 (0.186)	0.042 (0.204)
Payers	0.217 (0.210)	0.136 (0.114)	0.154 (0.135)	0.174 (0.160)	0.173 (0.167)	0.184 (0.171)	0.192 (0.179)	0.162 (0.149)	0.172 (0.163)	0.212 (0.199)	0.237 (0.224)	0.255 (0.244)	0.281 (0.267)
No-pay	0.142 (0.135)	0.102 (0.099)	0.101 (0.139)	0.117 (0.183)	0.083 (0.192)	0.022 (0.171)	-0.116 (0.115)	-0.160 (0.079)	-0.156 (0.094)	-0.091 (0.121)	-0.195 (0.087)	-0.152 (0.103)	-0.196 (0.090)
L _t /A _t (%)													
All firms	44.1 (45.7)	46.7 (47.2)	47.3 (47.1)	45.9 (46.2)	43.7 (43.0)	44.1 (43.9)	45.4 (45.2)	45.7 (45.8)	47.7 (47.3)	49.6 (50.6)	51.6 (52.2)	53.3 (54.5)	53.5 (55.4)
Payers	41.1 (39.8)	44.7 (44.1)	44.4 (44.8)	43.1 (42.3)	39.3 (39.6)	40.5 (40.6)	42.2 (42.5)	41.1 (41.0)	42.9 (42.4)	43.9 (44.0)	47.7 (48.7)	49.0 (50.4)	49.6 (51.8)
No-pay	50.3 (47.6)	48.8 (50.3)	48.6 (48.5)	46.9 (47.5)	45.3 (45.5)	45.6 (45.1)	50.2 (49.1)	52.3 (53.4)	52.6 (53.3)	54.7 (56.0)	56.2 (57.7)	57.3 (58.3)	57.4 (58.9)
Ntdshr _t (%)													
All firms	62.0 (65.0)	62.5 (64.3)	61.7 (62.3)	65.0 (68.8)	65.6 (68.7)	64.0 (65.8)	61.4 (63.1)	60.6 (62.4)	60.146 (62.000)	60.1 (61.8)	60.1 (62.1)	58.5 (60.6)	50.1 (51.1)
Payers	62.8 (65.0)	64.4 (64.9)	64.7 (63.8)	68.0 (70.6)	66.2 (68.5)	66.6 (68.9)	62.0 (63.7)	62.1 (63.9)	61.734 (63.677)	61.8 (63.6)	61.7 (63.9)	59.4 (61.4)	51.5 (52.6)
No-pay	60.4 (63.2)	60.4 (63.2)	60.4 (61.1)	64.0 (68.4)	65.3 (68.7)	63.0 (65.0)	60.4 (62.6)	58.3 (59.7)	58.518 (60.292)	58.6 (60.4)	58.3 (59.9)	57.6 (59.7)	48.7 (49.3)

Table 3 (continued)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
NoI _t (%)													
All firms	41.2 (40.9)	43.0 (42.2)	42.4 (42.0)	42.6 (42.1)	43.6 (42.8)	44.5 (43.1)	44.2 (43.0)	44.0 (43.1)	43.3 (42.2)	42.9 (41.4)	42.4 (40.3)	41.1 (39.2)	36.1 (33.5)
Payers	42.2 (43.3)	43.2 (42.2)	46.8 (44.9)	45.7 (44.4)	46.0 (48.4)	48.2 (48.5)	45.8 (45.4)	46.2 (46.7)	46.2 (45.9)	46.7 (46.9)	45.9 (46.0)	44.3 (43.3)	39.2 (37.8)
No-pay	39.2 (39.2)	42.8 (42.5)	40.4 (40.9)	41.5 (40.4)	42.8 (42.1)	43.1 (41.0)	41.9 (40.1)	40.8 (39.1)	40.4 (38.6)	39.4 (34.9)	38.4 (33.8)	38.2 (33.9)	32.9 (29.7)
ExpR _t													
All firms	0.126 (0.104)	0.131 (0.108)	0.151 (0.123)	0.150 (0.111)	0.159 (0.109)	0.174 (0.120)	0.164 (0.125)	0.185 (0.135)	0.201 (0.134)	0.185 (0.139)	0.178 (0.126)	0.176 (0.124)	0.158 (0.118)
Payers	0.113 (0.085)	0.111 (0.099)	0.117 (0.098)	0.118 (0.102)	0.117 (0.102)	0.130 (0.098)	0.127 (0.108)	0.138 (0.121)	0.139 (0.121)	0.139 (0.118)	0.129 (0.111)	0.129 (0.108)	0.120 (0.097)
No-pay	0.153 (0.135)	0.153 (0.130)	0.165 (0.131)	0.161 (0.114)	0.173 (0.113)	0.191 (0.128)	0.220 (0.158)	0.254 (0.156)	0.265 (0.155)	0.226 (0.161)	0.233 (0.156)	0.220 (0.151)	0.196 (0.144)
Perk _t													
All firms					0.186 (0.103)	0.185 (0.095)	0.184 (0.095)	0.204 (0.103)	0.205 (0.097)	0.197 (0.095)	0.170 (0.086)	0.162 (0.087)	0.153 (0.082)
Payers					0.140 (0.086)	0.132 (0.072)	0.157 (0.083)	0.161 (0.087)	0.120 (0.078)	0.108 (0.077)	0.102 (0.066)	0.103 (0.068)	0.102 (0.064)
No-pay					0.202 (0.109)	0.206 (0.108)	0.225 (0.120)	0.267 (0.124)	0.292 (0.123)	0.277 (0.120)	0.248 (0.121)	0.217 (0.111)	0.203 (0.104)
FCF _t													
All firms	0.007 (0.091)	-0.276 (-0.138)	-0.036 (-0.006)	-0.041 (-0.009)	-0.061 (-0.023)	0.055 (0.026)	-0.074 (0.003)	-0.160 (-0.056)	-0.025 (0.004)	-0.080 (-0.033)	-0.041 (-0.011)	-0.023 (-0.005)	-0.058 (-0.006)
Payers	0.090 (0.065)	-0.153 (-0.058)	0.010 (0.029)	-0.060 (-0.038)	-0.098 (0.012)	0.017 (0.038)	-0.071 (0.006)	-0.117 (-0.044)	-0.032 (0.005)	-0.095 (-0.046)	-0.054 (-0.014)	-0.027 (-0.005)	-0.057 (-0.005)
No-pay	-0.164 (0.106)	-0.408 (-0.216)	-0.056 (-0.012)	-0.035 (-0.006)	-0.048 (-0.032)	0.070 (0.018)	-0.079 (0.001)	-0.223 (-0.087)	-0.018 (0.004)	-0.066 (-0.023)	-0.025 (-0.005)	-0.019 (-0.005)	-0.059 (-0.007)
SEO _{t-1}													
All firms	0.273 (0.000)	0.209 (0.000)	0.241 (0.000)	0.089 (0.000)	0.225 (0.000)	0.155 (0.000)	0.162 (0.000)	0.231 (0.000)	0.063 (0.000)	0.062 (0.000)	0.025 (0.000)	0.017 (0.000)	0.003 (0.000)
Payers	0.189 (0.000)	0.182 (0.000)	0.261 (0.000)	0.139 (0.000)	0.278 (0.000)	0.169 (0.000)	0.188 (0.000)	0.248 (0.000)	0.099 (0.000)	0.079 (0.000)	0.034 (0.000)	0.024 (0.000)	0.006 (0.000)
No-pay	0.444 (0.000)	0.239 (0.000)	0.233 (0.000)	0.072 (0.000)	0.207 (0.000)	0.149 (0.000)	0.123 (0.000)	0.205 (0.000)	0.025 (0.000)	0.047 (0.000)	0.014 (0.000)	0.010 (0.000)	0.000 (0.000)

Table 3 (Continued)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
SEO _{t+1}													
All firms	0.109 (0.000)	0.154 (0.000)	0.228 (0.000)	0.170 (0.000)	0.202 (0.000)	0.287 (0.000)	0.077 (0.000)	0.063 (0.000)	0.028 (0.000)	0.019 (0.000)	0.003 (0.000)	0.046 (0.000)	0.127 (0.000)
Payers	0.135 (0.000)	0.256 (0.000)	0.304 (0.000)	0.228 (0.000)	0.257 (0.000)	0.388 (0.000)	0.103 (0.000)	0.091 (0.000)	0.042 (0.000)	0.034 (0.000)	0.006 (0.000)	0.083 (0.000)	0.167 (0.000)
No-pay	0.056 (0.000)	0.044 (0.000)	0.195 (0.000)	0.150 (0.000)	0.183 (0.000)	0.247 (0.000)	0.036 (0.000)	0.023 (0.000)	0.013 (0.000)	0.006 (0.000)	0.000 (0.000)	0.012 (0.000)	0.086 (0.000)

Table 4 Correlation Matrix

This table reports the Pearson correlation coefficient matrix for all the variables presented in Table 3. E_t/A_t is the ratio of aggregate earnings before interest to aggregate assets, and Y_t/BE_t is the ratio of aggregate common stock earnings to aggregate book equity. These are the two proxies for profitability. V_t/A_t is the ratio of the aggregate market value to the aggregate book value of assets, which is the proxy for investment opportunities. Aggregate assets (A_t) and the percent of listed firms with the same or lower market capitalization (SEP_t) are proxies for firm size. Total liabilities over total assets (L_t/A_t) is a proxy for leverage. $RtdE_t$ is retained earnings as a percentage of total equity in a firm, which is a measure for the maturity of a firm. The proportion of nonnegotiable shares ($Ntrshr_t$) and the shareholding of the largest shareholder whose shares are non-tradable ($No1_t$) are proxies for the power of the nonnegotiable shareholders. $ExpR_t$ is the sum of administration expense and sales expense divided by total sales; $Perk_t$ is the other cash flow occurring in association with sales and operations divided by total sales; and FCF_t is the ratio of free cash flow divided by total sales. All three are proxies for agency costs. SEO_{t-1} (SEO_{t+1}) is a dummy variable that takes the value of 1 if the firm had seasoned equity offerings including rights issues in year t-1 (year t+1), and zero otherwise.

	E_{it}/A_{it}	Y_{it}/BE_{it}	V_{it}/A_{it}	A_{it}	SEP_{it}	$RtdEt$	L_{it}/A_{it}	$Ntrshr_{it}$	$No1_{it}$	$ExpR_{it}$	$Perk_{it}$	FCF_{it}	SEO_{it-1}
Y_{it}/BE_{it}	0.81**												
V_{it}/A_{it}	0.18**	0.06**											
A_{it}	0.06**	0.06**	-0.19**										
SEP_{it}	0.36**	0.27**	0.03**	0.34**									
$RtdEt$	0.50**	0.70**	-0.06**	0.08**	0.26**								
L_{it}/A_{it}	-0.34**	-0.36**	-0.28**	0.08**	-0.16**	-0.40**							
$Ntrshr_{it}$	0.12**	0.08**	0.23**	0.01	0.10**	0.04**	-0.09**						
$No1_{it}$	0.15**	0.14**	0.02	0.15**	0.24**	0.13**	-0.13**	0.50**					
$ExpR_{it}$	-0.54**	-0.55**	0.10**	-0.09**	-0.24**	-0.46**	0.10**	-0.07**	-0.17**				
$Perk_{it}$	-0.25**	-0.20**	0.10**	-0.09**	-0.18**	-0.19**	0.07**	-0.03*	-0.16**	0.49**			
FCF_{it}	0.01	0.01	-0.02*	0.00	0.01	0.02	0.00	-0.01	0.02	-0.06**	-0.06**		
SEO_{it-1}	0.08**	0.07**	0.06**	0.01	0.07**	0.07**	-0.11**	-0.01	0.00	-0.06**	0.00	0.00	
SEO_{it+1}	0.21**	0.13**	0.10**	0.01	0.07**	0.09**	-0.03*	0.04**	0.04**	-0.10**	-0.06**	0.00	0.07**

*(**) denotes significance at the 5(1) percent level.

Table 5
Determinants on Dividend Payment (1994-2006)

This table presents the results of the Tobit analysis on dividend payment. The Tobit model consists of a selection equation and an OLS equation. The selection equation examines the decision to pay or not to pay, while the OLS equation examines the question of, given the decision to pay, what the payout ratio will be:

Decision (selection) equation:

$$\begin{aligned} \text{Prob}(Y_{it} > 0) &= a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 \text{No1}_{it} (\text{or } \text{Ntdshr}_{it}) + a_8 \text{FCF}_{it} + a_9 \text{Perk}_{it} + \sum c_t \text{YR}_t + u_{it}, \\ Z_i &= 1 \text{ if } Y_{it} > 0 \end{aligned} \quad (1)$$

OLS regression equation:

$$E(P_i | Z_i = 1) = a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 \text{No1}_{it} (\text{or } \text{Ntdshr}_{it}) + a_8 \text{FCF}_{it} + a_9 \text{Perk}_{it} + a_{10} \lambda_{it} + \sum c_t \text{YR}_t + v_{it}, \quad (2)$$

The selection equation is a Probit model. Y_{it} is the amount of cash dividend paid in excess of the withholding tax by firm i in year t . Z_i is a binary variable that takes the value of 1 if the cash dividend paid by firm i in year t is greater than the withholding tax, and zero otherwise. The OLS equation is a censored regression model, where P_i represents the payout ratio. The error terms u_{it} and v_{it} are assumed to be jointly normally distributed with zero mean and ρ correlation. Heckman's two-step estimation procedure has λ_{it} , the inverse Mills ratio, generated in the Probit model in the first pass and then added into the OLS regression as the second pass to avoid bias estimation due to the omitted variable of the censored data. The coefficient of λ_{it} , i.e. a_{10} , equals to the product of ρ and σ_v , the standard deviation of the residuals of the OLS regression. SEP_{it} is the percent of listed firms with the same or lower market capitalization; V_{it}/A_{it} is the ratio of the aggregate market value to the aggregate book value of assets; E_{it}/A_{it} is the ratio of aggregate earnings before interest to aggregate assets; L_{it}/A_{it} is total liabilities over total assets; SEO_{it-1} (SEO_{it+1}) is a dummy variable that takes the value of 1 if the firm had seasoned equity offerings including rights issues in year $t-1$ (year $t+1$), and zero otherwise; Ntdshr_{it} is the proportion of nonnegotiable shares and No1_{it} is the shareholding of the largest shareholder (whose shares are non-tradable); and FCF_{it} and Perk_{it} are the ratios of free cash flow divided by total sales and other cash flow occurring in association with sales and operations divided by total assets, respectively. YR_t is the year dummies. Notice all percent are converted into fraction when used in the regression. The coefficients for year dummies have been omitted from table to save space. Panel A reports the results for the selection equation, while Panel B reports the results for OLS regression. t -values are in parentheses.

Panel A: Selection

	Const.	SEP _{it}	V _{it} /A _{it}	E _{it} /A _{it}	Ntrshr _{it}	No1 _{it}	FCF _{it}	Perk _{it}	L _{it} /A _{it}	SEO _{it-1}	SEO _{it+1}	σ	Obs.
Model 1	-1.526**	0.934**	-0.332**	15.382**	1.120**		0.032	-0.566**	-1.482**			0.101749	7200
	(-11.233)	(13.760)	(-16.130)	(24.791)	(8.132)		(0.831)	(-7.105)	(-13.133)				
Model 2	-0.906**	0.899**	-0.296**	15.261**		0.510**	0.031	-0.544**	-1.408**			0.102339	7200
	(-7.751)	(13.056)	(-14.698)	(24.698)		(5.114)	(0.804)	(-6.819)	(-12.497)				
Model 3	-1.582**	0.926**	-0.330**	15.116**	1.120**		0.034	-0.562**	-1.501**	0.085	0.186**	0.100381	7200
	(-11.417)	(13.584)	(-15.978)	(24.177)	(8.240)		(0.896)	(-7.053)	(-13.229)	(1.395)	(2.891)		
Model 4	-0.088	0.892**	-0.294**	15.014**		0.510**	0.032	-0.540**	-1.426**	0.069	0.174**	0.100658	7200
	(-0.875)	(12.901)	(-14.526)	(24.109)		(5.128)	(0.850)	(-6.768)	(-12.585)	(1.122)	(2.712)		

Panel B: OLS

	Const.	SEP _{it}	V _{it} /A _{it}	E _{it} /A _{it}	Ntrshr _{it}	No1 _{it}	FCF _{it}	Perk _{it}	L _{it} /A _{it}	SEO _{it-1}	SEO _{it+1}	ρ	Obs.
Model 1	-0.058*	0.082**	-0.024**	1.648**	0.090**		-0.003	-0.033**	-0.069**			0.570333	7200
	(-1.970)	(7.089)	(-6.863)	(12.495)	(4.925)		(-0.642)	(-2.752)	(-3.952)				
Model 2	-0.04	0.078**	-0.022**	1.652**		0.090**	-0.003	-0.030*	-0.065**			0.588057	7200
	(-1.524)	(6.624)	(-6.441)	(12.178)		(5.484)	(-0.679)	(-2.496)	(-3.690)				
Model 3	-0.055	0.078**	-0.023**	1.618**	0.090**		-0.002	-0.031**	-0.065**	0.010	0.000	0.530815	7200
	(-1.820)	(6.838)	(-6.653)	(12.538)	(4.886)		(-0.566)	(-2.652)	(-3.676)	(1.775)	(0.039)		
Model 4	-0.035	0.074**	-0.021**	1.618**		0.090**	-0.003	-0.028*	-0.060**	0.009	-0.001	0.54135	7200
	(-1.314)	(6.332)	(-6.184)	(12.180)		(5.478)	(-0.616)	(-2.367)	(-3.370)	(1.582)	(-0.111)		

** denotes statistical significance at the 5(1) percent level.

Table 6
The Impact of Different Controlling Shareholders on Dividends (1994-2006)

This table presents the results of Tobit analysis on how different controlling shareholders may affect dividend payments. The Tobit model consists of a selection equation and an OLS equation. The selection equation examines the decision to pay or not to pay while the OLS equation examines the question of, given the decision to pay, what the payout ratio is:

Decision (selection) equation:

$$\begin{aligned} \text{Prob}(Y_{it} > 0) &= a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 \text{GOV}_{it} + a_8 \text{Ntdshr}_{it} (\text{or No1}_{it}) + a_9 \text{FCF}_{it} + a_{10} \text{Perk}_{it} + \sum c_t \text{YR}_t + u_{it} \\ Z_i &= 1 \text{ if } Y_{it} > 0 \end{aligned} \quad (3)$$

OLS regression equation:

$$E(P_i | Z_i = 1) = a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 \text{GOV}_{it} + a_8 \text{Ntdshr}_{it} (\text{or No1}_{it}) + a_9 \text{FCF}_{it} + a_{10} \text{Perk}_{it} + a_{12} \lambda_{it} + \sum c_t \text{YR}_t + v_{it} \quad (4)$$

The selection equation is a Probit model. Y_{it} is the amount of cash dividend paid in excess of the withholding tax by firm i in year t . Z_i is a binary variable that takes the value of 1 if the cash dividend paid by firm i in year t is greater than the withholding tax, and zero otherwise. The OLS equation is a censored regression model, where P_i represents the payout ratio. The error terms u_{it} and v_{it} are assumed to be jointly normally distributed with zero means and correlation ρ . Heckman's two-step estimation procedure has λ_{it} , the inverse Mills ratio, generated in the Probit model in the first pass and then added into the OLS regression as the second pass to avoid bias estimation due to the omitted variable of the censored data. The coefficient of λ_{it} , i.e. a_{12} , equals to the product of ρ and σ_v , the standard deviation of the residuals of the OLS regression. SEP_{it} is the percent of listed firms with the same or lower market capitalization; V_{it}/A_{it} is the ratio of the aggregate market value to the aggregate book value of assets; E_{it}/A_{it} is the ratio of aggregate earnings before interest to aggregate assets; L_{it}/A_{it} is total liabilities over total assets; SEO_{it-1} (SEO_{it+1}) is a dummy variable that takes the value of 1 if the firm had seasoned equity offerings including rights issues in year $t-1$ (year $t+1$), and zero otherwise; GOV_{it} is a dummy variable that takes the value of 1 if the controlling shareholder of the firm is a government agency or a government asset management company, and zero otherwise; Ntdshr_{it} is the proportion of nonnegotiable shares and No1_{it} is the shareholding of the largest shareholder (whose shares are non-tradable); and FCF_{it} and Perk_{it} are the ratios of free cash flow divided by total sales and other cash flow occurring in association with sales and operations divided by total assets, respectively. YR_t is the year dummies. Notice all percent are converted into fraction when used in the regression. The coefficients for year dummies have not been reported in the table to save space. Panel A reports the results for the selection equation, while Panel B reports the results for OLS regression. t -values are in parentheses.

Panel A: Selection

	Const.	SEP _{it}	V _{it} /A _{it}	E _{it} /A _{it}	Ntdshr _{it}	No1t	GOV _{it}	FCF _{it}	Perk _{it}	L _{it} /A _{it}	SEO _{itt-1}	SEO _{it+1}	σ	Obs.
Model 1	-1.552**	0.944**	-0.332**	15.396**	1.120**		0.061	0.031	-0.561**	-1.487**			0.102	7200
	(-11.271)	(13.791)	(-16.115)	(24.798)	(8.180)		(1.176)	(0.823)	(-7.044)	(-13.164)				
Model 2	-1.607**	0.936**	-0.330**	15.130**	1.120**		0.061	0.034	-0.557**	-1.506**	0.084	0.186**	0.100	7200
	(-11.455)	(13.615)	(-15.966)	(24.185)	(8.286)		(1.166)	(0.885)	(-6.991)	(-13.259)	(1.376)	(2.896)		
Model 3	-0.112	0.909**	-0.296**	15.274**		0.510**	0.06	0.03	-0.539**	-1.412**			0.102	7200
	(-1.106)	(13.098)	(-14.664)	(24.705)		(5.190)	(1.159)	(0.794)	(-6.748)	(-12.521)				
Model 4	-0.103	0.902**	-0.294**	15.027**		0.591**	0.06	0.032	-0.535**	-1.430**	0.068	0.174**	0.101	7200
	(-1.009)	(12.943)	(-14.496)	(24.116)		(5.202)	(1.153)	(0.838)	(-6.697)	(-12.610)	(1.106)	(2.716)		

Panel B: OLS

	Const.	SEP _{it}	V _{it} /A _{it}	E _{it} /A _{it}	Ntdshr _{it}	No1t	GOV _{it}	FCF _{it}	Perk _{it}	L _{it} /A _{it}	SEO _{itt-1}	SEO _{it+1}	ρ	Obs.
Model 1	-0.060*	0.082**	-0.024**	1.648**	0.090**		0.004	-0.003	-0.032**	-0.069**			0.570	7200
	(-2.006)	(7.085)	(-6.867)	(12.484)	(4.947)		(0.731)	(-0.648)	(-2.726)	(-3.958)				
Model 2	-0.039	0.079**	-0.023**	1.618**	0.090**		0.004	-0.002	-0.031**	-0.065**	0.010	0.000	0.531	7200
	(-1.201)	(6.835)	(-6.658)	(12.526)	(4.907)		(0.705)	(-0.571)	(-2.627)	(-3.683)	(1.772)	(0.040)		
Model 3	-0.042	0.079**	-0.022**	1.653**		0.090**	0.006	-0.003	-0.029*	-0.065**			0.588	7200
	(-1.589)	(6.650)	(-6.446)	(12.175)		(5.538)	(0.986)	(-0.687)	(-2.455)	(-3.699)				
Model 4	-0.037	0.075**	-0.021**	1.618**		0.090**	0.005	-0.003	-0.028*	-0.060**	0.009	-0.001	0.542	7200
	(-1.377)	(6.358)	(-6.190)	(12.177)		(5.530)	(0.957)	(-0.624)	(-2.327)	(-3.380)	(1.578)	(-0.111)		

*(**) denotes statistical significance at the 5(1) percent level.

Table 7
Downside Flexibility of Dividend Payment (1994-2006)

This table presents the results of Tobit analysis on the downside flexibility of dividend payments. The Tobit model consists of a selection equation and an OLS equation. The selection equation examines the decision to pay or not to pay, while the OLS equation examines the question of, given the decision to pay, what the payout ratio is:

Decision (selection) equation:

$$\text{Prob}(Y_{it} > 0) = a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 D + a_8 \text{No1}_{it}(\text{or Ntdshr}_{it}) + a_9 \text{GOV}_{it} + a_{10} D * \text{No1}_{it}(\text{or Ntdshr}_{it}) + a_{11} D * \text{GOV}_{it} + a_{12} \text{FCF}_{it} + a_{13} \text{Perk}_{it} + \sum c_t \text{YR}_t + u_{it}, \quad Z_i = 1 \text{ if } Y_{it} > 0 \quad (5)$$

OLS regression equation:

$$E(P_i | Z_i = 1) = a_0 + a_1 \text{SEP}_{it} + a_2 V_{it}/A_{it} + a_3 (E/A)_{it} + a_4 (L/A)_{it} + a_5 \text{SEO}_{it-1} + a_6 \text{SEO}_{it+1} + a_7 D + a_8 \text{No1}_{it}(\text{or Ntdshr}_{it}) + a_9 \text{GOV}_{it} + a_{10} D * \text{No1}_{it}(\text{or Ntdshr}_{it}) + a_{11} D * \text{GOV}_{it} + a_{12} \text{FCF}_{it} + a_{13} \text{Perk}_{it} + a_{14} \lambda_{it} + \sum c_t \text{YR}_t + v_{it}, \quad (6)$$

The selection equation is a Probit model. Y_{it} is the amount of cash dividend paid in excess of the withholding tax by firm i in year t . Z_i is a binary variable that takes the value of 1 if the cash dividend paid by firm i in year t is greater than the withholding tax, and zero otherwise. The OLS equation is a censored regression model, where P_i represents the payout ratio. The error terms u_{it} and v_{it} are assumed to be jointly normally distributed with zero means and correlation ρ . Heckman's two-step estimation procedure has λ_{it} , the inverse Mills ratio, generated in the Probit model in the first pass and then added into the OLS regression as the second pass to avoid bias estimation due to the omitted variable of the censored data. The coefficient of λ_{it} , i.e. a_{17} , equals to the product of ρ and σ_v , the standard deviation of the residuals of the OLS regression. SEP_{it} is the percentage of listed firms with the same or lower market capitalization; V_{it}/A_{it} is the ratio of the aggregate market value to the aggregate book value of assets; E_{it}/A_{it} is the ratio of aggregate earnings before interest to aggregate assets; L/A_t is total liabilities over total assets; SEO_{it-1} (SEO_{it+1}) is a dummy variable that takes the value of 1 if the firm had seasoned equity offerings including rights issues in year $t-1$ (year $t+1$), and zero otherwise; Ntdshr_{it} is the proportion of nonnegotiable shares and No1_{it} is the shareholding of the largest shareholder; GOV_{it} is a dummy variable that takes the value of 1 if the controlling shareholder of the firm is a government agency or a government asset management company, and zero otherwise; D is a dummy variable that takes the value of 1 if the earnings of a firm drops by more than 70% and zero otherwise; $D * \text{No1}_{it}$ (or Ntdshr_{it}), and $D * \text{GOV}_{it}$ are interactive dummies; FCF_{it} and Perk_{it} are the ratios of free cash flow divided by total sales and other cash flow occurring in association with sales and operations divided by total assets, respectively. YR_t is the year dummies. Notice all percent are converted into fraction when used in the regression. The coefficients for year dummies are not reported in the table to save space. t -values are in parentheses.

Panel A: Selection

	Const.	SEP _{it}	V _{it} /A _{it}	E _{it} /A _{it}	FCF _{it}	Perk _{it}	L _{it} /A _{it}	SEO _{it-1}	SEO _{it+1}	σ	Obs.
Model 1	-1.395**	0.974**	-0.306**	12.188**	0.044	-0.558**	-1.481**	0.094	0.178**	0.102	6920
	(-9.861)	(14.132)	(-14.746)	(17.790)	(1.125)	(-6.888)	(-12.959)	(1.520)	(2.783)		
Model 2	0.057	0.940**	-0.271**	12.088**	0.042	-0.536**	-1.410**	0.077	0.167**	0.103	6920
	(0.556)	(13.446)	(-13.276)	(17.701)	(1.099)	(-6.609)	(-12.346)	(1.244)	(2.608)		
Model 3	0.265**	1.019**	-0.277**	12.036**	0.040	-0.576**	-1.457**	0.055	0.173**	0.107	6920
	(2.840)	(14.768)	(-13.631)	(17.689)	(1.033)	(-7.122)	(-12.806)	(0.893)	(2.698)		
Model 4	-1.419**	0.983**	-0.306**	12.203**	0.043	-0.554**	-1.485**	0.093	0.179**	0.102	6920
	(-9.897)	(14.138)	(-14.734)	(17.799)	(1.112)	(-6.837)	(-12.982)	(1.505)	(2.786)		
Model 5	0.044	0.948**	-0.270**	12.102**	0.042	-0.531**	-1.413**	0.076	0.167**	0.103	6920
	(0.424)	(13.462)	(-13.247)	(17.710)	(1.085)	(-6.549)	(-12.363)	(1.231)	(2.611)		

	D	Ntshr _{it}	D* Ntshr _{it}	No1 _{it}	D*No1 _{it}	GOV _{it}	D* GOV _{it}
Model 1	-1.295**	1.144**	0.899				
	(-3.408)	(7.696)	(1.423)				
Model 2	-0.939**			0.500**	0.488		
	(-4.748)			(4.791)	(0.944)		
Model 3	-0.759**					0.033	-0.038
	(-9.512)					(0.615)	(-0.177)
Model 4	-1.283**	1.156**	0.899			0.056	-0.058
	(-3.365)	(7.739)	(1.410)			(1.039)	(-0.270)
Model 5	-0.929**			0.500**	0.488	0.055	-0.047
	(-4.629)			(4.857)	(0.925)	(1.012)	(-0.217)

Panel B: OLS

	Const.	SEP _{it}	V _{it} /A _{it}	E _{it} /A _{it}	FCF _{it}	Perk _{it}	L _{it} /A _{it}	SEO _{itt-1}	SEO _{it+1}	ρ	Obs.
Model 1	-0.059	0.082**	-0.023**	1.586**	-0.002	-0.033**	-0.068**	0.011	0.001	0.582	7200
	(-1.833)	(6.362)	(-6.422)	(12.963)	(-0.443)	(-2.676)	(-3.580)	(1.841)	(0.080)		
Model 2	-0.041	0.079**	-0.021**	1.589**	-0.002	-0.030*	-0.064**	0.010	0.000	0.601	7200
	(-1.397)	(5.909)	(-5.997)	(12.555)	(-0.481)	(-2.418)	(-3.310)	(1.639)	(-0.054)		
Model 3	-0.027	0.097**	-0.024**	1.669**	-0.001	-0.040**	-0.081**	0.008	0.001	0.697	7200
	(-0.957)	(6.578)	(-6.325)	(12.398)	(-0.292)	(-3.060)	(-3.894)	(1.329)	(0.193)		
Model 4	-0.060	0.083**	-0.023**	1.583**	-0.002	-0.032**	-0.068**	0.011	0.000	0.576	7200
	(-1.824)	(6.315)	(-6.385)	(12.895)	(-0.449)	(-2.628)	(-3.549)	(1.833)	(0.070)		
Model 5	-0.042	0.079**	-0.021**	1.586**	-0.002	-0.030*	-0.064**	0.010	0.000	0.596	7200
	(-1.422)	(5.897)	(-5.969)	(12.499)	(-0.491)	(-2.361)	(-3.290)	(1.631)	(-0.062)		

	D	Ntshr _{it}	D* Ntshr _{it}	No1 _{it}	D*No1 _{it}	GOV _{it}	D* GOV _{it}
Model 1	-0.086	0.090**	0.090				
	(-1.205)	(4.749)	(0.807)				
Model 2	-0.044			0.090**	0.025		
	(-1.237)			(5.385)	(0.343)		
Model 3	-0.042*					0.002	0.009
	(-2.318)					(0.264)	(0.255)
Model 4	-0.086	0.090**	0.090			0.004	0.011
	(-1.208)	(4.740)	(0.806)			(0.640)	(0.301)
Model 5	-0.043			0.090**	0.025	0.005	0.007
	(-1.210)			(5.416)	(0.307)	(0.903)	(0.195)

*(**) denotes statistical significance at the 5(1) percent level.

Table 8
Negotiable Shareholders' Responses to Dividend Announcements

This table presents the event study results on negotiable shareholders' responses to dividend announcements for the whole sample period (1994-2006), as well as for the two subsample periods (1994-1999) and (2000-2006). The standard market model is used to compute the cumulative abnormal returns in the relevant event windows: (-1, 1), (-3, 3), and (-10, 10). The estimation window is 120 days (-130, -11). The firms are categorized into those with more than a 70% decline in earnings in the year before the dividend announcement and those with a greater than 70% increase in profit in the year before the dividend announcement. The announcements are divided into three groups: dividend increase relative to the previous year (Div Inc), dividend decrease relative to the previous year (Div Dec), and dividend omission (Omi). t-values are in parentheses.

	Whole Sample Period: 1994-2006			Subsample Period I: 1994-2000			Subsample Period II: 2001-2006					
For firms with earnings decreasing by more than 70%												
Evt Win	Obs.	(-1, 1)	(-3, 3)	(-10, 10)	Obs.	(-1, 1)	(-3, 3)	(-10, 10)	Obs.	(-1, 1)	(-3, 3)	(-10, 10)
Div Inc	19	0.0082	0.0052	0.0043	9	-	-	-	10	-	-	-
		(0.76)	(0.37)	(0.14)		-	-	-		-	-	-
Div Dec	256	-0.002	-0.004	0.004	27	-0.018	-0.023	0.001	229	-0.001	-0.002	0.004
		(-0.61)	(-0.75)	(0.43)		(-1.42)	(-0.99)	(0.04)		(-0.13)	(-0.37)	(0.44)
Omi	238	-0.002	-0.007	-0.00092	21	-0.019	-0.025	-0.002	217	-0.000	-0.005	0.001
		(-0.5)	(-1.19)	(-0.1)		(-1.25)	(-1.00)	(-0.76)		(-0.10)	(-0.88)	(0.09)
For firms with earnings increasing by more than 70%												
Div Inc	292	0.0025	0.0068	0.0125	48	0.023**	0.023*	-0.004	244	-0.002	0.004	0.016*
		(0.7)	(1.41)	(1.55)		(3.17)	(2.27)	(-0.29)		(-0.38)	(0.66)	(1.72)
Div Dec	76	0.0243**	0.0382**	0.0478**	13	-	-	-	63	0.023**	0.044**	0.046**
		(2.52)	(2.51)	(2.4)		-	-	-		(2.02)	(2.51)	(2.72)
Omi	34	0.0221*	0.025	0.0395	7	-	-	-	27	0.019	0.030	0.054*
		(1.8)	(1.31)	(1.47)		-	-	-		(1.34)	(1.33)	(1.75)

* (**) denotes significance at the 10 (5) percent level.

Table 9
The Announcement Effect of the 2001 CSRC Stipulation

This table reports the event study results for the CSRC announcement on March 28, 2001, that firms could not have rights issues without paying cash dividends in the previous three years. The standard market model is used to compute the cumulative abnormal returns in the relevant event windows: (-1, 1), (-3, 3), and (-10, 10). The estimation window is 120 days (-130, -11). Two samples are used in the event study: all profitable firms in 2000 with data available around the announcement date and firms profitable for the past three years but that had omitted the dividend payments twice. t-values are in parentheses.

Event Window		(-1, 1)	(-3, 3)	(-10, 10)
	No. of Obs.			
All Profitable Firms	788	-0.0005	-0.0010	-0.0050**
		(-0.63)	(-1.20)	(-2.51)
Profitable Firms Rarely Pay	414	0.0005	0.0001	-0.0010
		(0.56)	(0.06)	(-0.39)

* (**) denotes significance at the 10(5) percent level.