


# Governance by One-Lot Shares

Feng Cao

*Hunan University Business School*  
[caofeng@hnu.edu.cn](mailto:caofeng@hnu.edu.cn)

Yuhai Xuan 

*University of California Irvine Paul Merage School of Business*  
[yuhai.xuan@uci.edu](mailto:yuhai.xuan@uci.edu) (corresponding author)

Rongli Yuan

*Renmin University of China Renmin Business School*  
[yuanrongli@rmbc.ruc.edu.cn](mailto:yuanrongli@rmbc.ruc.edu.cn)

Hong Zou

*University of Hong Kong Faculty of Business and Economics*  
[hongzou@hku.hk](mailto:hongzou@hku.hk)

## Abstract

We use a novel experiment in China to examine the effects of having a quasi-official investor own a small number of shares on specific firm outcomes. We find that, relative to control firms, pilot firms experience an increase in dissenting votes from independent directors, a reduction in tunneling and earnings management activities, and an improvement in merger performance. Independent directors questioned by the quasi-official shareholder in activism events subsequently lose board seats in the director market. Overall, our results shed light on a new mechanism for enhancing the protection of minority shareholders.

## I. Introduction

Firms with a controlling shareholder are prevalent in some parts of the world such as Asia and Latin America, and potential expropriation of minority investors by the controlling shareholder is a key agency problem in such firms.<sup>1</sup> While the protection of minority shareholders affects investor confidence in stock markets as well as financial market development and economic growth (Beck, Demirgüç-Kunt, and Levine (2003)), it remains a challenge for many markets with

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<sup>1</sup>See, for example, La Porta, Lopez-De-Silanes, and Shleifer (1999), Claessens, Djankov, and Lang (2000), Faccio and Lang (2002), Morck and Yeung (2004), and Lin, Ma, Malatesta, and Xuan (2011).

concentrated corporate ownership structures. In this study, we contribute to the search of mechanisms that help enhance the protection of minority shareholders by examining the effects of having a quasi-official investor own a small number of shares, exploiting a unique policy experiment in China.

China represents an attractive setting for studying the protection of minority investors for several reasons. First, Chinese listed firms generally have a concentrated ownership structure and a large number of individual investors. At the end of 2015, the largest shareholder of a Chinese listed firm on average holds 34% of ownership, and this percentage stays similar at the end of 2019. Meanwhile, there are over 167 million individual stock investors who account for about 90% of the daily trading volumes at the end of 2019 (Hong (2020)). Second, the limited ability to sue for damages and the reliance on public enforcement with mostly small penalties in our sample period leave the large number of unsophisticated individual investors vulnerable to expropriation by large shareholders' tunneling activities (Zou, Wong, Shum, Xiong, and Yan (2008)), Jiang and Kim (2015)).<sup>2</sup> Third, Chinese government and regulatory bodies have powerful influences. For example, the China Securities Regulatory Commission (CSRC) introduced the independent director system in listed firms in 2001 as the *primary* institutional arrangement for protecting minority shareholders. This system requires independent directors to vote on major business decisions and certify in writing whether such decisions are fair to minority shareholders.<sup>3</sup> Fourth, the market capitalization of the Chinese stock market has been the second largest in the world since 2014 and is of growing importance to foreign institutional investors' asset allocation and risk diversification given its low correlation with international stock markets (Carpenter, Lu, and Whitelaw (2021)).<sup>4</sup> Although independent directors were introduced onto corporate boards in 2001 to safeguard the interests of minority shareholders, how to enhance the effectiveness of independent directors in protecting minority shareholders, including foreign investors, remains a key challenge that has garnered interest from both investors and policymakers.

Against this backdrop, in December 2014, China incorporated the Securities Investor Service Center (hereafter as "the ISC"), a not-for-profit investor protection institution owned by several stock and futures exchanges. Its mission is to protect minority investors, and its operation is managed by the ISC's board of directors and supervised by the CSRC. In early 2016, the CSRC announced a pilot program requiring the ISC to acquire and hold 100 shares (i.e., one-lot shares, the minimum trading size in China) in listed firms incorporated in three pilot regions so that the ISC could then participate in the governance of pilot firms via shareholder activism.

The creation of the ISC represents a novel regulatory effort to remedy the perceived inadequate protection of minority shareholders in China. The ISC's activism is distinct from the activism of institutional investors in Western countries

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<sup>2</sup>Securities class actions are not adopted in China until 2020.

<sup>3</sup>Such focus of independent directors on protecting minority shareholders is different from that in the U.S., where firms typically have a diffuse ownership structure and independent directors are appointed to monitor management rather than controlling shareholders (Table IA1 in the Supplementary Material provides a detailed comparison of independent directors between China and the U.S.; we thank an anonymous reviewer for suggesting this comparison.)

<sup>4</sup>China comprises 31.3% of the MSCI Emerging Markets Index as of Aug. 2018.

due to several unique features of the ISC's design. First, the ISC is a not-for-profit institutional investor that does not have any business ties with the pilot firms. Therefore, it does not face any conflict of interests that may hinder institutional investors from challenging the management of invested firms (Chen, Harford, and Li (2007)). Second, holding only 100 shares in pilot firms, the ISC cannot govern a firm by the credible threat of exit (Admati and Pfleiderer (2009)). To fulfill its intended role, the ISC must actively monitor and voice its concerns about a target firm's governance and operational issues. Third, another important feature of the ISC is its quasi-official status, with two major stock exchanges as its shareholders and the CSRC overseeing its operations. This gives the ISC considerable influence.<sup>5</sup> These characteristics suggest that the ISC has a distinctive role as a quasi-official activist investor, enabling it to exert influence over the governance of pilot firms. Its impact likely extends far beyond the 100 shares it owns.

Our treatment firms comprise non-financial listed firms incorporated in the three pilot regions. For each pilot region, we find non-financial listed firms incorporated in a geographically adjacent region with similar economic development and business environment as the control group. The treatment firms and control firms share similar key characteristics in the year before the pilot, mitigating the concern that difference-in-differences (DID) results are driven by the differences in firm characteristics between the two groups.

We start by examining the effect of the pilot on the voting behavior of independent directors, exploiting the uniquely disclosed votes of independent directors in China. Independent directors in China are legally tasked with certifying the fairness of business transactions to minority investors by expressing written independent opinions and voting via the board. However, in China (and elsewhere), it is rare for independent directors to cast dissenting votes, as evidenced by the 2% of dissension rate in our sample. This suggests that independent directors are generally hesitant to confront the management and controlling shareholders.<sup>6</sup> Therefore, casting dissenting votes by independent directors entails great courage and is a significant matter, which often results in negative stock price reactions and increased public or regulatory scrutiny (Jiang, Wan, and Zhao (2016)). Considering that independent directors have a primary role in protecting the interests of minority investors, it is natural that the ISC closely monitors their behavior and

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<sup>5</sup>Although the ISC's suggestions are likely to be taken seriously by the boards and management of pilot firms, there is no guarantee. For example, the ISC sent shareholder inquiries to 166 listed firms between May and June 2016, but the response rate was only about 70% by mid-July 2016 (Zhu (2016)). In one instance, China Baoan disregarded the ISC's shareholder letter advising against the proposed amendments to the firm's corporate charters. As a result, the ISC urged shareholders to vote against the proposal during a subsequent shareholder meeting. The non-cooperative response of some listed firms to the ISC activism is consistent with Clause 4 of the *Operational Guideline of China Securities Investor Service Center* (hereafter the *ISC Operational Guideline*) that requires the ISC to engage in activism as a shareholder rather than as a quasi-regulator. The ISC stresses that it does not have administrative power and that its activism is solely based on the exercise of shareholder rights granted by the Company Law (National People's Congress of China (2013)).

<sup>6</sup>See Schwartz-Ziv and Weisbach (2013) for a similar dissension rate in an Israeli sample. The statistic is not available in the U.S. since voting by independent directors is not publicly disclosed.

performance.<sup>7</sup> Our DID results, at both the firm-year level and the firm-director-year level, show that the pilot significantly increases independent directors' casting of dissenting votes, suggesting that the presence of the ISC affects independent director behavior. The economic magnitude is sizable: the increase in the dissension rate of independent directors in pilot firms relative to control firms is about twice of the mean level and 30% of the standard deviation of dissenting votes.

Increased dissent among independent directors and the ISC's activism are likely to bring about changes in corporate financial policies that can significantly impact minority shareholders. Hence, we proceed to examine changes in firms' financial policies. We first examine changes in tunneling related-party transactions (RPTs) and find that pilot firms exhibit a decrease in such RPTs via funds occupied by a firm's controlling shareholder or its affiliates. We also examine the change in the amount of loan guarantee provided to the controlling shareholder and do not find a significant change in the pilot period, which is likely because loan guarantees to a firm's controlling shareholder have long been closely monitored by the CSRC and stock exchanges.

Since mergers and acquisitions (M&As) can also be used to facilitate tunneling by the controlling shareholder and may significantly impact minority shareholders' interests, we next examine the change in the frequency and quality of M&A transactions. We find that pilot firms experience an insignificant change in the number of M&A deals conducted but a significant improvement in the quality of M&As relative to control firms as proxied by deal announcement returns. The 5-day cumulative abnormal return is about 3.7% higher than that before the pilot.

In addition, we examine changes in firms' earnings management practices. Manipulated financial numbers enable firms to issue equity to public minority investors at inflated prices and facilitate subsequent tunneling by the controlling shareholder (Lo, Wong, and Firth (2010)) or help mask existing tunneling (Kim and Yi (2006)). We find that pilot firms exhibit a decrease in accrual earnings management as well as the incidence of managing earnings marginally above important thresholds such as the analyst consensus earnings forecast or zero profit. Overall, these results suggest enhanced protection for minority investors at pilot firms.

We also analyze the wealth effects of the pilot and the ISC activism events. We first investigate the market reaction to the CSRC's announcement of the pilot in 2016 and find that the announcement leads to a 2-day cumulative abnormal return (CAR $[-1,0]$ ) of  $-0.24\%$  for pilot firms. This suggests that investors may initially have felt uncertain about how the newly established ISC would function or worried about the potential negative consequences of increased administrative intervention. We then show that when the CSRC announced the expansion of the ISC one-lot shareholding program to other listed firms in 2017, the market reaction to stocks not included in the 2016 pilot was significantly positive, with a CAR  $[-1,0]$  of about  $0.4\%$ . Once investors have had the opportunity to observe the ISC's performance in protecting the rights of minority investors during the pilot period,

<sup>7</sup>Based on our hand-collected ISC activism event data from the ISC's officially designated website for the period 2016–2019, in approximately one-third of the events the ISC raises concerns about why independent directors have voted in favor of certain business transactions and how they have arrived at their independent opinions on the fairness of the transactions to minority shareholders. Ex ante, however, it is not clear whether the ISC one-lot shareholding pilot affects independent directors' voting behavior (see Section II.D for details).

the market is expected to have gained a clearer understanding of the impact of the ISC one-lot shareholding program. Therefore, investors interpret the expansion of the program positively, and such market reaction is consistent with the beneficial changes in firm financial policies that we show in our DID analyses. We further hand-collect the publicly disclosed material ISC activism events between 2016 and 2019 and find that ISC activism, on average, engenders a significantly positive market reaction. We find no evidence that busyness of the ISC reduces the value effects of the ISC's material activism events.

Lastly, we show that independent directors who are questioned by the ISC activism events have significantly fewer future board seats compared to those who have never been questioned. This finding suggests that the director labor market is aware of the ISC's commentary on independent director actions, and therefore, independent directors may increase their tendency to dissent to avoid the potential challenge and resulting stigma from the ISC, which could harm their reputation and future labor market prospects.

Overall, our study uncovers a new investor protection mechanism that is predicated on China's unique context. The setting is characterized by concentrated ownership, the existence of a large number of individual investors who are vulnerable to expropriation by large shareholders, limited ability for shareholders to seek compensation through class action lawsuits, independent directors' focus on protecting minority shareholders, strong influences of government agencies and regulatory bodies on corporate actions, shareholder rights that permit on-site inspection of company documents and meeting minutes, and liability exemption for independent directors who dissent, as provided by China's Company Law (National People's Congress of China (2013)).<sup>8</sup> Therefore, the generalizability of our results depends crucially on whether other markets share similar features including a concentrated ownership structure, a company law that grants similar shareholder rights, and the ability to establish an institution that has the same quasi-official identity.

Our study makes three contributions. First, our study enriches the growing literature on how to protect minority shareholders from the expropriation of controlling shareholders. In particular, using data from Israel, Hamdani, and Yafeh (2013) and Fried, Kamar, and Yafeh (2020) report mixed findings regarding the governance effects of granting more power to minority shareholders. Our study highlights the governance effect of a minority activist institutional investor in a unique context as discussed above.

Second, our article adds new evidence to the literature in search of novel mechanisms to enhance the protection of minority shareholders in the world's second largest capital market with growing participation of foreign investors. Prior studies have examined the effects of China's regulatory measures in the early 2000s, including Berkman, Cole, and Fu's (2010) analysis of granting more power to minority investors in annual shareholder meetings and prohibiting large shareholders involved in RPTs from voting in 2000; Firth, Lin, and Zou's (2010) analysis of granting public market trading rights to shares of large shareholders; and Chen, Ke, and Yang's (2013) analysis of a 2004 regulation that requires equity offering

<sup>8</sup>We provide a more detailed discussion of the liability exemption in Section II.D.

proposals to obtain the separate approval of minority shareholders. These early regulatory efforts have only achieved limited success, and this is why the ISC is established as a dedicated investor protection institution. Several contemporaneous studies examine the effects of the ISC on improving firms' information environment and performance, for example, fewer discretionary accruals in Ge, Ouyang, Shi, and Chen (2022); lower stock price crash risk in Hu, Jin, Gu, and Tang (2022); and better merger performance in Wang, Xiong, Ouyang, and Zhang (2023).<sup>9</sup> Our study differs from these studies in three important aspects. One, we examine the behavior of independent directors in terms of their voting and attendance practices, which is a crucial tool for safeguarding minority investors in China but has received limited attention in the existing literature. Our findings demonstrate how the effectiveness of this essential investor protection tool can be enhanced by a new mechanism. We also highlight the career consequence (i.e., loss of outside board seats) of being questioned by the ISC for independent directors as a channel underlying the observed increased dissension votes by independent directors. Two, we examine stock market reactions to the initiation and expansion of the pilots and show two contrasting market reactions, reflecting a learning process among market participants on the function of the ISC. We also examine and find significantly positive stock market reactions to ISC activism events. There is no evidence that busyness of the ISC reduces the value effects of the ISC's material activism events. Three, we examine changes in a broader set of financial policies including RPTs, M&As, and earnings management to form a more complete understanding.

Finally, our study is relevant to the debate over the merits of public versus private enforcement in regulating securities markets. La Porta et al. (2006) report that laws mandating disclosure and facilitating private enforcement through liability rules benefit stock markets, whereas public enforcement (e.g., by regulators) is less effective. Jackson and Roe (2009) show that public enforcement can also be effective in protecting investors when the regulator is sufficiently financed. Given the limitations of public enforcement and private securities litigation in safeguarding minority shareholders in China, a not-for-profit, quasi-official ISC has been established. The ISC holds 100 shares, which allows it to monitor pilot firms in its capacity as a private shareholder. This innovation represents a hybrid approach to securities enforcement and investor protection and is, therefore, a useful supplement to existing public and private enforcement.

## II. The ISC Pilot to Strengthen the Protection of Minority Shareholders and Hypotheses

### A. The Establishment of the ISC

China established the stock market in the early 1990s to provide a direct financing channel for financially constrained state-owned enterprises (SOEs) and to improve governance through partial privatization and public listing of shares. Since 1999 when the Securities Law became effective, the CSRC has taken various

<sup>9</sup>Two studies in Chinese (He and Fang (2021), Xiong and Tong (2022)) also find that ISC monitoring lowers earnings management and the likelihood of financial restatement.

measures to protect minority shareholders from controlling shareholders' expropriation, including requiring independent directors to shoulder the responsibility of safeguarding the interests of minority shareholders. In 2003, the Supreme People's Court issued a rule on handling private securities lawsuits alleging false disclosures, which, in theory, made securities litigation possible, although a pre-requisite (that the defendant firm must have been sanctioned by a regulator for being fraudulent) still constituted a significant barrier for initiating securities lawsuits (Zou et al. (2008)).

Despite these efforts, securities enforcement remains inadequate in deterring controlling shareholders from expropriating minority shareholders, especially with the rise of more family-controlled firms being listed. In 2013, the State Council issued the 2013-110 Measure, "*Opinions on Further Strengthening the Protection of Minority Investors*," which empowered the CSRC to set up not-for-profit investor protection institutions. On Dec. 5, 2014, the not-for-profit ISC is incorporated with shareholders comprising the Shanghai Stock Exchange, Shenzhen Stock Exchange, Shanghai Futures Exchange, China Financial Futures Exchange, and China Securities Depository and Clearing Corporation Limited (CSDC). With a sole mission of protecting minority shareholders, ISC operation is managed by the board of the ISC and is supervised by the CSRC.

## B. The ISC One-Lot Shareholding Pilot and the Types of ISC Activism

On Feb. 19, 2016, the CSRC announced a pilot program: the ISC would acquire one-lot (100) shares in listed firms incorporated in Shanghai, Guangdong (excluding Shenzhen), and Hunan. The CSRC hopes that the ISC's ownership may enable it to oversee pilot firms' activities and protect the interests of minority shareholders, achieved through the exercise of shareholder rights. This can supplement the limited public enforcement by the CSRC and stock exchanges as well as the underdeveloped private securities litigation. Clause 22 of the *ISC Operational Guideline* outlines the various courses of action available to the ISC. These include sending shareholder inquiries or suggestions to a listed firm regarding its operations and key decisions, attending and voting (including conducting proxy fights if necessary) in shareholder meetings, attending investor relationship meetings and press conferences, conducting onsite or online inquiries, providing open comments, requesting access to board and shareholder meeting minutes, shareholder lists, corporate charters, and financial reports, initiating litigation against a pilot firm and its directors and officers, and submitting shareholder meeting proposals (jointly with other shareholders to meet the shareholding requirement), among others.<sup>10</sup> These shareholder rights are granted by Article 97 of China's Company Law and are not subject to any minimum shareholding amount or duration requirement except for the submission of proposals to shareholder meetings.

Why is the ISC activism likely to have a governance effect? When the ISC exercises the above shareholder rights, the listed firms concerned are often

<sup>10</sup>By mid-March of 2018, the ISC has exercised the rights of questioning, inspecting, voting, litigating, and making suggestions 1,876 times ("China Moves to Protect Minority Shareholders," *China Daily*, Mar. 15, 2018, available at <https://www.chinadaily.com.cn/a/201803/15/WS5aa94cb7a3106e7dcc141ad7.html>). See Appendix A for examples of the activism activities that the ISC typically engages in.

cooperative, likely due to the quasi-official identity of the ISC, the wide media attention the ISC's activism often garners, and the ISC's potential communications with the CSRC and stock exchanges if it finds evidence of law violation (Chen, Yuan, and Li (2021)). The ISC stresses that it does *not* have any administrative or regulatory power and its activism is merely monitoring and advising by exercising shareholder rights granted by the Company Law, nor does it represent any regulator or self-disciplinary industry organization (Deng (2018)). In this vein, the ISC shareholding pilot *cannot* be replaced by the CSRC's inquiries about, and inspection of, listed firms because such CSRC actions would be interpreted as a regulatory action and have severe stock market consequences.

### C. The ISC's Activism Procedures

If the ISC follows a one-size-fits-all approach toward activism, then its actions may not lead to value creation as intended. The *ISC Operational Guideline* lays out the principles and procedures for identifying target firms to exercise shareholder rights. Clauses 4 and 15 specify that the ISC shall be issue-oriented and select target firms that can serve as representative cases for protecting the rights of minority investors or target firms that have attracted significant media attention or have been involved in public controversy. Clause 16 directs the ISC to identify potential target firms based on investors' visits, calls and emails received, stock exchanges' online investor interaction platform, media reports, filings and disclosures of listed firms, and information shared by regulators. Clause 19 classifies the ISC's activism actions into three types according to materiality: 1) ordinary actions that target simple and minor issues in investor protection; 2) material actions that target complex and sensitive issues in investor protection or involve accepting the entrustment of other shareholders of the same firm; and 3) extraordinary actions. Initiation of the ordinary actions only needs the approval of the head of the ISC Shareholder Rights Exercise Division; initiation of the material and extraordinary actions needs to pass the voting of the Rights Exercise Initiation Committee that is often attended by members of the ISC Expert Committee (composed of representatives from the securities, law, and accounting industries and scholars). Moreover, the ISC must report any extraordinary actions it intends to take to the CSRC's Investor Protection Bureau before initiating them.

In summary, the ISC appears to follow a rigorous procedure to determine which firms to target and what action to take via a collective decision process before a material action can be initiated.<sup>11</sup>

### D. The Effects of the ISC One-Lot Shareholding Pilot on the Behaviors of Independent Directors

Considering that independent directors in China are legally mandated to play a key role in safeguarding the interests of minority shareholders, and given the ISC's

<sup>11</sup>Two studies in Chinese (Chen et al. (2021), Zheng, Zhang, and Xie (2021)) report that when the ISC chooses which firms' shareholder meetings to attend, it adopts a merit-based principle by prioritizing problematic firms. There is no evidence that the ISC differentiates SOEs from non-SOEs in selecting target firms.



objective of protecting minority shareholders, it is understandable that the ISC pays significant attention to how independent directors behave during board decision-making. One of the most important roles of independent directors is to scrutinize management proposals and vote and express independent opinions on items put up for board voting to protect minority shareholders. Therefore, we are particularly interested in examining how the pilot affects the dissenting votes of independent directors. In doing so, we shed light on how an investor protection mechanism affects the functioning of another key investor protection mechanism (i.e., independent directors).

Article 112 of China's Company Law states that independent directors who vote against a board decision are exempted from regulatory sanctions and from bearing legal liabilities even if the corresponding board decision damages the interests of minority shareholders and causes a material loss to the listed firm subsequently. Nevertheless, casting dissenting votes by independent directors is a rare and significant event in China (Jiang et al. (2016)).<sup>12</sup> We contend that the low rate of dissension can be attributed to several factors. First, private securities litigation has been relatively undeveloped until recently, which results in independent directors facing a low risk of litigation. Hence, there is no pressing need for independent directors to dissent to protect themselves. Second, there is a tendency to avoid confrontation in traditional Chinese culture for fear of disturbing relationships and their mutual dependence (Kirkbride, Tang, and Westwood (1991)). Third, dissenting on management proposals at board meetings can become even more challenging when an independent director is added to the board after the CEO, as the CEO may have had a hand in selecting the director. Fourth, dissension by independent directors can be costly to both the firm and the dissenting directors. Jiang et al. (2016) show that independent directors' dissension results in negative stock price reactions and exposes firms to increasing public scrutiny. Chen, Fan, and Zhang (2022) find that dissenting rookie independent directors are less likely to be reappointed, entailing personal costs. Therefore, unless a proposal is highly controversial or seriously flawed, independent directors are often reluctant to vote against it. We thus view dissension as a significant action by independent directors in the Chinese context and examine the change in dissension rate to gauge the impact of the ISC pilot on independent director behavior.<sup>13</sup>

On the one hand, we predict that the presence of the ISC as a special-identity shareholder can serve as a disciplinary mechanism that induces independent directors to be more inclined to challenge management by casting dissenting votes. The ISC can listen to and comment on independent directors' self-evaluation of performance in annual shareholder meetings; it can also inspect board meeting minutes to understand, or demand explanation of, how independent directors deliberate and vote in board meetings. These activities provide the ISC with opportunities to assess

<sup>12</sup>In the sample period of 2004 to 2012, less than 6% of independent directors dissent at least once (Jiang et al. (2016)).

<sup>13</sup>There is a possibility that some of the dissensions of independent directors can be motivated by self-protection and thus harmful if the dissensions veto risky but value-increasing decisions. This concern of opportunistic dissension is unlikely to be severe considering the implicit personal cost of lower likelihood of reappointment for dissenting directors and the overall low level of dissension in China. We thank an anonymous reviewer for raising this point.

whether the independent directors of a pilot firm have fulfilled their obligation of protecting minority interests. Additionally, such activities assist the ISC in determining the appropriate course of action to be taken against independent directors, which may involve public commentary, questioning, communication with stock exchanges and/or the CSRC, or even filing lawsuits on behalf of investors in extreme cases.<sup>14</sup> Thanks to its special identity, the ISC's opinions often garner extensive media coverage. Therefore, any concerns raised by the ISC regarding independent directors can potentially damage the reputation of both the directors involved and the corresponding listed firm, thereby reducing their future job prospects.<sup>15</sup> Hence, the presence of the ISC is likely to affect the behavior of independent directors, leading them to cast more dissenting votes to avoid being challenged by the ISC. More dissensions by independent directors and the ISC's monitoring can result in improvements in corporate policies that have an important effect on the interests of minority shareholders. In addition, both anecdotal evidence and Jiang et al. (2016) suggest that dissension of independent directors may heighten public scrutiny of the firm concerned, which can bring about additional governance effects.

On the other hand, the pilot may not have a meaningful governance effect on impacting the behavior of independent directors or shaping corporate policies for three reasons. First, the ISC's ownership of 100 shares is insignificant in comparison with the large ownership of a controlling shareholder. Second, the ISC is a not-for-profit institution and lacks sufficient economic incentives to perform the intended role in actively monitoring a pilot firm. Third, the ISC may suffer from the same limitation as a public enforcer (e.g., the CSRC) in terms of financial resources and manpower. Moreover, even if the presence of the ISC as a shareholder may lead independent directors to be more willing to dissent, independent directors may also engage in more behind-the-scenes communications and monitoring to prevent a harmful management proposal from being put up for the board's voting. Therefore, *ex ante*, whether there is a discernible governance effect of the pilot on the dissension of independent directors and on firm policies is an empirical issue.

### III. Research Design

#### A. Sample Construction and Data Sources

The ISC one-lot shareholding pilot program started in Feb. 2016. As the CSRC regarded the pilot as a success, it decided to expand the pilot program to all listed

<sup>14</sup>Our collection of the publicly disclosed ISC activism events suggests that in about one-third of the activism events, the ISC requests independent directors to provide information and explanations on how they have arrived at independent opinions and voted yes on certain board decisions. Examining several litigation cases brought by the ISC, Xin, Huang, and Ji (2020) document that the ISC's litigation effort helps secure compensation for defrauded investors.

<sup>15</sup>For example, on Jan. 8, 2017, the ISC openly questions the dereliction of duty of some named independent directors of ST Huiqiu (stock code 600556), a Shanghai listed company. The questioning attracts wide media coverage and eventually triggers the investigation by the CSRC and regulatory actions by the Shanghai Stock Exchange (available at [http://www.cs.com.cn/app/weix/01/201701/20170108\\_5148077.html](http://www.cs.com.cn/app/weix/01/201701/20170108_5148077.html)). Also see the relevant discussion in Chen et al. (2021). We test this career consequence channel in Section IV.F.3.

firms in Apr. 2017. By the end of 2017, the ISC owned 100 shares in all listed firms. Therefore, we only have a clear group of treatment firms and control firms in 2016, and all firms become eventually treated in 2017. As a result, we conduct a DID analysis with a narrow window from 2015 to 2016 (one pre-pilot year and the pilot year). A similar short-window DID analysis is also adopted in extant studies (e.g., Chen, Harford, and Lin (2015)), Dobbie, Goldsmith-Pinkham, Mahoney, and Song (2020)). The advantage is that this approach minimizes the influence of confounding factors that can arise over a longer window of analysis; but a caveat is that some of the ISC's influences need a longer time to show up in firm performance and hence may not be observed in a short window.

Starting with all listed firms incorporated in Shanghai, Guangdong (excluding Shenzhen), and Hunan, we drop firms that have not been listed for a full financial year at the end of 2015 (the year before the pilot), financial firms, delisted firms, firms with missing financial or market data, and firms that experience a change in ultimate controlling owner type (see Table IA2 in the Supplementary Material for the detailed sample construction process). We end up with 447 treatment firms with non-missing observations in both 2015 (the year before the pilot) and 2016 (the pilot year), as shown in Table 1. We then take firms incorporated in Jiangsu as the control firms for treatment firms incorporated in Shanghai, firms incorporated in Shenzhen (part of Guangdong) as the (natural) control firms for treatment firms incorporated in other parts of Guangdong, firms incorporated in Hubei as control firms for treatment firms incorporated in Hunan. These three regions are selected for identifying control firms because they are not only geographically adjacent to the corresponding treatment regions but also share similar levels of economic development and business environments. We apply the same filters used in sampling treatment firms to this pool of control firms, and as Table 1 shows, we end up with 503 control firms. In effect, each control region possesses a roughly similar number of listed firms to that in the corresponding treatment region.

Financial data used in this study are primarily obtained from the China Stock Market Accounting Research (CSMAR) database. Our data are also supplemented by the Chinese Research Data Services Platform (CNRDS). All continuous variables are winsorized at 1% at both tails to mitigate the undue effects of extreme values in data.

TABLE 1  
Sample Firms by Regions

Table 1 shows the number of firms in each treatment and control region. We have 447 treatment/pilot firms and 503 control firms from geographically adjacent jurisdictions with a similar level of economic development and a similar business environment. Specifically, Jiangsu is the control region for Shanghai, Shenzhen is the control region for the rest of Guangdong, and Hubei is the control region for Hunan.

| Treatment Regions                           | No. of Firms | Control Regions | No. of Firms |
|---|--------------|-----------------|--------------|
| Shanghai                                    | 188          | Jiangsu         | 246          |
| Guangdong (excluding Shenzhen)              | 189          | Shenzhen        | 178          |
| Hunan                                       | 70           | Hubei           | 79           |
| Total                                       | 447          |                 | 503          |
| Total number of treatment and control firms |              | 950             |              |

## B. Regression Models

We estimate the following baseline DID model:

$$(1) \quad Y_{i,t} = \beta_0 + \beta_1 \text{TREAT}_i \times \text{POST}_t + \sum_{q=2}^m \beta_q \text{control variables}_{i,t-1} \\ + \text{Firm FEs} + \text{Year FEs} + \varepsilon$$

where  $Y$  is the measure of independent directors' dissenting votes – DISSENT, a dummy variable that equals 1 if there is at least one dissenting vote (against vote or abstention) by independent directors in a year, and 0 otherwise; in tests on changes in corporate financial policies,  $Y$  is a measure of RPTs, M&As, or earnings management. TREAT is a dummy variable that equals 1 if a firm is incorporated in Shanghai, Guangdong (excluding Shenzhen), and Hunan in 2015 (the year before the pilot), and 0 otherwise. POST is a dummy variable that equals 1 if an observation is in 2016 (the pilot year), and 0 if an observation is in 2015. TREAT×POST is an interaction term that picks up the pre-to-post change in  $Y$  of the treatment firms relative to the pre-to-post change in  $Y$  of the control firms.  $\beta_1$  is therefore the DID estimate of interest.

Firm-level control variables include lagged firm size (SIZE), financial leverage (LEV), firm profitability (ROA), and the book-to-market (BM) ratio. In the model on dissenting votes by independent directors, we further control for the number of independent directors (# OF INDEPENDENT DIRECTORS) to account for the possibility that dissenting votes are more likely at firms with a larger number of independent directors. Firm fixed effects (FEs) are included to control for the effects of omitted time-invariant firm characteristics and to ensure that we compare different years within a firm. TREAT and POST are absorbed by firm FEs and year FEs, respectively.

## IV. Results

### A. Summary Statistics

Panel A of [Table 2](#) shows the summary statistics of the variables for the period 2015 through 2016. As shown, the mean of DISSENT is 0.018, indicating that a firm's probability of having a dissenting vote by independent directors is on average about 2% a year. This mean incidence of dissension is the same as the 2% dissension rate in a proprietary data set on the board meeting minutes of 11 Israeli firms examined in Schwartz-Ziv and Weisbach (2013). Panel A also reports corporate policy dependent variables including two proxies for tunneling RPTs (OTHERREC and LOANGUARANTEES), the incidence and quality of M&As (HAVING AN M&A and CAR[−2,2]), and two proxies of financial reporting quality (ABNACCRUALS and NARROWBEAT). All variables are defined in [Appendix B](#), and we defer the detailed discussion of the choice and measurement of these variables to the relevant sections presented later.

In terms of the control variables, on average, firms in our sample have a log asset size of 21.986 (i.e., about USD 532 million based on the exchange rate of

TABLE 2  
Summary Statistics

Panel A of Table 2 shows the summary statistics of the variables used in the regression analysis for the period 2015–2016, where 2015 is the year before the pilot and 2016 is the pilot period. Panel B presents the *t*-test results from comparing the firm characteristics of treatment firms and control firms in the year before the pilot (i.e., year 2015) using standard errors clustered at the region level. Treatment firms are firms incorporated in Shanghai, Guangdong (excluding Shenzhen), and Hunan. Control firms are incorporated in geographically adjacent jurisdictions with a similar level of economic development and a similar business environment. Specifically, Jiangsu is the control region for Shanghai, Shenzhen is the control region for the rest of Guangdong, and Hubei is the control region for Hunan. All continuous variables are winsorized at 1% at both tails within a year.

*Panel A. Summary Statistics for the Variables Used in the Regression Analysis*

| Variable                     | N    | Mean   | SD    | P25    | P50    | P75    |
|------------------------------|------|--------|-------|--------|--------|--------|
| SIZE                         | 1900 | 21.986 | 1.231 | 21.142 | 21.846 | 22.657 |
| LEV                          | 1900 | 0.420  | 0.206 | 0.248  | 0.412  | 0.575  |
| ROA                          | 1900 | 0.037  | 0.051 | 0.013  | 0.035  | 0.063  |
| BM                           | 1899 | 0.414  | 0.229 | 0.236  | 0.368  | 0.563  |
| NO. OF INDEPENDENT DIRECTORS | 1900 | 3.986  | 1.250 | 3.000  | 4.000  | 5.000  |
| DISSENT                      | 1900 | 0.018  | 0.135 | 0.000  | 0.000  | 0.000  |
| LN(NUMBOARDMEETING)          | 1900 | 2.292  | 0.407 | 2.079  | 2.303  | 2.565  |
| ABSENCERATIO                 | 1900 | 0.001  | 0.010 | 0.000  | 0.000  | 0.000  |
| OTHERREC                     | 1900 | 0.016  | 0.022 | 0.004  | 0.009  | 0.019  |
| LOANGUARANTEES               | 1900 | 0.048  | 0.111 | 0.000  | 0.000  | 0.035  |
| HAVING AN M&A                | 1900 | 0.410  | 0.492 | 0.000  | 0.000  | 1.000  |
| CAR[-2,2]                    | 376  | -0.000 | 0.038 | -0.022 | -0.003 | 0.018  |
| ABNACCRUALS                  | 1886 | -0.001 | 0.077 | -0.040 | -0.003 | 0.035  |
| NARROWBEAT                   | 1622 | 0.039  | 0.193 | 0.000  | 0.000  | 0.000  |

*Panel B. Comparison of Firm Characteristics between the Treatment and Control Firms Before the Pilot*

|                                     | Treatment Firms |        | Control Firms |        | <i>t</i> -Value for the Difference<br>(treatment – control) |
|-------------------------------------|-----------------|--------|---------------|--------|---|
|                                     | N               | Mean   | N             | Mean   |   |
| SIZE                                | 447             | 21.947 | 503           | 21.826 | 0.81  |
| LEV                                 | 447             | 0.411  | 503           | 0.427  | -0.74   |
| ROA                                 | 447             | 0.041  | 503           | 0.039  | 0.50  |
| BM                                  | 447             | 0.469  | 502           | 0.477  | -0.36   |
| BOARDSIZE                           | 447             | 9.438  | 503           | 9.203  | 0.94  |
| NO. OF INDEPENDENT DIRECTORS        | 447             | 4.045  | 503           | 3.942  | 0.93  |
| PROPORTION OF INDEPENDENT DIRECTORS | 447             | 0.433  | 503           | 0.435  | -0.35   |
| SPECIALTREATMENT                    | 447             | 0.011  | 503           | 0.008  | 0.51  |
| TOP3HOLDINGS                        | 447             | 0.475  | 503           | 0.480  | -0.53   |
| TOP5HOLDINGS                        | 447             | 0.516  | 503           | 0.525  | -0.88   |
| DISSENT                             | 447             | 0.009  | 503           | 0.018  | -0.97   |
| LN(NUMBOARDMEETING)                 | 447             | 2.297  | 503           | 2.254  | 0.65  |
| ABSENCERATIO                        | 447             | 0.001  | 503           | 0.001  | -0.04   |
| OTHERREC                            | 447             | 0.017  | 503           | 0.014  | 1.55  |
| LOANGUARANTEES                      | 447             | 0.041  | 503           | 0.052  | -1.11   |
| HAVING AN M&A                       | 447             | 0.421  | 503           | 0.423  | -0.09   |
| CAR[-2,2]                           | 94              | -0.008 | 84            | 0.001  | -0.83   |
| ABNACCRUALS                         | 447             | 0.006  | 502           | 0.000  | 1.14  |
| NARROWBEAT                          | 370             | 0.062  | 425           | 0.028  | 1.32  |

CNY6.65/USD), a leverage ratio of about 42%, a return on assets (ROA) of about 3.7%, a BM ratio of the firm about 0.41, and approximately 4 independent directors on the board.

## B. Comparison of Firm Characteristics Between the Treatment and Control Firms in 2015

If treatment firms and control firms are different in key characteristics, such differences may spuriously result in differential changes in the dissenting votes of independent directors and in financial policies between the treatment and control firms. We therefore conduct *t*-tests of a comprehensive set of firm characteristics in the year *before* the pilot (i.e., 2015) and report the results in Panel B of Table 2.

These firm characteristics include all the variables reported in Panel A of Table 2 as well as additional characteristics including board size, the proportion of independent directors, ownership concentration (i.e., the share ownership held by top 3 shareholders (TOP3HOLDINGS) and top 5 shareholders (TOP5HOLDINGS)), and the status of special treatment (ST) listing. Firms that have reported a net loss for 2 consecutive years will be put under “ST” by stock exchanges in trading and their stocks are prefixed by “ST.” Stocks of firms that have reported a net loss for 3 consecutive years will be prefixed by “\*ST,” which warns investors of potential risk of delisting. It is assuring that the two groups show no statistically significant differences in board structure, ownership concentration, and the proportion of firms being labeled as ST or \*ST, and other firm characteristics. Therefore, it is unlikely that any DID results are simply an artifact of the pre-event differences in firm characteristics between the treatment and control firms. Nevertheless, we will also check whether the underlying assumption of a DID analysis (i.e., the existence of a parallel trend in the pre-event period) is met or not after the DID analyses.

### C. The Effect of the ISC One-Lot Shareholding Pilot on the Functioning of the Board

#### 1. The Effect of the Pilot on Dissenting Votes of Independent Directors

We present the results from DID regressions in Panel A of Table 3. Columns 1–2 show the DID results from a linear probability model with firm FEs. The coefficients of TREAT×POST are positive and significant at the 1% level. The point estimate in column 1 shows that the DID estimate of dissension is 4.1 percentage higher during the pilot. This magnitude is about twice of the mean level of the dissension rate or 30% of the standard deviation of the dissension rate and is economically sizable. Since independent directors may engage in more behind-the-scenes communications and oversight before a harmful management proposal is put up for the board’s voting when the ISC is present as a shareholder, the DID coefficient provides a lower-bound estimate of the improvement in the efforts of independent directors. In column 2, adding firm-level control variables has little effect on the magnitude and significance of the DID estimate.

In columns 3–4, as a robustness check, we estimate a Probit model without firm FEs but incorporating industry FEs to avoid the problem of incidental coefficient estimate in Probit models with a large number of firm FEs (Wooldridge (2010)). We also add back TREAT to identify the treatment group. The results are robust, and the marginal effect evaluated from 0 to 1 in TREAT×POST reported in the square bracket is 4.6 percentage points in column 4, which is similar to the point estimate in columns 1 and 2 under the OLS estimation. Taken together, compared to independent directors in control firms, independent directors of treatment firms are more likely to dissent in board voting during the ISC one-lot shareholding pilot.<sup>16</sup>

To verify the existence of a parallel trend between the treatment and control firms before the pilot, we conduct a dynamic DID analysis. Specifically, we extend

<sup>16</sup>In untabulated results, we redefine “dissent” by excluding abstention votes and repeat the DID analysis. Our results are robust to this stricter definition of “dissent.” We thank an anonymous reviewer for suggesting this robustness test.

TABLE 3  
The Effect of ISC Shareholding on Dissenting Votes of Independent Directors

Panel A of Table 3 presents DID regressions regarding the effect of the ISC one-lot shareholding pilot on the dissenting votes of independent directors. The testing window is years 2015–2016, where 2015 is the year before the pilot and 2016 is the pilot period. Columns 1–2 show the DID results using OLS estimations. Columns 3–4 present the DID results from Probit regressions as a robustness check. Some observations are lost due to the lack of dissenting votes in certain industry groups. Coefficients reported in square brackets in columns 3–4 are marginal effects when TREAT×POST changes from 0 to 1. Panel B reports the results from dynamic DID estimations over the period 2013–2016 with 2015 as the reference year. Y2013 equals 1 for 2013, and 0 otherwise. Y2014 equals 1 for 2014, and 0 otherwise. Y2016 equals 1 for 2016, and 0 otherwise. Firm-level control variables are lagged by one period relative to the dependent variables, and they are defined in detail in Appendix B. DISSENT is a dummy variable that equals 1 if there is at least one dissenting vote by independent directors in a firm-year, and 0 otherwise. Standard errors are clustered at the firm level. \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

*Panel A. Baseline*

| Y = DISSENT                     | OLS                |                    | Probit                        |                               |
|---------------------------------|--------------------|--------------------|-------------------------------|-------------------------------|
|                                 | 1                  | 2                  | 3                             | 4                             |
| TREAT×POST                      | 0.041***<br>(3.47) | 0.042***<br>(3.55) | 0.977***<br>(3.29)<br>[0.045] | 1.032***<br>(3.56)<br>[0.046] |
| TREAT                           |                    |                    | -0.223<br>(-0.99)             | -0.230<br>(-1.02)             |
| SIZE                            |                    | 0.007<br>(0.28)    |                               | -0.103<br>(-1.10)             |
| LEV                             |                    | 0.105<br>(1.23)    |                               | 0.340<br>(0.70)               |
| ROA                             |                    | 0.131<br>(0.78)    |                               | -0.605<br>(-0.41)             |
| BM                              |                    | -0.095<br>(-1.17)  |                               | 0.163<br>(0.25)               |
| NO. OF INDEPENDENT DIRECTORS    |                    | 0.001<br>(0.28)    |                               | 0.155***<br>(3.25)            |
| Firm FEs                        | Yes                | Yes                | No                            | No                            |
| Industry FEs                    | No                 | No                 | Yes                           | Yes                           |
| Year FEs                        | Yes                | Yes                | Yes                           | Yes                           |
| N                               | 1900               | 1899               | 1712                          | 1711                          |
| Within-firm $R^2$ /pseudo $R^2$ | 0.016              | 0.023              | 0.074                         | 0.102                         |

*Panel B. Dynamic DID*

| Y = DISSENT                     | (1) OLS            | (2) Probit         |
|---------------------------------|--------------------|--------------------|
| TREAT×Y2013                     | 0.008<br>(0.97)    | 0.131<br>(0.29)    |
| TREAT×Y2014                     | 0.002<br>(0.21)    | 0.063<br>(0.21)    |
| TREAT×Y2016                     | 0.042***<br>(3.55) | 1.041***<br>(3.56) |
| TREAT                           |                    | -0.244<br>(-1.07)  |
| Controls in Panel A             | Yes                | Yes                |
| Firm FEs                        | Yes                | No                 |
| Industry FEs                    | No                 | Yes                |
| Year FEs                        | Yes                | Yes                |
| N                               | 3688               | 3688               |
| Within-firm $R^2$ /pseudo $R^2$ | 0.016              | 0.120              |

the pre-event window to 3 years before the pilot in this analysis. We code four year-dummy variables representing year 2013 to year 2016, respectively. For example, Y2013 is a dummy variable that equals 1 for year 2013, and 0 otherwise. Other year dummies are defined analogously. Then, we use year variables for 2013, 2014, and 2016 to replace POST and report the DID results in Panel B of Table 3. If the pilot causes independent directors in the treatment firms

to cast more dissenting votes, we expect the coefficients of  $TREAT \times Y2013$  and  $TREAT \times Y2014$  to be insignificantly different from the coefficient for  $TREAT \times Y2015$  (the reference group), that is, there exists a parallel trend in independent directors' dissenting votes between the treatment and control firms before the initiation of the pilot. We also expect the coefficient of  $TREAT \times Y2016$  to be positive and statistically significant (i.e., the divergence between the two groups only appears in the pilot period).

As expected, the OLS DID result reported in column 1 of Panel B of [Table 3](#) suggests that the parallel trend assumption is met, and this is also confirmed by Graph 1–1 in the Supplementary Material Figure 1, which presents a graphical illustration of the parallel trend in the pre-event period and the divergence in the incidence of dissension in the pilot period between the two groups. In column 2, we repeat the dynamic DID with a Probit model (adding back  $TREAT$  and using industry FEs instead of firm FEs), and the result remains similar. We conclude that the parallel trend assumption underlying a valid DID test is met.

Since our results on the dissension of independent directors are not sensitive to OLS or Probit estimations, in the following analyses on dissenting votes, we focus on a linear probability model instead of a Probit model in order to incorporate firm FEs that effectively control for omitted time-invariant firm characteristics and allow better identification.

## 2. The Effect of the Pilot on Independent Director Dissensions: Firm-Director-Year-Level Analysis

Our previous analysis is at the firm-year level; in this section, we show the robustness of the results at the firm-director-year level. Note that only independent directors enter this analysis because the local disclosure regulation only mandates firms to disclose the voting and board meeting attendance records of independent directors. We use a dependent variable  $DIRECTOR\ DISSSENT$  that equals 1 if an independent director casts at least a dissenting vote in a firm-year, and 0 otherwise. The results from the OLS estimations are reported in Table IA3 in the Supplementary Material. The inferences from [Table 3](#) are robust to using a firm-director-year model that includes director, firm, and year fixed effects as well as various firm- and director-level control variables such as an independent director's gender, age, the total number of other board seats (excluding the current firm), and dummy variables that indicate whether or not an independent director has a master's degree or above, has an overseas education or working background, or is an academic, respectively.

## 3. The Effects of the Pilot on Routine Board Activities

In [Sections IV.C.1](#) and [IV.C.2](#), we have shown that independent directors become more likely to confront the management in board voting in the pilot. One may wonder whether a board and its independent directors also experience a change in routine board activities. Board meetings are the primary mechanism for independent directors to fulfill their monitoring and advising roles. Boards that meet more frequently likely work harder to serve shareholders' interests (Vafeas (1999)). Indeed, directors who are frequently absent from board meetings are labeled as poor performers and given lower shareholder approval rates in election. Therefore, in addition to independent directors' dissenting votes, we also examine



TABLE 4  
The Effects of ISC Shareholding on Routine Board Activities

Table 4 presents the results from OLS DID regressions regarding the effects of the pilot on the log total number of board meetings held by a firm in a year (columns 1–2) and the absence ratio of independent directors in attending board meetings (columns 3–4). Control variables are lagged by one period relative to the dependent variables, and they are defined in detail in Appendix B. LN(NUMBOARDMEETING) is the natural logarithm of the number of board meetings held by a firm in a year. ABSENCERATIO is the ratio of the total number of board meeting absence by all independent directors in a year to the total number of board meetings that all independent directors should attend in a year. The testing window is years 2015–2016, where 2015 is the year before the pilot and 2016 is the pilot period. Standard errors are clustered at the firm level. \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

| Y =                        | LN(NUMBOARDMEETING) |                    | ABSENCERATIO    |                    |
|----------------------------|---------------------|--------------------|-----------------|--------------------|
|                            | 1                   | 2                  | 3               | 4                  |
| TREAT×POST                 | −0.016<br>(−0.68)   | −0.014<br>(−0.60)  | 0.000<br>(0.53) | 0.001<br>(0.69)    |
| SIZE                       |                     | −0.026<br>(−0.75)  |                 | 0.000<br>(0.41)    |
| LEV                        |                     | 0.073<br>(0.59)    |                 | −0.005*<br>(−1.78) |
| ROA                        |                     | 0.178<br>(0.57)    |                 | −0.001<br>(−0.09)  |
| BM                         |                     | −0.191*<br>(−1.87) |                 | −0.005<br>(−1.11)  |
| Firm FEs                   | Yes                 | Yes                | Yes             | Yes                |
| Year FEs                   | Yes                 | Yes                | Yes             | Yes                |
| N                          | 1900                | 1899               | 1900            | 1899               |
| Within-firm R <sup>2</sup> | 0.010               | 0.017              | 0.000           | 0.004              |

whether independent directors change their routine board activities using the log number of board meetings held in a year (LN(NUMBOARDMEETING)) and independent directors' board meeting absence rate in a year (ABSENCERATIO) as proxies. ABSENCERATIO is defined as the ratio of the total number of absences from board meetings by all independent directors in a year to the total number of board meetings that all independent directors should attend in a year. These two proxies are measures of routine board activities because even if an independent director attends every board meeting and rubber-stamps each management proposal, he/she does not fulfill the duty to safeguard the interests of minority shareholders.

If the presence of the ISC as a special-identity activist also has an effect that spills over to other aspects of board operations, we expect an increase in the number of board meetings and a decrease in the absence rate of independent directors during the pilot. However, it is also possible to observe an insignificant change in the number of board meetings since the frequency of routine board meetings in 2016 should have been predetermined at the end of 2015 or the beginning of 2016, but the pilot does not start until Feb. 2016. In addition, statistics reported in Panel A of Table 2 show that in the year before the pilot, the absence rate of independent directors in our sample is already as low as 0.1%. Columns 1–2 of Table 4 present the results for LN(NUMBOARDMEETING), and columns 3–4 show the results for ABSENCERATIO. We find no significant changes in the (log) number of board meetings held in a year or the absence rate of the independent directors of treatment firms before and in the pilot compared to control firms.<sup>17</sup>

<sup>17</sup>We also examine the pre-to-post change in the log number of board meetings and in the absence ratio of independent directors for treatment firms (see the regression results in Table IA4 of the

Taken together, regarding the governance role of the pilot on the behavior of independent directors, we find that independent directors are more likely to confront the management and dissent in board voting during the pilot period. However, there is no evidence that routine board activities measured by board meeting frequency or the absence rate of independent directors in pilot firms change significantly in the pilot period compared to the control firms.

Changed independent director behavior and the ISC's activism may have a real impact on various corporate policies that have an important bearing on the interests of minority shareholders. Next, we examine changes in tunneling RPTs, M&As, and earnings management.

## D. The Effects of the ISC One-Lot Shareholding Pilot on Financial Policies

### 1. The Effects of the Pilot on RPTs

Under a concentrated ownership structure, controlling shareholders may expropriate the interests of minority shareholders via tunneling RPTs. Jiang, Lee, and Yue (2010) show that in China, controlling shareholders use intercorporate loans to siphon resources from the listed firms they control. Given the ISC's designated role in protecting minority shareholders, it is natural to investigate whether the pilot has any impact on mitigating possible tunneling RPTs.

Improved monitoring by independent directors can affect RPTs via the RPT committee (which is chaired by an independent director) or the audit committee (which is chaired by an independent director and is majority independent), as well as through independent directors' separate written independent opinions on conflicted transactions.<sup>18</sup> The ISC may also directly influence a pilot firm's large RPTs that need the endorsement of shareholders in which the ISC can voice concerns, seek explanations, and/or launch a proxy voting campaign.

We focus on two commonly used proxies for tunneling RPTs in China. First, following Jiang et al. (2010), we use the amount of "other accounts receivable" in a firm's balance sheet at the end of a year scaled by total assets to measure the amount of funds occupied by a firm's controlling shareholder or its controlled affiliates (OTHERREC).<sup>19</sup> Since tunneling RPTs can also take the form of loan guarantees provided by the listed firm to its controlling shareholder or its affiliates (Cheung, Rau, and Stouraitis (2006)), we use the amount of loan guarantees provided by a listed firm to its controlling shareholder or its controlled affiliates

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Supplementary Material). We find a marginally significant decrease in the absence ratios of independent directors in treatment firms in the pilot period. This corroborates the effect of the ISC on the behavior of independent directors in treated firms.

<sup>18</sup>See Clause 3 of *Guideline on Handling Related-Party Transactions* issued by the Shanghai Stock Exchange in 2011. The Shenzhen Stock Exchange also has a similar rule. Also see Article 27 of the 2014 *Guideline on Independent Directors' Discharging of Duties in Listed Companies* on the requirement of expressing separate independent opinions.

<sup>19</sup>In China, "other accounts receivable" is an item different from "accounts receivable" in that the latter is related to the sales of goods/services, but the former records intercorporate lending.

TABLE 5  
The Effect of ISC Shareholding on RPTs

Panel A of Table 5 presents the results from OLS DID regressions regarding the effects of the pilot on potential tunneling RPTs. The testing window is years 2015–2016, where 2015 is the year before the pilot and 2016 is the pilot period. The dependent variable in columns 1–2 is OTHERREC, defined as the amount of “other accounts receivable” at the end of a year scaled by total assets, which is used to measure the amount of funds occupied by the controlling shareholder or its controlled affiliates. The dependent variable in columns 3–4 is LOANGUARANTEES, defined as the amount of loan guarantees provided by a listed firm to its controlling shareholder or its affiliates in a year scaled by total assets. Panel B reports the results from dynamic DID estimations over the period 2013–2016 with 2015 as the reference year. Standard errors are clustered at the firm level. \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

*Panel A. Baseline*

| Y =                        | OTHERREC            |                     | LOANGUARANTEES    |                   |
|----------------------------|---------------------|---------------------|-------------------|-------------------|
|                            | 1                   | 2                   | 3                 | 4                 |
| TREAT×POST                 | −0.003**<br>(−2.07) | −0.003**<br>(−2.28) | −0.003<br>(−0.58) | −0.003<br>(−0.48) |
| SIZE                       |                     | −0.003<br>(−1.17)   |                   | 0.004<br>(0.56)   |
| LEV                        |                     | 0.002<br>(0.25)     |                   | 0.032<br>(0.80)   |
| ROA                        |                     | −0.023<br>(−0.85)   |                   | 0.164*<br>(1.85)  |
| BM                         |                     | 0.005<br>(0.67)     |                   | −0.002<br>(−0.08) |
| Firm FEs                   | Yes                 | Yes                 | Yes               | Yes               |
| Year FEs                   | Yes                 | Yes                 | Yes               | Yes               |
| N                          | 1900                | 1899                | 1900              | 1899              |
| Within-firm R <sup>2</sup> | 0.005               | 0.014               | 0.001             | 0.010             |

*Panel B. Dynamic DID*

| Y =                        | OTHERREC |                     | LOANGUARANTEES |                   |
|----------------------------|----------|---------------------|----------------|-------------------|
|                            | 1        | 2                   | 3              | 4                 |
| TREAT×Y2013                |          | −0.002<br>(−1.41)   |                | −0.001<br>(−0.11) |
| TREAT×Y2014                |          | −0.001<br>(−0.58)   |                | 0.001<br>(0.10)   |
| TREAT×Y2016                |          | −0.003**<br>(−2.20) |                | −0.003<br>(−0.62) |
| Controls in Panel A        |          | Yes                 |                | Yes               |
| Firm FEs                   |          | Yes                 |                | Yes               |
| Year FEs                   |          | Yes                 |                | Yes               |
| N                          |          | 3740                |                | 3740              |
| Within-firm R <sup>2</sup> |          | 0.014               |                | 0.008             |

at the end of a year scaled by total assets (LOANGUARANTEES) as an additional proxy for tunneling RPTs.<sup>20</sup>

Using these two dependent variables, we re-estimate equation (1) and report the results in Panel A of Table 5. The dependent variable is OTHERREC in columns 1–2 and LOANGUARANTEES in columns 3–4. As shown, the coefficients of TREAT×POST in the first 2 columns are negative and significant at the 5% level. The point estimate represents a reduction of 13.6% ( $= 0.003/0.022 \times 100$ ) of the standard deviation of OTHERREC, which is economically meaningful. While the results shown in columns 3–4 show that the amount of loan guarantees provided by

<sup>20</sup>Firms may also engage in tunneling M&As, and this will be captured by our analysis of the change in the incidence and quality of M&As in Section IV.D.2.

a pilot firm to its controlling shareholder or the controlling shareholder's affiliates decreases during the pilot, the decrease is not statistically significant.

In Panel B, we verify that the significant divergence in the change of OTHERREC between the treatment firms and control firms does not exist until the pilot period, suggesting that the parallel trend is met. A graphical illustration of the parallel trend before the pilot and the divergence in the pilot period between the treatment and control firms is presented in Graph 1–2 and Graph 1–3 of the Supplementary Material. Taken together, there is moderate evidence that the ISC pilot reduces tunneling RPTs via the occupation of listed firms' funds by controlling shareholders.

## 2. The Effects of the Pilot on M&A Decisions

M&As often involve lumpy investment and can be used to facilitate tunneling by the controlling shareholder (Albuquerque and Wang (2008)) or empire-building by self-interest managers (Jensen (1986)). This is why excessive M&As are often targeted by activist shareholders such as hedge funds (Gantchev, Sevilir, and Shivdasani (2020)). Based on the examination of the activism events disclosed by the ISC between 2016 and 2019, we find that M&As and reorganizations are one of the focal areas for the ISC's activism, representing approximately 45% of the events. We therefore explore the effects of the ISC shareholding pilot on the pilot firms' M&A decisions. In [Appendix A](#), we provide two examples on the ISC's questioning of the proposed M&As by Sitong Group (stock code 603838) and China Security Co. Ltd (stock code 600654).

To the extent that the pilot has a positive governance effect and independent directors dissent more often in board voting, we expect firms' incidence of engaging in M&As to decrease and the quality of M&As (conditional on having an M&A) to increase in the pilot period. As mentioned previously, independent directors are required by the CSRC to issue separate and independent opinions on whether major M&A and restructuring transactions are fair to minority shareholders. In addition, major M&As may need shareholder approval. For example, Article 121 of the Company Law in China stipulates that listed firms obtain the approval of at least two-thirds of shares represented by shareholders present in the shareholder meeting for major acquisitions or divestitures when the annual total of such transactions has exceeded the cap prescribed by a firm's corporate charter or has reached 30% of the firm's total assets.

Expecting possible resistance from independent directors, who are inclined to dissent more frequently when the ISC is a shareholder, and the ISC's potential challenge of low-quality M&A deals, the management may propose fewer low-quality M&A transactions, and the board of directors may exercise more prudence when approving M&A deals proposed by the management. We note a tension to this argument. If an independent director is more likely to opportunistically dissent to avoid bearing legal liability and veto risky but positive NPV acquisitions when the ISC is present as a shareholder, the quality of firms' M&A decisions may decline.

We examine two M&A proxies. The first proxy captures the quantity dimension, and the second proxy reflects the quality dimension. Examining a change in the quality of M&As also helps us measure any change in tunneling M&As that often result in negative market reactions at announcements (Cheung et al. (2006)).

Specifically, we use i) HAVING AN M&A, a dummy variable that equals 1 if a firm has announced at least one M&A deal larger than 1 million USD equivalent in deal value as an acquirer in a year and 0 otherwise, and ii) deal announcement return  $CAR[-2,2]$  as the measure of M&A quality, which follows Chen et al. (2015). Event day 0 is the deal announcement date. We require that an acquirer should not be under ST or \*ST in either 2015 or 2016 because such firms face significant regulatory restrictions in stock trading due to having persistent operating losses and the risk of delisting. As Panel A of Table 2 shows, the sample firms on average have a 41% of chance to announce an M&A (larger than 1 million USD equivalent in size) in a year.

The test on deal announcement returns is conducted at the deal level, and we further impose the following filters on the sample for the DID test: i) A firm has undertaken at least one acquisition in both 2015 and 2016; and ii) a firm needs to have at least 50 non-missing daily returns over the estimation window  $[-210, -11]$  and have return data over the event window  $[-2, 2]$ . After applying these filters, we obtain 376 deals. We replace  $Y$  in equation (1) with these two dependent variables and report the DID results in Panel A of Table 6.

Columns 1–2 are for the dependent variable HAVING AN M&A, and columns 3–4 are for the dependent variable  $CAR[-2,2]$ . The coefficients of  $TREAT \times POST$  in columns 1–2 are negative but insignificant where  $POST$  equals 1 for deals announced after Feb. 19, 2016, and 0 otherwise, suggesting that the pilot does not significantly reduce the occurrence of M&As.

In column 3, we examine the change in the deal announcement return measured by  $CAR[-2,2]$ . The coefficient of  $TREAT \times POST$  in column 3 is significantly positive, suggesting an improvement in the quality of M&A deals announced by treatment firms in the pilot period compared to the control firms. In column 4, we further control for acquirer characteristics (size, leverage, ROA, and BM ratio) measured in the fiscal year before the deal announcement and deal characteristics (deal size relative to the acquirer's market value measured 11 days before the announcement, payment methods, whether the target is a related party). The coefficient of  $TREAT \times POST$  in column 4 continues to be positive and significant, implying an increase of 3.7 percentage points in the deal announcement return during the pilot.

In Panel B, we verify that the significant divergence in the change of M&A deal announcement returns between the treatment firms and control firms does not exist until the pilot period, suggesting that the parallel trend is met (also refer to Graph 1–4 and Graph 1–5 of the Supplementary Material). Taken together, we find that the ISC one-lot shareholding pilot does not affect the incidence of M&As, but improves the quality of M&As.

### 3. The Effects of the Pilot on Financial Reporting

Manipulating financial reports via earnings management or outright accounting frauds often enables listed firms to issue equity to public minority investors at inflated prices and to facilitate subsequent tunneling by the controlling shareholder (Lo et al. (2010)). In contrast, in public equity issuance in China, the controlling shareholder rarely participates in the issuance with cash subscription to new shares. Opportunistic earnings management also helps mask tunneling and avoid

TABLE 6

## The Effect of ISC Shareholding on Mergers &amp; Acquisitions

Panel A of Table 6 presents the results from OLS DID regressions regarding the effects of the pilot on M&As. The dependent variable in columns 1–2 is HAVING AN M&A, a dummy variable that equals 1 if a firm has announced an M&A with at least 1 million USD equivalent in deal value in the year as an acquirer, and 0 otherwise. The dependent variable in columns 3–4 is CAR  $[-2,2]$ , which is the sum of abnormal return over the event window  $[-2,2]$ , and abnormal return is the difference between raw daily return and the predicted daily return using parameters estimated from a market model using CSMAR all stock equal-weighted return over the estimation window  $[-210,-11]$  requiring at least 50 non-missing daily returns. We exclude firms under “ST” or “\*ST” treatment from the tests as their stock trading is subject to restrictions. The testing window is years 2015–2016, where 2015 is the year before the pilot and 2016 is the pilot period. In columns 3–4, POST takes the value of 1 if an M&A deal is announced after the ISC pilot date (i.e., Feb. 19, 2016), and 0 otherwise. Control variables are lagged by one period relative to the dependent variables, and they are defined in Appendix B. Panel B reports the results from dynamic DID estimations over the period 2013–2016 with 2015 as the reference year. Standard errors are clustered at the firm level. \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

*Panel A. Baseline*

| Y =               | HAVING AN M&A     |                     | CAR $[-2,2]$       |                    |
|-------------------|-------------------|---------------------|--------------------|--------------------|
|                   | 1                 | 2                   | 3                  | 4                  |
| TREAT×POST        | -0.009<br>(-0.22) | -0.012<br>(-0.28)   | 0.037***<br>(3.32) | 0.037***<br>(2.89) |
| SIZE              |                   | -0.162**<br>(-2.45) |                    | 0.011<br>(0.87)    |
| LEV               |                   | -0.009<br>(-0.04)   |                    | -0.015<br>(-0.23)  |
| ROA               |                   | 0.629<br>(1.59)     |                    | 0.037<br>(0.53)    |
| BM                |                   | 0.309<br>(1.60)     |                    | -0.039<br>(-1.01)  |
| RELATIVE SIZE     |                   |                     |                    | 0.043<br>(0.91)    |
| ALLCASHDEAL       |                   |                     |                    | -0.003<br>(-0.06)  |
| ALLSTOCKDEAL      |                   |                     |                    | -0.023<br>(-0.46)  |
| RPT               |                   |                     |                    | 0.003<br>(0.32)    |
| Firm FEs          | Yes               | Yes                 | Yes                | Yes                |
| Year FEs          | Yes               | Yes                 | Yes                | Yes                |
| N                 | 1900              | 1899                | 376                | 359                |
| Within-firm $R^2$ | 0.001             | 0.011               | 0.055              | 0.069              |

*Panel B. Dynamic DID*

| Y =                 | HAVING AN M&A   |       | CAR $[-2,2]$      |
|---------------------|-----------------|-------|-------------------|
|                     | 1               | 2     | 2                 |
| TREAT×Y2013         | 0.055<br>(1.26) |       | -0.001<br>(-0.08) |
| TREAT×Y2014         | 0.016<br>(0.39) |       | 0.011<br>(1.00)   |
| TREAT×Y2016         | 0.002<br>(0.06) |       | 0.024**<br>(2.16) |
| Controls in Panel A |                 | Yes   | Yes               |
| Firm FEs            |                 | Yes   | Yes               |
| Year FEs            |                 | Yes   | Yes               |
| N                   |                 | 3740  | 508               |
| Within-firm $R^2$   |                 | 0.016 | 0.052             |

undesirable public and regulatory scrutiny triggered by reporting operating losses (Kim and Yi (2006)). Earnings management also helps prevent a firm from being labeled as an ST firm that is subject to a 5% cap on daily stock price changes and faces the delisting risk if operating loss sustains.

We, therefore, also examine whether the pilot reduces earnings management and thereby improves the quality of financial reporting. Enhanced monitoring by independent directors can affect earnings management via the audit committee (which is majority independent and chaired by an independent director) and independent opinions on financial reports. The ISC may also directly exert a positive effect on a pilot firm's financial reporting quality through making written inquiries or seeking explanations for dramatic changes in financial performance.

We use two common proxies for earnings management: i) ABNACCRUALS, defined as the signed performance-adjusted abnormal discretionary accruals (Kothari, Leone, and Wasley (2005)), and ii) NARROWBEAT, a dummy variable that equals 1 if a firm's reported earnings per share in a year beat the latest consensus earnings forecast measured before the earnings release by less than 3%, or if a firm reports a net operating loss last year but reports a small net profit this year (lower than 0.3% of the year-beginning assets<sup>21</sup>); it equals 0 otherwise. Similar measures are also used in prior studies (e.g., Degeorge, Patel, and Zeckhauser (1999)), Leuz, Nanda, and Wysocki (2003)). As shown in Panel A of Table 2, on average, our sample firms have a 3.9% chance of reporting earnings per share that beat the corresponding latest consensus earnings forecast by less than 3% or reporting a small net profit this year in contrast to a net operating loss reported last year.

We replace  $Y$  in equation (1) with these two earnings management proxies. We then repeat the DID analysis. Results in columns 1–2 of Panel A of Table 7 are based on ABNACCRUALS as the dependent variable; results in columns 3–4 are based on NARROWBEAT as the dependent variable. As the table shows, the coefficients of TREAT×POST in columns 2 and 4 are negative and statistically significant at the 5% level. The point estimate reported in these 2 columns implies a reduction that is 18.2% ( $=0.014/0.077 \times 100$ ) and 19.2% ( $=0.037/0.193 \times 100$ ) of the standard deviation of the corresponding earnings management proxy, respectively, which is economically significant. In Panel B, we verify that the significant divergence in the change of earnings management between the treatment and control firms does not exist until the pilot period (please also refer to Graph 1–6 and Graph 1–7 of the Supplementary Material).

Overall, the results indicate that the quality of financial reporting improves in the pilot period because of the reduction in accruals earnings management and firms' lower likelihood to barely meet certain earnings threshold (analysts' consensus earnings forecast or zero profit).

## E. Results from a Placebo Test

We also conduct a placebo test by moving the pilot event year backward by 1 year so that year 2015 becomes the pseudo-treatment year. If what we have documented so far is indeed caused by the ISC shareholding pilot in 2016, we should expect to see no similar results from the placebo DID tests. This is what we find in Table 8.

<sup>21</sup>Results are qualitatively similar if we use 0.1% of assets as the cutoff for a small net profit.

TABLE 7  
The Effect of ISC Shareholding on Earnings Management

Panel A of Table 7 presents the results from OLS DID regressions regarding the effects of the pilot on the quality of financial reporting proxied by earnings management. The testing window is years 2015–2016, where 2015 is the year before the pilot and 2016 is the pilot period. The dependent variable in columns 1–2 is ABNACCRUALS, defined as signed performance-adjusted abnormal discretionary accruals. The dependent variable in columns 3–4 is NARROWBEAT, which is a dummy variable that equals 1 if a firm's reported earnings per share in a year beat the latest analysts' consensus earnings forecast (measured before the earnings release) by less than 3%, or a firm reports a net loss last year but reports a small net profit this year with no more than 0.3% of the year-beginning total assets; it equals 0 otherwise. Control variables are lagged by one period relative to the dependent variables, and they are defined in Appendix B. Panel B reports dynamic DID estimations over the period 2013–2016 with 2015 as the reference year. Standard errors are clustered at the firm level. \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

*Panel A. Baseline*

| Y =                        | ABNACCRUALS         |                      | NARROWBEAT          |                     |
|----------------------------|---------------------|----------------------|---------------------|---------------------|
|                            | 1                   | 2                    | 3                   | 4                   |
| TREAT×POST                 | -0.014**<br>(-2.14) | -0.014**<br>(-2.29)  | -0.039**<br>(-2.06) | -0.037**<br>(-2.00) |
| SIZE                       |                     | -0.040***<br>(-3.53) |                     | 0.040<br>(1.44)     |
| LEV                        |                     | 0.045<br>(1.22)      |                     | -0.140<br>(-1.11)   |
| ROA                        |                     | 0.042<br>(0.40)      |                     | 0.064<br>(0.28)     |
| BM                         |                     | -0.018<br>(-0.56)    |                     | 0.048<br>(0.56)     |
| Firm FEs                   | Yes                 | Yes                  | Yes                 | Yes                 |
| Year FEs                   | Yes                 | Yes                  | Yes                 | Yes                 |
| N                          | 1886                | 1886                 | 1622                | 1622                |
| Within-firm R <sup>2</sup> | 0.010               | 0.036                | 0.007               | 0.006               |

*Panel B. Dynamic DID*

| Y =                        | ABNACCRUALS         | NARROWBEAT          |
|----------------------------|---------------------|---------------------|
|                            | 1                   | 2                   |
| TREAT×Y2013                | -0.009<br>(-1.43)   | -0.025<br>(-1.32)   |
| TREAT×Y2014                | -0.006<br>(-1.06)   | -0.021<br>(-1.02)   |
| TREAT×Y2016                | -0.015**<br>(-2.30) | -0.037**<br>(-2.02) |
| Controls in Panel A        | Yes                 | Yes                 |
| Firm FEs                   | Yes                 | Yes                 |
| Year FEs                   | Yes                 | Yes                 |
| N                          | 3725                | 3169                |
| Within-firm R <sup>2</sup> | 0.016               | 0.010               |

## F. Results from Market Event Studies

### 1. The Wealth Effects of the Pilot

Thus far, we have documented the changes in the voting behavior of independent directors and some key corporate financial policies that affect the interests of minority shareholders. We now examine the wealth effects of the pilot. Specifically, we conduct an event study of the market reaction to the CSRC's announcement of the pilot in Feb. 2016 ("Event 1") and the announcement of expanding the pilot to all other listed firms in Apr. 2017 ("Event 2").

Our extensive news search shows that Feb. 19, 2016, is the first reported instance when the market learns about the pilot. As the CSRC announcement is



TABLE 8  
The Effects of ISC Shareholding on the Protection of  
Minority Shareholders: A Placebo Test

Table 8 presents the results from a placebo test of the effects of the pilot on the protection of minority shareholders. Results from OLS DID regressions are reported. The dependent variable measures the dissenting votes of independent directors, tunneling RPTs (proxied by funds occupied by the controlling shareholder or its controlled affiliates reflected in "other accounts receivable" and loan guarantees provided by the listed firm to its controlling shareholder or controlled affiliates), M&As (a firm-year's incidence of announcing an M&A over 1 million USD equivalent, and CAR[-2,2]), and earnings management (signed abnormal discretionary accruals and the incidence of marginally managing earnings above some important earnings thresholds - analysts' consensus earnings forecasts or zero profit), respectively. Please refer to Appendix B for the detailed definitions of these variables. Control variables are lagged by one period relative to the dependent variables. While year 2016 is the true pilot year, in the placebo test, we move the event year backward by 1 year so that POST2 is defined to be a dummy variable that equals 1 for 2015 (i.e., the pseudo pilot year) and 0 for 2014 except for column 5 where POST2 equals 1 for deals announced after Feb. 19, 2015, and 0 otherwise. Standard errors are clustered at the firm level. \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

| Y =                        | DISSENT           | OTHERREC        | LOANGUARANTEES    | HAVING AN M&A     | CAR [-2,2]      | ABNACCRUALS     | NARROWBEAT      |
|----------------------------|-------------------|-----------------|-------------------|-------------------|-----------------|-----------------|-----------------|
|                            | 1                 | 2               | 3                 | 4                 | 5               | 6               | 7               |
| TREAT×POST2                | -0.004<br>(-0.43) | 0.001<br>(0.63) | -0.002<br>(-0.28) | -0.011<br>(-0.27) | 0.018<br>(1.39) | 0.006<br>(1.02) | 0.029<br>(1.41) |
| Control variables          | Yes               | Yes             | Yes               | Yes               | Yes             | Yes             | Yes             |
| Firm FES                   | Yes               | Yes             | Yes               | Yes               | Yes             | Yes             | Yes             |
| Year FES                   | Yes               | Yes             | Yes               | Yes               | Yes             | Yes             | Yes             |
| N                          | 1872              | 1872            | 1872              | 1872              | 249             | 1872            | 1565            |
| Within-firm R <sup>2</sup> | 0.010             | 0.018           | 0.004             | 0.026             | 0.055           | 0.012           | 0.014           |

made after the close of the trading session on Feb. 19, 2016 (Friday), we use Feb. 22, 2016 (the following trading day) as the event day (Day 0) of Event 1. The CSRC announces the expansion of the pilot to all other listed firms after the close of the trading session on Apr. 14, 2017 (Friday). We therefore use Apr. 17, 2017 (the following trading day) as Day 0 of Event 2.

To be included in the event study, a firm needs to be listed before 2015 and to have trading over the period from 1 day before to 1 day after each of the 2 event days. We estimate a market model over the estimation window of [-210,-11] requiring at least 50 trading days to derive alpha and beta of a stock relative to the equal-weighted daily return for all stocks in the CSMAR database. Our event window starts from the announcement Friday and is up to 1 trading day after the announcement day. We include Friday (i.e., Day -1) to take account of any potential information leakage because the two announcements are made after the close of the Friday trading session. One feature of the two CSRC announcements is that they are common regulatory events that affect many firms, and this feature can induce cross-sectional correlations in stock returns of firms. We therefore implement Kolari and Pynnonen's (2011) adjustment to standard errors to account for such cross-correlations. A similar approach is also used in Fernando, May, and Megginson (2012).

The results are reported in Table 9. Panel A shows the market reaction to the CSRC's announcement of the pilot in 2016 for three sets of stocks. Treatment firms incorporated in Shanghai, Guangdong (excluding Shenzhen), and Hunan experience a CAR of -0.24% over the event window [-1,0] (statistically significant at the 5% level, column 1), compared to the insignificant CAR[-1,0] of 0.09% on control firms from geographically adjacent jurisdictions (i.e., Jiangsu, Shenzhen, and Hubei) (column 2), and of 0.27% on all other firms (column 3). The small negative market reaction to the pilot announcement in treatment firms may be

TABLE 9

**Market Reactions to the CSRC's Announcement of the ISC One-Lot Shareholding Pilot and the Announcement of the Pilot Expansion**

Table 9 shows the market reactions to the CSRC's announcement of the pilot on Feb. 19, 2016, and the CSRC's announcement of expanding the pilot to all other listed firms in Shanghai and Shenzhen Stock Exchanges on Apr. 14, 2017. We implement Kolarik and Pynnönen's (2011) adjustment to standard errors to account for cross-correlations in stock returns among firms induced by a common regulatory event. As both announcements are made after the close of the trading session on Friday, we use Feb. 22, 2016 (the following trading day), as the pilot announcement day (i.e., Day 0) and Apr. 17, 2017 (the following trading day), as the pilot expansion announcement day. To be included in the event study, a firm needs to have been listed before 2015 and have trading over 1 day centering on each event day (Day 0). We estimate a market model over the estimation window of  $[-210, -11]$  requiring at least 50 trading days to derive alpha and beta of a stock relative to the equal-weighted daily returns for all stocks in the CSMAR database. Our event window starts from the announcement Friday and is up to Day 1. We include Friday (i.e., Day  $-1$ ) to take account of any potential information leakage because the two announcements are made after the close of the Friday trading session. Treatment Group includes firms incorporated in Shanghai, Guangdong (excluding Shenzhen), and Hunan. Control Group (Adjacent) includes firms from geographically adjacent jurisdictions (i.e., Jiangsu, Shenzhen, and Hubei). Control Group (All others) comprises control firms that are not adjacent to the three treatment regions. \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

|  | Treatment Group (%) | Control Group (Adjacent) (%) | Control Group (All others) (%) |
|--|---------------------|------------------------------|--------------------------------|
|  | 1                   | 2                            | 3                              |
| <i>Panel A. Market Reaction to the Announcement of the Pilot</i>           |                     |                              |                                |
| CAR $[-1,0]$   | -0.24**             | 0.09                         | 0.27                           |
| CAR $[-1,1]$   | -0.48***            | -0.07                        | 0.38                           |
| <i>Panel B. Market Reaction to the Announcement of the Pilot Expansion</i> |                     |                              |                                |
| CAR $[-1,0]$   | 0.14                | 0.37**                       | 0.39***                        |
| CAR $[-1,1]$   | 0.21                | 0.58**                       | 0.45**                         |

because investors feel uncertain about how the newly established ISC will function, are unsure about whether the ISC can have a meaningful governance effect on pilot firms given the ISC's small ownership, or suspect that the ISC merely represents administrative interventions into pilot firms.

Panel B shows the market reaction to the CSRC's announcement of expanding the pilot to all listed firms in Apr. 2017 for the three sets of stocks mentioned above. Previous control firms from geographically adjacent jurisdictions (i.e., Jiangsu, Shenzhen, and Hubei) experience an average 2-day CAR $[-1,0]$  of 0.37% (statistically significant at the 5% level, column 2), and of 0.39% for all other firms that have not been subjected to the pilot before (statistically significant at the 1% level, column 3). After more than one-year's pilot, investors have observed what the ISC has done in safeguarding the interests of minority shareholders as we show in the DID analysis. Therefore, we expect a positive market reaction to the expansion announcement for previous non-pilot firms (i.e., control firms). In contrast, the 2-day CAR $[-1,0]$  for the previous pilot firms (i.e., treatment firms in 2016) on the pilot expansion event is 0.14% (statistically not different from zero), which is expected given that these 2016 treatment firms do not significantly benefit from the expansion of the ISC one-lot shareholding program. We also repeat the event studies by using an alternative event window  $[-1,1]$ , and the results regarding CAR $[-1,1]$  tabulated in Table 9 are qualitatively similar.

## 2. The Wealth Effects of the ISC's Activism Events

In this section, we first examine the stock price reaction to the announcement of the ISC's activism events as a complement to our DID analysis above. We then

investigate whether the value effect of the activism events is affected by the ISC's workload.

To do so, we manually collect all publicly disclosed ISC activism events for the period of 2016 to 2019 from the ISC's designated information disclosure website.<sup>22</sup> Our final sample consists of 272 material activism events, categorized by the ISC into open questioning, attending shareholder meetings, attending press conferences of listed firms, online activism, and others (see Table IA5 in the Supplementary Material for the detailed sample selection procedure).<sup>23</sup> It is worth noting that this list of activism events is clearly not exhaustive or a random sample; it represents a sample of activism events that the ISC believes are important and deserve public disclosure. Therefore, we caution that the evidence that we obtain from analyzing this sample may not be generalizable to numerous ordinary (i.e., nonmaterial) activism events.

Each disclosure has a disclosure date, and inside the disclosed activism news, there is often an activism date. We hand-collect each disclosure date and each disclosed activism date. To gauge the stock market reaction, we estimate a market model over the estimation window of  $[-210, -11]$  requiring at least 50 trading days to derive alpha and beta of a stock relative to the equal-weighted daily return for all stocks in the CSMAR database. We use the disclosed activism date as the event date (Day 0), and when the activism date is not explicitly disclosed, we use the disclosure date as the event date. When there is no stock trading on Day 0, we use the next trading day as Day 0 in the event study and require that the next trading day be less than 5 days apart from Day 0.

The results of the event study are reported in Table 10. Panel A shows the average market reaction to an ISC activism event. We find that  $CAR[-1,0]$  averages 0.4%, which is statistically significant at the 1% level; using a 3-day event window ( $CAR[-1,1]$ ) yields similar results. Therefore, on average, the ISC activism engenders a positive market reaction upon the announcement, suggesting that investors interpret the ISC activism as value increasing. This result is consistent with the generally beneficial effects of the ISC pilot that we report in the DID analysis.

Since the ISC has limited manpower and financial resources, a natural question is whether the value effects of ISC activism are negatively affected when the ISC becomes too busy.<sup>24</sup> The hand-collected activism event data allow us to construct a measure for the busyness of the ISC and investigate this question. Specifically, we link the stock market reaction to the announcement of activism event  $i$  with a proxy of ISC busyness at the time of engaging in activism event  $i$ , which is measured by the number of ISC-disclosed activism events in the preceding month(s).

We report the OLS regression results of this investigation in Panel B of Table 10. The dependent variable of the analysis is the stock market reaction

<sup>22</sup>Clause 28 of the *ISC Operational Guideline* designates the China Investors website ([https://www.investor.org.cn/rights\\_interests\\_protection/exercise\\_service/exercise\\_news/](https://www.investor.org.cn/rights_interests_protection/exercise_service/exercise_news/)) as the primary website for disclosure of activism events.

<sup>23</sup>Some firms are referenced in ISC commentary articles that dedicate to certain common issues but do not contain specific activism dates; we do not include such referenced firms in the analysis. If the ISC asks a firm more than one question on the same day in online inquiries, we treat the firm-day as a single online inquiry in our sample.

<sup>24</sup>We thank an anonymous reviewer for suggesting this possibility.

TABLE 10  
The Wealth Effects of the ISC's Activism Events

Table 10 examines the wealth effects of the ISC's activism events. Panel A presents the stock market reaction to the ISC's activism events with the generalized sign test. Abnormal returns are estimated with a market model using the estimation period of 200 trading days  $[-210, -11]$ . Panel B reports the regression results of the determinants of market reaction to the ISC's activism events.  $\text{LN}(\text{ACTIVISM\_1MONTH})$  ( $\text{LN}(\text{ACTIVISM\_2MONTH})$ ) is the log number of material activism events that the ISC engages in the previous 1 month (2 months). \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

*Panel A. Market Reaction to the ISC's Activism Events*

| Event Window | No. of Firms | CAR (%) |
|--------------|--------------|---------|
| $[-1,0]$     | 272          | 0.40*** |
| $[-1,1]$     | 272          | 0.30**  |

*Panel B. The Determinants of Market Reaction to the ISC's Activism Events*

| Y =                                  | CAR $[-1,0]$         | CAR $[-1,1]$         | CAR $[-1,0]$         | CAR $[-1,1]$         |
|--------------------------------------|----------------------|----------------------|----------------------|----------------------|
|                                      | 1                    | 2                    | 3                    | 4                    |
| $\text{LN}(\text{ACTIVISM\_1MONTH})$ | 0.005<br>(1.35)      | 0.002<br>(0.52)      |                      |                      |
| $\text{LN}(\text{ACTIVISM\_2MONTH})$ |                      |                      | 0.005<br>(1.37)      | 0.002<br>(0.49)      |
| REPEATED                             | 0.015**<br>(2.00)    | 0.023**<br>(2.45)    | 0.016**<br>(2.06)    | 0.023**<br>(2.49)    |
| M&A-RELATED                          | 0.013**<br>(2.25)    | 0.017***<br>(2.64)   | 0.012**<br>(2.22)    | 0.017***<br>(2.63)   |
| DIRECTOR-RELATED                     | -0.003<br>(-0.54)    | 0.004<br>(0.63)      | -0.003<br>(-0.58)    | 0.004<br>(0.62)      |
| LETTER                               | 0.004<br>(0.33)      | 0.003<br>(0.20)      | 0.004<br>(0.31)      | 0.003<br>(0.19)      |
| ONSITE                               | 0.004<br>(0.46)      | -0.005<br>(-0.48)    | 0.003<br>(0.37)      | -0.005<br>(-0.52)    |
| OPEN_VOICE                           | -0.040***<br>(-3.39) | -0.048***<br>(-3.19) | -0.040***<br>(-3.40) | -0.048***<br>(-3.20) |
| SIZE                                 | 0.002<br>(0.57)      | -0.001<br>(-0.19)    | 0.002<br>(0.63)      | -0.001<br>(-0.16)    |
| LEV                                  | -0.001<br>(-0.11)    | 0.013<br>(1.14)      | -0.002<br>(-0.19)    | 0.012<br>(1.10)      |
| ROA                                  | -0.017<br>(-1.32)    | -0.011<br>(-0.82)    | -0.016<br>(-1.33)    | -0.011<br>(-0.81)    |
| BM                                   | -0.008<br>(-0.63)    | -0.005<br>(-0.35)    | -0.009<br>(-0.69)    | -0.005<br>(-0.37)    |
| Industry FEs                         | Yes                  | Yes                  | Yes                  | Yes                  |
| Year FEs                             | Yes                  | Yes                  | Yes                  | Yes                  |
| N                                    | 272                  | 272                  | 272                  | 272                  |
| Adjusted R <sup>2</sup>              | 0.057                | 0.086                | 0.059                | 0.086                |

to an activism event  $i$  ( $\text{CAR}[-1,0]$  or  $\text{CAR}[-1,1]$ ); this is our proxy for the value effect of an activism event. The ISC busyness measure is calculated as the natural logarithm of the total number of ISC-disclosed activism events in the preceding 1 month ( $\text{LN}(\text{ACTIVISM\_1MONTH})$ ) or 2 months ( $\text{LN}(\text{ACTIVISM\_2MONTH})$ ). Activism events are likely to take some time to complete, and so these two proxies can reasonably capture the busyness of the ISC when it starts engaging in activism event  $i$ . If busyness results in manpower and attention constraints, we expect the busyness measure to have a negative coefficient.

We include as control variables the activism event characteristics, which we manually code from each collected ISC activism event news. These characteristics include a dummy variable with one denoting whether the firm has previously been

targeted in ISC activism events (REPEATED), a dummy variable with one denoting whether the activism event targets M&As or reorganizations (M&A-RELATED), and a dummy variable with one denoting whether the activism event contains questioning the behavior of independent directors (DIRECTOR-RELATED). We also include dummy variables denoting the form of the activism: sending a shareholder letter to the target company (LETTER), onsite participation of shareholder meetings and press conferences, and onsite inspection of documents (e.g., corporate charters, the list of shareholders, financial reports, minutes of shareholder meetings, and board meetings) (ONSITE), open commenting or questioning in media (OPEN\_VOICE), and online inquiries through stock exchanges' interaction-easy e-platform (E-INQUIRY). We omit E-INQUIRY from the model so that online inquiries can serve as the reference group. In addition, we control for target firm characteristics including size, leverage, ROA, and BM ratio, as well as event year and industry fixed effects.

The results reported in Panel B of Table 10 show that recurring targets and activist campaigns that focus on M&As or significant company reorganizations are associated with higher market reactions. In contrast, open questioning in media, which may signal that the targeted firm is not cooperating on the identified serious issues and likely receive the ISC's escalating actions, is associated with lower market reactions. Of particular interest, the regression coefficients on the ISC busyness measure are statistically insignificant across specifications, regardless of whether the busyness is measured by the log number of activism events initiated by the ISC in the preceding 1 month or 2 months before the current activism event or whether the market reaction is measured by  $CAR[-1,0]$  or  $CAR[-1,1]$ . Therefore, to the extent that the observed market reaction to an activism event proxies for the value effect of the event, we find no evidence that busyness of the ISC is associated with lower value effects of ISC activism. This is consistent with the case-by-case approach adopted by the ISC for material actions that we discuss in Section II.C.

### 3. Labor Market Outcomes of Independent Directors Who are Questioned in ISC Activism Events

Thus far, we have shown that the presence of the ISC as a special-identity shareholder increases the dissension rate of independent directors in board voting. The evidence is consistent with the argument that fear of being targeted by the ISC leads independent directors to become more active in confronting management. As mentioned earlier, our hand-collected data show that in about one-third of the activism events initiated between 2016 and 2019, the ISC questions why independent directors have voted yes for certain business transactions and how they have arrived at their independent opinions that the transactions are fair to minority shareholders. A natural question is whether the ISC's questioning can result in adverse labor market outcomes for those targeted independent directors. The evidence (if any) also provides a channel for our main result that independent directors' dissension rates increase when the ISC is present as a special-identity shareholder.

We implement a DID test in which we focus on the ISC activism events that occur between 2016 and 2019 and involve questioning of independent directors. The window of analysis is from 2013 to 2020; we allow 3 years before the first ISC

activism event year (i.e., 2016) and stop the sample in 2020 because 2020 is the latest year for which director data are available. This sample choice ensures that we have at least one year after an activism event to observe the change in board seats of those independent directors who are questioned by the ISC in 2019.

The treatment sample consists of independent directors who are questioned by the ISC between 2016 and 2019. The control sample consists of independent directors who have never been questioned by the ISC by the end of the sample period. We count an independent director's total number of board seats in listed firms each year and use it as the dependent variable (BOARDSEATS), and the dependent variable is set to 0 for the year when an independent director exits the director market. Our DID test is at the director-year level, and we include director fixed effects that control for all time-invariant director attributes such as gender, education, working background, etc. We also control for the effects of time-variant director information (i.e., log age and the total number of board seats in the previous year) and require both treatment and control directors to have non-missing data on these control variables. This procedure leaves us a treatment sample of 449 independent directors questioned by the ISC between 2016 and 2019.

Following Gormley and Matsa (2016); Houston, Lin, and Xie (2018); and Gao, Li, and Ma (2021), we estimate a generalized staggered DID model. Specifically, we define QUESTIONED as a dummy variable that equals 1 for years after an independent director is questioned by the ISC, and 0 for other years. For independent directors who serve as the control group, their QUESTIONED indicator always takes the value of 0. The coefficient on QUESTIONED is thus the DID estimate of interest. Since a director's total number of board seats is a count variable, we estimate a Poisson model but our results are robust to using OLS regressions. The DID results are reported in Table 11. Column 1 presents the results from the baseline DID. The coefficient estimate on QUESTIONED is  $-0.454$  and is statistically significant at the 1% level, which implies that relative to the control group, an independent director questioned by the ISC loses board seats by about 36.5% ( $= \exp(-0.454) - 1$ ). This evidence is consistent with our argument that being questioned by the ISC has a negative reputation effect, resulting in adverse labor market outcomes for the targeted independent directors.

In column 2, we present the results from dynamic DID estimations in which we divide QUESTIONED into different relative year DID dummy variables. For example, QUESTIONED( $t$ ) is a dummy variable that equals 1 for a year that is  $t$  years after (before) an independent director is questioned by the ISC when  $t$  is positive (negative). When  $t$  equals 0, it indicates the year of being questioned. QUESTIONED( $-3+$ ) is a dummy variable that equals 1 for years that are at least 3 years before the year of being questioned, and 0 otherwise; QUESTIONED( $3+$ ) is a dummy variable that equals 1 for years that are at least 3 years after the year of being questioned, and 0 otherwise. The year before the questioning (i.e., QUESTIONED( $-1$ )) is omitted as the reference year. Standard errors are clustered at the director level.

The results show that the divergence in the number of board seats between the questioned independent directors and control independent directors appears after,

TABLE 11  
Labor Market Outcomes of Independent Directors Questioned by the ISC

Table 11 presents the results from Poisson DID regressions regarding the labor market outcomes of independent directors questioned in the ISC's activism events between 2016 and 2019. The window of analysis is from 2013 to 2020. We allow 3 years before the first ISC activism event year (i.e., 2016) and stop the sample in 2020 that is the latest year for which the director data are available. The treatment sample consists of independent directors who are questioned by the ISC between 2016 and 2019. The control sample consists of independent directors who have never been questioned by the ISC by the end of the sample period. QUESTIONED is a dummy variable that equals 1 for years after an independent director is questioned by the ISC and 0 for other years. The dependent variable (BOARDSEATS) is the total number of board seats that an independent director holds. Column 1 presents the results from the baseline DID, and column 2 presents the results from the dynamic DID with the dummy variable for the year before questioning (i.e., QUESTIONED(-1)) being omitted as the reference group. QUESTIONED(*t*) is a dummy variable that equals 1 for a year that is *t* years after (before) an independent director is questioned by the ISC when *t* is positive (negative). When *t* equals 0, it indicates the year of being questioned. QUESTIONED(-3+) is a dummy variable that equals 1 for years that are at least 3 years before the year of being questioned, and 0 otherwise; QUESTIONED(3+) is a dummy variable that equals 1 for years that are at least 3 years after the year of being questioned, and 0 otherwise. Standard errors are clustered at the director level. \*\*\*, \*\*, \* represents significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

| Y =                          | BOARDSEATS           |                      |
|------------------------------|----------------------|----------------------|
|                              | 1                    | 2                    |
| QUESTIONED                   | -0.454***<br>(-9.03) |                      |
| QUESTIONED(-3+)              |                      | -0.042<br>(-1.21)    |
| QUESTIONED(-2)               |                      | -0.024<br>(-0.76)    |
| QUESTIONED(0)                |                      | 0.003<br>(0.13)      |
| QUESTIONED(1)                |                      | -0.466***<br>(-8.14) |
| QUESTIONED(2)                |                      | -0.404***<br>(-4.77) |
| QUESTIONED(3+)               |                      | -0.591***<br>(-4.36) |
| LN(AGE)                      | 1.464***<br>(5.72)   | 1.461***<br>(5.71)   |
| BOARDSEATS IN THE PRIOR YEAR | 0.325***<br>(67.39)  | 0.325***<br>(67.40)  |
| Director FEs                 | Yes                  | Yes                  |
| Year FEs                     | Yes                  | Yes                  |
| <i>N</i>                     | 60018                | 60018                |
| Chi-square                   | 4764.50              | 4774.40              |

but not before, the ISC activism event. The evidence is consistent with a causal effect of the ISC questioning.

Taken together, being questioned by the ISC appears to tarnish the reputation of the independent directors concerned and reduce their subsequent labor market opportunities. This provides support for a potential channel underlying the dissension results: independent directors' fear of the stigma associated with the ISC's questioning leads them to dissent more often in board voting when the ISC is present as a special-identity shareholder.

## V. Conclusions

How to protect minority shareholders from a controlling shareholder's expropriation is a challenge for markets with a concentrated corporate ownership structure. Exploiting China's establishment of the not-for-profit quasi-official

ISC and its one-lot shareholding pilot in listed firms as a novel experiment that aims to strengthen the protection of minority shareholders, we assess its governance effects on the behavior of independent directors and on subsequent corporate policies.

Holding 100 shares of a pilot listed firm, the ISC can play a governance role via voicing and exercising the shareholder rights granted by the Company Law, and the quasi-official identity makes its voice influential. The ISC pays special attention to whether and how independent directors perform their legally accorded role in protecting minority shareholders; its open comments on, and questioning of, individual independent directors, magnified by media reports, can lead to potential adverse reputation for the directors concerned. This, in turn, leads independent directors to be more willing to confront management and pressures a pilot firm to be more vigilant in the protection of minority shareholders.

Our DID analyses show a higher chance of independent director dissensions during the pilot as well as improvements in some key corporate policies in pilot firms compared to control firms, including fewer tunneling RPTs (i.e., fewer funds occupied by the controlling shareholder or its controlled affiliates), improved quality of M&As proxied by higher deal announcement returns, and higher transparency proxied by less earnings management (lower discretionary accruals and a reduced incidence of narrowly beating analysts' consensus earnings forecast or reporting a small net profit). However, our DID analysis does not show significant changes in firms' routine board activities such as board meeting frequency and the absence ratio of independent directors in attending board meetings.

Based on the 1-year experiment, the CSRC quickly expands the ISC one-lot shareholding program to all Chinese listed firms in Apr. 2017. Our event studies of the market reactions to the initiation and expansion announcements of the ISC one-lot shareholding pilot suggest that initially, the market is unsure about what the newly established ISC likely does and so reacts with a small price drop, and after observing the ISC's activism for a year, the market reacts positively to the expansion of the ISC shareholding program. The latter result is broadly consistent with the results of ex-post DID analyses. Event study of a sample of material ISC activism events also shows a positive market reaction to the announcement of the ISC activism. Importantly, supporting our argument that the presence of the ISC as a special-identity shareholder leads independent directors to be more attentive to their legal duty of protecting minority shareholders and be more likely to confront the management in board voting, we find that independent directors face reduced opportunities in the director labor market after being questioned in ISC activism.

Our study enriches the literature on novel mechanisms of protecting minority shareholders and shows how an investor protection mechanism affects the functioning of other key investor protection mechanisms (independent directors in our setting) for which there is little evidence in the literature. Although our results show that the ISC has a positive impact on safeguarding minority shareholders in China, it is important to note that the applicability and efficacy of this unique investor protection mechanism in other settings with concentrated ownership structures will depend on the establishment of a similar quasi-official entity and the extent of shareholder rights conferred by the relevant local company law.



## Appendix A. Examples of the ISC's Activism Activities

| Date           | Activism Activities  |
|----------------|--|
| Jun. 15, 2016  | The ISC visits Fosu Keji (stock code 000973), inspects the minutes of board and shareholder meetings, and talks to the board chairman, with a focus on the decision process of a major M&A.  |
| Jul. 25, 2016  | The ISC sues Pitupi (stock code 600696) for misrepresentations on behalf of 9 investors.   |
| Jul. 26, 2016  | The ISC raises questions about Sitong Group's (stock code 603838) proposed acquisition in the firm's press conference and expresses significant concerns on the sustainability of the target firm's profitability and high valuation as well as the inability of some target firm shareholders to provide performance pledge.  |
| Jan. 8, 2017   | The ISC openly questions the dereliction of duty of some directors, supervisors, and officers of ST Huiqiu (stock code 600556), which attracts wide media report and subsequently triggers the investigation of the CSRC and the Shanghai Stock Exchange.  |
| Apr. 1, 2017   | The ISC raises questions about China Security Co. Ltd's (stock code 600654) proposed acquisition in the firm's press conference and expresses significant concerns on the potential adverse impact of the proposed acquisition on the firm's financial condition given that the firm's debt ratio is high and goodwill accounts for about 70% of the firm's net assets after a series of acquisitions in the previous years. |
| May 25, 2017   | The ISC attends the annual shareholder meeting of Tiantan Biology (stock code 600161), questions the high similarity in independent directors' self-evaluations.   |
| Jun. 1, 2017   | The ISC attends the annual shareholder meeting of Changchun Gas (stock code 600333), and recommends that independent directors report annual performance at the annual shareholder meeting in person and respond to shareholder inquiries.   |
| Oct. 15, 2017  | The ISC visits Tuozhong Gufen (stock code 002346), inspects corporate charters, minutes of board and shareholder meetings, and makes suggestions on improvement.   |
| Aug.–Oct. 2017 | The ISC visits 41 listed firms in 12 provinces, inspects corporate charters and minutes of board and shareholder meetings, and provides suggestions on improvement.  |
| Mar.–Jun. 2018 | The ISC attends 100 annual shareholder meetings of pilot firms; based on these presences, the ISC states in the official <i>Securities Times</i> that in 75% of the 100 shareholder meetings, there is a problem of directors' low attendance rates at shareholder meetings and in 39% of the 100 firms, only one independent director presents an annual self-evaluation report to the shareholder meeting.                 |

Source: Based on the authors' news search on the ISC.

## Appendix B. Variable Definitions

Appendix B provides definitions for all the variables used in the article.

| Variable                                 | Definition  |
|--|---|
| <i>Board Activities</i>                  |   |
| DISSENT                                  | Dummy variable that equals 1 if there is at least one dissenting vote (including against vote and abstention) by independent directors in a year, and 0 otherwise.  |
| LN(NUMBOARDMEETING)                      | Natural logarithm of the total number of board meetings in a year.  |
| ABSENCERATIO                             | The ratio of the total number of board meeting absence by all independent directors in a year to the total number of board meetings that all independent directors should attend in a year.   |
| DIRECTOR DISSENT                         | Dummy variable that equals 1 if there is at least one dissenting vote by an independent director in a firm–year, and 0 otherwise.   |
| <i>Related Party Transactions (RPTs)</i> |   |
| OTHERREC                                 | The amount of "other accounts receivable" at the end of a year scaled by total assets, which measures the amount of funds occupied by the controlling shareholder or its controlled affiliates.   |
| LOANGUARANTEES                           | The amount of loan guarantees provided by a listed firm to its controlling shareholder or its controlled affiliates in a year scaled by total assets.   |
| <i>Mergers &amp; Acquisitions</i>        |   |
| HAVING AN M&A                            | Dummy variable that equals 1 if a firm has announced an M&A with at least 1 million USD equivalent in deal value as an acquirer in the year, and 0 otherwise.   |
| CAR[−2,2]                                | M&A deal announcement return, which is the sum of abnormal return over the event window [−2,2], and abnormal return is the difference between raw daily return and the predicted daily return using parameters estimated from a market model using CSMAR all stock equal-weighted return over the estimation window [−210,−11] requiring at least 50 non-missing daily returns. |
| RELATIVE SIZE                            | Deal value scaled by the acquirer's market value measured at day = −11.   |
| ALLCASHDEAL                              | Dummy variable that equals 1 if a deal is all paid by cash, and 0 otherwise.  |
| ALLSTOCKDEAL                             | Dummy variable that equals 1 if a deal is all paid by the acquirer's stocks, and 0 otherwise.   |
| RPT                                      | Dummy variable that equals 1 if a deal involves a related party, and 0 otherwise.   |
| <i>Earnings Management</i>               |   |
| ABNACCRUALS                              | (Signed) performance-adjusted abnormal discretionary accruals (see Kothari et al. (2005)). We estimate the following model for each industry–year group (requiring at least 10 usable observations in each regression):   |

(continued on next page)

(continued)

| Variable                               | Definition   |
|--|--|
|  | $TA_{i,t}/A_{i,t-1} = \alpha_1(1/A_{i,t-1}) + \alpha_2(\Delta REV_{i,t}/A_{i,t-1} - \Delta REC_{i,t}/A_{i,t-1}) + \alpha_3(PPE_{i,t}/A_{i,t-1}) + \alpha_4 ROA_{i,t} + \alpha_5 BM_{i,t} + \varepsilon_{i,t}$ <p>TA is total accrual defined as the difference between net profit and net operating cash flow; A is total assets; <math>\Delta REV</math> is the annual change in revenue; <math>\Delta REC</math> is the annual change in net receivables; PPE is net property, plant, and equipment at the end of a year; ROA is return on assets; and BM ratio is the book-to-market ratio of equity.</p> |
| NARROWBEAT                             | Dummy variable that equals 1 if a firm's reported earnings per share in a year beat the latest analysts' consensus earnings forecast (measured before the earnings release) by less than 3%, or if a firm reports a net loss last year but reports a small net profit (i.e., lower than 0.3% of the year-beginning assets) this year; it equals 0 otherwise.   |
| <i>Control Variables</i>               |  |
| TREAT                                  | Dummy variable that equals 1 if a firm is incorporated in Shanghai, Guangdong (excluding Shenzhen), and Hunan in 2015 (the year before the ISC one-lot shareholding pilot), and 0 otherwise.   |
| SIZE                                   | Natural logarithm of total assets at the end of a year.  |
| LEV                                    | Financial leverage, calculated as the ratio of the book value of total debts to the book value of total assets at the end of a year.   |
| ROA                                    | Return on assets, measured as the ratio of net profit to the book value of total assets at the end of a year.  |
| BM                                     | BM ratio, calculated as total assets/(total assets – book value of equity + market value of equity) at the end of a year.  |
| NO. OF INDEPENDENT DIRECTORS           | The number of independent directors on the board.  |
| PROPORTION OF INDEPENDENT DIRECTORS    | The number of independent directors on the board divided by board size.  |
| BOARDSIZE                              | The number of directors on the board.  |
| TOP3HOLDINGS                           | Ownership concentration proxied by the total share ownership of top 3 shareholders of a firm.  |
| TOP5HOLDINGS                           | Ownership concentration proxied by the total share ownership of top 5 shareholders of a firm.  |
| SPECIALTREATMENT                       | Dummy variable set to 1 if a firm is labeled as ST or *ST.   |
| <i>ISC Activism Characteristics</i>    |  |
| LN(ACTIVISM_1MONTH)                    | Natural logarithm of the total number of ISC-disclosed activism events in the preceding month.   |
| LN(ACTIVISM_2MONTH)                    | Natural logarithm of the total number of ISC-disclosed activism events in the preceding 2 months.  |
| REPEATED                               | Dummy variable that equals 1 if the company has previously been targeted in ISC activism events, and 0 otherwise.  |
| M&A-RELATED                            | Dummy variable that equals 1 if the activism event targets M&As or reorganizations, and 0 otherwise.   |
| DIRECTOR-RELATED                       | Dummy variable that equals 1 if the activism event contains questioning the behavior of the independent directors of a firm, and 0 otherwise.  |
| LETTER                                 | Dummy variable that equals 1 if the form of activism is sending a shareholder letter to the target company, and 0 otherwise.   |
| ONSITE                                 | Dummy variable that equals 1 if the form of activism is onsite participation of shareholder meetings, press conferences, onsite inspection of corporate charters, the list of shareholders, financial reports, minutes of shareholder meetings, and board meetings, and 0 otherwise.   |
| OPEN_VOICE                             | Dummy variable that equals 1 if the form of activism is open commenting or questioning in media, and 0 otherwise.  |
| E-INQUIRY                              | Dummy variable that equals 1 if the form of activism is online inquiry through the stock exchange's interaction-easy e-platform, and 0 otherwise.  |
| <i>Independent Director Attributes</i> |  |
| QUESTIONED                             | Dummy variable that equals 1 for years after an independent director is questioned by the ISC, and 0 otherwise.  |
| LN(AGE)                                | Natural logarithm of an independent director's age.  |
| BOARDSEATS                             | An independent director's total number of board seats.   |

## Supplementary Material

To view supplementary material for this article, please visit <http://doi.org/10.1017/S0022109024000516>.

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