Title

A regulatory minority shareholder and CSR: Evidence from China

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Abstract

To safeguard the interests of minority shareholders, the establishment of the China Securities Investor Services Center (CSISC) in 2014 marked a significant institutional innovation in China. This study employs the DID model to investigate the impact of the exercise of CSISC shareholding on CSR and assesses the protective effect of this institutional innovation. The results indicate that CSISC exercise can indeed restrain CSR, particularly among firms with excessive CSR practices. Heterogeneity tests reveal that this conclusion is more pronounced for samples characterized by weak social supervision pressure and low CSR disclosure quality. Further mechanistic analysis demonstrates that CSISC exercise can diminish CSR through two channels: disclosing negative information and bolstering the participation of minority shareholders in corporate governance. Moreover, the study finds that CSISC exercise also enhances the risk-taking level of enterprises. Collectively, these findings suggest that CSR may be influenced by agency issues, and the exercise of CSISC shareholding can prompt insiders to curtail CSR to safeguard the interests of minority shareholders.

Keywords

Corporate Governance; China Securities Investor Services Center; Minority Shareholders; Corporate Social Responsibility

1. Introduction

In comparison to the dispersed shareholding structure prevalent in Western capital markets, the high concentration of equity in Chinese listed firms endows insiders (managers and large shareholders) with both the incentive and the capacity to exploit the interests of minority shareholders (Jian and Wong, 2010; Jiang et al., 2010). Administrative regulation has long been a vital tool for safeguarding minority shareholders. However, in practice, it has often fallen short of achieving the desired outcomes (Mehta and Zhao, 2020). The primary reason for this shortfall lies in the limited discourse power of minority shareholders, who often display a tendency towards indifference when exercising their rights, preferring to resort to "free-riding" or "voting with their feet" strategies (Gillan & Starks, 2003). Hence, how to enhance the influence of minority shareholders for self-protection has become an urgent issue for regulatory authorities to address.

In this context, the non-profit securities-based public financial institution, China Securities Investor Services Center (CSISC), was established in 2014. Its primary mandate is to exercise and safeguard the rights of minority shareholders by holding 100 common shares of listed firms. Different from ordinary minority shareholders, CSISC's administrative regulatory background and its capacity to file securities support lawsuits can influence insiders' decisions, thereby amplifying the discourse power of minority shareholders. Consequently, CSISC is also recognized as a regulatory minority shareholder. Furthermore, CSISC adopts a "pilot-first, then expansion" strategy. In February 2016, CSISC exercised its rights in Shanghai, Guangdong (excluding Shenzhen), and Hunan provinces. The methods employed by CSISC for exercising its shareholding rights include submitting shareholder proposal letters, attending

shareholder meetings, participating in briefings on listed company restructuring, online voting, public advocacy, litigation, and so on. In April 2017, CSISC shareholding exercises were expanded nationwide.

With the increasing attention to sustainable development concepts and practices, the firm's insiders tend to allocate more resources to CSR activities. Existing research presents two opposing views on whether CSR can enhance firm value. On one hand, according to stakeholder theory and resource dependence theory, proponents of value-adding CSR argue that firms can develop social capital by collaborating with external stakeholders through CSR, thereby drawing resources from the outside world, overcoming resource constraints, and ultimately enhancing firm value. This can manifest in various ways, such as lower capital costs (Malik, 2015), lower financing costs (Cheng et al., 2014), lower corporate risks (Guo et al., 2021), higher M&A returns (Deng et al., 2013), higher product market benefits (Schinzel, 2018).On the other hand, based on the principal-agent theory, proponents of value-destroying CSR argue that CSR primarily serves the interests of insiders and may reflect opportunistic speculative motives (Friedman, 1970). For example, managers and large shareholders may use CSR as a tool to conceal firm misconduct. Studies have shown that CSR practices can exacerbate the risk of stock price collapse (Zhang et al., 2023)and be used to conceal poor earnings quality, especially in firms with highly concentrated ownership (Choi et al., 2013). Du (2015) argued that firm philanthropic giving is intended to cover up environmental misconduct. Moreover, insiders may over-invest in CSR for their reputation (Mc Williams, 2006). Compared to value-adding CSR, value-destroying CSR may come at the expense of harming the interests of minority shareholders. CSISC, established to protect minority shareholders, may constrain value-destroying CSR. However, there is limited literature addressing whether CSISC inhibits CSR, the mechanisms underlying its effects, and potential differences between CSISC and CSR in different contexts.

Our study is related to two categories of literature. The first pertains to the ramifications of the CSISC exercise. The existing literature delves into discussions surrounding the impacts of CSISC on the economic value of exercised firms, such as investment efficiency (Haung et al., 2023), firm risk (Chen et al., 2023), earnings management (Ge et al., 2022), and stock price collapse (Hu et al., 2022). Overall, this body of literature sheds light on the effectiveness of CSISC in influencing insiders' decisions and protecting minority shareholders. Considering the discretion of insiders in CSR, they possess the motivation and capability to employ CSR activities for their interests. However, these studies haven't explored the impact of CSISC exercise from the perspective of firm social value.

The second category of the relevant literature revolves around CSR studies. In addition to the research on CSR's impact on firm value mentioned above, there has been a growing body of research investigating the driving factors of CSR. Some studies focus on internal governance. For instance, board diversity has been positively associated with CSR performance (Harjoto et al., 2015). In comparison, our study is more aligned with the impact of external governance on CSR. Xia et al. (2024) emphasized as an external governance mechanism, directors' and officers' (D&O) liability insurance

increases CSR. Sun et al. (2023) discovered that digital transformation can promote CSR by improving analyst coverage. Erhemjamts and Huang (2019) highlighted the importance of institutions with longer investment horizons in influencing CSR. While existing literature has primarily focused on how external governance can enhance value-adding CSR, these studies ignore how external governance can mitigate value-destroying CSR.

The literature most closely associated with our study addresses the investigation of CSISC on ESG. Song et al. (2023), using a sample of Chinese-listed firms, identified that CSISC shareholding improves ESG performance, with this relationship being more pronounced in the presence of improved external governance mechanisms. However, this study is subject to two limitations. First, in terms of research methodology, it constructed treatment and control groups based on pilot and non-pilot areas, thereby ignoring the actual exercise behavior of CSISC shareholding. Secondly, it lacked mechanisms tests of how the exercising of CSISC shareholding influences ESG.

We conducted manual data collection on the actual exercise of CSISC shareholding and employed a multi-time-point difference-in-difference (DID) model to identify the causal effects of CSISC exercise on CSR. The results reveal that the exercise of CSISC shareholding significantly impedes CSR, particularly for firms engaging in excessive CSR activities. Additionally, we examined the heterogeneity in the impact of CSISC exercise on CSR, taking into consideration the difference in the social supervision pressure and the disclosure quality of CSR among firms. Our findings indicate that CSISC exercise exerts a stronger inhibitory effect on CSR in firms facing weak social supervision pressure and exhibiting low CSR disclosure quality. Furthermore, we delved into the specific mechanisms through which CSISC exercise hinders CSR, discovering that CSISC encourages exercised firms to disclose hidden negative information and enhances the involvement of minority shareholders in corporate governance, thus curbing insiders' attempts to advance their interests through CSR. Additionally, the CSISC exercise is found to enhance the risk-taking propensity of firms.

The potential marginal contributions of the study are primarily manifested in three ways: firstly, it introduces a novel governance mechanism for CSR within the framework of principal-agent theory. The question of how firms curtail CSR has received limited attention in the literature. For instance, Liu and Chiang (2024) found that employment protection law prompts firms to reduce unnecessary CSR by allocating more funds to employees. Consistent with their findings, our study delves into how the exercise of CSISC shareholding impedes CSR.

Secondly, our study extends the literature on the impact of CSISC exercise. Previous studies have primarily examined the protective effect of CSISC on minority shareholder rights from the perspective of the economic value of enterprises, exploring factors including audit fees, earnings management, stock price crash risk, and underinvestment (Dong, 2022; Ge et al., 2022; Hu et al., 2022; Huang et al., 2023). In contrast, our study focuses on the social value perspective to evaluate the protective role of CSISC.

Thirdly, our study contributes to the understanding of factors influencing CSR.

While previous studies have emphasized the impact of board characteristics, analysts, and institutional investors on CSR, we further highlight the role of regulatory minority shareholders.

2. Theoretical analysis

The principal-agent theory posits that CSR serves as a tool for a firm's insiders to advance their interests. For instance, they may use CSR to conceal firm misconduct or bolster their reputation, which is at the expense of sacrificing the wealth of minority shareholders (Barnea & Rubin, 2010). CSISC was established to protect minority shareholders. Therefore, we posit that the CSISC exercise curtails CSR through two mechanisms: the revelation of negative information and the enhancement of minority shareholders' engagement in corporate governance.

CSISC may constrain firm misconduct concealed through CSR by promoting negative information disclosure, leading to a decrease in CSR. Firstly, as a regulatory minority shareholder, the CSISC exercise acts as a deterrent to insiders, compelling them to disclose negative information (Yuan et al., 2016), consequently reducing the risk of stock price crashes (Hu et al., 2022). Secondly, according to signaling theory, CSISC sends a signal to external stakeholders that the exercised enterprise may engage in behaviors detrimental to the interests of minority shareholders, leading to increased regulatory pressure by attracting media and regulatory agency attention (Miller, 2006; Dyck et al., 2008), thereby effectively reducing insiders' inclination to conceal firm misconduct. Additionally, the CSISC's litigation actions can expedite exercised firms' disclosure of negative information (Skinner, 1997). Collectively, the disclosure of negative information diminishes insiders' propensity to conceal misconduct through CSR.

CSISC enhances minority shareholders' engagement in corporate governance, resulting in a decrease in CSR. Firstly, considering the regulatory background of CSISC, its exercise and protection actions may draw the attention of minority shareholders, thus raising their awareness of exercising and protecting their rights and forming minority shareholder activism. Secondly, CSISC can effectively reduce the costs associated with minority shareholders participating in corporate governance, such as information search costs, thus improving their governance and supervision capabilities for firms. Thirdly, CSISC can collaborate with minority shareholders to exercise shareholder rights and amplify their influence on insider decision-making. Collectively, the participation of minority shareholders in corporate governance better constrains and supervises insiders, thus inhibiting CSR aimed at pursuing their interests.

Hypothesis: The exercising of CSISC shareholding impedes CSR.

3. Research design

3.1 Sample selection and data sources

Since CSISC began exercising shareholder rights in 2016, we have selected A-share listed companies in Shanghai and Shenzhen from the period 2013 to 2021 as our research sample. CSISC's actual exercise data was sourced from the "exercise service"

section of the China investor website[i]. While ESG data was obtained from the Wind database. Financial data were collected from the CSMAR and CNRDS databases. The data underwent the following four-step processing: (1) exclusion of samples subject to Chinese special treatment. (2) deletion of samples from the financial industry. (3) removal of samples with missing values. (4) elimination of single-valued samples. Finally, this process yielded a total of 22,968 firm-year observations. Additionally, all continuous variables were winsorized at their 1st and 99th percentiles.

3.2 regression model

We estimate Eq. (1) to test our hypothesis:

$$ESG_{i,t} = \alpha_0 + \alpha_1 CSISC_{i,t} + \alpha_2 CV_{i,t} + \mu_i + \theta_t + \varepsilon_{i,t} \quad (1)$$

Following Feng et al. (2022), we utilize ESG as a proxy for CSR. CSISC is represented as a dummy variable, with a value of 1 if a firm is exercised by CSISC in the current year, and 0 otherwise. Consistent with previous studies, we incorporate a set of control variables, including *firm size*, *ROA*, *leverage ratio*, *sales growth ratio*, *Tobin's Q*, *board size*, *independent director ratio*, *CEO duality*, and *the shareholding ratio of the largest shareholder*. Additionally, μ_i and θ_t represent firm-fixed effects and year-fixed effects, respectively, while ε represents the random perturbation term. Furthermore, we conduct clustering at the firm level. Table *1* presents definitions for all variables.

The coefficient α_1 is the estimator of primary interest, as it indicates whether the exercise of CSISC shareholding reduces CSR. A reduction in CSR due to CSISC's exercise may suggest CSR may be influenced by agency issues.

TABLE 1

Definition of variables.

Variable type	*Variable name*	*definition*
Dependent variable	*ESG*	Corporate Social Responsibility.
Independent variable	*CSISC*	Dummy variable If the enterprise is exercised by the CSISC in the current year, the value will be 1 in that year and subsequent years; otherwise, its value is zero.
Control variable	*Firm size*	Log of the firm's total assets as of the end of the fiscal year.
	ROA	The firm's net profit is divided by the total assets at the end of the fiscal year.
	Leverage ration	The firm's debt-to-assets ratio as of the end of the fiscal year.
	Sales growth ration	The firm's revenue growth for the current period is divided by the previous year's revenue.
	Tobin's Q	The firm's market value is divided by its total assets as of the end of the fiscal year.
	Board size	The natural logarithm of the number of board members for company i in period T.
	Independent director ratio	Percentage of independent board members for company i in period T.
	CEO duality	Dummy variable If the firm's chairman and general manager are the same person, the value will be 1; otherwise, its value is zero.
	The shareholding ratio of	The shareholding ratio of the largest shareholder shareholders as

the largest shareholder	of the end of the fiscal year.

4. Empirical analysis

4.1 Descriptive statistics

Table 2 presents descriptive statistics of the main variables. The mean value of *ESG* during the sample period is 73.20, with a standard deviation of 5.41, indicating notable differences in CSR among Chinese listed firms. The mean value of *CSISC* is 0.03, suggesting that 3% of the sample enterprises are exercised by CSISC. The distributions of the descriptive statistics for the other variables are also reasonable and are not discussed in detail.

TABLE 2

Summary statistics.

Variable	N	mean	P50	Std. dev	Min	Max
ESG	22968	73.20	73.50	5.41	57.41	84.29
CSISC	22968	0.03	0.00	0.17	0.00	1.00
Firm size	22968	22.32	22.14	1.30	19.95	26.23
ROA	22968	0.04	0.04	0.05	-0.22	0.20
Leverage ration	22968	0.42	0.41	0.20	0.05	0.88
Sales growth ration	22968	0.18	0.12	0.39	-0.52	2.41
Tobin's Q	22968	2.11	1.67	1.36	0.86	8.46
Board size	22968	2.12	2.20	0.20	1.61	2.71
Independent director ratio	22968	0.38	0.36	0.05	0.33	0.57
CEO duality	22968	0.29	0.00	0.45	0.00	1.00
The shareholding ratio of the largest shareholder	22968	0.34	0.31	0.15	0.09	0.75

4.2 Baseline regression

Table 3 presents the results of the DID regression. In Column (1), the coefficient of CSISC is significantly negative at the 5% level. Upon introducing the control variables in Column (2), the coefficient of CSISC remains negative and significant at the 1% level. In terms of economic significance, the CSR of firms exercised by CSISC is *1.1* lower than that of firms not exercised. Therefore, it can be preliminarily concluded that the exercise of CSISC shareholding may hinder CSR, thus supporting the hypothesis.

TABLE 3

Baseline regression.

	(1)	(2)
Variables	*ESG*	*ESG*
CSISC	-0.94**	-1.10***
	(0.39)	(0.37)
Firm size		1.39***
		(0.12)
ROA		6.51***
		(0.91)
Leverage ration		-4.11***

		(0.42)
Sales growth ration		-0.27***
		(0.08)
Tobin's Q		0.04
		(0.04)
Board size		0.49
		(0.43)
Independent director ratio		6.73***
		(1.24)
CEO duality		-0.08
		(0.12)
The shareholding ratio of the largest shareholder		2.41***
		(0.71)
Constant	73.22***	39.33***
	(0.01)	(2.91)
Firm FE	Yes	Yes
Year FE	Yes	Yes
N	22968	22968
Adj-R^2	0.58	0.59

Notes: firm-level cluster robust standard errors are in parentheses.
*p< .1. **p< .05. ***p< .01.

Moreover, if the CSISC exercise impedes CSR, it suggests that CSR may be influenced by agency issues. Excessive CSR represents a typical form of agency issues between insiders and minority shareholders in enterprises. Hence, we anticipate that the negative effect is more pronounced for firms with excessive CSR. Following Dechow et al. (1995) and Habiba (2023), we partition the sample into firms with excessive CSR and non-excessive CSR. Initially, we regress *ESG* on firm characteristics according to the Jones model by industry and year to derive the optimal ESG and the residual. Subsequently, firms are classified into the excessive CSR sample if the residual is higher in the top quartile or if the residual is positive; otherwise, firms are categorized into the non-excessive CSR sample.

Table 4 presents the results of subsample regression analysis. As anticipated, in Column (1) and Column (3), the coefficients of CSISC are negative and statistically significant in the excessive CSR samples. However, Column (2) and Column (4) reveal that the coefficient is negative but lacks significance in the non-excessive CSR samples. This evidence suggests that CSISC exercise can hinder excessive CSR, thereby safeguarding the rights of minority shareholders. Once again, the hypothesis is supported.

TABLE 4

Subsamples with excessive vs. non-excessive CSR.

	The top quartile of the residual ESG		Comparison of residual ESG with 0	
Variables	(1) excessive-CSR	(2) Non-excessive-CSR	(3) excessive-CSR	(4) Non-excessive-CSR
CSISC	-0.97**	-0.60	-0.54*	-0.57
	(0.40)	(0.34)	(0.28)	(0.43)
Coeff. Diff.	0.01**		0.50	

Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
N	5711	16445	11685	10366
Adj R^2	0.68	0.55	0.65	0.52

Notes: firm-level cluster robust standard errors are in parentheses.
*p< .1. **p< .05. ***p< .01.

4.3 Robustness Tests

Firstly, we test the parallel trend assumption of the DID analysis. As depicted in Fig. 1, CSR exhibits a similar time trend before the CSISC exercise, indicating that the study passes the parallel trend test.

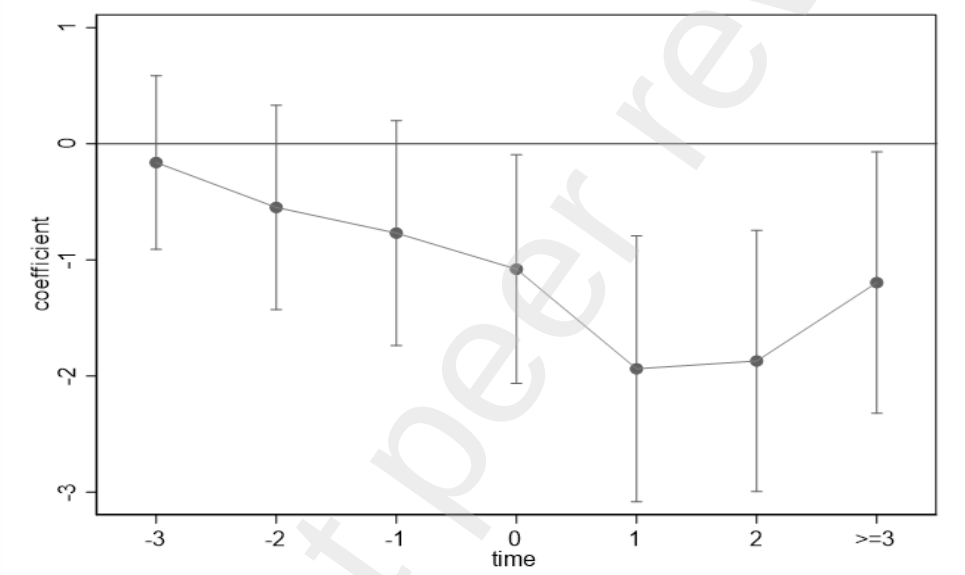

Fig. 1. Parallel trend assumption.

Notes: Horizontal axis 0 represents the year in which the firm is exercised by the CSISC, negative values represent the year before the exercise, and positive values represent the year after the exercise. Solid dots indicate the estimated coefficients of equation (2) δ_t, and the short vertical lines indicate the 95% upper and lower confidence intervals corresponding to the clustering to firm-level robust standard errors.

Secondly, to mitigate the influence of unobservable factors on the results, we conducted a placebo test by randomly selecting firms exercised by CSISC. Fig. 2 demonstrates that our main finding is unlikely to be driven by unobservable omitted variables.

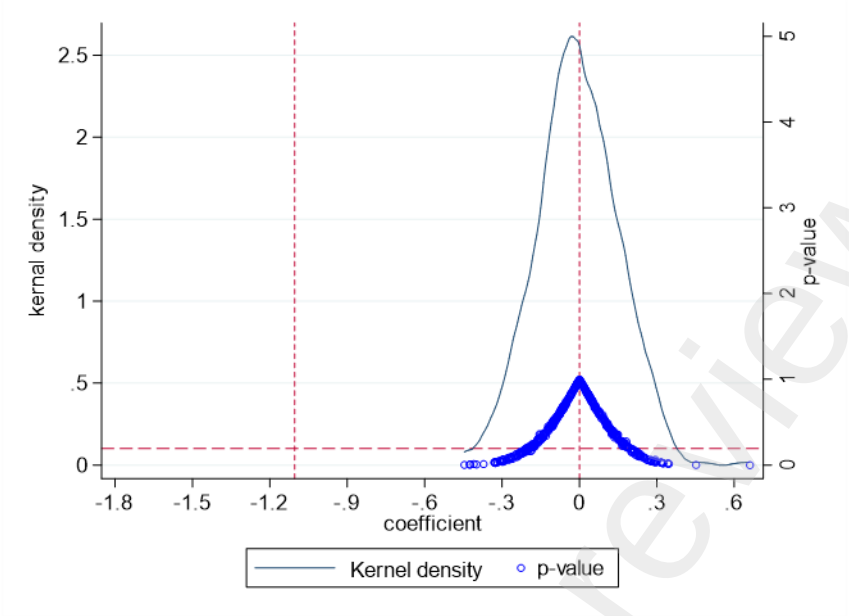

Fig. 2. **Placebo Test**.

Thirdly, considering that exercised firms may not have been randomly selected, we employ PSM-DID and the entropy balance method to re-estimate Eq. (1). As illustrated in Table 5, the coefficients of CSISC are significantly negative, indicating that the results remain robust.

TABLE 5

Robustness test: PSM-DID and Entropy balance method.

	(1)	(2)
	PSM-DID	Entropy Balance
Variables	*ESG*	*ESG*
CSISC	-0.84**	-1.35***
	(0.38)	(0.43)
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
N	5075	22968
Adj-R²	0.57	0.70

Notes: firm-level cluster robust standard errors are in parentheses.

*p< .1. **p< .05. ***p< .01.

Furthermore, during China's economic transition period, numerous policies have been issued that may impact CSR. We hypothesize that environmental and legal regulations might influence CSR. Therefore, we incorporate the new environmental protection law and the establishment of circuit courts as control dummy variables in the baseline analyses. Table 6 demonstrates that the results remain consistent. Additionally, we replaced the dependent variable in Table 7, and the results still hold.

TABLE 6

Robustness tests: eliminating alternative policies.

	(1)	(2)
Variables	environmental	legal regulations

	regulations	
	ESG	ESG
CSISC	-1.10***	-1.10***
	(0.37)	(0.37)
The new Environmental Protection Law	0.25	
	(0.18)	
Circuit courts		-0.18
		(0.14)
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
N	22968	22968
Adj-R^2	0.59	0.59

Notes: firm-level cluster robust standard errors are in parentheses.
*p< .1. **p< .05. ***p< .01.

TABLE 7

Robustness tests: replacing the dependent variable.

	(1)	(2)	(3)
Variables	*ESG_R*	*adj_ESG_mean*	*adj_ESG_median*
CSISC	-0.24***	-1.02***	-1.04***
	(0.08)	(0.37)	(0.37)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
N	22968	22968	22968
Adj-R^2	0.55	0.57	0.57

Notes: firm-level cluster robust standard errors are in parentheses.
*p< .1. **p< .05. ***p< .01.

4.4 Mechanism tests

The CSISC exercise inhibits CSR by disclosing negative information and enhancing minority shareholders' participation in corporate governance. In this section, we empirically test the mechanisms outlined above.

Firstly, CSISC can improve the information environment of exercised enterprises, resulting in the release of negative information by insiders. This disclosure can constrain insiders from concealing firm misconduct through CSR. We employ four proxy variables to measure the disclosure of negative information, including accounting robustness (Cscore), punishment (Punish), litigation risk (Lawsuit), and media focus (Media). The higher their value, the greater the disclosure of negative information. Table 8 presents the regression results using these four variables as the dependent variables. The coefficients for CSISC are significantly positive, indicating that the CSISC exercise asks insiders to disclose more negative information, thereby leading to a decrease in CSR.

Secondly, CSISC enhances minority shareholders' participation in corporate governance, thereby constraining and supervising insiders. We measure the level of

minority shareholders participation in corporate governance using their shareholding ratio in the annual general meeting of shareholders (i.e., the total shareholding ratio minus the shareholding ratio of the 1st largest shareholder and the top 3 largest shareholders), denoted as MinorityHolding1 and MinorityHolding2. The larger the shareholding ratio, the higher the level of participation in corporate governance. In Table 9, the coefficients of CSISC are positive and statistically significant at the 5% level, indicating that CSISC exercise enhances minority shareholders' participation in corporate governance, consequently reducing CSR.

TABLE 8

Mechanism analysis of disclosing negative information.

	(1)	(2)	(3)	(4)
Variables	*Cscore*	*Lawsuit*	*Punish*	*Media*
CSISC	0.01***	0.33*	0.39***	0.11**
	(0.00)	(0.17)	(0.10)	(0.05)
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes			Yes
Year FE	Yes	Yes	Yes	Yes
N	22617	12974	17848	17848
Adj-R²	0.87	0.04	0.02	0.68

Notes: firm-level cluster robust standard errors are in parentheses. Columns (2) and (3) are standard errors.

*p< .1. **p< .05. ***p< .01.

TABLE 9

Mechanism analysis of enhancing minority shareholders' participation in governance.

	(1)	(2)
Variables	*MinorityHolding 1*	*MinorityHolding2*
CSISC	1.86**	1.84**
	(0.80)	(0.80)
Control variable	Yes	Yes
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	21510	21510
Adj-R²	0.78	0.78

Notes: firm-level cluster robust standard errors are in parentheses.

*p< .1. **p< .05. ***p< .01.

4. 5 Heterogeneity discussion

4.5.1 The heterogeneity of social supervision pressure

After confirming that CSISC impedes the CSR of exercised firms, we further investigate the heterogeneous effects of the CSISC exercise across subsamples. When firms face weak social supervision pressure, insiders are more inclined to invest in CSR to serve their interests. Therefore, we would expect that the negative relation is more significant in subsamples with weak social supervision pressure. In Table 10, we divide firms into two subsamples based on their association with polluting industries. In Panel

A, we categorize firms belonging to heavily polluting industries into the weak social supervision pressure subsample, while the rest of the firms are grouped into the strong social supervision pressure subsample. We find that the coefficients of CSISC are pronounced in firms belonging to non-heavily polluting industries, namely firms with weak social supervision pressure. In Panel B, we use firm ownership to proxy the pressure of social supervision, and we find that the negative effects of CSISC exercise on CSR are significant for firms with non-SOEs. Collectively, the results in Table 10 show that the negative relation between CSISC exercise and CSR is only significant in firms with weak social supervision pressure.

TABLE 10

Heterogeneity tests: Subsamples with low vs. high social supervision pressure.

Panel A: heavily polluting industries		
Variables	(1) heavily polluting industries	(2) non-heavily polluting industries
	ESG	*ESG*
CSISC	0.31	-1.45***
	(0.82)	(0.41)
Coeff. Diff.	0.000***	
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
N	5480	17448
Adj-R²	0.56	0.61
Panel B: firm ownership		
Variables	(1) SOEs	(2) Non-SOEs
	ESG	*ESG*
CSISC	-0.57	-1.39***
	(0.59)	(0.48)
Coeff. Diff.	0.000***	
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
N	8010	14865
Adj-R²	0.64	0.57

Notes: firm-level cluster robust standard errors are in parentheses.
*p< .1. **p< .05. ***p< .01.

4.5.2 The heterogeneity of CSR disclosure quality

When the quality of CSR disclosure is low, insiders are more inclined to pursue personal benefits through CSR. In Table 11, we divide firms into low CSR disclosure quality and high CSR disclosure quality subsamples. In Panel A, the high (low) CSR disclosure quality subsample comprises firms audited (non-audited) by the four major international accounting firms. We find that the negative effects of CSISC exercise on CSR are only significant among firms audited by non-Big-4 auditors. In Panel B, we classify firms mandated to disclose CSR reports by the Shanghai Stock Exchange (SSE) and the Shenzhen Stock Exchange (SZSE) into the high CSR disclosure quality

subsamples, while the rest of the firms constitute the low CSR disclosure quality subsamples. We also find that the negative effects of CSISC exercise on CSR only exist in firms with non-mandatory CSR disclosure. Collectively, the results in Table 11 indicate that the negative relation between CSISC exercise and CSR only exists in firms with low CSR disclosure quality.

The results in Table 10 and Table 11 suggest that CSISC exercise can impede CSR, especially in firms with weak social supervision pressure and low CSR disclosure quality. The reason is that in the above two types of enterprises, due to insufficient supervision and regulation, CSR is more likely to be a tool that serves insiders' interests, so CSISC exercise can play an evident protective effect.

TABLE 11

Heterogeneity tests: Subsamples with low vs. high CSR disclosure quality.

Panel A: Big 4 Auditors			
Variables	(1) non-Big 4		(2) Big 4
	ESG		*ESG*
CSISC	-1.45***		0.91
	(0.37)		(1.54)
Coeff. Diff.		0.000***	
Controls	Yes		Yes
Firm FE	Yes		Yes
Year FE	Yes		Yes
N	21534		1381
Adj-R²	0.586		0.628
Panel B: CSR disclosure system			
Variables	(1) non-mandatory-CSR disclosure		(2) mandatory-CSR disclosure
	ESG		*ESG*
CSISC	-1.46***		2.69**
Coeff. Diff.		0.000***	
Controls	Yes		Yes
Firm FE	Yes		Yes
Year FE	Yes		Yes
N	19861		2921
Adj-R²	0.571		0.585

Notes: firm-level cluster robust standard errors are in parentheses.
*p< .1. **p< .05. ***p< .01.

4.6 Additional analysis

The study may also have an alternative interpretation, this is, to avoid attracting attention from CSISC, except for value-destroying CSR, firms may reduce value-adding CSR. If the CSISC exercise hinders this CSR, it could result in a reduction in the firm's risk-taking levels. Therefore, we examine the impact of CSISC exercise on the risk-taking levels of firms. As demonstrated in Table 12, the CSISC increases the level of risk-taking in exercised firms, indicating that CSISC exercise primarily restrains CSR influenced by agency issues.

TABLE 12

Additional analysis.

	(1)	(2)	(3)
Variables	*CRT1*	*CRT2*	*CRT3*
CSISC	0.06***	0.07***	0.08***
	(0.02)	(0.02)	(0.03)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
N	22968	22968	22967
Adj-R^2	0.59	0.51	0.34

Notes: firm-level cluster robust standard errors are in parentheses.
*p< .1. **p< .05. ***p< .01.

5 Conclusions

This study treated the actual exercising of CSISC shareholding as a quasi-natural experiment, employing a DID design to identify the causal effect of the CSISC exercise on CSR. The results suggest that: (1) the CSISC exercise has an inhibitory effect on CSR, particularly for firms with excessive CSR, and (2) the effectiveness of the CSISC exercise is influenced by social supervision pressure and CSR disclosure quality. Firms facing weak social supervision pressure and exhibiting low CSR disclosure quality are more likely to reduce their CSR. (3) Mechanistic analysis indicates that the CSISC exercise inhibits CSR by disclosing negative information and enhancing minority shareholders' participation in corporate governance. (4) Additional analysis reveals that the CSISC can increase the risk-taking level of the exercised enterprises, indicating that CSISC exercise primarily inhibits CSR influenced by agency issues.

Declaration of Competing Interest

None

Data availability

The authors do not have permission to share data.

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[i] The methods of the exercising of CSISC: attending shareholders' meetings, attending media briefings, making public statements and others.