

This document is downloaded from DR-NTU, Nanyang Technological University Library, Singapore.

Title	Minority shareholders' control rights and the quality of corporate decisions in weak investor protection countries : a natural experiment from China
Author(s)	Chen, Zhihong; Ke, Bin; Yang, Zhifeng
Citation	Chen, Z., Ke, B., & Yang, Z. (2013). Minority shareholders' control rights and the quality of corporate decisions in weak investor protection countries : A natural experiment from China. <i>The accounting review</i> , 88(4), 1211-1238.
Date	2013
URL	<a href="http://hdl.handle.net/10220/18185">http://hdl.handle.net/10220/18185</a>
Rights	© 2013 American Accounting Association

# Minority Shareholders' Control Rights and the Quality of Corporate Decisions in Weak Investor Protection Countries: A Natural Experiment from China

Zhihong Chen,<sup>1</sup> Bin Ke,<sup>2</sup> and Zhifeng Yang<sup>3</sup>

Editor's note: Accepted by John Harry Evans III.  
*Submitted August 2011*  
*Accepted February 2013*

We wish to thank two anonymous reviewers, Senior Editor John Harry Evans III, Bill Baber, Assaf Hamdani, Zoran Ivkovic, Guohua Jiang, Sydney Leung, Mingcai Li, Kai Li, Suresh Radhakrishnan, Gord Richardson, Florin Sabac, Subrata Sarkar, Rodrigo Verdi, Cong Wang, Kun Wang, Charles Wasley, Jian Xue, Xiongsheng Yang, Tianyu Zhang, Jerry Zimmerman, Luo Zuo, and workshop participants at the University of Alberta, City University of Hong Kong, Hong Kong Polytechnic University, Georgetown University, MIT, National University of Singapore China Brownbag, Rochester University, Southwestern University of Finance and Economics, Nanjing University, Shanghai University of Finance and Economics, Sun Yat-sen University, University of New South Wales, Wuhan University, Indira Gandhi Institute for Development Research Conference on Emerging Markets Finance (2010), the 2009 University of Minnesota Empirical Conference, the 2010 China International Conference in Finance, the 2010 AAA annual meeting, the 2009 Journal of Corporate Finance conference (Beijing), the Third International Conference on Corporate Governance in Emerging Markets, and the 2011 Chinese Accounting Professors' Association of North America (CAPANA) conference for helpful comments and Liangcheng Wang for able research assistance. Zhifeng Yang acknowledges the research support of the City University of Hong Kong (Grant no.: 7008014). The paper won the best paper award at the 2011 CAPANA conference.

<sup>1</sup> City University of Hong Kong, 83 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong, China. Tel: +852 3442 6211. Fax: +852 3442 0349. Email: [chenzh@cityu.edu.hk](mailto:chenzh@cityu.edu.hk).

<sup>2</sup> Nanyang Business School, Nanyang Technological University, S3-01B-39, 50 Nanyang Avenue, Singapore 639798. Tel: +65 6790 4832. Fax: +65 67913697. Email: [kebin@ntu.edu.sg](mailto:kebin@ntu.edu.sg).

<sup>3</sup> City University of Hong Kong, 83 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong, China. Tel: +852 34424013. Fax: +852 3442 0349. Email: [zhifeng@cityu.edu.hk](mailto:zhifeng@cityu.edu.hk).

## **Abstract**

Using a 2004 Chinese securities regulation that requires equity offering proposals to obtain the separate approval of voting minority shareholders, we examine whether giving minority shareholders increased control over corporate decisions helps reduce value-decreasing corporate decisions for firms domiciled in weak investor protection countries. We find that the regulation deters management from submitting value-decreasing equity offering proposals in firms with higher mutual fund ownership. There is also weak evidence that minority shareholders are more likely to veto value-decreasing equity offering proposals in firms with higher mutual fund ownership in the post-regulation period. Overall, our evidence suggests that in weak investor protection countries, the effect of granting minority shareholders increased control over corporate decisions on the quality of corporate decisions depends on the composition of minority shareholders.

JEL: G32, G34, G38

Keywords: corporate governance, shareholder democracy, direct shareholder participation, financing policy

## I. INTRODUCTION

Corporate ownership is highly concentrated in weak investor protection countries (La Porta et al. 1999; Claessens et al. 2000). Hence, the agency conflict between firm executives and controlling shareholders is minimal and the major agency conflict is between minority shareholders and controlling shareholders and their appointed executives, hereafter referred to as insiders or management for brevity. Since rational minority shareholders will price protect, insiders should have an incentive to bond themselves to good corporate governance in order to mitigate minority shareholders' adverse selection (Jensen and Meckling 1976). However, in reality, many listed firms in weak investor protection countries do not adopt good corporate governance because weak country-level investor protection directly increases the costs that insiders incur to bond themselves to good governance (Dojidge et al. 2007).

As reviewed by La Porta et al. (2000) and La Porta et al. (2008), the extant international corporate governance literature shows that failure to establish strong country-level investor protection carries significant economic costs for both firms individually and countries as a whole. Therefore, identifying effective control mechanisms to strengthen the legal protection of minority shareholders becomes an important research issue. However, due to poor legal enforcement, many traditional investor protection provisions such as board independence are not very effective in reducing insiders' agency problems (DeFond and Hung 2004). To combat insiders' agency problems, shareholder activists have shown an increasing interest in shifting the corporate decision making power from insiders to minority shareholders (Vascellaro and Tibken 2008). Regulators around the world are also showing an increasing willingness to propose regulations that would grant minority shareholders increased control over corporate decisions (Scannell 2009; Ridley and Menon 2009).

However, whether minority shareholders should be granted increased control over corporate decisions is hotly debated because it is difficult to quantify ex ante most of the costs and benefits associated with an increase in minority shareholders' control rights (Vascellaro and Tibken 2008; Scannell 2009; Holzer and Berman 2010; Holzer 2011). Proponents such as Bebchuk (2005) argue that granting minority shareholders increased control over corporate decisions is necessary to combat widespread managerial agency problems and therefore will increase shareholder value. Opponents such as Bainbridge (2006) counter that minority shareholders' direct participation in corporate decisions will reduce shareholder value for several reasons. First, minority shareholders may lack the necessary information idiosyncratic to a particular firm to make informed decisions. Second, some minority shareholders such as public pension funds may have an incentive to use their control power to pursue social, political or environmental agendas that hurt shareholder value (Porter 1992). Third, even if minority shareholders are granted increased control rights over corporate decisions, not all of them will have the incentive or ability to effectively exercise their rights (Listokin 2010), especially in countries with weak law enforcement. As a result, there is a risk that a small number of non-shareholder value maximizing minority shareholders can hijack major corporate decisions. Finally, minority shareholders' intervention in firm management may cause unnecessary diversion of management attention and firm resources from other more productive uses (Business Roundtable and the U.S. Chamber of Commerce vs. the SEC, No. 10-1305 (DC Cir. July 22, 2011)).

The objective of this study is to provide direct empirical evidence relevant to this debate. Specifically, we use a unique 2004 securities regulation issued by the China Securities Regulatory Commission (CSRC), commonly referred to as the segmented voting regulation, to

examine whether giving minority shareholders increased control over corporate decisions helps improve the quality of corporate decisions for firms domiciled in weak investor protection countries. Prior to the segmented voting regulation, insiders of publicly traded Chinese firms frequently diverted corporate sources to themselves using various mechanisms, including issuing new equity at discounted prices followed by the diversion of the equity offering proceeds to controlling shareholders. The segmented voting regulation seeks to reduce the extent of insiders' diversion by requiring several types of major corporate decisions, the most common of which is equity offering proposals, to obtain the *separate* approval of minority shareholders who participate in the voting.

To assess the effect of the segmented voting regulation on the quality of corporate decisions, we conduct three empirical analyses. Our first analysis uses the equity offering proposals over the period 1/1/2004-6/30/2005 to test whether the segmented voting regulation discourages insiders from submitting value-decreasing proposals. Because insiders' expropriation will directly reduce the amount of cash flows available to minority shareholders, which in turn will result in a decline in stock prices, an equity offering proposal is defined to be value-decreasing (value-increasing) if the cumulative abnormal stock return to the announcement of the proposal (denoted as *CAR*) is negative (positive). Our second analysis examines the difference in the magnitude of *CAR* for the equity offering proposals *submitted* to shareholders for approval across the pre- and post-segmented voting regulation periods. Our third analysis uses the detailed voting data available in the post-regulation period to examine (a) which minority shareholders are more likely to participate in the voting and (b) whether minority shareholders' voting decisions are correlated with proposal quality.

We expect the effect of the segmented voting regulation to depend on the effectiveness with which minority shareholders exercise their control power. Hence, we also consider the influence of the top ten minority shareholders' ownership, which firms must disclose quarterly. We decompose the top ten minority shareholders into institutional investors and individual investors because the former are often regarded as more sophisticated and better informed. We further decompose institutional investors into mutual funds and other miscellaneous institutions such as brokerage firms or industrial companies because mutual funds are the largest homogenous institutional investor group for our sample firms. For the reasons discussed in section III, we do not make any predictions on the effects of the different types of institutional ownership.

We find that on average the segmented voting regulation significantly deters value-decreasing proposals but not value-increasing proposals. The segmented voting regulation's deterrence effect on value-decreasing proposals is stronger in firms with higher mutual fund ownership or higher individual shareholder ownership but not in firms with higher other institutional ownership. Consistent with the deterrence effect of the segmented voting regulation, we find that the mean *CAR* for the submitted proposals is significantly negative in the pre-regulation period but becomes significantly positive in the post-regulation period. The difference in *CAR* across the two periods is significant and increases with mutual fund ownership but not with the other institutional ownership or individual investor ownership. Overall, our results suggest that giving minority shareholders increased control over corporate decisions can help increase the quality of corporate decisions in a weak investor protection country like China, but only in firms with higher mutual fund ownership.

With regard to minority shareholders' voting behavior in the post-regulation period, we find that minority shareholders with lower stock ownership levels are less likely to vote on submitted proposals. Among the top ten minority shareholders, individual shareholders are less likely to vote on submitted proposals than mutual funds and other institutional investors. We find mixed evidence on the association between proposal quality and the likelihood of minority shareholders' vetoing the proposal in the post-regulation period. We find no evidence of a negative association between proposal quality and minority shareholders' veto for the full sample. In addition, there is weak evidence of a negative association for firms with higher mutual fund ownership. In section IV, we explain how this seemingly counterintuitive evidence is consistent with an equilibrium where insiders are deterred from submitting value-decreasing proposals and therefore minority shareholders rarely face the need to veto submitted proposals.

We conduct a series of robustness checks for our empirical results. We find no evidence that our results are attributable to alternative explanations, such as confounding regulatory announcements or a general improvement in investor protection during our sample period.

Our study makes several important contributions. First, we contribute to a growing literature following La Porta et al. (1997, 1998) that analyzes the effect of legal environments on shareholder value and financial market development. Most studies in this literature examine a country's legal environment as a whole and do not examine the specific mechanisms through which law affects financial markets. Understanding the consequences of introducing specific investor protection mechanisms is important because country-level legal reforms are often incremental and piecemeal. In addition, the majority of the studies use cross-country regressions and therefore their conclusions are subject to the well-known concerns of endogeneity, measurement error, and correlated omitted variables (La Porta et al. 2008). A key contribution of

our study is to directly demonstrate the effect of adopting one specific investor protection mechanism on the quality of corporate decisions. As detailed in section II, our unique setting allows us to overcome several common methodological challenges in establishing the causal effect of changing minority shareholders' control on the quality of corporate decisions.

Second, our results are also relevant to a growing literature on the proxy voting decisions of mutual funds resulting from the recent availability of mutual fund proxy voting data (Davis and Kim 2007; Cremers and Romano 2011). This literature finds that mutual funds often support management in proxy voting (Cremers and Romano 2011), raising questions about the governance role of mutual funds. However, the evidence from our study suggests that a key governance role of mutual funds is to deter management from submitting value-decreasing proposals. Therefore, a narrow focus on mutual funds' actual voting behavior may significantly understate the governance role of mutual funds.

Third, we provide timely information to government regulators around the world who are debating whether to grant minority shareholders more direct influence over corporate decisions. The evidence from our study suggests that in weak investor protection countries, the positive effect of giving minority shareholders a direct say on corporate decisions depends on the composition of minority shareholder ownership.

The next section discusses the institutional background and related research. Section III discusses the effect of the regulation on management's proposal submission decision. Section IV analyzes minority shareholders' voting behavior in the post-regulation period. Section V concludes.

## **II. INSTITUTIONAL BACKGROUND AND RELATED RESEARCH**

## **Institutional Background**

Prior to China's split share structure reform beginning in May 2005, domestically listed Chinese firms, often referred to as A share firms, had two types of common stocks. The first type was non-tradable shares, which were largely owned by a controlling shareholder and typically represented two-thirds of a firm's share capital. The second type was tradable shares, which were owned by Chinese citizens, domestic institutions and qualified foreign institutional investors, and listed on one of the two domestic stock exchanges. We refer to the holders of tradable shares as minority shareholders in this paper. Aside from the difference in tradability, the non-tradable shares and tradable shares enjoy equal voting and cash flow rights. Chen and Yuan (2006) find that the non-tradable shares are very illiquid, typically selling for less than 20 percent of the market price of tradable shares, thus limiting the ownership benefits of equity to the controlling shareholders if they wish to sell in the short run.

Due to lack of investor protection in China (Allen et al. 2005), controlling shareholders of A share firms have a strong incentive to divert the resources of A share firms to themselves (Jian and Wong 2010; Berkman et al. 2011; Fan et al. 2007; Jiang et al. 2010).<sup>1</sup> Prior to the issuance of the segmented voting regulation, equity offerings were a popular mechanism for corporate insiders to expropriate resources from existing minority shareholders. Specifically, management could first price an equity offering at a significant discount relative to the prevailing market price of trading shares in order to entice both existing and new minority (i.e., tradable) shareholders to participate in the offering, resulting in a significant dilution of existing shareholders' equity

---

<sup>1</sup> In addition to the agency conflict between the controlling shareholder and minority shareholders, an agency conflict also exists between all shareholders and the management in state-controlled Chinese firms. This is because the controlling shareholder of state-controlled firms is the government which may not have the same incentive as the controlling shareholder of a family controlled firm to monitor the management. The existence of this additional agency conflict further increases the need for minority shareholder protection.

interest.<sup>2</sup> The dilution effect was largely borne by existing minority shareholders because the market price of non-tradable shares was much lower than the market price of tradable shares and therefore the new equity offering price was almost surely above the market price of non-tradable shares. Second, management could divert part or all of the proceeds from the equity offering to the controlling shareholder through various channels such as related party transactions and related party loans (CSRC 2004). Hence, existing minority shareholders rarely benefited from the proceeds of the new equity offering. In the presence of a dominant controlling shareholder in most A share firms, tradable shareholders had little ability to stop the insiders from passing value-decreasing proposals because equity offering proposals only required the approval of more than 50 percent of *all* common shares that *participated* in the voting.

To curb such expropriation behavior, the CSRC issued a regulation entitled “*Provisions on Strengthening the Protection of the Rights and Interests of the General Public Shareholders*”, commonly referred to as the segmented voting regulation, on December 7, 2004. In addition to the previous requirement that major corporate decisions be approved by more than 50 percent of all tradable and non-tradable shares that participate in the voting, the segmented voting regulation requires several major corporate decisions, including equity offering, major corporate restructuring, and overseas listing of subsidiaries, to be separately approved by more than 50 percent of the *tradable* shares that participate in the voting.<sup>3</sup> The new regulation applied to all domestically listed firms and took effect on December 7, 2004.

---

<sup>2</sup> In the pre-segmented voting regulation period controlling shareholders rarely purchased shares in equity offerings because any new shares they acquired were non-tradable but had to be purchased at the same price as tradable shares.

<sup>3</sup> In addition to the segmented voting rule, the segmented voting regulation also contains four additional investor protection provisions: (a) strengthening the role of independent directors by requiring material related party transactions and the hiring and dismissal of the company auditor to be subject to the approval of at least one half of the independent directors; (b) improving investor relations by encouraging management to improve the quality of corporate disclosures and investor communications; (c) encouraging listed firms to adopt a regular dividend policy and prohibiting listed firms that have not distributed cash dividends in the past three years from issuing new equity; and (d) holding controlling shareholders and company executives to the standard of fiduciary duty for minority

## Related Research

Not much is known, based on the extant literature, about the economic effects of granting minority shareholders increased control over corporate decisions for firms domiciled in weak investor protection countries. One stream of relevant research is the international corporate governance literature that examines the cross-sectional association between country-level investor protection and shareholder value and financial market development (see La Porta et al. 2008 for a review). However, this literature does not examine the specific channels through which law affects financial markets.<sup>4</sup> More importantly, this literature does not distinguish investor protection provisions that facilitate minority shareholders' monitoring of insiders who make corporate decisions from investor protection provisions that shift the control over corporate decisions from insiders to minority shareholders. In addition, as noted by La Porta et al. (2008), many studies in this literature suffer from the problems of correlated omitted variables, measurement error and endogeneity. It is still an open question whether improving a country's investor protection would necessarily lead to an improvement in the quality of corporate decisions, especially in weak investor protection countries.

Berkman et al. (2011) examine the abnormal stock returns around the announcements of three Chinese securities regulations within a two-month period in 2000.<sup>5</sup> Berkman et al. find that firms with weaker governance experienced significantly larger abnormal returns around the

---

shareholders and increasing the administrative penalties for violation of such fiduciary duty. As explained in section III, we show that our results are unlikely to be explained by any of these four investor protection provisions.

<sup>4</sup> A notable exception is Atanasov et al. (2010) who study the effect of a 2002 Bulgarian law change that prohibits dilutive equity offerings, freezeouts and going-private transactions. However, they do not consider how granting minority shareholders direct control over corporate decisions affects the quality of corporate decisions.

<sup>5</sup> The first regulation allows shareholders with more than five percent voting rights to propose motions for discussion at the shareholders' annual meeting and prohibits shareholders involved in a related party transaction from voting on the transaction. The second regulation prohibits listed firms from issuing loan guarantees to their shareholders, shareholder controlled or affiliated companies, or any individual. The third regulation requires the board to perform a rigorous due diligence investigation prior to any material asset acquisition or disposal.

announcements of the three regulations than did firms with stronger governance. While their results suggest that the three regulations increased the degree of investor protection, it is difficult to determine whether their results are due to a significant increase in minority shareholders' control over corporate decisions as opposed to a strengthening of firms' internal governance.

Gillian and Starks (2007) identify several methodological challenges in establishing the causal effect of changing minority shareholders' control over corporate decisions on shareholder value. First, minority shareholders' control over corporate decisions often changes slowly. Therefore, a researcher may find it difficult to reliably measure such a small change in minority shareholders' control or detect the effect of the small change on shareholder value.

Second, most changes in minority shareholders' control over corporate decisions deal with general corporate governance issues such as board structure or voting procedures rather than with specific corporate decisions. Hence, it is difficult to directly attribute any observed change in managerial behavior such as changes in corporate investment to a change in minority shareholders' control.

Third, even if a change in minority shareholders' control is related to a specific corporate decision, a researcher generally cannot observe the outcome of the specific decision made by minority shareholders and thus has to infer the impact of the change in minority shareholders' control from aggregate performance outcomes such as stock prices or accounting earnings. As stock prices and accounting earnings reflect the effects of multiple economic forces, any association between changes in minority shareholders' control and changes in stock prices or earnings could be subject to alternative explanations.

Our setting offers features to address these methodological challenges. Specifically, the segmented voting regulation represents a significant mandatory shift in the control over

corporate decisions from management to minority shareholders and deals with specific corporate decisions involving equity offering proposals. In addition, we can observe the outcomes of the specific decisions made by minority shareholders. Hence, we can more directly demonstrate the causal link between an increase in minority shareholders' control over corporate decisions and the change in the quality of corporate decisions in our setting.

### **III. THE EFFECT OF THE SEGMENTED VOTING REGULATION ON THE QUALITY OF MANAGEMENT'S EQUITY OFFERING PROPOSALS**

#### **The Deterrence Effect of the Segmented Voting Regulation**

We first examine whether the segmented voting regulation deters managers from submitting value-decreasing proposals. Consistent with the notion of shareholder value maximization (Shleifer and Vishny 1997), which focuses on the cash flow rights of stock ownership as reflected in stock prices, we use the market adjusted cumulative abnormal return over the [-2, +10] trading days around the proposal announcement date (denoted as *CAR*) to proxy for proposal quality.<sup>6,7</sup> We extend the *CAR*'s holding period to ten trading days after the proposal announcement for several reasons. First, the Chinese stock exchanges limit the maximum daily stock price movement to be no more than  $\pm 10$  percent so that a short window *CAR* may not fully capture the proposal quality. Second, equity offering is a complex business decision for which minority shareholders may need more time to digest the information included in the proposal and to search for private information to evaluate the merits of the proposal. This is especially important in China because management usually does not provide detailed

---

<sup>6</sup> The period between the proposal announcement date and the proposal voting date is at least 20 trading days for all but one proposal. For this one proposal, the *CAR*'s holding period includes nine trading days that end on the day before the voting date. Our inferences are similar if this one proposal is dropped. Throughout the paper, similar inference means that results are consistent with our predictions at a two-tailed significance level of ten percent.

<sup>7</sup> Prior China related event studies also use relatively long periods to measure abnormal returns (e.g., Fan et al. 2008; Berkman et al. 2010).

information on equity offering proposals. Finally, the Chinese stock market is dominated by small retail investors and there are not enough sophisticated investors such as financial analysts or institutional investors who can help quickly impound the value implications of an equity offering proposal into stock prices (Ma 2004).

### ***The sample and data sources***

We limit our empirical analysis to the eligible firm months over the period 1/1/2004-6/30/2005. Our sample starts on 1/1/2004 because detailed ownership data on the top ten minority shareholders are not available before 2004. Our sample ends on 6/30/2005 because in May 2005 the CSRC launched a major reform, the split share structure reform, which converted non-tradable shares into tradable shares and therefore temporarily suspended the approval of equity offering proposals.

As detailed in Appendix A, we follow various CSRC regulations to identify all the A share firm months in which the firms are eligible to propose equity offerings as of the beginning of each observation month. After deleting observations with missing control variables, there are 21,512 firm months during our sample period, of which 855 unique firms containing 11,924 (55.4 percent) firm months are deemed eligible to propose equity offerings. All financial data are obtained from either the WIND or CSMAR (China Securities Market and Accounting Research) database. We use WIND to identify the sample of equity offering proposals submitted in our sample period and hand collect all the relevant information on the equity offering proposals.

### ***Methodology and predictions***

We use the following multinomial logit model to test the effect of the segmented voting regulation on management's decision to submit value-increasing versus value-decreasing equity offering proposals:

$$SUBMISSION_{it} = a + b * AFTER + c * CONTROL_{it} + \varepsilon_{it} \quad (1)$$

where  $i$  and  $t$  are firm and month indicators, respectively.  $SUBMISSION_{it}$  is A if firm  $i$  does not submit a proposal in month  $t$  (the benchmark), B if firm  $i$  submits a value-increasing (i.e.,  $CAR > 0$ ) proposal in month  $t$ , and C if a firm  $i$  submits a value-decreasing (i.e.,  $CAR \leq 0$ ) proposal in month  $t$ .  $AFTER$  is a dummy variable that is equal to one for the 7 months in the post-regulation period starting in December 2004, and zero for the 11 months in the pre-regulation period.<sup>8,9</sup>  $CONTROL$  is a list of common determinants of equity offerings to be discussed below. All the other variables are defined in Table 1.

The effect of the segmented voting regulation on managerial behavior depends on how management anticipates minority shareholders' voting behavior. If minority shareholders are not independent from management, management will continue to submit value-decreasing proposals. If minority shareholders are independent and thus have the incentive to use their control power to veto value-decreasing proposals, rational management should anticipate this and thus should be less likely to submit value-decreasing proposals such that the coefficient on  $AFTER$  should be negative for value-decreasing proposals. Furthermore, there are significant costs associated with submitting a proposal that is later vetoed. One cost is the nontrivial time and resources devoted to the preparation of the proposal. Another cost is the damage to management and directors'

---

<sup>8</sup> There were no equity offering proposals announced during the period December 1, 2004-December 6, 2004.

<sup>9</sup> Upon the release of the exposure draft of the regulation on September 27, 2004, some firms might have attempted to avoid the final regulation by accelerating future equity offering proposals to the period 9/27/2004-12/7/2004. As a robustness check, we also define  $AFTER$  using September 2004 as a cutoff and find similar inferences.

reputation resulting from the veto of a value-decreasing proposal. In addition, management may be forced to face the media and investors to explain the reasons for the veto, which could be embarrassing to management (see, e.g., “Equity Offering Proposal Vetoed, Fuyao Inc. Has to Look For Alternative Financing Sources”, China Mining Journal, June 23, 2004).

To the extent that they are rational, minority shareholders should not veto value-increasing equity offering proposals in both the pre- and post-regulation periods. Anticipating this, management’s submission behavior for value-increasing proposals should not change after the segmented voting regulation. Therefore, we do not expect the coefficient on *AFTER* to be negative for value-increasing proposals.

To control for systematic differences in the characteristics of the sample firms across the two time periods, we follow existing corporate finance research (Jung et al. 1996; Berger et al. 1997; Myers 2003; Leary and Roberts 2010) by including the following common equity financing determinants: *Q*, *CASH*, *CFO*, *LEV*, *VOLATILITY*, *AR12*, *ASSETS*, and industry fixed effects. All control variables are defined using the most recently available information as of the beginning of month *t*.<sup>10</sup>

We conjecture that the deterrence effect of the segmented voting regulation should hinge on minority shareholders’ expected voting behavior. Hence, we also examine whether the effect of *AFTER* varies with a firm’s minority shareholder ownership structure. Economic theory suggests that the incentive to participate in shareholder voting should increase with a shareholder’s stock ownership. Hence, we focus on the stock ownership of the top ten minority shareholders.

---

<sup>10</sup> Following Li et al. (2009), we also control for a dummy variable for state-controlled firms and a regional institutional development index developed by Fan and Wang (2004) in our Tables 2 and 3 and obtain similar inferences.

Among the top ten minority shareholder ownership, we distinguish the ownership of mutual funds (*MUTUAL\_OW*N), other institutional investors (*OTHERINST\_OW*N), and individual investors (*INDIVIDUAL\_OW*N), as defined in Table 1. We decompose the top ten minority shareholders into individual investors and institutional investors because institutional investors are believed to enjoy economies of scale, informational advantages, and greater financial sophistication. We further decompose institutional investors into mutual funds and other institutional investors because mutual funds are the largest homogenous institutional investor group in our sample period and thus it is interesting to separately study the impact of mutual fund ownership. The category of other institutional investors contains a diverse list of institutional investors with tiny ownership stakes, including brokerage firms, national social security trust funds, insurance companies, foreign institutions, domestic industrial corporations, etc. Hence, we do not break down the *OTHERINST\_OW*N ownership category further and make no prediction for the effect of this category.<sup>11</sup>

Due to the presence of opposing economic forces, it is difficult to make a clear prediction about the effect of mutual fund ownership on management's proposal submission decision. On the one hand, there are economic forces that would encourage mutual fund managers to support (object to) managerial decisions that increase (decrease) shareholder value. First, Chinese mutual funds' primary business activity is fund management and hence we expect Chinese mutual funds to be more independent and be more willing to object to value-decreasing managerial

---

<sup>11</sup> Chen et al. (2007) argue that independent long-horizon institutions with large ownership stakes have a stronger incentive to monitor managerial behavior. In particular, Chen et al. (2007, p.283) argue that the longer an institution has been invested in a firm, the better is its knowledge of the firm and the more influence it will have with management. In our setting, an institution's influence with management is explicitly granted by the segmented voting regulation and thus is independent of the institution's investment horizon. Hence, we consider an institution's independence and ownership level but not investment horizon. We expect both short-horizon institutional ownership and long-horizon institutional ownership to have an incentive to deter management from submitting value-decreasing proposals. Empirically, we find little evidence that the results in Tables 2 and 3 are stronger for firms with higher long-horizon mutual fund ownership.

decisions.<sup>12</sup> Second, the Chinese mutual fund industry is fairly competitive and therefore underperforming mutual funds face a significant risk of fund withdrawal by mutual fund investors (Ferreira and Ramos 2009; Xiao and Shi 2011; Liu 2011). Third, mutual fund managers who deliver lackluster fund performance face a significant risk of employment termination (Li 2008; Jing 2009). For example, mutual fund managers are regularly ranked based on past fund performance by popular Chinese magazines and newspapers. Highly ranked fund managers command high cash compensation, while lower ranked fund managers face the threat of rapid termination.

On the other hand, opposing economic forces may induce mutual fund managers to support managerial decisions that decrease shareholder value. For example, many Chinese mutual funds are controlled by the Chinese government which is known to have non-value maximizing objectives or brokerage firms which may have other business relations with publicly traded firms such as investment banking. Furthermore, due to China's weak rule of law, mutual fund managers could collude with listed firms' management in order to extract private benefits for themselves.

Despite these conflicting forces, anecdotal evidence suggests that Chinese mutual funds have been increasingly active in protecting their funds' ownership interests from insiders' expropriation. Even prior to the passage of the segmented voting regulation, several prominent cases illustrated mutual fund activism, including ten mutual fund management companies, representing 53 mutual funds, objecting to China Merchants Bank's proposed RMB\$10 billion

---

<sup>12</sup> Mutual funds may also have business ties such as consulting arrangements with the firms in their investment portfolio, but Davis and Kim (2007) find no evidence that business ties negatively affect U.S. mutual funds' independence (Cremers and Romano 2011). A buy-side analyst working in the Chinese mutual fund industry for many years told us that Chinese mutual funds in our sample period provided little consulting services to publicly listed Chinese firms.

convertible bond offering in 2003 (Sun 2003). This mutual fund activism was one of the triggers that led to the passage of the segmented voting regulation in 2004 (Fang 2004).

## ***Results***

Table 1 shows the descriptive statistics and correlations for the relevant regression variables in model (1) for the 11,924 firm-month observations. Approximately 0.9 percent of the firm months (105 unique proposals) included value-increasing equity offerings while one percent of the firm months (123 unique proposals) included value-decreasing equity offerings. Among the top ten minority shareholders, the mean mutual fund ownership is 4.6 percent of the total outstanding tradable shares versus 4.5 percent for the other institutional shareholders and two percent for individual shareholders. These percentages are economically meaningful but are much lower than the mean institutional ownership in listed U.S. firms. Despite the small aggregate ownership, the top ten institutional shareholders can be influential because the segmented voting regulation requires that equity offering proposals be *separately* approved by the majority of tradable shares that participate in the voting. We document in section IV that the top ten institutional shareholders are more likely to participate in the voting and therefore are likely to have a substantial impact on the voting outcomes under the segmented voting regulation.

[place Table 1 about here]

Panel A of Table 2 shows the regression results of the multinomial logit regression model (1) for value-increasing equity offering proposals and value-decreasing equity offering proposals relative to the reference group of firms that do not have any equity offering proposals in a month.

The coefficients on the control variables are generally consistent with prior research though they are not always significant.<sup>13</sup>

[place Table 2 about here]

The insignificant coefficient on *AFTER* for value-increasing proposals suggests that there is no evidence that increasing minority shareholders' control over corporate decisions affects management's likelihood of submitting value-increasing equity offering proposals. The coefficient on *AFTER* for value-decreasing proposals is significantly negative, suggesting that management is less likely to submit value-decreasing equity offering proposals in the post-regulation period.

Panel B of Table 2 shows the results of model (1) after allowing the coefficient on *AFTER* to vary with the minority shareholder type. With respect to value-increasing proposals, the coefficients on *AFTER*×*MUTUAL\_OWN*, *AFTER*×*OTHERINST\_OWN* and *AFTER*×*INDIVIDUAL\_OWN* are all insignificant at the ten percent two-tailed level. With respect to value-decreasing proposals in Panel B of Table 2, the coefficients on *AFTER*×*MUTUAL\_OWN* and *AFTER*×*INDIVIDUAL\_OWN* are significantly negative but the coefficient on *AFTER*×*OTHERINST\_OWN* is insignificant, suggesting that the presence of mutual fund ownership and individual investor ownership discourages management from submitting value-decreasing proposals in the post-regulation period relative to the pre-regulation period.<sup>14</sup> Following Ai and Norton (2003) and Norton et al. (2004), we also compute the

---

<sup>13</sup> Given the low frequency of equity offering proposals, we also use the Table 2 analysis using a rare event logit model. Alternatively, we re-estimate the regressions in Table 2 using an industry and firm size matched sample. Our inferences are similar using both alternative approaches.

<sup>14</sup> The significant interaction effect for *AFTER*×*MUTUAL\_OWN* is unlikely to reflect mutual funds' stock picking ability. If it did, the coefficient on *MUTUAL\_OWN* should be also significantly negative rather than insignificant for the pre-regulation period for value-decreasing proposals in Table 2, Panel B.

marginal effect of  $AFTER \times MUTUAL\_OWN$  for value-decreasing proposals.<sup>15</sup> We find that the change in the marginal effect of  $AFTER$  associated with a one standard deviation change of  $MUTUAL\_OWN$  is -0.71%, which is economically significant relative to the unconditional probability (one percent) of value-decreasing proposals in our sample period.

### **Quality of Submitted Equity Offering Proposals Before Versus After the Segmented Voting Regulation**

Given that the segmented voting regulation discouraged value-decreasing equity offering proposals as shown in Table 2, we should also expect the average quality of *submitted* equity offering proposals to be higher in the post-regulation period than in the pre-regulation period. We test this prediction by comparing the average magnitude of  $CAR$  across the pre- and post-regulation periods. We expect the average  $CAR$  to be more positive in the post-regulation period.<sup>16</sup>

Panel A of Table 3 shows that proposal quality is higher in the post-regulation period. The mean and median  $CAR$  are both significantly negative in the pre-regulation period using the t-test and rank-sum test. In contrast, the mean and median  $CAR$  are both positive in the post-regulation period and significantly different from zero using the t-test. In addition, the mean and median  $CAR$ s are significantly different over the two time periods using either a t-test or rank-sum test.

[place Table 3 about here]

---

<sup>15</sup> The STATA codes for computing the marginal effect of an interaction term in a multinomial logit model are available from the authors upon request.

<sup>16</sup> It is important to note that we cannot automatically infer the results in Table 2 based on the confirmative evidence in Table 3. This is because Table 3 does not distinguish value-decreasing proposals from value-increasing proposals. For example, an increase in  $CAR$  across the two periods in Table 3 could be caused by an increase in the number of value-increasing proposals but there could be no change in the pattern of value-decreasing proposals in the two periods.

Panel B of Table 3 shows the regression results on the impact of the top ten minority shareholder composition on *CAR* across the two time periods without and with control variables. Since inferences are similar across the two regressions, we focus on the results in the first regression. Since management had absolute control over equity offering decisions in the pre-regulation period, it may not be surprising to observe that none of the coefficients on *MUTUAL\_OWN*, *OTHERINST\_OWN*, and *INDIVIDUAL\_OWN* is significant. However, consistent with the evidence in Table 2, the coefficient on *AFTER*×*MUTUAL\_OWN* is significantly positive, suggesting that mutual fund shareholders play an effective governance role in the post-regulation period by improving the quality of submitted proposals. The coefficient on *AFTER*×*MUTUAL\_OWN* is also economically significant. A one standard deviation increase in *MUTUAL\_OWN* is associated with an increase in *CAR* of 3.22% from the pre- to post-period. There is no evidence of an improvement in proposal quality over the two time periods in firms with higher other institutional or higher individual shareholder ownership. Overall, the combined results in Tables 2 and 3 provide fairly mixed evidence on the effect of individual investor ownership on the quality of managerial equity offering proposals. Therefore, we do not draw any strong conclusion on the effect of individual investor ownership.

### **Robustness Checks**

In this section we perform a series of robustness checks to rule out alternative explanations for the regression results in Tables 2 and 3.

#### ***Potential limitations of CAR as a proxy for proposal quality***

We acknowledge that *CAR* could suffer from several potential limitations as a proxy for proposal quality. First, *CAR* may not fully capture the information content of stock market's reactions to announcements of equity offering proposals due to information leakage. Hence, we also measure *CAR* over either [-10, +10] or [-5, +10] trading days and obtain similar inferences.

Second, *CAR* could be nonzero for volatile stocks even when the announcement of an equity offering proposal suggests no evidence of managerial agency problems. Hence, our classification of value-decreasing versus value-increasing proposals based on the sign of *CAR* in Table 2 is likely to be noisy. To deal with this concern, we create a standardized *CAR* (denoted as *SCAR*), which is defined as  $\frac{CAR}{\sqrt{N}\sigma}$ , where *N* is number of trading days in the *CAR* window, and  $\sigma$  is standard deviation of daily market-adjusted returns over the [-280,-31] trading days prior to the equity offering proposal announcement date. Then we redefine an equity offering proposal to be value-decreasing if its *SCAR* is below -1.65, value-increasing if its *SCAR* is above +1.65, and value neutral if its *SCAR* falls between -1.65 and +1.65. The cutoff 1.65 is the critical T value for the two-tailed significance level of ten percent. Inferences are similar using *SCAR*.

Third, even if management continues to submit a large number of value-decreasing equity offering proposals in the post-regulation period, *CAR* may not be negative due to the stock market's anticipation of minority shareholders' vetoing value-decreasing proposals. However, as we have argued in the section "*Methodology and Predictions*", due to the costs of preparing an equity offering proposal and the reputation cost resulting from the vetoing of a managerial proposal, we believe that it is not rational for managers to submit value-decreasing proposals that are expected to be vetoed by minority shareholders. Empirically, to the extent that this anticipation effect exists, it does not appear to be severe in our sample because as shown in section IV, only a small number of equity offering proposals were vetoed by minority

shareholders in the post period. Finally, even if this anticipation effect is material, we can still use Table 2's research design to conclude that the segmented voting regulation has a significant disciplinary effect on managerial financing decisions. The disciplinary effect is reflected in the deterrence effect noted in our paper as well as minority shareholders' ex post vetoing of submitted value-decreasing proposals. The *CAR* at the proposal announcement will capture both effects. Hence, we can still use Table 2 to assess the overall effectiveness of the regulation, but we can no longer use *CAR* as a proxy for proposal quality or use Table 2 to separately identify the deterrence effect of the regulation.

Fourth, Myers and Majluf (1984) show that *CAR* could be negative in the presence of information asymmetry between insiders and outside investors. Hence, even if the true underlying quality of the proposed equity offerings does not improve in the post-regulation period, the average *CAR* could be still less negative in the post-regulation period. The reason is that corporate insiders may have an incentive to provide more information about the proposed equity offerings and therefore the degree of information asymmetry between insiders and outside investors is smaller in the post-regulation period than in the pre-regulation period. We do not believe that our results in Tables 2 and 3 can be attributed to this alternative explanation for several reasons. The first reason is that Myers and Majluf's information asymmetry hypothesis cannot explain why the average *CAR* in the post-regulation period is significantly positive as shown in Table 3. The second reason is that the prices of all equity offerings are determined based on the prevailing stock prices prior to the offerings. Hence, we expect corporate insiders to have equal incentives in both time periods to provide information to outside investors in order to mitigate the dilution of existing equity holders. The third reason is that the CSRC did not change the mandatory disclosures that are required to be contained in equity offering proposals during

our sample period. We find no evidence that the disclosure quality of the equity offering proposals measured by the number of words contained in an equity offering proposal differs between the pre-regulation period and the post-regulation period.<sup>17</sup>

Fifth, the quality of *CAR* as a proxy for proposal quality could be affected by confounding corporate announcements occurring during the *CAR* measurement window. To deal with this issue, we use a regression approach<sup>18</sup> to remove the portion of *CAR* that is correlated with the two most common firm-specific announcements occurring during the *CAR* measurement window, earnings surprises and dividend surprises, and obtain similar inferences.

Sixth, we replicate our key interaction regression models shown in Tables 2 and 3 using a short-window *CAR* measured over trading days [-1,+1] centered on the proposal announcement date and untabulated results support similar inferences.

Finally, we measure the equity offering proposal quality using observable firm characteristics rather than *CAR*, which could be problematic if the Chinese stock market is inefficient. Existing finance theory (e.g., Jung et al. 1996) suggests that high growth firms with a low balance of cash holding and high leverage should face a higher legitimate need for equity financing. Because the segmented voting regulation discourages managers from making value-decreasing equity offering proposals that are not justified by their firms' economic situations, we expect that the firms that do submit equity offering proposals are more likely to be firms with higher growth (*Q* and *SALESGROWTH*), lower cash holdings (*CASH*), and higher leverage (*LEV*) in the post-regulation period than in the pre-regulation period. Table 4 shows the results of this hypothesis. To control for industry-year effects of the firm characteristics, the values of all the

---

<sup>17</sup> This finding also suggests that provision (b) noted in footnote 3 is ineffective in inducing corporate insiders to disclose more information.

<sup>18</sup> The detail of this regression approach is available from the authors upon request.

variables in Table 4 are adjusted for the industry-year medians. With the exception of  $Q$ , the differences in  $SALESGROWTH$ ,  $CASH$ , and  $LEV$  across the two time periods are all consistent with our predictions.

[place Table 4 about here]

### ***The confounding effect of the split share reform***

We next examine whether the results in Tables 2 and 3 are due to management's anticipation of future securities regulations that occurred after December 7, 2004. The most significant securities reform in China following the segmented voting regulation was the split share structure reform in 2005. The key effect of this reform was to increase the liquidity of non-tradable shares, which in turn should help align the interests between minority shareholders and controlling shareholders, especially those with a larger ownership of non-tradable shares. Therefore, in anticipation of the reform, controlling shareholders with higher stock ownership may have weaker incentive to expropriate minority shareholders in our post-regulation period. To rule out this alternative explanation, we rerun the regressions in Tables 2 and 3 by including  $NONTRADE\_OWN$ , defined as the stock ownership of all non-tradable shareholders, and its interaction with  $AFTER$ . Untabulated regression results show that the coefficients on  $AFTER \times NONTRADE\_OWN$  are never significantly different from zero, suggesting no evidence of an anticipation effect of the reform. More importantly, inferences with respect to the key coefficients of interest in Tables 2 and 3,  $AFTER \times MUTUAL\_OWN$ , are unaffected.

### ***General improvement in investor protection***

The results in Tables 2 and 3 could potentially be explained by China's gradual improvement in investor protection during our sample period. We perform several types of analyses to rule out this alternative explanation. First, we examine whether there is a time trend in the mean/median *CAR* over our sample period. To the extent that our results in Tables 2 and 3 are due to China's gradual improvement in investor protection, we should observe similar findings even for the period prior to the segmented voting regulation. As shown in Figure 1, there is no evidence of a time trend in the mean/median *CAR* over our sample period except for the jump in *CAR* coincident with the segmented voting regulation.

[place Figure 1 about here]

Second, we replicate the interaction effect regressions in Tables 2 and Table 3 using a pseudo *AFTER* over the following three alternative 18-month time periods prior to the segmented voting regulation: (a) January 2003-June 2004; (b) April 2003-September 2004; and (c) July 2003-November 2004. As the regulation took effect on December 7, 2004, the last pseudo period contains only 17 months. We choose a gap of 3 months between the starting months of the three pseudo periods. Similar to the definition of *AFTER*, the pseudo *AFTER* is zero for the first 11 months and one for the remaining months. The untabulated regression results suggest no evidence that the results in Tables 2 and 3 are due to a gradual improvement in investor protection.

Third, we examine whether the investor protection provision (c) noted in footnote 3 explains the results of Table 2 by restricting our sample firms in Table 2 to those that paid cash dividends in at least one of the past three years. Our inferences are not changed (untabulated). This may not be surprising because this restriction only results in a small reduction in our sample from 11,924 to 10,317.

Fourth, we conduct a falsification test by examining whether there is a decline in the extent of inter-corporate loans from A share firms to their controlling shareholders in the post-regulation period. Jiang et al. (2010) show that inter-corporate loans are a common mechanism that controlling shareholders use to expropriate minority shareholders of publicly traded A share firms. While a general improvement in investor protection such as the four additional investor protection provisions of the segmented voting regulation noted in footnote 3 (especially provisions (a) and (d)), may reduce controlling shareholders' incentive to expropriate minority shareholders using both inter-corporate loans and value-decreasing equity offering proposals, the segmented voting regulation does not directly limit management's ability to expropriate minority shareholders using inter-corporate loans. Therefore, to the extent that the results in Tables 2 and 3 are due to a general improvement in investor protection rather than the segmented voting regulation, we should also observe a similar decline in the extent of outstanding inter-corporate loans post the segmented voting regulation. We use the following OLS regression model to test this prediction:

$$OREC_{it} = \beta_i + \beta_1 * AFTER + \beta_2 * LNNTA_{it} + \varepsilon_{it} \quad (2)$$

where  $i$  and  $t$  are firm and quarter indicators, respectively.  $OREC$ , defined as gross other receivables deflated by year-end total assets, is a proxy for the inter-corporate loans per Jiang et al. (2010).  $AFTER$  is equal to one for the fiscal quarters after the 4<sup>th</sup> quarter of 2004 and zero otherwise. Because  $OREC$  is scaled by total assets, we include  $LNNTA$  (defined as the natural logarithm of quarter-end total assets) to control for size effects. The model includes firm fixed effects, but inference is similar without the firm fixed effects. To determine whether minority shareholder composition affects the coefficient on  $AFTER$ , we also allow the coefficient on  $AFTER$  to vary with  $MUTUAL\_OWN$ ,  $OTHERINST\_OWN$ , and  $INDIVIDUAL\_OWN$ .

[place Table 5 about here]

Table 5 shows the regression results of *OREC* for all publicly traded A share firms over our sample period 1/1/2004-6/30/2005.<sup>19</sup> Inference is similar if the sample in Table 5 is limited to firms whose *OREC* at the 2003 year-end is above the median or only the firms included in Table 2. To avoid alternative explanation resulting from a change in the mix of the sample firms over time, we require each firm to have non-missing observations in each of the 6 quarters over our sample period. This sample restriction results in a loss of 740 firm quarters in Model 1 and 641 firm quarters in Model 2. As shown in Model 1, the coefficient on *AFTER* is significantly positive. In addition, the coefficients on the interaction terms between *AFTER* and the three minority shareholder ownership structure variables in Model 2 are insignificant. Overall, the results in Table 5 reduce the concern that our results in Tables 2 and 3 are due to a general improvement in investor protection over our sample period.

#### **IV. MINORITY SHAREHOLDERS' VOTING BEHAVIOR IN THE POST-REGULATION PERIOD**

##### **Determinants of Minority Shareholders' Participation in the Voting**

We now use the detailed minority shareholder voting data available in the post-regulation period to analyze minority shareholders' voting behavior. We first examine the influences of a minority shareholder's ownership and minority shareholder's type on the minority shareholder's incentive to participate in the voting of submitted proposals.<sup>20</sup>

[place Table 6 about here]

---

<sup>19</sup> Jiang et al. (2010) also find that the level of *OREC* is negatively associated with the listed firm's future earnings performance. This negative relation holds in our sample as well. In addition, the negative relation is similar for both the pre- and post-regulation periods, suggesting that the nature of *OREC* is similar over the two time periods.

<sup>20</sup> We find no evidence that *CAR* is a significant determinant of minority shareholders' voting participation decision.

Panel A of Table 6 shows the descriptive statistics on minority shareholders' participation rates. *PARTICIPATE\_ALL* is the number of tradable shares that participated in the voting as a fraction of all the outstanding tradable shares on the voting date. Recall that minority shareholders in this paper refer to tradable shareholders. The other participation rate variables are defined similarly except that they are defined for different subsets of tradable shareholders. For example, *PARTICIPATE\_MUTUAL* is the number of tradable shares owned by mutual funds that are among the top ten tradable shareholders on the voting date and participated in the voting as a fraction of the total number of tradable shares owned by mutual funds who are among the top ten tradable shareholders on the voting date. We have all the data needed to compute *PARTICIPATE\_ALL*, but we cannot directly compute the other participation rates due to lack of data on the top ten tradable shareholders on the voting date. Therefore, we use the algorithm explained in the notes to Table 6 to infer the top ten tradable shareholders who are eligible to vote on the voting date.

As shown in Panel A of Table 6, the median participation rate is 13.3 percent for minority shareholders as a whole. This low rate is largely driven by non-top ten minority shareholders as evidenced by the median participation rate of only 4.4 percent for non-top ten minority shareholders in contrast to a median participation rate of 62.8 percent for the top ten minority shareholders. This finding is consistent with the economic intuition that minority shareholders with lower ownership benefit less from voting. Among the top ten minority shareholders, the median participation rates are 65.6 percent, 48.8 percent, and 18.3 percent for mutual funds, other institutions, and individual shareholders, respectively. The top ten individual shareholders' median participation rate of 18.3 percent is surprising low, suggesting that many top ten individual shareholders are not active in corporate governance.

Panel B of Table 6 models the determinants of voting participation by the top ten minority shareholders who are eligible to vote on the voting date. As expected, minority shareholders with lower stock ownership are less likely to vote. However, even after controlling for stock ownership, it is interesting to observe that both mutual funds and other institutions are still more likely to vote than individual shareholders. The coefficient on *MUTUAL* is also significantly different from the coefficient on *OTHERINST* (two-tailed p-value=0.025), suggesting that mutual funds more actively participate in shareholder voting than other institutions. These results are consistent with the findings in Tables 2 and 3.

### **Proposal Quality and Minority Shareholders' Voting Behavior**

In this section we examine the relation between proposal quality and minority shareholders' voting decisions. This analysis helps reconcile our findings in Tables 2 and 3 with the mixed results on mutual funds' governance role in the U.S. literature based on mutual funds' proxy voting data (e.g., Davis and Kim 2007; Cremers and Romano 2011). This U.S. literature shows that U.S. mutual funds often side with management in proxy voting, suggesting that they are not active in corporate governance. We argue that it is difficult to draw any strong inference about minority shareholder monitoring from an *insignificant* relation between proposal quality and minority shareholders' voting decisions. First, if minority shareholders such as brokerage firms are not independent and thus will not exercise their veto power, managers who understand this will continue to submit value-decreasing proposals and such proposals will be always approved. Second, if such minority shareholders are independent and thus would veto value-decreasing managerial proposals, we expect rational managers not to submit such value-decreasing proposals in the first place and therefore minority shareholders will not have to veto

submitted managerial proposals. Hence, regardless of minority shareholders' independence, we should not expect minority shareholders' voting decisions to be systematically correlated with proposal quality in equilibrium. In other words, an insignificant relation between proposal quality and minority shareholders' voting decisions could be still consistent with minority shareholders being effective monitors.

Of course, management may not be able to perfectly anticipate how minority shareholders will vote. Hence, in reality we may still observe the submission and veto of value-decreasing proposals in equilibrium. Accordingly, we also use the following logit model to examine the empirical relation between proposal quality and minority shareholders' voting in the post-regulation period:

$$VETO_{it} = a + b * DCAR_{it} + \varepsilon_{it} \quad (3)$$

where  $i$  and  $t$  are proposal and date indicators, respectively.  $VETO$  is a dummy variable that equals 1 if a proposal is vetoed by minority shareholders in the post-regulation period, and zero if it is passed by minority shareholders in the post-regulation period. Following Brickley et al. (1988), we use  $DCAR$  rather than  $CAR$  as a proposal quality proxy because  $CAR$  could be subject to greater endogeneity concern.  $DCAR$  is a dummy variable that is equal to one for value-increasing equity offering proposals (i.e.,  $CAR > 0$ ) and zero otherwise. We also allow the coefficient on  $DCAR$  to vary with the level of stock ownership of each of the three types of top ten minority shareholders.  $MUTUAL\_OWN$ ,  $OTHERINST\_OWN$  and  $INDIVIDUAL\_OWN$  are measured at the fiscal quarter end immediately before the proposal voting date.

[place Table 7 about here]

Table 7 shows the results of regression model (3). There are 82 equity offering proposals that were voted on by minority shareholders in the post-regulation period. Ten out of the 82

proposals (12 percent) were vetoed by minority shareholders. As shown in model 1 of Table 7, on average there is no association between proposal quality and minority shareholders' voting decisions. Model 2 in Table 7 reports the logit regression result of model (3) that allows the coefficient on *DCAR* to vary with *MUTUAL\_OWN*, *OTHERINST\_OWN*, and *INDIVIDUAL\_OWN*. The coefficient on *DCAR*×*MUTUAL\_OWN* is significantly negative (two-tailed  $p=0.011$ ). Thus, there is evidence that minority shareholders are more likely to veto value-decreasing proposals in firms with higher mutual fund ownership. However, this finding is not robust when we replace *VETO* with *AGREE*, defined as the number of tradable shares that agreed with the managerial proposal as a fraction of the total number of tradable shares that voted on the proposal. The untabulated Tobit's regression result of *AGREE* shows that the coefficient on *DCAR* in model 1 remains insignificant and the coefficients on *MUTUAL\_OWN* and *DCAR*×*MUTUAL\_OWN* in model 2 also become insignificant. Overall, at best there is only weak evidence of a negative association between proposal quality and minority shareholders' vetoing of submitted equity offering proposals in firms with higher mutual fund ownership. Though counterintuitive, the mixed finding in Table 7 is consistent with an equilibrium in which managers with perfect information anticipate that minority shareholders will veto value-decreasing proposals.

## V. CONCLUSION

This study examines how the segmented voting regulation that requires managerial equity offering proposals to seek the separate approval of voting tradable shareholders, referred to as minority shareholders, affects the quality of equity offering proposals. We find that the effect of the regulation depends on the types of minority shareholders present in the firm. The regulation

helps deter management from submitting value-decreasing equity offering proposals in firms with higher mutual fund ownership or individual investor ownership but not in firms with higher ownership by other institutional investors. In addition, the mean abnormal stock return around the proposal announcement (*CAR*) for the *submitted* proposals is significantly more positive in the post-regulation period than in the pre-regulation period for firms with higher mutual fund ownership but not for firms with higher ownership by either other institutions or individual shareholders. We also find weak evidence that proposal quality is negatively associated with minority shareholders' likelihood of vetoing the proposal in firms with higher mutual fund ownership but not in firms with higher ownership by either other institutions or individual shareholders.

Our study provides timely input to the debate on the costs and benefits of granting minority shareholders increased control over corporate decisions. Our results are directly relevant to the CSRC facing the challenging task of protecting minority shareholders' interests and developing the country's domestic financial market. Given China's poor record of investor protection and weak law enforcement, it is important to determine whether the segmented voting regulation worked as intended in certain firms. To our knowledge, this is the first study to show how strengthening minority shareholders' direct control over corporate decisions affects the quality of those decisions for firms domiciled in weak investor protection countries.

Our study also suggests several possible avenues for future research. First, it would be interesting to examine how the segmented voting regulation affects management's incentives to explore alternative methods of expropriation. This question is relevant to assessing the direct and indirect effects of the regulation on shareholder value. The evidence in Table 6 is a good starting point but more research is warranted to understand the full magnitude of such indirect effects.

Second, it may be interesting to examine how the segmented voting regulation affects the combined gain of both minority shareholders and controlling shareholders. It is possible that the segmented voting regulation merely represents a wealth transfer from controlling shareholders to minority shareholders without improving the overall economic efficiency of the firm. Nevertheless, given that government regulations often fail to achieve their intended effects, demonstrating the direct effect of the segmented voting regulation on the quality of equity offering proposals is a useful first step in our quest to understanding the overall efficiency effects of this regulatory change to firms and the economy.

## REFERENCES

- Ai, Chunrong and Edward C. Norton. 2003. Interaction terms in logit and probit models. *Economics Letters* 80: 123 – 129.
- Allen, F., J. Qian, and M. Qian. 2005. Law, finance, and economic growth in China. *Journal of Financial Economics* 77: 57-116.
- Atanasov, V., B. Black, C. Ciccotello, and S. Gyoshev. 2010. How does law affect finance? An examination of equity tunneling in Bulgaria. *Journal of Financial Economics* 96: 155-173.
- Bainbridge, S. M. 2006. Director primacy and shareholder disempowerment. *Harvard Law Review* 119: 1735-1758.
- Bebchuk, L. A. 2005. The case for increasing shareholder power. *Harvard Law Review* 118: 1-65.
- Berger, P. G., E. Ofek, and D. L. Yermack. 1997. Managerial entrenchment and capital structure decisions. *Journal of Finance* 52(4): 1411-1438.
- Berkman, H., R. A. Cole, and J. Fu. 2011. Political connections and minority-shareholder protection: Evidence from securities-market regulation in China. *Journal of Financial and Quantitative Analysis* 45 (6): 1391-1417.
- Brickley, J. A., R. C. Lease, and C. W. Smith, Jr. 1988. Ownership structure and voting on antitakeover amendments. *Journal of Financial Economics* 20: 267-291.
- Chen, X., J. Harford, and K. Li. 2007. Monitoring: which institutions matter? *Journal of Financial Economics* 86 (2): 279-305.
- Chen, K., and H. Yuan. 2006. Government involvement, market forces, and the pricing of earnings: A comparison of China's floating and non-floating shares. Hong Kong University of Science and Technology working paper.
- Claessens, S., S. Djankov, and L. H. P. Lang. 2000. The separation of ownership and control in east Asian corporations. *Journal of Financial Economics* 58: 81-112.
- Cremers, M., and R. Romano. 2011. Institutional investors and proxy voting on compensation plans: The impact of the 2003 mutual fund voting disclosure rule. *American Law and Economics Review* 13: 220-268.
- CSRC (China Securities Regulatory Commission). 2004. Strengthening the administration of the equity offering proceeds in publicly listed firms. February 4, 2004 (In Chinese).
- Davis, G. F., and E. H. Kim. 2007. Business ties and proxy voting by mutual funds. *Journal of Financial Economics* 85: 552-570.
- DeFond, M., and M. Hung. 2004. Investor protection and corporate governance: Evidence from worldwide CEO turnover. *Journal of Accounting Research* 42: 269-312.
- Doidge, C., G. A. Karolyi, and R. M. Stulz. 2007. Why do countries matter so much for corporate governance. *Journal of Financial Economics* 86 (1): 1-39.
- Fan, J. P. H., O. Rui, and M. Zhao. 2008. Public governance and corporate finance: Evidence from corruption cases. *Journal of Comparative Economics* 36: 343-364.
- Fan G., and X. L. Wang. 2004. *NERI Index of Marketization of China's Provinces*, Economics Science Press (in Chinese).

- Fan, J. P. H., T. J. Wong, and T. Zhang. 2007. Politically connected CEOs, corporate governance, and post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics* 84: 330-357.
- Fang, Y. 2004. The background leading to the segmented voting regulation. *Securities Times*, December 9, 2004 (in Chinese).
- Ferreira, M. A., and S. B. Ramos. 2009. Mutual fund industry competition and concentration: International evidence. Universidade Nova de Lisboa working paper.
- Gillan, S., and L. T. Starks. 2007. The evolution of shareholder activism in the United States. *Journal of Applied Corporate Finance* 19 (1): 55-73.
- Holzer, J., and D. Berman. 2010. Investors gain new clout. *The Wall Street Journal*, August 26, 2010.
- Holzer, J. 2011. Court deals blow to SEC, activists. *The Wall Street Journal*, July 23, 2011.
- Jensen, M., and W. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics* 3: 305-360.
- Jian, M., and T. J. Wong. 2010. Propping through related party transactions. *Review of Accounting Studies* 15 (1): 70-105.
- Jiang, G., C. Lee, and H. Yue. 2010. Tunneling through inter-corporate loans: The China experience. *Journal of Financial Economics* 98: 1-20.
- Jing, N. 2009. Fund managers wanted. *China Daily*, September 14, 2009.
- Jung, K., Y. Kim, and R. Stulz. 1996. Timing, investment opportunities, managerial discretion, and the security issue decision. *Journal of Financial Economics* 42: 159-185.
- La Porta, R., F. Lopez-de-Silanes, and A. Shleifer. 1999. Corporate ownership around the world. *Journal of Finance* 54: 471-517.
- La Porta, R., F. Lopez-De-Dilanes, and A. Shleifer. 2008. The economic consequences of legal origins. *Journal of Economic Literature* 46 (2): 285-332.
- La Porta, R., F. Lopez-De-Dilanes, A. Shleifer, and R. Vishny. 1997. Legal determinants of external finance. *Journal of Finance* 52 (3): 1131-1150.
- La Porta, R., F. Lopez-De-Dilanes, A. Shleifer, and R. Vishny. 1998. Law and finance. *Journal of Political Economy* 106 (6): 1113-1155.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny, 2000. Investor protection and corporate governance. *Journal of Financial Economics* 58: 3-28.
- Leary, M. T., and M. R. Roberts. 2010. The pecking order, debt capacity, and information asymmetry. *Journal of Financial Economics* 95: 332-355.
- Li, K. 2008. Poor performing mutual fund managers will be replaced quickly: The average Chinese mutual fund manager's tenure is 515 days. *China Enterprise News*, July 14, 2008 (in Chinese).
- Li, K., H. Yue, and L. Zhao. 2009. Ownership, institutions, and capital structure: Evidence from China. *Journal of Comparative Economics* 37: 471-490.
- Listokin, Y. 2010. If you give shareholders power, do they use it? An empirical analysis. *Journal of Institutional and Theoretical Economics* 166 (1): 38-53.
- Liu, M. 2011. Chongqing Beer suffers from seven consecutive days of legally permitted maximum stock price drops of -10%; Dachen Mutual Fund faced investors' redemption in excess of RMB10 billion. *Moneyweek*, December 19, 2011 (in Chinese).
- Ma, S. 2004. The efficiency of China's stock market. *The Chinese economy series*. Ashgate Publishing Limited.

- Myers, S. C. 2003. Chapter 4: Financing of Corporations. *Handbook of the Economics of Finance*, edited by G.M. Constantinides, M. Harris and R. Stulz: 215-253.
- Myers, S. C., and N. S. Majluf. 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13: 187-221.
- Norton, Edward C., Hua Wang, and Chunrong Ai. 2004. Computing interaction effects and standard errors in logit and probit models. *The Stat Journal* 4(2): 103 – 116.
- Porter, M. 1992. Capital choices: Changing the way America invests in industry. *Journal of Applied Corporate Finance* 5 (2): 4-16.
- Ridley, K., and R. Menon. 2009. Investors in UK brace to take on boards. Reuters, November 26, 2009.
- Scannell, K. 2009. Policy makers work to give shareholders more boardroom clout. *The Wall Street Journal*, March 26, 2009.
- Shleifer, A., and R. Vishny. 1997. A Survey of corporate governance. *Journal of Finance* 52 (2): 737-83.
- Sun, S. L. 2003. Mutual fund managers join forces in objecting to China Merchants Bank's RMB\$10 billion convertible debt financing proposal. *China Securities Market Weekly*, September 15, 2003 (in Chinese).
- Vascellaro, J. E., and S. Tibken. 2008. Yahoo, Icahn settle proxy battle in wake of rejected Microsoft offer. *The Wall Street Journal*, July 21, 2008.
- Xiao, J., and J. Shi. 2011. Historical performance and fund flows: Does “redemption anomaly” exist in China’s open-ended fund market? *Economic Research Journal* 1: 112-125 (in Chinese).

## APPENDIX A. THE PROCEDURES USED TO IDENTIFY THE FIRMS ELIGIBLE TO PROPOSE EQUITY OFFERINGS

We rely on the following regulations issued by the Chinese Securities Regulatory Commission (CSRC) to identify the firms that are eligible to propose an equity offering:

- a) Measures for the Administration of New Share Issuance by Listed Companies (Order No. 1 [2001] of the CSRC);
- b) Notice on the Administration of New Share Issuance by Listed Companies (Order No. 43 [2001] of the CSRC);
- c) Implementation Measures for Listed Companies' Issuing Convertible Corporate Bonds (Order No. 2 [2001] of the CSRC);
- d) The Interim Measures for the Administration of Convertible Corporate Bonds (Order No. 16 [1997] of the Securities Committee of the State Council);
- e) Notice on the Administration of Convertible Corporate Bond Issuance by Listed Companies (Order No. 115 [2001] of the CSRC);
- f) Notice on the Conditions for the Additional Issuance of Securities by Listed Companies (Order No. 2 [2002] of the CSRC); and
- g) Notice of the China Securities Regulatory Commission on Several Issues Concerning Major Purchases, Sales and Exchanges of Assets by Listed Companies (Order No. 105 [2001] of the CSRC).

These regulations require firms that wish to propose an equity offering to meet several qualitative and quantitative requirements. Because most qualitative requirements are subjective and difficult to measure using publicly available data, we rely on the quantitative requirements to determine a firm's equity offering eligibility. Specifically, a firm is deemed eligible to propose a *rights offering* if it satisfies the following two conditions: a) the average return on equity (ROE) over the past three years is no less than six percent; and b) the firm has not conducted any rights offering in the previous year. A firm is deemed eligible to propose a *general offering* if it satisfies the following two conditions: a) the average ROE (based on an unknown formula specified by the CSRC) over the past three years is no less than ten percent;<sup>21</sup> and b) the ROE in

---

<sup>21</sup> As we do not have access to the CSRC's ROE formula, we define ROE as annual net income divided by the average shareholder's equity.

the previous year is no less than ten percent. However, under the CSRC regulations a firm is also deemed eligible to propose a general offering if it experiences a “significant” restructuring in any of the previous three years. A restructuring is deemed significant if the restructuring’s deal value is no less than 50 percent of the firm’s gross total assets. A firm is deemed eligible to propose a *convertible bond offering* if it satisfies the following two conditions: a) the average ROE over the past three years is no less than ten percent or the average ROE based on net income excluding non-recurring items over the past three years is no less than six percent; and b) the firm does not report a loss in any of the previous three years. Again, under the CSRC regulations a firm is also deemed eligible to propose a convertible bond offering if it experiences a “significant” restructuring in any of the previous three years.

We exclude a firm year from our sample if it does not satisfy the eligibility requirements for a general offering, a rights offering, or a convertible bond offering. If we literally follow the above eligibility requirements, a significant number of firm years that did propose equity offerings would be excluded. Hence, we relax the quantitative thresholds by reducing the ten percent threshold to nine percent, the six percent threshold to five percent, and the 50 percent threshold to 40 percent. With those relaxed thresholds, we retain all but one equity offering proposals in our final sample.

**TABLE 1**  
**Descriptive Statistics (N=11,924 firm-month observations)**

**Panel A. Descriptive Statistics**

Variable Name	Mean	Std	Q1	Median	Q3
<i>SUBMISSION=B</i>	0.009	0.093	0.000	0.000	0.000
<i>SUBMISSION=C</i>	0.010	0.099	0.000	0.000	0.000
<i>MUTUAL_OWN</i>	0.046	0.081	0.000	0.004	0.055
<i>OTHERINST_OWN</i>	0.045	0.080	0.003	0.017	0.055
<i>INDIVIDUAL_OWN</i>	0.020	0.020	0.004	0.017	0.030
<i>Q</i>	0.574	0.357	0.328	0.512	0.759
<i>CASH</i>	0.172	0.118	0.084	0.142	0.228
<i>CFO</i>	0.071	0.107	0.017	0.072	0.126
<i>LEV</i>	0.466	0.188	0.340	0.467	0.588
<i>VOLATILITY</i>	0.023	0.011	0.018	0.021	0.025
<i>AR12</i>	0.054	0.286	-0.126	-0.006	0.177
<i>ASSETS</i>	21.430	1.080	20.736	21.312	22.016

The sample covers the firm months that are eligible to issue new equity over January 2004 to June 2005. *CAR* is the market adjusted cumulative abnormal return over the [-2, +10] trading days around the equity offering proposal announcement date. *SUBMISSION* = A if a firm does not submit a proposal in month *t*, B if a firm submits a value-increasing (i.e.,  $CAR > 0$ ) proposal in month *t*, and C if a firm submits a value-decreasing (i.e.,  $CAR \leq 0$ ) proposal in month *t*. *MUTUAL\_OWN* is the total stock ownership (as a percentage of the total outstanding tradable shares) of all the open ended and close ended mutual funds ranked among the top ten minority shareholders at the end of the quarter prior to month *t*. *OTHERINST\_OWN* is the total stock ownership (as a percentage of the total outstanding tradable shares) of all the other institutional investors ranked among the top ten minority shareholders at the end of the quarter prior to month *t*. *INDIVIDUAL\_OWN* is the total stock ownership (as a percentage of the total outstanding tradable shares) of all the individual investors ranked among the top ten minority shareholders at the end of the quarter prior to month *t*. *Q* is the natural logarithm of a firm's Tobin's Q at the end of the quarter prior to month *t*. *Q* is defined as the market value minus the book value of shareholders' equity plus total assets divided by total assets. Results are similar if the market value of non-tradable shares is assumed equal to their book value in the *Q* definition. *CFO* is cash flows from operations over four quarters divided by the average total assets at the end of the quarter prior to month *t*. *LEV* is total debts divided by total assets at the end of the quarter prior to month *t*. *CASH* is cash and marketable securities divided by total assets at the end of the quarter prior to month *t*. *ASSETS* is the natural logarithm of total assets at the end of the quarter prior to month *t*. *VOLATILITY* is the standard deviation of daily stock returns over a one year period that ends in the beginning of month *t*. *AR12* is the buy and hold equally weighted market adjusted abnormal return over a one-year period that ends at the beginning of month *t*.

**Panel B. Pearson Correlations**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SUBMISSION=B (1)	1											
SUBMISSION=C (2)	-0.009 (0.306)	1										
AFTER (3)	0.012 (0.204)	-0.023 (0.012)	1									
MUTUAL_OWEN (4)	0.029 (0.001)	-0.002 (0.815)	0.121 (0.000)	1								
OTHERINST_OWEN (5)	-0.003 (0.710)	0.001 (0.903)	-0.030 (0.001)	0.030 (0.001)	1							
INDIVIDUAL_OWEN (6)	-0.014 (0.126)	0.005 (0.580)	-0.017 (0.058)	-0.446 (0.000)	-0.156 (0.000)	1						
LEV (7)	0.031 (0.001)	0.019 (0.042)	0.020 (0.028)	-0.079 (0.000)	-0.009 (0.356)	0.119 (0.000)	1					
Q (8)	-0.014 (0.118)	0.000 (0.999)	-0.165 (0.000)	0.080 (0.000)	-0.015 (0.105)	0.177 (0.000)	-0.273 (0.000)	1				
CFO (9)	0.011 (0.249)	0.012 (0.185)	0.045 (0.000)	0.260 (0.000)	0.062 (0.000)	-0.226 (0.000)	-0.173 (0.000)	0.071 (0.000)	1			
VOLATILITY (10)	-0.010 (0.279)	-0.018 (0.054)	0.174 (0.000)	-0.034 (0.000)	-0.012 (0.209)	0.123 (0.000)	-0.027 (0.003)	0.095 (0.000)	-0.071 (0.000)	1		
AR12 (11)	0.029 (0.002)	0.009 (0.342)	0.026 (0.005)	0.461 (0.000)	0.044 (0.000)	-0.273 (0.000)	-0.113 (0.000)	0.147 (0.000)	0.270 (0.000)	0.201 (0.000)	1	
CASH (12)	-0.026 (0.005)	-0.034 (0.000)	0.014 (0.125)	0.020 (0.027)	0.038 (0.000)	0.056 (0.000)	-0.342 (0.000)	0.127 (0.000)	0.131 (0.000)	0.164 (0.000)	0.067 (0.000)	1
ASSETS (13)	0.020 (0.030)	0.006 (0.535)	0.014 (0.119)	0.242 (0.000)	0.145 (0.000)	-0.522 (0.000)	0.221 (0.000)	-0.475 (0.000)	0.177 (0.000)	-0.207 (0.000)	0.216 (0.000)	-0.208 (0.000)

**TABLE 2**  
**The Effect of the Segmented Voting Regulation on Management's Incentive to Submit Value-Increasing and Value-Decreasing Equity Offering Proposals: Multinomial Logit Regression Results**

**Panel A. Main Effects Model**

Independent Variable	SUBMISSION=B (Value Increasing)		SUBMISSION=C (Value Decreasing)	
	Coefficient	<i>p</i> -value	Coefficient	<i>p</i> -value
<i>AFTER</i>	0.239	(0.214)	-0.450	(0.019)
<i>LEV</i>	1.318	(0.001)	0.808	(0.050)
<i>Q</i>	-0.509	(0.181)	-0.074	(0.805)
<i>CFO</i>	1.090	(0.230)	1.576	(0.112)
<i>VOLATILITY</i>	-23.376	(0.310)	-28.458	(0.041)
<i>AR12</i>	1.315	(0.000)	0.398	(0.144)
<i>CASH</i>	-2.184	(0.024)	-3.675	(0.000)
<i>ASSETS</i>	-0.144	(0.229)	-0.089	(0.407)
<i>Industry fixed effects</i>			YES	
Pseudo R-square			0.030	
N			11,924	

**Panel B. Interaction Effects Model**

Independent Variable	<i>SUBMISSION=B</i> (Value Increasing)		<i>SUBMISSION=C</i> (Value Decreasing)	
	Coefficient	<i>p-value</i>	Coefficient	<i>p-value</i>
<i>MUTUAL_OWN</i>	0.635	(0.730)	1.890	(0.198)
<i>OTHERINST_OWN</i>	-0.960	(0.533)	0.383	(0.760)
<i>INDIVIDUAL_OWN</i>	3.043	(0.678)	9.678	(0.068)
<i>AFTER</i>	0.346	(0.353)	0.666	(0.160)
<i>AFTER</i> × <i>MUTUAL_OWN</i>	1.539	(0.478)	-9.765	(0.004)
<i>AFTER</i> × <i>OTHERINST_OWN</i>	-0.005	(0.998)	-0.698	(0.818)
<i>AFTER</i> × <i>INDIVIDUAL_OWN</i>	-16.478	(0.181)	-33.060	(0.048)
<i>LEV</i>	1.416	(0.001)	0.811	(0.080)
<i>Q</i>	-0.631	(0.119)	-0.072	(0.813)
<i>CFO</i>	0.925	(0.307)	1.675	(0.085)
<i>VOLATILITY</i>	-21.091	(0.328)	-30.325	(0.038)
<i>AR12</i>	1.170	(0.000)	0.506	(0.104)
<i>CASH</i>	-2.195	(0.028)	-3.675	(0.000)
<i>ASSETS</i>	-0.204	(0.151)	-0.086	(0.536)
<i>Industry fixed effects</i>			YES	
Pseudo R-square			0.037	
N			11,924	

The sample covers the firm months that are eligible to issue new equity over January 2004 to June 2005. *AFTER* is a dummy variable that is equal to one for the 7 firm-month observations after the regulation (i.e., December 2004 and after), and zero otherwise. See Table 1 for other variable definitions. Two-tailed robust *p* values are clustered at the firm level.

**TABLE 3**  
**The Effect of the Segmented Voting Regulation on the Quality of Equity Offering Proposals**

**Panel A. The Market Reactions to Announcements of Equity Offering Proposals in the Pre- and Post-Regulation Periods**

	CAR in the Pre-Regulation Period (N=147)	CAR in the Post-Regulation Period (N=81)	Two-Tailed <i>p</i> -value on the Test of the Difference	
			t-test	rank-sum test
Mean	-0.0143	0.0136		
Median	(-0.0176)	(0.0177)	0.003	0.004
Standard deviation	[0.0679]	[0.0663]		
Two-tailed <i>p</i> -value of one-sample t-test	0.012	0.069		
Two-tailed <i>p</i> -value of one-sample rank-sum test	0.005	0.119		

**Panel B. OLS Regression Result of CAR: Interaction Effects Model**

Independent Variable	Model 1 (Without Control Variables)		Model 2 (With Control Variables)	
	Coefficient	<i>p</i> -value	Coefficient	<i>p</i> -value
<i>MUTUAL_OWN</i>	0.004	(0.964)	-0.006	(0.946)
<i>OTHERINST_OWN</i>	-0.116	(0.231)	-0.112	(0.265)
<i>INDIVIDUAL_OWN</i>	-0.021	(0.903)	0.043	(0.828)
<i>AFTER</i>	-0.012	(0.533)	-0.017	(0.403)
<i>AFTER</i> × <i>MUTUAL_OWN</i>	0.365	(0.002)	0.397	(0.003)
<i>AFTER</i> × <i>OTHERINST_OWN</i>	0.146	(0.193)	0.141	(0.239)
<i>AFTER</i> × <i>INDIVIDUAL_OWN</i>	0.400	(0.562)	0.445	(0.551)
<i>LEV</i>			-0.011	(0.779)
<i>Q</i>			-0.013	(0.478)
<i>CFO</i>			0.009	(0.849)
<i>VOLATILITY</i>			0.284	(0.220)
<i>AR12</i>			-0.004	(0.828)
<i>CASH</i>			0.019	(0.755)
<i>ASSETS</i>			0.003	(0.596)
<i>Industry fixed effects</i>		YES		YES
Adjusted R-square		0.106		0.082
N		228		224

The sample contains the equity offering proposals announced over the period 1/1/2004-6/30/2005. All the variables are defined as in Tables 1 and 2 except that they are measured at the end of the quarter prior to the equity offering proposal announcement date. Two-tailed robust *p* values shown in Panel B are clustered at the firm level.

**Table 4**  
**Characteristics of Firms That Proposed Equity Offerings in the Sample Period**

Variable	Pre-Regulation Period			Post-Regulation Period			<i>p</i> -value of the Test of Difference	
	N	Mean	Median	N	Mean	Median	<i>t</i> -test	Wilcoxon rank sum test
<i>Industry-year median adjusted Q</i>	147	0.024	-0.035	81	0.023	-0.047	(0.970)	(0.451)
<i>Industry-year median adjusted SALESGROWTH</i>	135	0.085	0.032	77	0.221	0.099	(0.051)	(0.083)
<i>Industry-year median adjusted CASH</i>	147	-0.005	-0.020	81	-0.027	-0.049	(0.077)	(0.037)
<i>Industry-year median adjusted LEV</i>	147	0.039	0.038	81	0.069	0.079	(0.126)	(0.069)

*SALESGROWTH* is defined as the natural logarithm of the ratio of total sales over quarters T-3 to T to total sales over quarters T-7 to T-4, where quarter T is the fiscal quarter immediately before month *t*. All the other variables are defined in Table 1.

**TABLE 5**  
**The Regression Result of Inter-Corporate Loans**

	Dependent Variable = <i>OREC</i>			
	Model 1 (Main Effect)		Model 2 (Interaction Effect)	
	Coefficient	<i>p</i> -value	Coefficient	<i>p</i> -value
<i>MUTUAL_OWN</i>			0.010	<i>(0.411)</i>
<i>OTHERINST_OWN</i>			-0.022	<i>(0.137)</i>
<i>INDIVIDUAL_OWN</i>			-0.152	<i>(0.063)</i>
<i>AFTER</i>	0.008	<i>(0.000)</i>	0.006	<i>(0.039)</i>
<i>AFTER</i> × <i>MUTUAL_OWN</i>			-0.009	<i>(0.490)</i>
<i>AFTER</i> × <i>OTHERINST_OWN</i>			0.003	<i>(0.873)</i>
<i>AFTER</i> × <i>INDIVIDUAL_OWN</i>			0.080	<i>(0.381)</i>
<i>ASSETS</i>	-0.047	<i>(0.005)</i>	-0.047	<i>(0.007)</i>
<i>Firm fixed effects</i>		YES		YES
Adjusted R-square		0.890		0.888
N		6,906		6,879

The sample in each column includes all A share firms that have nonmissing data in each of the 6 quarters over 1/1/2004-6/30/2005. *OREC* is gross other receivables divided by year-end total assets. *AFTER* is one for the quarters after 1/1/2005 and zero otherwise. All variables are winsorized at the 1st and 99th percentiles. See Table 1 for other variable definitions. *MUTUAL\_OWN*, *OTHERINST\_OWN*, and *INDIVIDUAL\_OWN* are measured at the beginning of the quarter. Two-tailed robust *p* values clustered at the firm level are reported in parentheses.

**TABLE 6**  
**Minority Shareholders' Voting Participation Rate in the Post-Regulation Period**

<b>Panel A. Descriptive Statistics on Minority Shareholders' Voting Participation</b>						
Variable	N	Mean	S.D.	25%	50%	75%
<i>PARTICIPATE_ALL</i>	80	0.161	0.129	0.061	0.133	0.235
<i>PARTICIPATE_TOP10</i>	76	0.550	0.277	0.365	0.628	0.780
<i>PARTICIPATE_NONTOP10</i>	76	0.089	0.104	0.015	0.044	0.135
<i>PARTICIPATE_MUTUAL</i>	56	0.635	0.358	0.456	0.656	1.000
<i>PARTICIPATE_OTHERINST</i>	64	0.476	0.416	0.000	0.488	0.912
<i>PARTICIPATE_INDIVIDUAL</i>	51	0.270	0.307	0.000	0.183	0.409

<b>Panel B. Determinants of Top Ten Minority Shareholders' Voting Participation</b>		
Independent Variable	Dependent Variable = <i>VOTE</i>	
	Coefficient	<i>p-value</i>
<i>MUTUAL</i>	0.965	(0.009)
<i>OTHERINST</i>	0.511	(0.034)
<i>OWN</i>	0.281	(0.000)
<i>CONSTANT</i>	-1.043	(0.000)
Pseudo R-square	0.093	
N	751	
Test of hypothesis		
Null hypothesis	Difference in coefficient	<i>p-value</i>
<i>MUTUAL</i> – <i>OTHERINST</i> = 0	0.454	(0.025)

*PARTICIPATE\_ALL* is the number of tradable shares that participated in the voting as a fraction of all the outstanding tradable shares on the voting date. The other participation rate variables are defined similarly except that they are defined for different subsets of tradable shareholders. For example, *PARTICIPATE\_MUTUAL* is defined as the number of tradable shares owned by mutual funds who are among the top ten tradable shareholders on the voting date and participated in the voting as a fraction of the total number of tradable shares owned by mutual funds who are among the top ten tradable shareholders on the voting date. The top ten tradable shareholders who are eligible to vote on the voting date are derived indirectly using the following algorithm. First, for each equity offering proposal voted in quarter *t*, we identify the top ten tradable shareholders as disclosed at the beginning and end of quarter *t* and the top ten voting tradable shareholders as disclosed in the voting outcome announcement. Second, if the voting date is exactly at the end of quarter *t*, we assume that the top ten tradable shareholders as disclosed by the company's periodic report at the end of quarter *t* are the top ten tradable shareholders eligible to vote on the voting date. Third, if the voting date falls during quarter *t* and a tradable shareholder is among the top ten tradable shareholders either at the beginning or at the end of quarter *t* or both, we compare *VOL1* (defined as all tradable shareholders' trading volume from the beginning of quarter *t* to the voting date) and *VOL2* (defined as all tradable shareholders' trading volume from the voting date to the end of quarter *t*). If  $VOL1 < VOL2$ , we assume that the top ten tradable shareholders at the beginning of quarter *t* have not sold their shares by the voting date and therefore are eligible to vote on the voting date. If  $VOL1 \geq VOL2$ , we assume that the top ten tradable shareholders at the end of quarter *t* are

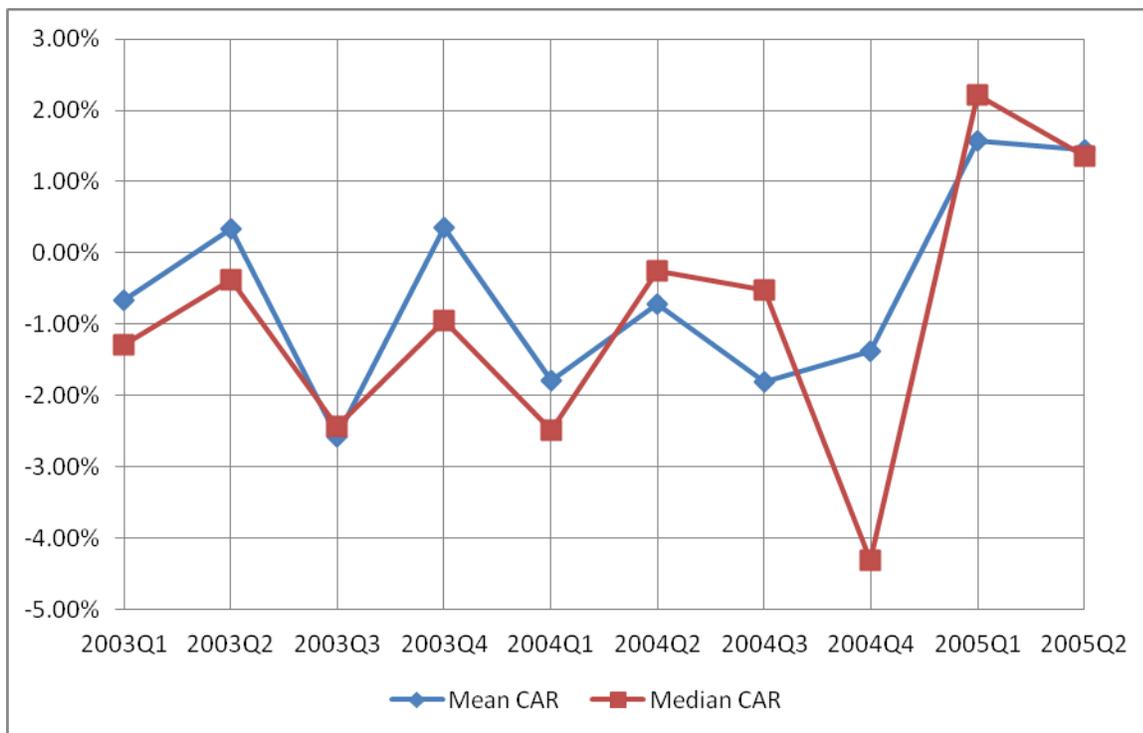
the shareholders eligible to vote on the voting date. Fourth, we rank the tradable shareholders identified in step (2) through (3) above along with the top ten voting tradable shareholders based on their stock ownership. It is important to include the top ten voting tradable shareholders in the ranking because our steps (2) and (3) may miss some top ten tradable shareholders who might have turned over their shares quickly around the voting date. Those who are ranked among the top ten are assumed to be the top ten tradable shareholders eligible to vote on the vote date. *VOTE* is a dummy variable that equals one if a minority shareholder voted in a submitted proposal and zero otherwise. *MUTUAL* is a dummy variable that equals one if the minority shareholder is a mutual fund. *OTHERINST* is defined similarly for other institutions. *OWN* is the percentage of tradable shares held by a minority shareholder. There are 82 proposals minority shareholders voted on in the post-regulation period, but the sample sizes in Panels A and B are smaller due to missing data. The unit of observation is a proposal in Panel A and a top ten tradable shareholder in Panel B.

**TABLE 7**  
**Proposal Quality and the Likelihood of Minority Shareholders' Veto in the Post-Regulation Period**

Independent Variable	Dependent Variable = <i>VETO</i>			
	Model 1 (Main Effects)		Model 2 (Interaction Effects)	
	Coefficient	<i>p-value</i>	Coefficient	<i>p-value</i>
<i>CONSTANT</i>	-1.576	(0.000)	-2.225	(0.025)
<i>DCAR</i>	-0.799	(0.255)	2.948	(0.164)
<i>MUTUAL_OWN</i>			0.112	(0.090)
<i>OTHERINST_OWN</i>			0.045	(0.664)
<i>INDIVIDUAL_OWN</i>			-0.068	(0.749)
<i>DCAR</i> × <i>MUTUAL_OWN</i>			-0.454	(0.011)
<i>DCAR</i> × <i>OTHERINST_OWN</i>			-0.166	(0.192)
<i>DCAR</i> × <i>INDIVIDUAL_OWN</i>			-0.602	(0.376)
Pseudo R-square	0.023		0.219	
N	82		82	

The sample contains the equity offering proposals that minority shareholders voted on in the post-regulation period. The dependent variable is *VETO*, a dummy variable that is 1 if a proposal is vetoed by minority shareholders, and zero if it is passed by minority shareholders. *DCAR* is a dummy variable equals to one if *CAR*>0 and zero otherwise. *CAR* is the market adjusted cumulative abnormal return over the [-2, +10] trading days around the proposal announcement date. *MUTUAL\_OWN*, *OTHERINST\_OWN* and *INDIVIDUAL\_OWN* are defined as in Table 1 except that all of them are measured at the end of the fiscal quarter immediately prior to the proposal voting date. Two-tailed robust *p* values clustered at the firm level are reported in parentheses.

**FIGURE 1**  
**Stock Market Reactions to Equity Offering Proposal Announcements by Calendar Quarter**



See Table 1 for the definition of *CAR*. The mean/median *CAR* is computed by calendar quarter. The proposals submitted on or after December 7 in the 4<sup>th</sup> quarter of 2004 are treated as proposals submitted in the 1<sup>st</sup> quarter of 2005.

<createDate>2011-08-04 14:23:03.603</createDate>  
<reviseDate>2012-11-12 00:00:00.000</reviseDate>  
<doi>10.1354.TAR-2011-0344.1</doi>  
<finalDecisionDate></finalDecisionDate>  
<conflictOfInterest></conflictOfInterest>  
<qcCompleteDate></qcCompleteDate>  
<approvedDate></approvedDate>