

## Article

# Will the Governance of Non-State Shareholders Inhibit Corporate Social Responsibility Performance? Evidence from the Mixed-Ownership Reform of China's State-Owned Enterprises

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**Abstract:** Fulfilling social responsibilities in order to sustain development has increasingly become a strategic choice for companies. Good corporate governance can guarantee high corporate social responsibility performance. This paper selects state-owned enterprises listed on the Shanghai and Shenzhen A-Share market from 2013 to 2019 as samples and uses a panel data OLS regression model to empirically test the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises from two aspects of shareholding: structure and high-level governance. The results show that, first, the governance of non-state shareholders helps to improve the social responsibility performance of state-owned enterprises; second, that mechanism analysis indicates that non-state shareholders improve the social responsibility performance of state-owned enterprises by improving the internal control quality; and third, the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises is heterogeneous in three aspects: the degree of marketization, the level of product market competition, and the corporate profitability. This paper not only helps to clarify the factors which influence the social responsibility performance of state-owned enterprises, but also enriches studies on the economic consequences brought by non-state shareholders through participating in the governance of state-owned enterprises.

**Keywords:** mixed-ownership reform of state-owned enterprises; governance of non-state shareholders; corporate social responsibility performance; internal control quality



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## 1. Introduction

As China's president Xi Jinping said, only caring wealth is truly meaningful wealth, and only companies that actively undertake social responsibility are the most competitive and vital companies [1]. Companies should make good social responsibility performance a strategic priority. Corporate social responsibility (CSR) was first proposed by Sheldon (1924). It means that while a company creates profits, it is responsible for shareholders, consumers, employees, partners, environmental resources, and the harmonious development of society. Corporate social responsibility takes into consideration the interests of stakeholders and differs from shareholder primacy theory [2], reflecting the prioritization of long-term strategies over short-term profit-seeking strategies. Corporate social responsibility performance is not only a cost or constraint, but also nurtures opportunities, promotes innovation, and enhances competitiveness. By actively fulfilling their social responsibilities, companies can reduce capital costs [3,4], financing constraints [5,6], and corporate risk [7–9]; improve product awareness [10], customer loyalty [11–13], and corporate reputation [14,15]; and thereby increase revenue and value [16–19], maximize long-term profit [20], and achieve sustainable development [21,22].

Academic circles have discussed the factors that influence corporate social responsibility performance from two aspects: external drive and inner enterprise. External driving factors include the social system and economic environment, relevant government laws and regulations, and other stakeholders [23–25]. Companies that comply with norms concerning fulfilling social responsibilities as expected can gain legitimacy and the resources necessary for survival. The internal influencing factors include corporate characteristics, governance structures, and performance. Among them, corporate characteristics include corporate size [26,27], nature, and industry attributes [28]; governance structures include shareholding structure [29–32], executive shareholding and compensation systems [29,33,34], CEO duality, board size and diversification, board independence, and the proportion of independent directors [35–39]; corporate performance includes corporate profitability and financial leverage [40,41].

Ownership structure is a key factor in corporate governance. In the mixed-ownership reform of state-owned enterprises, non-state shareholders are introduced in corporate governance and form diversified property right subjects, thereby improving the governance structure, the market decision-making mechanisms, and the governing efficiency and competitiveness of state-owned enterprises. By participating in the governance of state-owned enterprises, non-state shareholders improve the quality of internal control and accounting information [42,43], reduce agency costs [44], improve supervision and incentive mechanisms [45,46], and enhance the executive compensation-performance sensitivity [47], thus improving the level of corporate governance [48]. In addition, non-state shareholders can improve the production efficiency [49,50], investment efficiency [51], innovation efficiency [52], and performance of state-owned enterprises [44,53,54].

By reviewing the literature on corporate social responsibility and the governance of non-state shareholders, we can make some observations. First, fulfilling corporate social responsibility has gradually become the consensus of stakeholders and the driving force of sustainable development. Although the existing literature has conducted many discussions on the factors which influence corporate social responsibility performance, there are few studies on how the nature of property rights and shareholder heterogeneity affect corporate social responsibility performance. Second, the mixed-ownership formed by diversified property rights subjects helps to improve the corporate governance of state-owned enterprises. In mixed-ownership reform, non-state shareholders are introduced into the operating decisions of state-owned enterprises, which promotes the transformation of operational mechanisms and improves the governing efficiency and performance of state-owned enterprises. However, the corporate property of state-owned enterprises means that they must play a leading role in social responsibility performance. Based on the few studies on the interactive relationship between the governance of non-state shareholders and the level of corporate social responsibility performance, this paper explores the following three questions: (1) Does the governance of non-state shareholders affect the social responsibility performance of state-owned enterprises?; (2) If so, what is the mechanism by which the governance of non-state shareholders affects the social responsibility performance of state-owned enterprises?; and (3) In which aspects do heterogeneous impacts exist?

This paper selects state-owned enterprises which were listed on Shanghai and Shenzhen A-Share Market from 2013 to 2019 as samples and uses the panel data OLS regression model to empirically test the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises in terms of the two aspects of shareholding structure and high-level governance. The study found that: (1) the governance of non-state shareholders can help to improve the social responsibility performance of state-owned enterprises; (2) non-state shareholders improve the level of social responsibility performance by enhancing the internal control quality of state-owned enterprises; (3) the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises is heterogeneous in three aspects: the degree of marketization, the level of product market competition, and the corporate profitability. Compared with state-owned enterprises that are located in regions with a high degree of

marketization, that face fierce product market competition, and that have a low profitability, non-state shareholders can significantly improve the social responsibility performance of state-owned enterprises that are located in regions with a low degree of marketization, that face weak product market competition, and that have a high profitability.

The main contributions of this paper are as follows: First, it expands the analysis framework of factors influencing corporate social responsibility performance. Existing studies mainly examine the factors which influence corporate social responsibility performance from the aspects of social system and environment, corporate characteristics, and governance structure. However, few studies have deeply explored the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises. The paper adds new empirical evidence from the mixed-ownership reform of state-owned enterprises in China and further clarifies the factors which influence the social responsibility performance of state-owned enterprises. Second, it enriches the research on the economic consequences brought by non-state shareholders through participating in the governance of state-owned enterprises. Regarding the economic consequences brought by non-state shareholders through participating in the governance of state-owned enterprises, the existing literature mainly focuses on corporate governance, corporate efficiency, and performance, while this paper, within the background of China's nationwide mixed-ownership reform of state-owned enterprises, significantly discusses the mechanism by which the governance of non-state shareholders affects the social responsibility performance of state-owned enterprises and the heterogeneity of these impacts, making a marginal contribution to enriching the theoretical literature on the economic consequences brought about by non-state shareholders through participating in the governance of state-owned enterprises.

The rest of this paper is arranged as follows: the second part discusses research methods, including the research hypothesis, research data, and model design; the third part contains an empirical analysis; the fourth part considers further research; and the fifth part contains our conclusions.

## 2. Methods

### 2.1. Research Hypothesis

#### 2.1.1. The Influence of the Governance of Non-State Shareholders on the Social Responsibility Performance of State-Owned Enterprises

A modern enterprise is a union in which the benefits gained by the owners of physical, human, and social capital through contracting are greater than the costs incurred [55]. Fulfilling social responsibilities can satisfy the interest demands of different stakeholders, and good corporate governance helps to ensure that companies better fulfill their social responsibilities [33,56]. Ownership structure is a key factor that affects corporate governance. Mixed-ownership reform has changed the ownership structure of state-owned enterprises by introducing non-state shareholders to corporate governance; this has formed a new situation in which state-owned shareholders and non-state shareholders hold shares together.

First, the shareholding of non-state shareholders helps form a balanced and diversified shareholding structure and alleviates the agency problem caused by the overwhelming number of state-owned shares. Non-state shareholders can also appoint senior managers to participate in the governance of state-owned enterprises and thereby gain more corporate information and discourse power, play a substantive role in supervision and governance, and improve the internal control quality of state-owned enterprises [42]. High-quality internal control can improve information quality and communication efficiency, effectively reduce the degree of corporate information asymmetry, alleviate the "insider control" problem of state-owned enterprises, promote the improvement of governance structures and governance mechanisms, and enhance the level of corporate governance [48,57] and performance [44,53,54]. Social responsibility performance, as an important activity in the relationship between companies and stakeholders, is affected by corporate governance. The improvement of corporate governance can ensure that companies better fulfill their social responsibilities. At the same time, corporate social responsibility performance will consume

corporate resources and increase costs in the short term, and value appreciation will only be achieved after a long time. Therefore, the improvement of corporate performance can enhance the ability of state-owned enterprises to perform social responsibilities, thereby improving their social responsibility performance.

Secondly, non-state shareholders have clear profit goals, are more concerned about corporate operational efficiency and performance than state-owned shareholders, and pay more attention to corporate sustainable development. Corporate social responsibility performance, as an aspect coordinating the relationship between companies, markets, governments, the environment, and other stakeholders, is mainly based on moral, institutional, and economic factors. Among them, the economic motivation arising from the pursuit of sustainable development is the fundamental internal driving force determining corporate social responsibility performance. Business activities are affected by both internal and external environment factors [58,59]. By fulfilling corporate social responsibilities, companies can maintain and balance the interests of their stakeholders, establish a benign and harmonious interactive relationship with them, create an optimal internal and external environment, reduce potential operating risks, increase profitability, maximize corporate value, and ensure sustainable corporate development. Therefore, to obtain a high return on investment, non-state shareholders should focus on the long-term healthy development of enterprises and actively fulfil their corporate social responsibilities in order to meet the interests of multiple stakeholders.

The shareholding of non-state shareholders and the decline in the proportion of state-owned shares in the process of the mixed-ownership reform of state-owned enterprises may affect the resource endowments as well as the financing constraints on state-owned enterprises. Compared with state-owned shareholders, non-state shareholders are more able to make decisions in accordance with market rules, thus increasing the difficulty and cost of government intervention in the operation of state-owned enterprises [60,61]. Under these circumstances, the business objectives of companies will be simplified to a certain extent and the policy burden on them will also be reduced. The above-mentioned changes in state-owned enterprises may also reduce the resource effects, such as the financing convenience, government subsidies, and tax incentives that accompany state-owned shares, thereby strengthening the financing constraints faced by state-owned enterprises. Through fulfilling corporate social responsibility, companies can establish a good social image and corporate reputation, gain the favor of various stakeholders, obtain more resources and gain easier access to financing [5,6,62]. In order to alleviate possible financing constraints, non-state shareholders have ample incentive to urge state-owned enterprises to prioritize their social responsibilities.

Finally, non-state shareholders can improve state-owned enterprises' social responsibility performance through participation in corporate governance and imitation learning. It is the innate nature of state-owned enterprises to assume social responsibility. Generally speaking, non-state shareholders may not be as keen to participate in corporate social responsibility as state-owned enterprises. However, after non-state shareholders enter state-owned enterprises to participate in corporate governance, they may pay more attention to corporate social responsibility performance by imitating and learning the behavior of state-owned shareholders. On the one hand, state-owned enterprises have undertaken important functions such as making up for market failures, macro-control and resource allocation, and they also face higher expectations of social responsibilities in a market economy; on the other hand, state-owned enterprises' fulfillment of social responsibilities will involve economic goals and non-economic goals. State-owned enterprises' attention to environmental, public and other responsibilities will promote the realization of economic goals; and fulfilling their economic responsibilities will affect the realization of their non-economic goals. Economic goals and non-economic goals promote and influence each other. When non-state shareholders are introduced into the governance of state-owned enterprises, under the influence of the social responsibility culture of state-owned enterprises,

non-state shareholders become more concerned about corporate social responsibilities, thereby further improving the social responsibility performance of state-owned enterprises.

Therefore, this paper proposes the following hypotheses:

**Hypothesis 1 (H1).** *The governance of non-state shareholders helps to improve the social responsibility performance of state-owned enterprises.*

### 2.1.2. The Mediating Effect of Internal Control Quality

The internal control system, as the foundation of corporate internal governance mechanisms, affects not only companies but also stakeholders. Internal control, as an institution to standardize and optimize corporate behavior and safeguard the legitimate rights and interests of stakeholders, is implemented throughout the entire process of corporate operation and management. High-quality internal control can improve corporate decision making, safeguard and balance the legitimate rights and interests of all stakeholders, and promote the fulfillment of corporate social responsibility while ensuring sound operation [63]. At the same time, the profit-seeking non-state shareholders introduced to the governance of state-owned enterprises under mixed-ownership reform will pay more attention to corporate operating performance and returns on investment and have strong motivation to supervise the company's management. Good internal control can improve information quality and communication efficiency, reduce corporate information asymmetry, and enable information to be accurately and effectively transmitted inside and outside companies, thereby restricting managers' opportunistic behavior and reducing agency costs. Therefore, in order to protect their own interests, non-state shareholders have an incentive to improve the quality of the internal control of state-owned enterprises [42]. The governance of non-state shareholders can improve the quality of internal control, thereby improving the social responsibility performance of state-owned enterprises. Therefore, this paper proposes the following hypothesis:

**Hypothesis 2 (H2).** *Internal control quality plays a mediating role in the impact of non-state shareholders on the social responsibility performance of state-owned enterprises.*

### 2.2. Data Sources and Sample Selection

The measure "Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening Reform" (2013) proposed the development of a mixed-ownership economy and supported the mixed-ownership reform of state-owned enterprises. This paper selects state-owned enterprises that were listed on the Shanghai and Shenzhen A-Share Market from 2013 to 2019 as samples to test the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises within the background of the mixed-ownership reform of state-owned enterprises. The sample data were screened as follows: (1) we excluded financial companies and delisted companies, (2) we excluded ST and ST\* companies, and (3) we eliminated samples with missing data. Finally, unbalanced panel data with 6651 observations were obtained. The data of non-state shareholders, including the nature and shareholding ratio of the top ten shareholders disclosed in the annual reports of listed companies and the resumes of directors, supervisors, and senior managers, were collected and sorted manually. The Corporate Social Responsibility (CSR) data were selected from the hexun.com 2013–2019 "Social Responsibility Report of Listed Companies" (accessed on 18 June 2021); other relevant data mainly came from the CSMAR database.

### 2.3. Model Design

The following regression model was constructed to test the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises:

$$CSR_{i,t} = \alpha_0 + \alpha_1 Nonsoe_{i,t} + \alpha_2 Controls_{i,t} + \alpha_3 \Sigma Year_t + \alpha_4 \Sigma Ind_k + \varepsilon_{i,t} \quad (1)$$

Furthermore, we used the stepwise regression method proposed by Baron and Kenny [64] and referred to the mediating effect test model of MacKinnon et al. [65]. Based on model (1), the following regression model was constructed to test the mediating effect of internal quality control:

$$ICI_{i,t} = \beta_0 + \beta_1 Nonsoe_{i,t} + \beta_2 Controls_{i,t} + \beta_3 \Sigma Year_t + \beta_4 \Sigma Ind_k + \varepsilon_{i,t} \quad (2)$$

$$CSR_{i,t} = \theta_0 + \theta_1 Nonsoe_{i,t} + \theta_2 ICI_{i,t} + \theta_3 Controls_{i,t} + \theta_4 \Sigma Year_t + \theta_5 \Sigma Ind_k + \varepsilon_{i,t} \quad (3)$$

## 2.4. Variable Definitions

### 2.4.1. Corporate Social Responsibility Performance (CSR)

The explained variable is the level of corporate social responsibility performance. Based on Feng et al. [66], the comprehensive social responsibility scores of Chinese listed companies issued by third-party rating agencies and hexun.com were used as the measurement index. The social responsibility scoring system was based on the perspectives of stakeholders, including: shareholder responsibilities; employee responsibilities and rights; the interests and responsibilities of suppliers, clients, and consumers; environmental responsibilities; and public responsibilities.

### 2.4.2. Governance of Non-State Shareholders (Nonsoe)

The explanatory variable is the governance of non-state shareholders. Based on Cai et al. [47], the governance of non-state shareholders (Nonsoe) was measured from the two aspects of shareholding structure and high-level governance. In terms of the shareholding structure, the shareholding ratio of the largest non-state shareholder among the top ten shareholders (Shr\_nonsoe1st) and the shareholding ratio of non-state shareholders among the top ten shareholders (Shr\_nonsoe) were used to represent the shareholding level of non-state shareholders. In terms of high-level governance, the proportion of directors, supervisors, and senior managers appointed by non-state shareholders among the top ten shareholders (DJG\_nonsoe) and the proportion of directors appointed by non-state shareholders among the top ten shareholders (D\_nonsoe) were used to represent the extent to which non-state shareholders are involved in the decision making of state-owned enterprises. The criterion for appointing a senior executive was as follows. If a natural shareholder serves as a senior executive in a listed company, it is deemed that the person appoints a senior executive to the company; if a senior executive of a listed company serves in the unit of a legal person shareholder, it is deemed that the legal person appoints a senior executive to the company.

### 2.4.3. Internal Control Quality (ICI)

The mediating variable is internal control quality. Based on Liu et al. [42], the DIB Internal Control Information Disclosure Index was used as a measurement index.

### 2.4.4. Control Variables

Based on the relevant literature, the following control variables were selected: corporate size (Size), financial leverage (Lev), liquidity (Liquidity), capital density (Density), return on equity (Roe), number of employees (Lnlabor), corporate growth (Growth), market power (Market), corporate ability to create social wealth (TobinQ), and proportion of state-owned shares (Stata). In order to control the influence of the fixed effects of year and industry on the conclusions of this paper, this model set up the dummy variables of year (Year) and industry (Industry). In order to avoid the influence of outliers on the results of this study, all continuous variables were Winsorized at the levels of 1% and 99% and the regression models were treated with the White test. The specific definition of each variable is shown in Table 1.

**Table 1.** Definitions of variables.

Variable Name	Variable Symbol	Definitions of Variables
Corporate social responsibility performance level	CSR	Obtained from hexun.com 2013–2019 “Social Responsibility Report of Listed Companies”.
Shareholding ratio of the largest non-state shareholder	Shr_nonsoe1st	The proportion of shares held by the largest non-state shareholder among the top ten shareholders.
Shareholding ratio of non-state shareholders among the top ten shareholders	Shr_nonsoe	The proportion of shares held by all non-state shareholders among the top ten shareholders.
Proportion of directors, supervisors and senior managers appointed by non-state shareholders	DJG_nonsoe	The proportion of the number of directors, supervisors and senior managers appointed by non-state shareholders among the top ten largest shareholders to the total number of directors, supervisors and senior managers.
Proportion of directors appointed by non-state shareholders	D_nonsoe	The proportion of the number of directors appointed by non-state shareholders among the top ten largest shareholders to the total number of directors.
Internal control quality	ICI	DIB Internal Control Information Disclosure Index.
Corporate size	Size	The natural logarithm of corporate total assets.
Financial leverage	Lev	Total liabilities at the end of the period/total assets at the end of the period.
Liquidity	Liquidity	Net operating cash flow/total assets.
Capital density	Density	Total fixed assets/number of employees, logarithm.
Return on equity	Roe	Return on equity.
Number of employees	Lnlabor	Number of employees, logarithm.
Corporate growth	Growth	Corporate operating income growth rate for the year.
Market power	Market	Sales revenue/operating cost, logarithm.
Corporate ability to create social wealth	TobinQ	Corporate market value/total assets.
Proportion of state-owned shares	Stata	Proportion of state-owned shares to total shares.
Industry	Industry	Industry dummy variable.
Year	Year	Year dummy variable.

### 3. Analysis

#### 3.1. Descriptive Statistics

In order to form an overall understanding of the sample data, descriptive statistical analyses were performed on the main variables, as shown in Table 2.

**Table 2.** Descriptive statistics of the main variables.

Variable	Number of Samples	Average	Standard Deviation	Minimum	Maximum
CSR	6651	24.754	16.939	−3.410	75.560
DJG_nonsoe	6651	0.026	0.063	0	0.333
D_nonsoe	6651	0.035	0.083	0	0.429
Shr_nonsoe1st	6651	0.069	0.095	0.003	0.504
Shr_nonsoe	6651	0.138	0.131	0.009	0.648
Size	6651	22.876	1.401	20.130	27.028
Lev	6651	0.504	0.204	0.082	0.944
Liquidity	6651	0.045	0.066	−0.151	0.221
Density	6651	2.667	2.403	0.386	15.668
Roe	6651	0.052	0.127	−0.688	0.319
Lnlabor	6651	8.144	1.337	4.852	11.622
Growth	6651	0.112	0.345	−0.522	2.166
Market	6651	0.050	0.153	−0.568	0.558
TobinQ	6651	1.421	1.362	0.122	7.535
Stata	6651	0.078	0.163	0	0.722

The results show that the average corporate social responsibility performance level (CSR) is 24.754, indicating that the current corporate social responsibility performance level is generally not high. The standard deviation is 16.939, the minimum is −3.41, and the maximum is 75.56, indicating that the level of social responsibility performance varies greatly between companies. In terms of shareholding structure, the average shareholding ratio of the largest non-state shareholder (Shr\_nonsoe1st) is 6.9%, while the average shareholding ratio of non-state shareholders among the top ten shareholders (Shr\_nonsoe) is 13.8%, indicating that the shareholding ratio of non-state shareholders in state-owned enterprises is still at a low level. In terms of high-level governance, the average proportion of directors, supervisors, and senior managers appointed by non-state shareholders among the top ten shareholders (DJG\_nonsoe) is 2.6%, while the average proportion of directors appointed by non-state shareholders among the top ten shareholders (D\_nonsoe) is 3.5%, which shows that the proportion of senior executives appointed by non-state shareholders is still relatively low, far below the average shareholding ratio of non-state shareholders. Additionally, the rights of non-state shareholders are different from those of state-owned shareholders, even though they hold the same shares. The distribution of other control variables is consistent with the existing literature, so it is not described in this paper.

### 3.2. Correlation Analysis

Table 3 presents the Pearson correlation matrix. There is a significant positive relationship between the explained variable, Corporate Social Responsibility Performance (CSR), and each of the four measures for the governance of non-state shareholders (DJG\_nonsoe, D\_nonsoe, Shr\_nonsoe1st, and Shr\_nonsoe). None of the correlation coefficients among the variables shown in Table 3 exceeds 0.5, indicating that multicollinearity does not affect the results. In addition, the variance inflation factor (VIF) values are all less than 3. Therefore, we can reasonably conclude that there is no multicollinearity between independent variables in our regression models.



Table 3. Pearson Correlation Matrix.

	CSR	DJG_nonsoe	D_nonsoe	Shr_nonsoe1st	Shr_nonse	Size	Lev	Liquidity	Density	Growth	Roe	Lnlabor	Market	TobinQ	Stata
CSR	1														
DJG_nonsoe	0.027 **	1													
D_nonsoe	0.031 **	0.925 ***	1												
Shr_nonsoe1st	0.074 ***	0.199 ***	0.190 ***	1											
Shr_nonsoe	0.066 ***	0.307 ***	0.307 ***	0.878 ***	1										
Size	0.242 ***	−0.115 ***	−0.105 ***	0.176 ***	0.116 ***	1									
Lev	−0.075 ***	−0.108 ***	−0.104 ***	0.029 **	−0.014	0.423 ***	1								
Liquidity	0.151 ***	0.018	0.021 *	0.024 **	0.017	0.101 ***	−0.184 ***	1							
Density	−0.026 **	−0.042 ***	−0.050 ***	−0.005	−0.006	0.046 ***	0.013	−0.163 ***	1						
Growth	0.086 ***	0.044 ***	0.048 ***	0.034 ***	0.056 ***	0.066 ***	0.030 **	0.026 **	−0.090 ***	1					
Roe	0.418 ***	0.059 ***	0.060 ***	0.044 ***	0.068 ***	0.155 ***	−0.222 ***	0.274 ***	−0.109 ***	0.203 ***	1				
Lnlabor	0.147 ***	−0.085 ***	−0.068 ***	0.155 ***	0.111 ***	0.721 ***	0.257 ***	0.178 ***	−0.342 ***	0.001	0.083 ***	1			
Market	0.391 ***	0.081 ***	0.081 ***	0.006	0.023 *	0.161 ***	−0.281 ***	0.343 ***	−0.039 ***	0.174 ***	0.612 ***	0.024 **	1		0
TobinQ	−0.053 ***	0.147 ***	0.136 ***	−0.039 ***	0.026 **	−0.573 ***	−0.473 ***	0.011	−0.021 *	−0.005	0.035 ***	−0.388 ***	0.029 **	1	1
Stata	0.015	0.023 *	0.012	−0.075 ***	−0.084 ***	0.045 ***	−0.029 **	0.029 **	0.011	0.132 ***	0.060 ***	0.019	0.095 ***	0.030 **	1

Note: \*\*\*, \*\*, \* indicate significance at the 1%, 5%, and 10% statistical levels, respectively.

### 3.3. Multiple Regression Results

#### 3.3.1. The Impact of the Governance of Non-State Shareholders on the Social Responsibility Performance of State-Owned Enterprises

In order to test the impact of the governance of non-state shareholders on the level of social responsibility performance of state-owned enterprises, the panel data OLS regression model was used to conduct an econometric test. Results are shown in Table 4.

**Table 4.** Governance of non-state shareholders and the level of social responsibility performance of state-owned enterprises.

	CSR			
	(1)	(2)	(3)	(4)
Shr_nonsoe1st	5.886 *** (3.11)			
Shr_nonsoe		3.435 *** (2.65)		
DJG_nonsoe			7.296 *** (2.93)	
D_nonsoe				5.954 *** (3.18)
Size	3.020 *** (11.83)	3.052 *** (11.99)	3.132 *** (12.40)	3.134 *** (12.41)
Lev	−10.524 *** (−9.92)	−10.540 *** (−9.93)	−10.631 *** (−10.01)	−10.624 *** (−10.01)
Liquidity	0.616 (0.22)	0.661 (0.23)	0.698 (0.24)	0.721 (0.25)
Density	−0.143 * (−1.68)	−0.148 * (−1.73)	−0.138 (−1.61)	−0.136 (−1.59)
Roe	31.385 *** (16.53)	31.378 *** (16.52)	31.514 *** (16.58)	31.503 *** (16.58)
Lnlabor	0.142 (0.57)	0.142 (0.57)	0.169 (0.68)	0.163 (0.65)
Growth	−0.220 (−0.48)	−0.232 (−0.51)	−0.193 (−0.42)	−0.205 (−0.45)
Market	19.446 *** (13.27)	19.285 *** (13.17)	18.895 *** (12.82)	18.892 *** (12.85)
TobinQ	0.226 (1.38)	0.227 (1.38)	0.239 (1.47)	0.239 (1.47)
Stata	−3.625 *** (−3.68)	−3.652 *** (−3.70)	−3.944 *** (−4.02)	−3.915 *** (−3.99)
Constant	−36.233 *** (−8.31)	−37.025 *** (−8.53)	−38.790 *** (−8.97)	−38.813 *** (−8.98)
Year/Industry	Yes	Yes	Yes	Yes
Observations	6651	6651	6651	6651
R <sup>2</sup>	0.387	0.386	0.387	0.387

Note: \*\*\*, \* indicate significance at the 1%, and 10% statistical levels, respectively. The t values are in parentheses.

Table 4 reports the regression results of the governance of non-state shareholders and the level of social responsibility performance of state-owned enterprises in terms of the two aspects of shareholding structure and high-level governance. In terms of shareholding structure, column (1) shows that the shareholding ratio of the largest non-state shareholder (Shr\_nonsoe1st) is significantly positively correlated with the social responsibility performance level (CSR) of state-owned enterprises at the 1% level; column (2) shows that the shareholding ratio of non-state shareholders among the top ten shareholders (Shr\_nonsoe) is significantly positively correlated with the social responsibility performance level (CSR) of state-owned enterprises at the 1% level. In terms of high-level governance, column (3) shows that the proportion of directors, supervisors, and senior managers appointed by non-state shareholders among the top ten shareholders (DJG\_nonsoe) is significantly

positively correlated with the social responsibility performance level (CSR) of state-owned enterprises at the 1% level; column (4) shows that the proportion of directors appointed by non-state shareholders among the top ten shareholders (*D\_nonsoe*) is significantly positively correlated with the social responsibility performance level (CSR) of state-owned enterprises at the 1% level. Based on the above results, in the process of mixed-ownership reform of state-owned enterprises, the governance of non-state shareholders can improve the social responsibility performance of state-owned enterprises. Thus, H1 is verified. The possible reasons for this are that, first, good corporate governance ensures the fulfillment of corporate social responsibilities, where non-state shareholders participate in corporate governance through mixed-ownership reform, which improves corporate governance and performance and urges companies to better fulfill their social responsibilities; second, the shareholding of non-state shareholders enables state-owned enterprises to operate and develop in a market-oriented manner, which reduces the unique resource effects brought about by state-owned shares and strengthens the financing constraints on state-owned enterprises. Meanwhile, by fulfilling social responsibility, companies can meet the needs of all stakeholders, obtain abundant resources, and gain easier access to financing; third, the ultimate goal of corporate economic behavior is to create value [67–70] and achieve sustainable development [71]. Social responsibility performance can increase corporate revenue, create firm value [17–19], and ensure sustainable development [72]. Based on the “profit seeking nature”, non-state shareholders in a state-owned enterprise would promote better fulfillment of social responsibility to enhance financial performance and investment return.

### 3.3.2. Mechanism Test: The Mediating Effect of Internal Control Quality

In order to examine the mediating effect of internal control quality on the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises, stepwise regression was used to test the mediating effect. The test results are shown in Tables 5 and 6.

Table 5 reports the mediating role of internal control quality on the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises from the aspect of shareholding structure. In column (1), the shareholding ratio of the largest non-state shareholder (*Shr\_nonsoe1st*) is significantly positively correlated with internal control quality (ICI) at the 1% level. In column (3), ICI and CSR are significantly positively correlated at the 1% level, and *Shr\_nonsoe1st* and CSR are still significantly positively correlated at the 5% level. In column (2), the shareholding ratio of non-state shareholders among the top ten shareholders (*Shr\_nonsoe*) and internal control quality (ICI) are significantly positively correlated at the 1% level. In column (4), ICI and CSR are significantly positively correlated at the 1% level, while *Shr\_nonsoe* and CSR are still significantly positively correlated at the 5% level, indicating that internal control quality partially mediates the impact of the governance of non-state shareholders on the social responsibility performance level of state-owned enterprises from the aspect of shareholding structure.

Table 6 reports the mediating role of internal control quality on the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises from the aspect of a high-level structure. In column (1), the proportion of directors, supervisors, and senior managers appointed by non-state shareholders (*DJG\_nonsoe*) is significantly positively correlated with internal control quality (ICI) at the 5% level. In column (3), ICI and CSR are significantly positively correlated at the 1% level, and *DJG\_nonsoe* and CSR are still significantly positively correlated at the 1% level. In column (2), the proportion of directors appointed by non-state shareholders (*D\_nonsoe*) and internal control quality (ICI) are significantly positively correlated at the 5% level. In column (4), ICI and CSR are significantly positively correlated at the 1% level, and *D\_nonsoe* and CSR are still significantly positively correlated at the 1% level, indicating that regarding the aspect of high-level governance, internal control quality partially mediates the impact of

the governance of non-state shareholders on the social responsibility performance level of state-owned enterprises. The empirical results show that the governance of non-state shareholders can improve the social responsibility performance of state-owned enterprises by elevating the internal control quality. Therefore, H2 is verified. The reason for this is that non-state shareholders participate in corporate governance through mixed-ownership reform, which can strengthen corporate supervision and improve the internal control quality [42], while a good internal control environment urges companies to fulfill their social responsibility while ensuring good business operations [63]. Therefore, non-state shareholders improve the social responsibility performance of state-owned enterprises by improving the internal control quality.

**Table 5.** Mechanism analysis from the aspect of shareholding structure: internal control quality.

	ICI		CSR	
	(1)	(2)	(3)	(4)
Shr_nonsoe1st	3.710 *** (5.58)		4.786 ** (2.53)	
Shr_nonsoe		2.817 *** (6.07)		2.596 ** (2.00)
ICI			0.297 *** (8.37)	0.298 *** (8.39)
Size	0.748 *** (7.82)	0.755 *** (7.90)	2.798 *** (10.89)	2.827 *** (11.03)
Lev	−2.891 *** (−6.78)	−2.888 *** (−6.77)	−9.667 *** (−9.12)	−9.679 *** (−9.12)
Liquidity	−0.547 (−0.51)	−0.507 (−0.48)	0.778 (0.27)	0.812 (0.29)
Density	−0.094 * (−2.55)	−0.097 ** (−2.65)	−0.116 (−1.36)	−0.119 (−1.40)
Roe	0.738 (0.95)	0.701 (0.90)	31.166 *** (16.64)	31.169 *** (16.65)
Lnlabor	−0.146 (−1.52)	−0.149 (−1.55)	0.185 (0.74)	0.186 (0.75)
Growth	−0.204 (−0.97)	−0.226 (−1.07)	−0.159 (−0.35)	−0.165 (−0.37)
Market	3.120 *** (5.07)	3.046 *** (4.96)	18.521 *** (12.73)	18.378 *** (12.65)
TobinQ	−0.140 ** (−2.00)	−0.149 ** (−2.13)	0.268 ** (1.66)	0.271 * (1.67)
Stata	−2.381 *** (−5.74)	−2.352 *** (−5.66)	−2.919 *** (−3.00)	−2.952 *** (−3.02)
Constant	22.827 *** (13.65)	22.569 *** (13.52)	−43.002 *** (−9.86)	−43.748 *** (−10.06)
Year/Industry	Yes	Yes	Yes	Yes
Observations	6651	6651	6651	6651
R <sup>2</sup>	0.204	0.205	0.395	0.395

Note: \*\*\*, \*\*, \* indicate significance at the 1%, 5%, and 10% statistical levels, respectively. The t values are in parentheses.

**Table 6.** Mechanism analysis from the aspect of high-level governance: internal control quality.

	ICI		CSR	
	(1)	(2)	(3)	(4)
DJG_nonsoe	2.011 ** (2.03)		6.692 *** (2.70)	
D_nonsoe		1.724 ** (2.32)		5.437 *** (2.91)
ICI			0.301 *** (8.49)	0.300 *** (8.48)
Size	0.814 *** (8.52)	0.815 *** (8.53)	2.887 *** (11.33)	2.890 *** (11.34)
Lev	−2.949 *** (−6.87)	−2.947 *** (−6.86)	−9.744 *** (−9.19)	−9.739 *** (−9.19)
Liquidity	−0.530 (−0.50)	−0.522 (−0.49)	0.857 (0.30)	0.877 (0.31)
Density	−0.092 ** (−2.50)	−0.091 ** (−2.48)	−0.110 (−1.30)	−0.108 (−1.28)
Roe	0.831 (1.06)	0.827 (1.06)	31.264 *** (16.68)	31.255 *** (16.69)
Lnlabor	−0.133 (−1.39)	−0.135 (−1.40)	0.209 (0.84)	0.204 (0.82)
Growth	−0.176 (−0.83)	−0.179 (−0.85)	−0.141 (−0.31)	−0.151 (−0.34)
Market	2.859 *** (4.61)	2.855 *** (4.61)	18.035 *** (12.34)	18.036 *** (12.36)
TobinQ	−0.119 * (−1.69)	−0.119 * (−1.71)	0.275 * (1.72)	0.275 * (1.72)
Stata	−2.567 *** (−6.19)	−2.559 *** (−6.17)	−3.173 *** (−3.27)	−3.148 *** (−3.24)
Constant	21.390 *** (12.82)	21.376 *** (12.82)	−45.219 *** (−10.46)	−45.227 *** (−10.46)
Year/Industry	Yes	Yes	Yes	Yes
Observations	6651	6651	6651	6651
R <sup>2</sup>	0.201	0.201	0.395	0.395

Note: \*\*\*, \*\*, \* indicate significance at the 1%, 5%, and 10% statistical levels, respectively. The t values are in parentheses.

### 3.4. Robustness Test

In order to ensure the reliability of our research conclusions, we carried out the following robustness tests.

#### 3.4.1. Endogenous Problems

In this study, there may be endogenous problems led by missing variables, so 2SLS regression was used to alleviate them. With reference to Cai et al. [47] and Fan et al. [73], we determined whether regions where companies were located became leased territories from the First Opium War to the founding of New China (TERRITORIES), and whether regions where companies were located were commercial ports (COMPORT) as the instrumental variables for the degree of reform of state-owned enterprises. The Cragg–Donald Wald F statistical value was used to test whether the instrumental variables were weak instrumental variables, the Kleibergen–Paap rk LM statistical value was used to test the under-identification problem of the tool, and the Hansen J statistical value was used to test the over-identification problem of the instrumental variables. The reasons for the selection of instrumental variables are as follows: First, after the First Opium War, China was forced to sign a series of unequal treaties, including the forced opening of some trade ports and the establishment of leased territories. According to Fan et al. [73], these trade ports include: Fujian, Guangdong, Shanghai, Zhejiang, Hainan, Hubei, Jiangsu, Liaoning, Shandong, Tianjin, Xinjiang, Anhui, Guangxi, Chongqing and Hebei; The leased territories

include Tianjin, Jiangsu, Shanghai, Zhejiang, Anhui, Jiangxi, Fujian, Guangdong, Shandong, Chongqing and Hubei. In the regions that became leased territories or commercial ports, foreign entities could conduct economic and cultural activities such as the establishment of banks, factories, public utilities, and schools. Therefore, these regions had easy access to the systems and cultures of developed Western countries and may have had complete systems and comprehensive state-owned enterprise reforms. Secondly, the matter whether the regions where companies were located became leased territories and whether the regions where companies were located were commercial ports had a weak impact on the corporate social responsibility performance level. Therefore, the matters of whether regions where companies were located became leased territories from the First Opium War to the founding of New China (TERRITORIES) and whether regions where companies were located were commercial ports (COMPORT) meet the two criteria for instrumental variables: relevance and exogeneity.

Table 7 reports the 2SLS regression results. The instrumental variables passed the tests of weak instrumental variable and over-identification. In the first step, the coefficients of TERRITORIES in column (1), column (3), column (5), and column (7) are all significantly positive at the 1% level. This shows that in regions that once became leased territories, the higher the degree of mixed-ownership reform was, the more opportunities for non-state shareholders to participate in the governance of state-owned enterprises there were. In the second step, the coefficients of the shareholding ratio of the largest non-state shareholder in column (2) (Shr\_nonsoe1st); the shareholding ratio of non-state shareholders among the top ten shareholders in column (4) (Shr\_nonsoe); the proportion of directors, supervisors, and senior managers appointed by non-state shareholders among the top ten shareholders (DJG\_nonsoe) in column (6); and the proportion of directors appointed by non-state shareholders among the top ten shareholders (D\_nonsoe) in column (8) are all significantly positive at the 1% level, which shows that the governance of non-state shareholders can help to improve the social responsibility performance of state-owned enterprises. Therefore, after taking into account endogenous problems, the conclusions of this paper remain unchanged.

**Table 7.** Governance of non-state shareholders and the social responsibility performance level of state-owned enterprises: 2SLS regression.

	First-Step	Second-Step	First-Step	Second-Step	First-Step	Second-Step	First-Step	Second-Step
	Shr_nonsoe1st	CSR	Shr_nonsoe	CSR	DJG_nonsoe	CSR	D_nonsoe	CSR
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TERRITORIES	0.021 *** (6.21)		0.017 *** (3.41)		0.009 *** (4.21)		0.014 *** (4.60)	
COMPORT	−0.006 * (−1.75)		0.001 (0.19)		0.001 (0.34)		0.000 (0.12)	
Shr_nonsoe1st		62.527 *** (2.86)						
Shr_nonsoe				58.109 *** (2.74)				
DJG_nonsoe						112.873 *** (2.76)		
D_nonsoe								76.422 *** (2.83)
Size	0.017 *** (9.33)	2.058 *** (4.44)	0.020 *** (8.05)	1.969 *** (3.84)	−0.002 (−1.45)	3.297 *** (11.89)	−0.002 * (−1.65)	3.303 *** (12.08)

Table 7. Cont.

	First-Step	Second-Step	First-Step	Second-Step	First-Step	Second-Step	First-Step	Second-Step
	Shr_nonsoe1st	CSR	Shr_nonsoe	CSR	DJG_nonsoe	CSR	D_nonsoe	CSR
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lev	−0.011 (−1.51)	−9.750 *** (−8.30)	−0.017 (−1.61)	−9.501 *** (−7.50)	0.005 (0.95)	−11.003 *** (−9.42)	0.005 (0.76)	−10.847 *** (−9.57)
Liquidity	−0.008 (−0.38)	0.774 (0.25)	−0.025 (−0.88)	1.643 (0.50)	−0.017 (−1.31)	2.116 (0.66)	−0.025 (−1.54)	2.156 (0.69)
Density	0.000 (0.64)	−0.146 (−1.58)	0.002 ** (2.01)	−0.226 ** (−2.18)	−0.000 (−1.43)	−0.064 (−0.66)	−0.001 ** (−1.97)	−0.052 (−0.55)
Roe	0.022 * (1.86)	29.825 *** (14.26)	0.043 *** (2.76)	28.684 *** (12.15)	0.001 (0.20)	31.033 *** (15.38)	0.002 (0.29)	30.987 *** (15.59)
Lnlabor	0.003 * (1.68)	−0.005 (−0.02)	0.005 ** (2.01)	−0.102 (−0.34)	−0.001 (−1.22)	0.344 (1.22)	−0.001 (−0.41)	0.235 (0.87)
Growth	0.010 *** (2.70)	−0.793 (−1.44)	0.021 *** (4.11)	−1.378 ** (−2.00)	0.005 ** (2.14)	−0.670 (−1.26)	0.008 *** (2.67)	−0.731 (−1.35)
Market	−0.051 *** (−4.58)	22.386 *** (11.38)	−0.039 ** (−2.56)	21.593 *** (11.19)	0.035 *** (4.87)	15.343 *** (7.16)	0.044 *** (4.76)	15.958 *** (8.22)
TobinQ	0.009 *** (7.90)	−0.246 (−0.97)	0.015 *** (8.90)	−0.553 (−1.54)	0.005 *** (5.37)	−0.288 (−1.05)	0.006 *** (5.07)	−0.195 (−0.80)
Stata	−0.045 *** (−8.08)	−0.981 (−0.67)	−0.070 *** (−8.95)	0.281 (0.15)	0.007 (1.50)	−4.589 *** (−4.17)	0.004 (0.65)	−4.102 *** (−3.90)
Constant	−0.359 *** (−11.46)	−16.365 * (−1.83)	−0.382 *** (−9.12)	−16.763 * (−1.81)	0.062 *** (3.24)	−45.911 *** (−8.57)	0.078 *** (3.05)	−44.906 *** (−8.78)
Year/Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.074	0.293	0.070	0.221	0.051	0.241	0.049	0.272
Kleibergen-Paap rk LM statistic	50.284 (0.000)		30.525 (0.000)		34.889 (0.000)		43.138 (0.000)	
Cragg-Donald Wald F	25.132		15.737		17.696		21.888	
Hansen J statistic	0.239 (0.625)		0.062 (0.803)		0.090 (0.764)		0.043(0.836)	
Observations	6651	6651	6651	6651	6651	6651	6651	6651

Note: \*\*\*, \*\* \* indicate significance at the 1%, 5%, and 10% statistical levels, respectively. In the first step, t-values are in parentheses; in the second step, z-values are in parentheses.

### 3.4.2. Replace the Index Measuring the Governance of Non-State Shareholders

Using equity balance (the ratio of the sum of the shareholding proportion of non-state shareholders in the top ten shareholders to the sum of the shareholding proportion of state-owned shareholders in the top ten shareholders) (Mixrate) as a substitute variable for the shareholding structure of non-state shareholders; the dummy variables of whether non-state shareholders appoint directors, supervisors, and senior managers (if non-state shareholders appoint directors, supervisors, and senior managers, take 1; otherwise, take 0) (DJG\_dum) and whether non-state shareholders appoint directors (if non-state shareholders appoint directors, take 1; otherwise, take 0) (D\_dum) are used as substitute variables for the governance of non-state shareholders to repeat the regression analysis from the point of view of high-level governance.

Table 8 reports the regression results of the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises after replacing the index measuring the governance of non-state shareholders. The results of column (1) show that the coefficient of equity balance (Mixrate) is significantly positive at the 5% level; while the results in column (2) show that the coefficient of whether non-state shareholders appoint directors, supervisors, and senior managers (DJG\_dum) is significantly positive at the 1% level. The results of column (3) show that the coefficient

of whether non-state shareholders appoint directors (D\_dum) is significantly positive at the 1% level, which means that after replacing the index measuring the governance of non-state shareholders, the governance of non-state shareholders can still improve the social responsibility performance of state-owned enterprises. The research conclusions of this paper remain stable.

**Table 8.** Robustness test: governance of non-state shareholders and corporate social responsibility performance level of state-owned enterprises.

	CSR		
	(1)	(2)	(3)
Mixrate	1.205 ** (2.06)		
DJG_dum		1.810 *** (4.48)	
D_dum			1.712 *** (4.06)
Size	3.089 *** (12.21)	3.162 *** (12.52)	3.154 *** (12.49)
Lev	−10.629 *** (−10.01)	−10.709 *** (−10.12)	−10.700 *** (−10.11)
Liquidity	−10.629 *** (0.21)	0.616 (0.22)	0.738 (0.26)
Density	−0.146 * (−1.71)	−0.146 * (−1.72)	−0.139 (−1.63)
Roe	31.574 *** (16.59)	31.441 *** (16.54)	31.452 *** (16.55)
Lnlabor	0.153 (0.61)	0.164 (0.66)	0.165 (0.66)
Growth	−0.186 (−0.41)	−0.240 (−0.52)	−0.246 (−0.54)
Market	19.310 *** (13.20)	18.792 *** (12.77)	18.831 *** (12.80)
TobinQ	0.239 (1.45)	0.249 (1.53)	0.242 (1.49)
Stata	−3.718 *** (−3.77)	−3.978 *** (−4.06)	−3.907 *** (−3.99)
Constant	−37.896 *** (−8.78)	−39.717 *** (−9.16)	−39.437 *** (−9.11)
Year/Industry	Yes	Yes	Yes
Observations	6651	6651	6651
R <sup>2</sup>	0.387	0.388	0.388

Note: \*\*\*, \*\*, \* indicate significance at the 1%, 5%, and 10% statistical levels, respectively. The t values are in parentheses.

Table 9 reports the regression results of the mediating effect of internal control quality after replacing the index measuring the governance of non-state shareholders. In column (1), equity balance (Mixrate) is significantly positively correlated with internal control quality (ICI) at the 5% level. In column (4), ICI and CSR are significantly positively correlated at the 1% level, and Mixrate and CSR are still significantly positively correlated at the 10% level. In column (2), whether non-state shareholders appoint directors, supervisors, and senior managers (DJG\_dum) is significantly positively correlated with internal control quality (ICI) at the 1% level. In column (5), ICI and CSR are significantly positively correlated at the 1% level, and DJG\_dum and CSR are still significantly positively correlated at the 1% level. In column (3), whether non-state shareholders appoint directors (D\_dum) is significantly positively correlated with internal control quality (ICI) at the 1% level. In column (6), ICI and CSR are significantly positively correlated at the 1% level, and D\_dum and CSR are still significantly positively correlated at the 1% level. The results show that after replacing the index measuring the governance of non-state shareholders, the internal control quality still mediates the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises. Thus, the conclusions of this paper remain robust.



**Table 9.** Robustness test: the mediating effect of internal control quality.

	ICI			CSR		
	(1)	(2)	(3)	(4)	(5)	(6)
Mixrate	0.579 ** (2.57)			1.031 * (1.78)		
DJG_dum		0.612 *** (4.00)			1.629 *** (4.06)	
D_dum			0.594 *** (3.73)			1.536 *** (3.67)
ICI				0.301 *** (8.49)	0.296 *** (8.36)	0.297 *** (8.39)
Size	0.796 *** (8.35)	0.825 *** (8.65)	0.823 *** (8.62)	2.849 *** (11.17)	2.918 *** (11.44)	2.909 *** (11.42)
Lev	−2.953 *** (−6.89)	−2.977 *** (−6.94)	−2.975 *** (−6.93)	−9.741 *** (−9.18)	−9.828 *** (−9.30)	−9.816 *** (−9.28)
Liquidity	−0.562 (−0.53)	−0.551 (−0.52)	−0.509 (−0.48)	0.758 (0.27)	0.780 (0.28)	0.889 (0.31)
Density	−0.095 *** (−2.58)	−0.094 ** (−2.57)	−0.092 ** (−2.50)	−0.117 (−1.38)	−0.118 (−1.40)	−0.111 (−1.31)
Roe	0.853 (1.10)	0.804 (1.03)	0.807 (1.04)	31.317 *** (16.69)	31.203 *** (16.65)	31.212 *** (16.66)
Lnlabor	−0.138 (−1.44)	−0.134 (−1.40)	−0.134 (−1.39)	0.195 (0.78)	0.203 (0.82)	0.205 (0.82)
Growth	−0.179 (−0.85)	−0.193 (−0.91)	−0.196 (−0.93)	−0.132 (−0.30)	−0.182 (−0.41)	−0.188 (−0.42)
Market	3.008 *** (4.88)	2.809 *** (4.54)	2.819 *** (4.56)	18.405 *** (12.68)	17.960 *** (12.30)	17.993 *** (12.33)
TobinQ	−0.127 * (−1.81)	−0.118 * (−1.69)	−0.121 * (−1.73)	0.277 * (1.71)	0.284 * (1.78)	0.277 * (1.74)
Stata	−2.467 *** (−5.93)	−2.581 *** (−6.24)	−2.557 *** (−6.18)	−2.976 *** (−3.05)	−3.214 *** (−3.32)	−3.148 *** (−3.25)
Constant	21.718 *** (13.06)	21.046 *** (12.62)	21.130 *** (12.67)	−44.426 *** (−10.29)	−45.945 *** (−10.60)	−45.715 *** (−10.56)
Year/Industry	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6651	6651	6651	6651	6651	6651
R <sup>2</sup>	0.202	0.203	0.202	0.395	0.396	0.396

Note: \*\*\*, \*\*, \* indicate significance at the 1%, 5%, and 10% statistical levels, respectively. The t values are in parentheses.

#### 4. Discussion

The decision-making of companies is inevitably restricted and affected by the specific institutional environment in which they are located. As China comprehensively deepens its reforms, the aspect of the degree of marketization has become an important institutional environmental factor that affects corporate decision making. In regions with a high degree of marketization, the level of legalization and corporate governance is high and corporate information is more transparent, meaning that the level of corporate social responsibility performance is relatively high. In regions with a low degree of marketization, the corporate legal environment is relatively poor, investor protection is weak, and corporate information is less transparent. Therefore, non-state shareholders will urge companies to fulfill their social responsibility and thus protect the rights and interests of stakeholders, including non-state shareholders.

Therefore, this paper further distinguishes the degree of marketization in the regions where state-owned enterprises are located and examines how the degree of marketization impacts the relationship between the governance of non-state shareholders and the social responsibility performance level of state-owned enterprises. Drawing on the method used by Wang et al. [74] in “Marketization Index of China’s Provinces: NERI Report 2018”, the degree of marketization in the regions where the sample state-owned enterprises are located is distinguished. If the marketization index of a province or city where a state-owned enterprise is located is lower than the median marketization index of that same year, the state-owned enterprise is classified as a state-owned enterprise in a region with a low degree of marketization. On the contrary, if the marketization index of a province or city where a state-owned enterprise is located is higher than the median marketization

index of that same year, the state-owned enterprise is classified as a state-owned enterprise in a region with a high degree of marketization.

According to the theory of industrial organization, product market competition is also an important external environment that affects corporate decision making. Based on the sufficient information hypothesis, when the degree of industry competition is high, fierce industry competition can reduce the degree of information asymmetry between management and external information users. Companies in highly competitive industries have higher information transparency and smoother information exchanges with stakeholders; meanwhile, companies in less competitive industries have lower information transparency, making access to corporate information more difficult and costly. Good corporate social responsibility performance can reduce information asymmetry. Non-state shareholders can establish close contacts with stakeholders by fulfilling more corporate social responsibilities and obtaining more relevant stakeholder information.

This paper distinguishes the level of product market competition in the industries in which state-owned enterprises are located and examines the impact of product market competition on the relationship between the governance of non-state shareholders and the social responsibility performance level of state-owned enterprises. With reference to Luo [75] and Li et al. [76], the Herfindahl–Hirschman Index (HHI) was used to measure the level of product market competition. The Herfindahl–Hirschman Index is the sum of squares of the proportion of the main business income of each company to the main business income of the overall market. The smaller the HHI is, the lower the market concentration is and the greater the level of product market competition is. The larger the HHI is, the higher the market concentration is and the lower the level of product market competition is. Based on the median of the Herfindahl–Hirschman Index of all sample companies, all samples are divided into the high competition group and the low competition group.

Companies need to have abundant capital before they can fulfill their social responsibility. As economic organizations, companies generally seek profit, long-term survival, and sustainable development. Therefore, companies should first realize economic value. When companies have a high profitability, non-state shareholders have economic motive to invest surplus funds into corporate social responsibility performance, as they think that by fulfilling social responsibility, companies can improve their image, maintain long-term cooperation with stakeholders, and increase their competitiveness and long-term value. When companies have low profitability, non-state shareholders will give more consideration to corporate survival and invest existing resources in improving economic performance, meaning that investment in corporate social responsibility performance will be correspondingly reduced.

Therefore, this paper further distinguishes the profitability of state-owned enterprises and examines the impact of corporate profitability on the relationship between the governance of non-state shareholders and the social responsibility performance level of state-owned enterprises. The return on total assets is used to measure the profitability of companies, while the median return on total assets of all sample companies is used to divide all samples into a high profitability group and a low profitability group.

In order to test the heterogeneous impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises under different degrees of marketization, different levels of product market competition, and different levels of corporate profitability, a sub-group regression was performed. The test results are shown in Tables 10 and 11.

**Table 10.** Heterogeneity analysis from the aspect of shareholding structure: degree of marketization, product market competition, and corporate profitability.

	Low Mar- ketization Degree	High Mar- ketization Degree	Low Com- petition Level	High Com- petition Level	High Profitability	Low Profitability
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A						
Shr_nonsoelst	7.574 ** (2.71)	4.292 (1.63)	7.884 *** (3.53)	3.170 (0.88)	6.645 *** (2.58)	3.192 (1.16)
Size	3.443 *** (9.19)	2.180 *** (5.99)	2.794 *** (9.30)	4.114 *** (8.00)	2.771 *** (7.93)	3.201 *** (8.72)
Lev	−11.696 *** (−7.90)	−8.545 *** (−5.48)	−10.515 *** (−8.11)	−12.053 *** (−6.26)	−8.146 *** (−4.57)	−9.069 *** (−6.09)
Liquidity	3.599 (0.92)	−3.252 (−0.78)	−1.715 (−0.50)	6.451 (1.23)	−0.126 (−0.03)	−3.318 (−0.85)
Density	−0.125 (−0.95)	−0.113 (−1.01)	−0.144 (−1.38)	−0.359 ** (−2.37)	−0.252 ** (−2.03)	0.178 (1.48)
Roe	27.700 *** (10.78)	34.697 *** (12.45)	30.665 *** (12.88)	32.235 *** (9.97)	28.094 *** (5.85)	21.526 *** (9.82)
Lnlabor	−0.102 (−0.28)	0.719 ** (2.02)	−0.074 (−0.25)	0.625 (1.31)	0.200 (0.59)	0.071 (0.20)
Growth	−0.050 (−0.09)	−0.503 (−0.70)	−0.673 (−1.28)	0.549 (0.58)	−1.606 *** (−2.65)	0.612 (0.89)
Market	19.443 *** (9.25)	19.924 *** (9.27)	19.161 *** (10.82)	18.305 *** (6.59)	14.436 *** (6.53)	24.970 *** (10.79)
TobinQ	0.352 (1.55)	−0.077 (0.32)	0.101 (0.49)	0.692 ** (2.45)	−0.157 (−0.69)	0.464 * (1.89)
Stata	−5.683 *** (−4.24)	−1.166 (−0.83)	−3.190 *** (−2.80)	−4.447 ** (−2.22)	−1.982 (−1.56)	−6.182 *** (−4.06)
Constant	−44.076 *** (−6.80)	−22.181 *** (−3.62)	−29.403 *** (−5.76)	−63.836 *** (−7.15)	−30.677 *** (−5.14)	−41.717 *** (−6.64)
Year/Industry	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3390	3261	4568	2083	3357	3294
R <sup>2</sup>	0.383	0.393	0.391	0.400	0.298	0.364
Panel B						
Shr_nonsoe	4.129 ** (2.17)	2.525 (1.38)	5.448 *** (3.48)	−0.432 (−0.19)	4.447 ** (2.48)	0.456 (0.24)
Size	3.477 *** (9.29)	2.201 *** (6.06)	2.823 *** (9.43)	4.151 *** (8.06)	2.802 *** (8.04)	3.260 *** (8.92)
Lev	−11.766 *** (−7.94)	−8.516 *** (−5.46)	−10.542 *** (−8.12)	−12.093 *** (−6.26)	−8.085 *** (−4.54)	−9.154 *** (−6.15)
Liquidity	3.719 (0.95)	−3.249 (−0.78)	−1.678 (−0.49)	6.443 (1.23)	−0.018 (−0.00)	−3.273 (−0.83)
Density	−0.133 (−1.01)	−0.114 (−1.02)	−0.153 (−1.46)	−0.356 ** (−2.35)	−0.255 ** (−2.05)	0.176 (1.46)
Roe	27.686 *** (10.77)	34.693 *** (12.46)	30.632 *** (12.85)	32.234 *** (9.98)	27.926 *** (5.81)	21.574 *** (9.85)
Lnlabor	−0.123 (−0.34)	0.731 ** (2.05)	−0.070 (−0.23)	0.624 (1.31)	0.187 (0.55)	0.068 (0.19)
Growth	−0.080 (−0.14)	−0.503 (−0.70)	−0.704 (−1.34)	0.617 (0.65)	−1.643 *** (−2.72)	0.641 (0.93)
Market	19.291 *** (9.22)	19.769 *** (9.18)	18.995 *** (12.85)	18.462 *** (6.64)	14.271 *** (6.44)	24.729 *** (10.72)
TobinQ	0.348 (1.52)	−0.075 (−0.31)	0.096 (0.46)	0.709 ** (2.50)	−0.166 (−0.73)	0.489 ** (1.99)
Stata	−5.693 *** (−4.24)	−1.208 (−0.85)	−3.210 *** (−2.82)	−4.615 ** (−2.28)	−1.949 (−1.53)	−6.311 *** (−4.14)
Constant	−44.72 *** (−6.91)	−22.838 *** (−3.74)	−30.26 *** (−5.96)	−64.427 *** (−7.20)	−31.453 *** (−5.29)	−42.88 *** (−6.88)
Year/Industry	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3390	3261	4568	2083	3357	3294
R <sup>2</sup>	0.382	0.393	0.391	0.400	0.297	0.364

Note: \*\*\*, \*\*, \* indicate significance at the 1%, 5%, and 10% statistical levels, respectively. The t values are in parentheses.

**Table 11.** Heterogeneity analysis from the aspect of high-level governance: degree of marketization, product market competition, and corporate profitability.

	Low Mar- ketization Degree	High Mar- ketization Degree	Low Com- petition Level	High Com- petition Level	High Profitability	Low Profitability
	(1)	(2)	(3)	(4)	(5)	(6)
Panel C						
DJG_nonsoe	9.096 ** (2.57)	4.549 (1.28)	8.219 ** (2.77)	4.663 (1.05)	11.610 *** (3.50)	0.409 (0.11)
Size	3.543 *** (9.55)	2.270 *** (6.28)	2.947 *** (9.91)	4.156 *** (8.13)	2.898 *** (8.34)	3.273 *** (9.07)
Lev	−11.983 *** (−8.09)	−8.490 *** (−5.44)	−10.683 *** (−8.21)	−12.002 *** (−6.22)	−8.061 *** (−4.54)	−9.171 *** (−6.17)
Liquidity	3.862 (0.98)	−3.251 (−0.78)	−1.641 (−0.48)	6.502 (1.24)	0.374 (0.09)	−3.282 (−0.84)
Density	−0.117 (−0.89)	−0.108 (−0.96)	−0.136 (−1.29)	−0.356 ** (−2.35)	−0.235 * (−1.89)	0.177 (1.46)
Roe	27.969 *** (10.87)	34.684 *** (12.46)	30.855 *** (12.96)	32.318 *** (9.96)	27.948 *** (5.84)	21.583 *** (9.85)
Lnlabor	−0.079 (−0.22)	0.742 ** (2.08)	−0.021 (−0.07)	0.614 (1.29)	0.247 (0.73)	0.067 (0.18)
Growth	−0.039 (−0.07)	−0.467 (−0.65)	−0.627 (−1.20)	0.558 (0.59)	−1.641 *** (−2.73)	0.650 (0.94)
Market	18.721 *** (8.88)	19.625 *** (9.06)	18.330 *** (10.33)	18.170 *** (6.52)	13.595 *** (6.11)	24.689 *** (10.69)
TobinQ	0.374 * (1.66)	−0.072 (−0.30)	0.143 (0.69)	0.676 ** (2.41)	−0.187 (−0.84)	0.495 ** (2.02)
Stata	−6.051 *** (−4.53)	−1.405 (−1.00)	−3.561 ** (−3.13)	−4.691 ** (−2.35)	−2.406 * (−1.90)	−6.339 *** (−4.17)
Constant	−46.320 *** (−7.20)	−24.257 *** (−3.97)	−33.029 *** (−6.52)	−64.607 *** (−7.26)	−33.772 *** (−5.66)	−43.129 *** (−6.96)
Year/Industry	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3390	3261	4568	2083	3357	3294
R <sup>2</sup>	0.382	0.393	0.390	0.400	0.298	0.363
Panel D						
D_nonsoe	8.668 ** (3.10)	3.003 (1.16)	5.779 ** (2.51)	5.239 (1.63)	7.844 *** (3.25)	1.983 (0.68)
Size	3.544 *** (9.56)	2.268 *** (6.27)	2.948 *** (9.91)	4.163 *** (8.14)	2.888 *** (8.31)	3.276 *** (9.08)
Lev	−11.966 *** (−8.09)	−8.487 *** (−5.44)	−10.650 *** (−8.19)	−11.971 *** (−6.22)	−7.985 *** (−4.50)	−9.183 *** (−6.18)
Liquidity	3.962 (1.01)	−3.249 (−0.78)	−1.679 (−0.49)	6.608 (1.27)	0.280 (0.07)	−3.302 (−0.84)
Density	−0.115 (−0.87)	−0.107 (−0.95)	−0.135 (−1.29)	−0.353 ** (−2.34)	−0.238 * (−1.92)	0.179 (1.48)
Roe	27.941 *** (10.86)	34.683 *** (12.46)	30.892 *** (12.98)	32.274 *** (9.96)	27.940 *** (5.84)	21.558 *** (9.83)
Lnlabor	−0.084 (−0.24)	0.741 ** (2.07)	−0.029 (−0.10)	0.597 (1.25)	0.237 (0.70)	0.071 (0.19)
Growth	−0.053 (−0.09)	−0.471 (−0.65)	−0.643 (−1.23)	0.548 (0.58)	−1.651 *** (−2.73)	0.646 (0.94)
Market	18.724 *** (8.89)	19.657 *** (9.10)	18.332 *** (10.34)	18.147 *** (6.53)	13.834 *** (6.25)	24.697 *** (10.69)
TobinQ	0.371 * (1.65)	−0.069 (−0.29)	0.152 (0.74)	0.658 ** (2.35)	−0.175 (−0.78)	0.493 ** (2.01)
Stata	−6.120 *** (−4.59)	−1.353 (−0.96)	−3.543 *** (−3.12)	−4.686 ** (−2.36)	−2.315 * (−1.83)	−6.333 *** (−4.16)
Constant	−46.339 *** (−7.21)	−24.211 *** (−3.96)	−32.978 *** (−6.51)	−64.682 *** (−7.27)	−33.499 *** (−5.62)	−43.263 *** (−6.99)
Year/Industry	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3390	3261	4568	2083	3357	3294
R <sup>2</sup>	0.383	0.393	0.390	0.400	0.298	0.364

Note: \*\*\*, \*\*, \* indicate significance at the 1%, 5%, and 10% statistical levels, respectively. The t values are in parentheses.

From the aspect of shareholding structure, Table 10 depicts the heterogeneous impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises under different degrees of marketization, different levels of product market competition, and different levels of corporate profitability. In Panel A, the coefficients of the shareholding ratio of the largest non-state shareholder (*Shr\_nonsoe1st*) are positive in the low marketization degree group, the low competition level group, and the high profitability group, and they are all significant at the 1% level. The *Shr\_nonsoe1st* coefficients of the high marketization degree group, the high competition level group, and the low profitability group are all positive but not significant. In Panel B, the coefficients of the shareholding ratio of non-state shareholders in the top ten shareholders (*Shr\_nonsoe*) are positive in the low marketization degree group, the low competition level group, and the high profitability group, and are significant at the 5%, 1% and 5% levels, respectively. The *Shr\_nonsoe* coefficients of the high marketization degree group and the low profitability group are positive but not significant, while the *Shr\_nonsoe* coefficient of the high competition level group is negative but not significant.

From the aspect of high-level governance, Table 11 shows the heterogeneous impact of the governance of non-state shareholders on the social responsibility performance level of state-owned enterprises under different degrees of marketization, different levels of product market competition, and different levels of corporate profitability. Panel C shows that in the low competition group and the high profitability group, the coefficients of the proportion of directors, supervisors, and senior managers appointed by non-state shareholders (*DJG\_nonsoe*) are significantly positive at the 1% level; the coefficient of *DJG\_nonsoe* in the low marketization degree group is significantly positive at the 5% level; and the *DJG\_nonsoe* coefficients are positive but not significant in the high marketization degree group, the high competition level group, and the low profitability group. Panel D shows that in the low marketization degree group and the high profitability group, the coefficients of the proportion of directors appointed by non-state shareholders (*D\_nonsoe*) are significantly positive at the 1% level; the coefficient of *D\_nonsoe* in the low competition group is significantly positive at the 5% level; and the *D\_nonsoe* coefficients are positive but not significant in the high marketization degree group, the high competition level group, and the low profitability group.

These empirical results show that, compared with the state-owned enterprises that are located in regions with a high degree of marketization that face fierce product market competition and that have a low profitability, non-state shareholders can significantly improve the social responsibility performance of state-owned enterprises that are located in regions with a low degree of marketization, that face weak product market competition, and that have high profitability.

This paper further explores the impact of the governance of non-state shareholders on five sub-indicators of CSR: shareholders, employees, supply chain, environment and public welfare. The test results are shown in Table 12.

Table 12 reports the regression results of the governance of non-state shareholders and five sub-indicators of CSR of state-owned enterprises in terms of the two aspects of shareholding structure and high-level governance. Panel A shows that each of the four measures for the governance of non-state shareholders (*Shr\_nonsoe1st*, *Shr\_nonsoe*, *DJG\_nonsoe*, and *D\_nonsoe*) is significantly positively correlated with the shareholders' responsibility performance level of state-owned enterprises at the 1% level.

**Table 12.** Governance of non-state shareholders and the five sub-indicators of CSR.

Panel A				
Shareholders				
Shr_nonsoe1st	2.032 *** (4.19)			
Shr_nonsoe		1.595 *** (4.52)		
DJG_nonsoe			4.927 *** (7.31)	
D_nonsoe				4.033 *** (7.91)
Constant	−7.707 *** (−6.35)	−7.829 *** (−6.49)	−8.752 *** (−7.34)	−8.769 *** (−7.36)
Year/Industry	Yes	Yes	Yes	Yes
Observations	6651	6651	6651	6651
R <sup>2</sup>	0.710	0.710	0.711	0.711
Panel B				
Employees				
Shr_nonsoe1st	0.940 ** (2.25)			
Shr_nonsoe		0.371 (1.32)		
DJG_nonsoe			1.370 ** (2.52)	
D_nonsoe				1.520 *** (3.50)
Constant	−11.657 *** (−12.61)	−11.849 *** (−12.84)	−12.079 *** (−13.12)	−12.118 *** (−13.17)
Year/Industry	Yes	Yes	Yes	Yes
Observations	6651	6651	6651	6651
R <sup>2</sup>	0.209	0.209	0.209	0.210
Panel C				
Supply Chain				
Shr_nonsoe1st	1.208 * (1.95)			
Shr_nonsoe		0.498 (1.16)		
DJG_nonsoe			1.457 * (1.69)	
D_nonsoe				0.932 (1.47)
Constant	−8.804 *** (−6.26)	−9.044 *** (−6.46)	−9.326 *** (−6.70)	−9.309 *** (−6.69)
Year/Industry	Yes	Yes	Yes	Yes
Observations	6651	6651	6651	6651
R <sup>2</sup>	0.213	0.213	0.213	0.213
Panel D				
Environment				
Shr_nonsoe1st	1.261 ** (1.96)			
Shr_nonsoe		0.296 (0.69)		
DJG_nonsoe			0.364 (0.49)	
D_nonsoe				0.312 (0.53)
Constant	−9.676 *** (−6.89)	−10.008 *** (−7.12)	−10.143 *** (−7.25)	−10.145 *** (−7.25)
Year/Industry	Yes	Yes	Yes	Yes
Observations	6651	6651	6651	6651
R <sup>2</sup>	0.212	0.212	0.212	0.212
Panel E				
Public Welfare				
Shr_nonsoe1st	0.680 (1.43)			
Shr_nonsoe		0.857 ** (2.41)		
DJG_nonsoe			−0.600 (−0.84)	
D_nonsoe				−0.775 (−1.51)
Constant	1.611 (1.35)	1.690 (1.43)	1.413 (1.19)	1.439 (1.22)
Year/Industry	Yes	Yes	Yes	Yes
Observations	6651	6651	6651	6651
R <sup>2</sup>	0.336	0.336	0.335	0.336

Note: \*\*\*, \*\*, \* indicate significance at the 1%, 5%, and 10% statistical levels, respectively. The t values are in parentheses. Control variables are included in all models but results are not reported in this table due to space limitation. Regressions results of control variables are available at request.

Panel B shows that two measures for the governance of non-state shareholders (Shr\_nonsoe1st, and DJG\_nonsoe) are significantly positively correlated with the employee responsibility performance level of state-owned enterprises at the 5% level. One of the

measures, the proportion of directors appointed by non-state shareholders among the top ten shareholders (*D\_nonsoe*), is significantly positively correlated with the employee responsibility performance level of state-owned enterprises at the 1% level. But one measure, the shareholding ratio of non-state shareholders among the top ten shareholders (*Shr\_nonsoe*), is not significantly positively correlated with the employee responsibility performance level of state-owned enterprises.

Panel C shows that two measures for the governance of non-state shareholders (*Shr\_nonsoe1st*, and *DJG\_nonsoe*) are significantly positively correlated with the performance level of rights and responsibilities of suppliers, customers and consumers of state-owned enterprises at the 10% level.

Panel D shows that one of the measures for the governance of non-state shareholders (*Shr\_nonsoe1st*) is significantly positively correlated with the environmental responsibility performance level of state-owned enterprises at the 5% level. Panel E shows that one of the measures for the governance of non-state shareholders (*Shr\_nonsoe*) is significantly positively correlated with the public responsibility performance level of state-owned enterprises at the 5% level.

These empirical results show that in the process of mixed-ownership reform of state-owned enterprises, the governance of non-state shareholders can improve the performance of rights and responsibilities of shareholders, employees, suppliers, customers and consumers of state-owned enterprises. The governance of non-state shareholders in the dimension of shareholding structure can also improve the performance level of environmental responsibility and public responsibility of state-owned enterprises to a certain extent.

## 5. Conclusions

Fulfilling social responsibility is an important way for companies to interact with stakeholders and achieve sustainable development. Good corporate governance is an important guarantee for achieving the long-term and orderly development of corporate social responsibility. This paper selected state-owned enterprises that were listed on the Shanghai and Shenzhen A-Share Market from 2013 to 2019 as samples and used a panel data OLS regression model to empirically test the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises in terms of the two aspects of shareholding structure and high-level governance. The following main conclusions were obtained:

First, the governance of non-state shareholders helps to improve the social responsibility performance of state-owned enterprises. By introducing non-state shareholders in corporate governance, mixed-ownership reform can improve the governance and performance of state-owned enterprises, which in turn improves the social responsibility performance of state-owned enterprises. In addition, the shareholding of non-state shareholders accelerates the market-oriented transformation of the governance model of state-owned enterprises, thereby reducing the unique resource endowment brought about by state-owned shares and strengthening the financing constraints on state-owned enterprises. Therefore, non-state shareholders have the motive to urge companies to fulfill their corporate social responsibilities, to meet the interests of all stakeholders, to obtain more resources, and to gain easier access to financing.

Second, the mechanism analysis indicates that non-state shareholders improve the social responsibility performance of state-owned enterprises by elevating the internal control quality. The governance of non-state shareholders improves the internal control quality of state-owned enterprises. Meanwhile, high-quality internal control protects the legitimate rights and interests of all stakeholders and promotes the long-term prioritization of corporate social responsibility.

Third, the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises is heterogeneous in three aspects: the degree of marketization, the level of product market competition, and the corporate profitability. The promotional role of non-state shareholders in improving the social responsibility per-

formance of state-owned enterprises is more significant in state-owned enterprises that are located in regions with a lower degree of marketization that face weak product market competition and that have a high profitability.

Findings from this study offer a new and fresh insight on the impact of the governance of non-state shareholders on the social responsibility performance of state-owned enterprises and the path of action. These findings can help policymakers understand the importance of deepening mixed ownership reform in China's state-owned enterprises, encourage non-state shareholder participation in corporate governance, and improve state-owned enterprises' social responsibility performance. Fulfilling social responsibilities in order to sustain development has increasingly become a strategic choice for companies. Taking on social responsibility is a mutually beneficial behavior that safeguards the long-term interests of enterprises and meets the requirements of social development. The investment in social responsibility helps enterprises realize sustainable and healthy development. This paper provides evidence that good corporate governance can ensure high corporate social responsibility performance.

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## References

1. Xi, J. Speech at the Symposium on Cybersecurity and Informatization Work Conference. In *On the Party's Propaganda and Ideological Work*; Central Party Literature Publishing House: Beijing, China, 2020. (In Chinese)
2. Hong, M.; Drakeford, B.; Zhang, K. The Impact of Mandatory CSR Disclosure on Green Innovation: Evidence from China. *Green Financ.* **2020**, *3*, 302–322. [\[CrossRef\]](#)
3. Ghoul, S.E.; Guedhami, O.; Kwok, C.C.Y.; Mishra, D.R. Does Corporate Social Responsibility Affect the Cost of Capital? *J. Bank. Financ.* **2011**, *9*, 2388–2406. [\[CrossRef\]](#)
4. Dhaliwal, D.S.; Li, O.Z.; Tsang, A.; Yang, Y.G. Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting. *Account. Rev.* **2011**, *1*, 59–100. [\[CrossRef\]](#)
5. Goss, A.; Roberts, G.S. The Impact of Corporate Social Responsibility on the Cost of Bank Loans. *J. Bank. Financ.* **2011**, *7*, 1794–1810. [\[CrossRef\]](#)
6. Cheng, B.; Ioannou, I.; Serafeim, G. Corporate Social Responsibility and Access to Finance. *Strateg. Manag. J.* **2014**, *1*, 1–23. [\[CrossRef\]](#)
7. Sharfman, M.P.; Fernando, C.S. Environmental Risk Management and the Cost of Capital. *Strateg. Manag. J.* **2008**, *6*, 569–592. [\[CrossRef\]](#)
8. Lee, D.D.; Faff, R.W. Corporate Sustainability Performance and Idiosyncratic Risk: A Global Perspective. *Financ. Rev.* **2009**, *2*, 213–237. [\[CrossRef\]](#)
9. Albuquerque, R.; Koskinen, Y.; Zhang, C. Corporate Social Responsibility and Firm Risk: Theory and Empirical Evidence. *Manag. Sci.* **2019**, *10*, 4451–4469. [\[CrossRef\]](#)
10. Bardos, K.S.; Ertugrul, M.; Gao, L.S. Corporate Social Responsibility, Product Market Perception, and Firm Value. *J. Corp. Financ.* **2020**, *62*, 101588. [\[CrossRef\]](#)
11. Daub, C.H.; Ergenzinger, R. Enabling Sustainable Management through a New Multi-Disciplinary Concept of Customer Satisfaction. *Eur. J. Mark.* **2005**, *10*, 998–1012. [\[CrossRef\]](#)
12. Krasnikov, A.; Mishra, S.; Orozco, D. Evaluating the Financial Impact of Branding Using Trademarks: A Framework and Empirical Evidence. *J. Mark.* **2009**, *6*, 154–166. [\[CrossRef\]](#)
13. Luo, X.; Bhattacharya, C.B. The Debate over Doing Good: Corporate Social Performance, Strategic Marketing Levers, and Firm-idiosyncratic Risk. *J. Mark.* **2009**, *6*, 198–213. [\[CrossRef\]](#)
14. Hill, C.W.; Jones, T.M. Stakeholder-Agency Theory. *J. Manag. Stud.* **1992**, *2*, 131–154. [\[CrossRef\]](#)
15. Dowling, G. How Good Corporate Reputations Create Corporate Value. *Corp. Reput. Rev.* **2006**, *2*, 134–143. [\[CrossRef\]](#)



16. Luo, X.; Bhattacharya, C.B. Corporate Social Responsibility, Customer Satisfaction, and Market Value. *J. Mark.* **2006**, *70*, 1–18. [[CrossRef](#)]
17. Flammer, C. Competing for Government Procurement Contracts: The Role of Corporate Social Responsibility. *Strateg. Manag. J.* **2018**, *5*, 1299–1324. [[CrossRef](#)]
18. Li, Z.; Liao, G.; Albitar, K. Does Corporate Environmental Responsibility Engagement Affect Firm Value? The Mediating Role of Corporate Innovation. *Bus. Strategy Environ.* **2020**, *3*, 1045–1055. [[CrossRef](#)]
19. Utomo, M.N.; Rahayu, S.; Kaujan, K.; Irwandi, S.A. Environmental performance, environmental disclosure, and firm value: Empirical study of non-financial companies at Indonesia Stock Exchange. *Green Financ.* **2020**, *1*, 100–113. [[CrossRef](#)]
20. Johnson, H.L. *Business in Contemporary Society: Framework and Issues*; Wadsworth Publishing Company: Belmont, CA, USA, 1971.
21. Jones, T.M.; Wicks, A.C. Convergent Stakeholder Theory. *Acad. Manag. Rev.* **1999**, *2*, 206–221. [[CrossRef](#)]
22. Liao, G.; Hou, P.; Shen, X.; Albitar, K. The impact of economic policy uncertainty on stock returns: The role of corporate environmental responsibility engagement. *Int. J. Financ. Econ.* **2021**, *3*, 4386–4392. [[CrossRef](#)]
23. Trueman, B. Managerial Disclosures and Shareholder Litigation. *Rev. Account. Stud.* **1997**, *2*, 181–199. [[CrossRef](#)]
24. Roberts, R.W. Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory. *Account. Organ. Soc.* **1992**, *6*, 595–612. [[CrossRef](#)]
25. Van Marrewijk, M. Concepts and Definitions of CSR and Corporate Sustainability: Between Agency and Communion. *J. Bus. Ethics* **2003**, *2*, 95–105. [[CrossRef](#)]
26. Baumann-Pauly, D.; Wickert, C.; Spence, L.J.; Scherer, A.G. Organizing Corporate Social Responsibility in Small and Large Firms: Size Matters. *J. Bus. Ethics* **2013**, *115*, 693–705. [[CrossRef](#)]
27. Udayasankar, K. Corporate Social Responsibility and Firm Size. *J. Bus. Ethics* **2008**, *2*, 167–175. [[CrossRef](#)]
28. Sen, S.; Bhattacharya, C.B.; Korschun, D. The Role of Corporate Social Responsibility in Strengthening Multiple Stakeholder Relationships: A Field Experiment. *J. Acad. Mark. Sci.* **2006**, *2*, 158–166. [[CrossRef](#)]
29. Barnea, A.; Rubin, A. Corporate Social Responsibility as a Conflict between Shareholders. *J. Bus. Ethics* **2010**, *1*, 71–86. [[CrossRef](#)]
30. Li, W.; Zhang, R. Corporate Social Responsibility, Ownership Structure, and Political Interference: Evidence from China. *J. Bus. Ethics* **2010**, *4*, 631–645. [[CrossRef](#)]
31. Oh, W.Y.; Chang, Y.K.; Martynov, A. The Effect of Ownership Structure on Corporate Social Responsibility: Empirical Evidence from Korea. *J. Bus. Ethics* **2011**, *2*, 283–297. [[CrossRef](#)]
32. Chen, S.; Wang, Y.; Albitar, K.; Huang, Z. Does ownership concentration affect corporate environmental responsibility engagement? The mediating role of corporate leverage. *Borsa Istanbul. Rev.* **2021**, *21*, S13–S24. [[CrossRef](#)]
33. Johnson, R.A.; Greening, D.W. The Effect of Corporate Governance and Institutional Ownership Types on Corporate Social Performance. *Acad. Manag. J.* **1999**, *5*, 564–576.
34. McGuire, J.; Dow, S. The Persistence and Implications of Japanese Keiretsu Organization. *J. Int. Bus. Stud.* **2003**, *4*, 374–388. [[CrossRef](#)]
35. Tapver, T. CSR Reporting in Banks: Does the Composition of the Board of Directors Matter? *Quant. Financ. Econ.* **2019**, *2*, 286–314. [[CrossRef](#)]
36. Liao, L.; Lin, T.; Zhang, Y. Corporate Board and Corporate Social Responsibility Assurance: Evidence from China. *J. Bus. Ethics* **2018**, *1*, 211–225. [[CrossRef](#)]
37. Harjoto, M.; Laksmana, I.; Lee, R. Board Diversity and Corporate Social Responsibility. *J. Bus. Ethics* **2015**, *4*, 641–660. [[CrossRef](#)]
38. Chang, Y.K.; Oh, W.Y.; Park, J.H.; Jang, M.G. Exploring the Relationship Between Board Characteristics and CSR: Empirical Evidence from Korea. *J. Bus. Ethics* **2017**, *2*, 225–242. [[CrossRef](#)]
39. Dentchev, N.A. Corporate Social Performance as a Business Strategy. *J. Bus. Ethics* **2004**, *4*, 395–410. [[CrossRef](#)]
40. Attig, N.; Ghouli, S.E.; Guedhami, O.; Suh, J. Corporate Social Responsibility and Credit Ratings. *J. Bus. Ethics* **2013**, *117*, 679–694. [[CrossRef](#)]
41. Lee, E.P.; Bannon, D.P.O. The Corporate Social-Financial Performance Relationship: A Typology and Analysis. *Bus. Soc.* **1997**, *4*, 419–429.
42. Liu, Y.; Zheng, Q.; Cai, G. Do Non-state-owned Shareholders Improve the Internal Control Quality in SOEs? Empirical Evidence from State-owned Listed Companies. *Account. Res.* **2016**, *11*, 61–68. (In Chinese)
43. Zeng, S.; Cai, G.; Cheng, M. Do Non—State Shareholders Improve Accounting Information Quality? Evidence from Competitive State-owned Listed Companies. *Account. Econ. Res.* **2017**, *4*, 28–44.
44. Li, S.; Xia, J.; Long, C.X.; Tan, J. Control Modes and Outcomes of Transformed State-owned Enterprises in China: An Empirical Test. *Manag. Organ. Rev.* **2012**, *2*, 283–309. [[CrossRef](#)]
45. Megginson, W.L.; Netter, J.M. From State to Market: A Survey of Empirical Studies on Privatization. *J. Econ. Lit.* **2001**, *2*, 321–389. [[CrossRef](#)]
46. Gupta, N. Partial Privatization and Firm Performance. *J. Financ.* **2005**, *2*, 987–1015. [[CrossRef](#)]
47. Cai, G.; Liu, J.; Ma, X. Governance of Non-state Shareholders and Executive Compensation Incentives of State-owned Enterprises. *J. Manag. World* **2018**, *5*, 137–149. (In Chinese)
48. Boateng, A.; Huang, W. Multiple Large Shareholders, Excess Leverage and Tunneling: Evidence from an Emerging Market. *Corp. Gov. Int. Rev.* **2017**, *1*, 58–74. [[CrossRef](#)]

49. Jefferson, G.H.; Jian, S. Privatization and Restructuring in China: Evidence from Shareholding Ownership, 1995–2001. *J. Comp. Econ.* **2006**, *1*, 146–166. [[CrossRef](#)]
50. Dong, X.; Putterman, L.; Unel, B. Privatization and Firm Performance: A Comparison between Rural and Urban Enterprises in China. *J. Comp. Econ.* **2006**, *3*, 608–633. [[CrossRef](#)]
51. Jiang, F.; Cai, W.; Wang, X.; Zhu, B. Multiple Large Shareholders and Corporate Investment: Evidence from China. *J. Corp. Financ.* **2018**, *50*, 66–83. [[CrossRef](#)]
52. Li, W.; Yu, M. The Shareholding Structure of Privatized Enterprises and Corporate Innovation. *J. Manag. World* **2015**, *4*, 112–125. (In Chinese)
53. Megginson, W.L.; Nash, R.C.; Randenborgh, M.V. The Financial and Operating Performance of Newly Privatized Firms: An International Empirical Analysis. *J. Financ.* **1994**, *2*, 403–452. [[CrossRef](#)]
54. Bortolotti, B.; Souza, J.D.; Fantini, M.; Megginson, W.L. Privatization and the Sources of Performance Improvement in the Global Telecommunications Industry. *Telecommun. Policy* **2002**, *5–6*, 243–268. [[CrossRef](#)]
55. Zhang, R. *On the Efficiency of Financial Governance*; Chinese Financial & Economic Publishing House: Beijing, China, 2010. (In Chinese)
56. Aguinis, H.; Glavas, A. What We Know and Don't Know About Corporate Social Responsibility: A Review and Research Agenda. *J. Manag.* **2012**, *4*, 932–968. [[CrossRef](#)]
57. Liu, G.S.; Beirne, J.; Sun, P. The Performance Impact of Firm Ownership Transformation in China: Mixed Ownership vs. Fully Privatised Ownership. *J. Chin. Econ. Bus. Stud.* **2015**, *3*, 197–216. [[CrossRef](#)]
58. Liu, Y.; Li, Z.; Xu, M. The influential factors of financial cycle spillover: Evidence from China. *Emerg. Mark. Financ. Trade* **2020**, *6*, 1336–1350. [[CrossRef](#)]
59. Uddin, M.A.; Hoque, M.E.; Ali, M.H. International economic policy uncertainty and stock market returns of Bangladesh: Evidence from linear and nonlinear model. *Quant. Financ. Econ.* **2020**, *2*, 236–251. [[CrossRef](#)]
60. Boycko, M.; Shleifer, A.; Vishny, R.W. A Theory of Privatisation. *Econ. J.* **1996**, *435*, 309–319. [[CrossRef](#)]
61. Sappington, D.E.; Stiglitz, J.E. Privatization, Information and Incentives. *J. Policy Anal. Manag.* **1987**, *4*, 567–585. [[CrossRef](#)]
62. Lin-Hi, N.; Blumberg, I. The Link between (Not) Practicing CSR and Corporate Reputation: Psychological Foundations and Managerial Implications. *J. Bus. Ethics* **2018**, *1*, 185–198. [[CrossRef](#)]
63. Halebian, J.; Finkelstein, S. Top Management Team Size, CEO Dominance, and Firm Performance: The Moderating Roles of Environmental Turbulence and Discretion. *Acad. Manag. J.* **1993**, *4*, 844–863.
64. Baron, R.M.; Kenny, D.A. The Moderator–mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *J. Personal. Soc. Psychol.* **1986**, *6*, 1173–1182. [[CrossRef](#)]
65. MacKinnon, D.P.; Cox, S.; Baraldi, A.N. Guidelines for the Investigation of Mediating Variables in Business Research. *J. Bus. Psychol.* **2012**, *27*, 1–14. [[CrossRef](#)]
66. Feng, L.; Xiao, X.; Cheng, X. Effect of Corporate Social Responsibility on Firm Risk: Based on the Economic Conditions of China. *Nankai Bus. Rev.* **2016**, *6*, 141–154. (In Chinese)
67. Xu, M.; Albitar, K.; Li, Z. Does corporate financialization affect EVA? Early evidence from China. *Green Financ.* **2020**, *4*, 392–408. [[CrossRef](#)]
68. Tuzcuoğlu, T. The impact of financial fragility on firm performance: An analysis of BIST companies. *Quant. Financ. Econ.* **2020**, *2*, 310–342. [[CrossRef](#)]
69. Anic, V. Constant leverage certificates: Dynamics, performance, and risk-return characteristics. *Quant. Financ. Econ.* **2020**, *4*, 693–724. [[CrossRef](#)]
70. Li, T.; Li, X.; Liao, G. Business Cycles and Energy Intensity. Evidence from Emerging Economies. *Borsa Istanbul. Rev.* **2021**; *in press*. [[CrossRef](#)]
71. Li, Z.; Ao, Z.; Mo, B. Revisiting the Valuable Roles of Global Financial Assets for International Stock Markets: Quantile Coherence and Causality-in-Quantiles Approaches. *Mathematics* **2021**, *15*, 1750. [[CrossRef](#)]
72. Li, Z.; Zou, F.; Tan, Y.; Zhu, J. Does Financial Excess Support Land Urbanization—An Empirical Study of Cities in China. *Land* **2021**, *6*, 635. [[CrossRef](#)]
73. Fan, J.; Wong, T.J.; Zhang, T. Institutions and Organizational Structure: The Case of State-owned Corporate Pyramids. *J. Law Econ. Organ.* **2013**, *6*, 1217–1252. [[CrossRef](#)]
74. Wang, X.; Fan, G.; Hu, L. *Marketization Index of China's Provinces: NERI Report 2018*; Social Sciences Academic Press: Beijing, China, 2019. (In Chinese)
75. Luo, Y. Industrial Dynamics and Managerial Networking in an Emerging Market: The Case of China. *Strateg. Manag. J.* **2003**, *13*, 1315–1327. [[CrossRef](#)]
76. Li, J.J.; Poppo, L.; Zhou, K.Z. Do Managerial Ties in China Always Produce Value? Competition, Uncertainty, and Domestic vs. Foreign Firms. *Strateg. Manag. J.* **2008**, *4*, 383–400. [[CrossRef](#)]