

Corporate Social Responsibility, Internal Control and Enterprise Value—Based on the Chinese Stock Market

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Abstract

Taking China's A-share listed companies as the research sample, this paper studies the relationship between corporate social responsibility, internal control and enterprise value. The research results show that there is a positive correlation between the corporate social responsibility and the enterprise value. It shows corporate social responsibility behavior will enhance the enterprise value. At the same time, the behavior of corporate social responsibility also contributes to the improvement of enterprise internal control. Internal control has a partial intermediary role in the process of social responsibility affecting enterprise value. In that way, the corporate social responsibility can affect enterprise value by improving enterprise internal control. Further research shows that compared with the private enterprises, the internal control in the state-owned enterprises has a more significant partial mediating effect in the process of corporate social responsibility affecting enterprise value.

Keywords

Social Responsibility, Enterprise Value, Internal Control, Intermediary Utility

1. Introduction

As the issue of Corporate Social Responsibility (CSR) is more and more concerned, shareholders, investors and other stakeholders, are increasingly demanding that companies should not only be responsible for them, but also for the society. Investors will consider the company's moral issues when they are making investment decisions, and customers will pay attention to the social impact of the enterprise when they are making purchase decisions. Therefore, in

order to meet the growing demand for corporate social responsibility, enterprises begin to disclose their corporate social responsibility reports and take corporate social responsibility as an important part of corporate strategy. However, there are still some controversies. Does corporate social responsibility increase or decrease shareholder wealth? Is it good for the long-term development of the enterprise?

In recent years, more and more enterprises began to establish internal control system, and take internal control system as an important means to prevent business risks and enhance enterprise value. At the same time, the Ministry of Finance issued the “Guidelines for the Application of Internal Control of Enterprises No. 4—Social Responsibility”, requiring enterprises to combine corporate social responsibility and internal control. But what is the relationship between internal control and corporate social responsibility? What role does internal control play in the impact of corporate social responsibility on enterprise value? This is the focus of this paper.

In previous studies on social responsibility, corporate social responsibility, internal control and enterprise value are rarely combined. Therefore, this paper examines the relationship between corporate social responsibility and enterprise value, and the role that internal control plays in the relationship between social responsibility and enterprise value. This study not only provides a reference for shareholders and managers to understand the relationship between corporate social responsibility and enterprise value, and but also provides a basis for stakeholders to evaluate the role of internal control.

Based on the data of China’s A-share listed companies from 2012 to 2017, this paper finds that corporate social responsibility can significantly affect the enterprise value, and internal control plays a partial intermediary role between corporate social responsibility and enterprise value. In addition, the intermediary effect of internal control is more obvious in state-owned enterprises.

The rest of the paper is structured as follows. Section 2 provides literature review and research hypotheses. Section 3 discusses the sample, variable measurements, and research design. Section 4 presents empirical results and discusses the findings. Section 5 concludes the study.

2. Literature Review and Research Hypotheses

2.1. Literature Review

2.1.1. Corporate Social Responsibility and Corporate Value

The research on the economic consequences of CSR has not reached a consistent conclusion since the 1970s. Supporters of social responsibility believe that corporate social responsibility will maximize the interests of all stakeholders and shareholders [1] [2] [3]. Companies with high social responsibility ratings show better growth in stock market-based indicators (such as risk-adjusted returns) and accounting-based indicators (such as ROA, business income growth rate) [4], and the conflict among stakeholders of the enterprise is lower [5]. Through

social responsibility investment, enterprises can attract responsible consumers and obtain financing from investors with a sense of social responsibility [6], with lower corresponding financing cost [7]. In addition, the strength of this relationship is influenced by the enterprise life cycle [8]. Opponents of the corporate social responsibility believe that the fulfillment of social responsibility by enterprises serves the interests of management rather than shareholders [9]. Corporate Social responsibility behaviors will increase the operating cost of enterprises, weaken their competitiveness and ultimately reduce their value [10]. Besides, scholars have found that enterprises' social responsibility to customers and employees will reduce their financial performance [11]. Because of the existence of agency costs, shareholders will bear the risks and costs of corporate social responsibility, while the benefits will be enjoyed by the management. Therefore, corporate social responsibility is actually a kind of agency cost [12], and the behavior of corporate social responsibility is more like a "self-care tool" of the management, which will not bring the improvement of corporate value [13].

2.1.2. Corporate Social Responsibility and Internal Control

The interaction between corporate social responsibility and internal control has always been the focus of scholars. On the one hand, in order to ensure the fulfillment of corporate social responsibility, enterprises need to improve the corporate governance system [14]. Because a good corporate governance system will improve the fulfillment level of corporate social responsibility [15]. Besides, the internal control is the essence of corporate governance system [16]. Because a good internal control system can not only promote the regularization and standardization of corporate social responsibility performance, effectively solve the problem that corporate social responsibility performance relies on managers' personal preference [17], but also can promote the information disclosure and commitment of corporate social responsibility [18]. On the other hand, the undertaking of corporate social responsibility will improve the internal control environment and improve the internal control of enterprises [19]. Enterprises assume more social responsibilities to stakeholders, which will create a public image that complies with the law, openness and sustainability. Therefore, enterprises are bound to establish a set of perfect internal control system to maintain this image [20]. At the same time, enterprises with good social responsibility can provide higher quality financial reports [21] and face lower financial risks [22]. This means that it is easier for companies to achieve the basic goals of internal control and the higher the quality of internal control [23].

2.1.3. Internal Control and Enterprise Value

The economic consequences of internal control have gone beyond the scope proposed in the COSO report, which has a significant positive effect on the improvement of enterprise performance and value [24]. Internal control can improve an enterprise's agency cost [25], earnings quality [26], information transparency and value [27]. In addition, enterprises with high internal control quali-

ty face lower tax burden [28], lower possibility of financial distress [29], lower risk of stock price decline, and have generally better business performance than companies with defects in internal control [30]. In addition, internal control also has an important impact on inhibiting the company's inefficient investment [31], the capital occupation of major shareholders [32], and the decisions of directors, CFO and other executives and corporate stakeholders [33].

With a review of the literature, it can be found that the current scholars focus on the relationship between social responsibility, enterprise value and internal control. However, there are relatively few studies on the interaction mechanism of the three factors combined. Therefore, based on the existing research, this paper further studies whether social responsibility can promote the improvement of enterprise value by improving the internal control of enterprises, that is, whether internal control has an intermediary role in the relationship between social responsibility and enterprise value. The study of this paper provides a reference for shareholders and other stakeholders to understand whether social responsibility improves enterprise value, and provides a basis for the objective evaluation of the internal control system.

2.2. Research Hypotheses

2.2.1. The Hypothesis of the Relationship between Corporate Social Responsibility and the Enterprise Value

There are three ways that corporate social responsibility affects the enterprise value. Firstly, corporate social responsibility can coordinate the relationship between enterprises and stakeholders. Enterprises are "a set of contracts" concluded by stakeholders [34], according to which resources stakeholders invest into enterprises. Corporate social responsibility is the essential embodiment of stakeholders' demands for contracts. Specifically, corporate social responsibility refers to the responsibility that an enterprise must assume to shareholders, creditors, suppliers, government, employees, customers, communities and other stakeholders and the environment in its production and operation activities [35]. Therefore, companies with good corporate social responsibility will maintain a positive relationship with stakeholders. So that conflicts between stakeholders and management will be alleviated [36], and the agency cost of enterprises will be reduced accordingly. Secondly, corporate social responsibility can be used as a signal transmission mechanism [37] to reduce the information asymmetry of enterprises [38]. For investors, due to the existence of information asymmetry, they cannot completely identify the quality of a company, which will eventually lead to adverse selection and other problems. However, corporate social responsibility activities will convey to investors that they are trustworthy, which will reduce agency costs between enterprises and investors, enhance investors' confidence to obtain more financing support. Finally, corporate social responsibility activities can improve corporate reputation [39]. Corporate social responsibility behavior involves all stakeholders, and corporate social responsibility activities will affect the evaluation of stakeholders on enterprises. The higher the corpo-

rate social responsibility rating is, the higher the external evaluation will be [40]. In that way, a good reputation will be formed among stakeholders. This reputation will become an intangible resource owned by the enterprise, which can form its competitive advantage and ultimately increase its value.

In summary, corporate social responsibility can affect the value of enterprises through internal and external approaches. On the one hand, it can improve the operating efficiency of the enterprises by reducing their agency costs; on the other hand, it can strengthen their competitive advantages and increase their value. Therefore, based on the above analysis, the following research hypothesis is proposed.

Hypothesis 1. The fulfillment of corporate social responsibility by an enterprise can enhance its value.

2.2.2. The Hypothesis of the Relationship between Corporate Social Responsibility and Internal Control

The relationship between corporate social responsibility and internal control is the focus of scholars. There are two ways for the influence of corporate social responsibility on internal control. First, corporate social responsibility helps to optimize the internal control environment. The control environment contains the factors such as the governance structure and enterprise culture, which is the foundation of internal control. Corporate social responsibility activities is a kind of moral behavior related form good corporate culture, and good corporate culture will promote the beneficial future transactions. Corporate social responsibility to the staff behavior can give employees a sense of security to enhance the enthusiasm of employees. It is beneficial to increase the enterprise's internal cooperation [41], and to improve the enterprise internal control environment [19]. It is also advantageous to the enterprise internal control construction in the end. Second, corporate social responsibility contributes to the realization of internal control objectives. Internal control of the basic goals includes providing reliable financial reporting and guard against the risk of enterprise. The existing research shows that fulfill the social responsibility of the company can provide more transparent and reliable financial reports [42]. This is because the government and the outside world attaches great importance to the social responsibility of corporate. This is a form of external supervision, therefore, enterprise managers are more likely to adhere to high standards of behavior. Honesty and morality motive is stronger, and the likelihood of false earnings reports would also be reduced [43]. At the same time, reputation effect produced by social responsibility behavior will form a protection mechanism. When an enterprise encounters a negative event, this mechanism will give the enterprise a larger buffer space to mitigate the impact of the negative event on the enterprise and reduce the severity of the risk.

In summary, the establishment of an effective internal control system requires the joint efforts of all stakeholders. The fulfillment of corporate social responsibility can enhance the cooperation within enterprises and improve the imple-

mentation of internal control. Therefore, based on the above analysis, the following research hypothesis is proposed.

Hypothesis 2. Corporate social responsibility can improve the internal control of enterprises.

2.2.3. The Hypothesis of the Relationship between Corporate Social Responsibility, Enterprise Value and Internal Control

Through the above analysis shows that the corporate social responsibility behavior can shape a good corporate image. In order to maintain the image, with a higher moral standard of managers will be the establishment of the corresponding internal control system [20]. And in that way, enterprise operation and management will become transparent. The interests of all stakeholders can get better safeguard. Stakeholders will give companies more trust. Enterprise decreases in the agency cost of the enterprise and the management efficiency will be higher. In the end, it will promote the enterprise's value. In addition, the implementation of corporate social responsibility is the enterprise in the release to the world "their trustworthy" signal. At the same time, to show the sustainability and reliability of the signal, socially responsible companies will strengthen their internal control construction. The companies will take the internal control system as the guarantee of its corporate social responsibility sustainability and address the public's concerns about the integrity and credibility of enterprises' performance of social responsibilities [44].

Therefore, companies with a sense of corporate social responsibility have a strong incentive to ensure that their CSR behaviors are reliable. The higher the CSR rating, the easier it is for enterprises to establish an effective internal control system. More stakeholders will adhere to the basic standards of internal control. The operation of the enterprise will become more transparent, and the agency cost of the enterprise will be reduced, and the value of the enterprise will be increased. Therefore, based on the above analysis, the following research hypothesis is proposed.

Hypothesis 3. Enterprises fulfill corporate social responsibility can improve their value by improving their internal control. That is, internal control plays an intermediary role in the relationship between social responsibility and enterprise value.

The difference of property right nature of enterprises has always been an important topic for Chinese scholars. Due to the particularity of China's economic system, the coexistence of state-owned enterprises and private enterprises has always been the unique embodiment of China's economic system. State-owned enterprises face more supervision and pressure from government departments in their operations. Therefore, state-owned enterprises assume more social responsibilities and are more likely to assume corporate social responsibilities. At the same time, government departments have formulated relevant laws and regulations for state-owned enterprises to fulfill their corporate social responsibilities. While undertaking corporate social responsibilities, state-owned enterprises will

inevitably establish corresponding internal control systems to meet the requirements of these laws and regulations. However, private enterprises face less external pressure to undertake corporate social responsibility, and their corporate social responsibility is mainly determined by the values of managers, so it is more arbitrary and unsustainable. Therefore, based on the different property rights, the following research hypothesis is proposed.

Hypothesis 4. It is more obvious that state-owned enterprises improve enterprise value by undertaking corporate social responsibility and perfecting internal control.

3. Research Methodology

3.1. Sample and Variables

In this paper, we select Chinese A-share companies listed on the Shanghai and Shenzhen Exchanges from 2012 to 2017 as the research objects. We excluded the following companies: 1) ST, PT (listed company under special treatment), 2) financial companies, and 3) those with incomplete data. In order to avoid the influence of extreme values on the empirical results, this paper conducted a reduction treatment on the main continuous variables at the level of 1% and 99%. Finally, a total of 7572 study samples were obtained from 1262 companies. The social responsibility data in this paper are from HeXun (<http://www.hexun.com/>), the internal control index is from DIB internal control database (<http://www.ic-erm.com/>), and all the financial data involved are from CSMAR database (<http://www.gtarsc.com/Home>). Before the analysis, relevant variables are standardized and Stata 12.0 is used for statistical analysis.

3.1.1. Measurement

1) The Enterprise Value Measurement. In this paper, economic added value (EVA) is used as a measure of enterprise value. Economic added value (EVA) refers to the income after deducting all the invested capital cost including equity and debt from the after-tax net operating profit. Its core is that capital investment has costs, because companies only create value for shareholders when their profits are higher than their capital costs (including equity costs and debt costs). The adoption of EVA as the measurement variable of enterprise value can overcome the disadvantages of the traditional evaluation system, such as ignoring the cost of equity capital and the short-term behavior of enterprises [45], to measure the actual value of enterprises more comprehensively.

2) CSR Measurement. Following prior studies [43], in this paper, the social responsibility score published by HeXun is used as the measurement index of corporate social responsibility. The social responsibility score released by HeXun is calculated based on the corporate social responsibility report published on the official website of the listed companies in Shanghai and Shenzhen (<http://www.hexun.com/>). The rating system examines the corporate social responsibility from five dimensions: shareholder responsibility, employee responsibility, supplier responsibility, customer and consumer rights and interests' re-

sponsibility, environmental responsibility and social responsibility. The higher the CSR score, the better the CSR performance level.

3) Internal Control. In this paper, we used the DIB internal control information disclosure index to reflect the quality of internal control information disclosure. The data were obtained from the DIB internal control and risk management database (<http://www.ic-erm.com/>). DIB internal control index is a research result designed based on foreign internal control index and combined with China's institutional environment and the current situation of listed companies. The index range is 0 - 1000. This paper uses its self-admission logarithm to measure the quality of internal control. The larger the internal control index is, the more perfect the internal control system is.

3.1.2. Control Variables

Following prior studies [1] [18] [37], we used several control variables for the factors that have been shown to affect the dependent variables of enterprise value and internal control efficiency.

A summary of the variable definitions is shown in **Table 1**.

3.2. Empirical Models

Firstly, according to hypothesis 1, in order to test the relationship between corporate social responsibility and enterprise value, the following model is constructed in this paper. The significant CSR coefficient is one of the prerequisites for the existence of mediating effect

$$EVA_{i,t} = \alpha_0 + \alpha_1 CSR_{i,t} + \alpha_2 Controls_{i,t} + \varepsilon_{i,t} \quad (1)$$

Secondly, according to hypothesis 2, in order to test the relationship between corporate social responsibility and internal control, the following model is constructed in this paper. The significant CSR coefficient in model 2 is another prerequisite for the existence of mediating effect.

$$IC_{i,t} = \beta_0 + \beta_1 CSR_{i,t} + \beta_2 Controls_{i,t} + \varepsilon_{i,t} \quad (2)$$

Thirdly, according to hypothesis 3, and using the method for testing the intermediate factors presented by Wen Zhonglin [46], we investigate whether internal controls play a mediating role in the relationship between CSR and the enterprise value. The following model is constructed in this paper. The significant IC coefficient in model 3 is another prerequisite for the existence of mediating effect. In addition, γ_1 in model 3 was compared with α_1 in model 1 to verify whether internal control, as a mediating variable, plays a mediating role in the process of corporate social responsibility affecting enterprise value. If γ_1 in model 3 is not significant, there is no mediating effect. If γ_1 in model 3 is significant and decreased compared with the α_1 coefficient in model 1, it indicates that there is a partial mediating effect of internal control, and hypothesis 3 is verified.

$$EVA_{i,t} = \gamma_0 + \gamma_1 CSR_{i,t} + \gamma_2 IC_{i,t} + \gamma_3 Controls_{i,t} + \varepsilon_{i,t} \quad (3)$$

Table 1. Summary of variable definitions.

Category	Variable	Symbol	Variable Description
Dependent Variable	Enterprise Value	EVA	The economic added value of enterprises
Independent Variable	Corporate Social Responsibility	CSR	HeXun's total score of social responsibility reports of listed companies
	Internal Control	IC	The logarithm of the internal control index
	Company Size	Size	The logarithm of total assets
	Enterprise Nature	Soe	State-owned enterprises are 1, or 0
	Equity Concentration	Con	The largest shareholder shareholding ratio
Control Variable	Board Size	Board	The logarithm of the number of board members
	Proportion of Independent Directors	DD	The proportion of independent directors on the board of directors
	Financial Risk	Risk	Financial leverage
	Growth Ability	Growth	Growth rate of operating income
	Separation Rate	Dual	If the chairman concurrently serves as the general manager, it is 1; otherwise, it is 0
	Year	Year	The dummy variable, which belongs to a certain year, is 1; otherwise, it is 0

4. Results and Discussion

4.1. Descriptive Statistics

Table 2 shows descriptive summary of the variables. The average value of the economic added value (EVA) is 1.784. The significant SD indicated that the EVA varied widely between different companies in China. And the SD of the EVA is 10.231. It shows that there are great differences in the value of the sample companies. The average CSR is 28.460, indicating that the performance of social responsibility of China's listed companies is still at a low level on the whole. The SD of the CSR is 18.782, indicating that there is a big difference in the corporate social responsibility of the sample companies. In our firm dataset, the average firm has an IC score of 667.362. For the company ownership, 49.76% are state-owned, and 21.35% have the CEO also serving as the chairman of the board.

In order to investigate the impact of corporate social responsibility on the enterprise value, this paper groups samples according to the average of corporate social responsibility score, and conducts descriptive statistical analysis on relevant variables, as shown in **Table 3**. From **Table 3**, the corporate value and internal control of companies with good corporate social responsibility performance are significantly higher than those with poor corporate social responsibility performance. The average value of the corporate value of companies with

good corporate social responsibility performance is 4.874, while the average value of the corporate value of companies with poor corporate social responsibility performance is 0.453. There is no significant difference in company size, and the financial risk of companies with good corporate social responsibility performance is lower than that of companies with poor corporate social responsibility performance. In addition, the growth of companies with good corporate social responsibility performance is also higher than that of companies with poor corporate social responsibility performance.

Table 2. Summary of descriptive statistics.

Variable	Observations	Average	SD	Max.	Min.
EVA	7572	1.784	10.231	73.235	-20.316
CSR	7572	28.460	18.781	77.860	-2.44
IC	7572	667.362	74.080	985.600	16.75
Size	7572	22.481	1.304	26.426	20.098
Soe	7572	0.498	0.500	1	0
Con	7572	0.355	0.152	0.751	0.084
Board	7572	2.166	0.198	2.708	1.609
DD	7572	0.372	0.053	0.571	0.333
Risk	7572	1.449	1.328	9.944	-0.894
Growth	7572	0.158	0.396	1.346	-0.493
Dual	7572	0.214	0.410	1	0

Note: in order to better describe the basic situation of variables, IC refers to the original data before taking logarithm, the same as below.

Table 3. Grouping descriptive statistics.

Variable	Good Corporate Social Responsibility Performance			Poor Corporate Social Responsibility Performance		
	Observations	Average	Mean	Observations	Average	Mean
EVA	2280	4.874	1.061	5292	0.453	-0.216
CSR	2280	51.494	56.766	5292	18.537	19.665
IC	2280	692.721	693.32	5292	656.438	664.305
Size	2280	23.019	22.888	5292	22.250	22.080
Soe	2280	0.575	1	5292	0.464	0
Con	2280	0.391	0.394	5292	0.340	0.320
Board	2280	2.194	2.197	5292	2.154	2.197
DD	2280	0.374	0.333	5292	0.372	0.333
Risk	2280	1.280	1.062	5292	1.522	1.118
Growth	2280	0.168	0.104	5292	0.154	0.0817
Dual	2280	0.179	0	5292	0.228	0

4.2. Correlation Coefficient Analysis

Table 4 is the Person correlation coefficient matrix of the main variables. From the table, the correlation coefficient between enterprise value (EVA) and corporate social responsibility (CSR) is 0.21, which is significant at the 1% level. It preliminarily indicates that enterprises undertaking corporate social responsibility can enhance enterprise value. The correlation coefficient between corporate social responsibility (CSR) and internal control (IC) is 0.29, which is significant at the 1% level. It preliminarily indicates that the company undertaking corporate social responsibility has more perfect internal control. In addition, the maximum value of variance inflation factor (VIF) of each variable is less than 2, and the Mean VIF is 1.22, so it can be considered that there is no serious multi-collinearity.

4.3. Regression Analysis

In this paper, the fixed effect model is adopted for empirical analysis, and **Table 5** shows the results of model regression. From **Table 5**, each model is significant at the 1% level, indicating that the overall regression effect of the model is effective.

In model 1, the coefficient of corporate social responsibility is 1.091, which is significant at the 1% level, indicating that corporate social responsibility will enhance corporate value. Hypothesis 1 is verified and a condition for the existence of intermediary effect is established.

In model 2, the coefficient of corporate social responsibility is 0.191, which is significant at the 1% level, indicating that there is a significant positive correlation between corporate social responsibility and internal control. Enterprises undertaking corporate social responsibility will promote the improvement of enterprise internal control. Hypothesis 2 is verified, and the second premise of the existence of mediating effect is satisfied.

Table 4. Correlation analysis of the variables.

Variable	1	2	3	4	5	6	7	8	9	10	11
EVA	1										
CSR	0.21***	1									
IC	0.29***	0.30**	1								
Size	0.35***	0.28**	0.25*	1							
Soe	0.08***	0.11**	0.07**	0.31**	1						
Con	0.14***	0.13**	0.13*	0.26**	0.24***	1					
Board	0.04***	0.11**	0.07*	0.24**	0.23***	0.01	1				
DD	0.08***	0.13	0.01	0.08**	-0.03**	0.05**	-0.47*	1			
Risk	-0.09**	-0.10*	-0.04*	0.11**	0.09***	-0.03*	0.06**	-0.31	1		
Growth	0.04***	0.04*	0.17*	0.04**	-0.11**	-0.01	-0.03*	-0.24	-0.4*	1	
Dual	-0.02**	-0.05*	-0.04	-0.01*	-0.29**	-0.10*	-0.18*	0.10***	-0.04	0.03*	1

Note: This table presents Pearson correlation coefficients between the variables. * Statistical significance at the 10% level. ** Statistical significance at the 5% level. *** Statistical significance at the 1% level.

Table 5. Regression results analysis.

Variable	Model 1	Model 2	Model 3
	Coefficient	Coefficient	Coefficient
	(T value)	(T value)	(T value)
CSR	1.091*** (7.96)	0.191*** (15.54)	0.648*** (4.76)
IC			2.324*** (12.90)
Size	2.611*** (12.69)	0.176*** (15.44)	2.203*** (11.56)
Soe	-0.317* (-1.82)	-0.017 (-0.75)	-0.277* (-1.64)
Con	2.730*** (3.08)	0.212*** (2.88)	2.238*** (2.60)
Board	-0.774 (-0.97)	-0.066 (-0.96)	-0.620 (-0.81)
DD	8.286*** (2.73)	-0.142 (-0.54)	8.616*** (2.95)
Risk	-0.857*** (-11.29)	-0.031*** (-3.32)	-0.785*** (-10.53)
Growth	0.408* (1.85)	0.370*** (12.63)	-0.453** (-1.98)
Dual	0.405* (1.66)	-0.020 (-0.73)	0.451* (1.90)
Constant	-58.370*** (-11.68)	-3.418*** (-12.25)	-50.426**8 (-10.71)
Year	Yes	Yes	Yes
Observations	7572	7572	7572
F Value	34.72***	88.51***	37.02***
R ²	0.158	0.179	0.200

Meanwhile, in model 3, the regression coefficient of internal control is 2.324, which is significant at 1% level and meets the last condition of internal control as a mediator variable. The regression coefficient of corporate social responsibility is 0.648, which is significantly lower than the regression coefficient of model 1 at the 1% significance level. Hypothesis 3 is verified. It shows that the internal control in the corporate social responsibility in the process of enterprise value of the

partial intermediary effect, namely corporate social responsibility can enhance the value of the enterprise by perfecting the internal control. This suggests that corporate socially responsible companies are more likely to establish internal control system, the internal control system as the guarantee of the corporate social responsibility behavior, in order to enhance sustainability of the corporate social responsibility behavior and credibility.

Table 6 shows the regression results of corporate social responsibility, internal control and enterprise value under different property rights. From **Table 6**, in the model 1, the state coefficient of corporate social responsibility is greater than the private group, suggesting that state-owned enterprises to fulfill social responsibility to the positive role of enterprise value is bigger. This is because the object of corporate social responsibility proposed by China at the first time is state-owned enterprises. State-owned enterprises are facing more pressure from government departments and are the backbone of the national economy. Therefore, state-owned enterprises have sufficient motivation and obligation to undertake corporate social responsibility. In the results of model 2, the impact of corporate social responsibility fulfillment by state-owned enterprises on internal control is higher than that of non-state-owned enterprises, indicating that state-owned enterprises undertaking corporate social responsibility has a better effect on the improvement of internal control level. In both types of enterprises, the mediating effect of internal control exists and is very significant. We can use the $\beta_1 \times \gamma_2 / (\beta_1 \times \gamma_2 + \gamma_1)$ to calculate the size of the mediating effect. State-owned group of intermediary effect is 0.506, and the mediation effect of private groups is 0.195. That shows the intermediary effect of state-owned enterprises is more obvious. That is to say, compared to the private enterprises, state-owned enterprises through the corporate social responsibility to strengthen internal control, to enhance the effect of enterprise value is bigger, so the mediation effect of internal control is bigger.

4.4. Caution Test

In order to enhance the reliability of the research conclusions, the following robustness test was conducted in this paper:

1) Redefining enterprise value, corporate social responsibility index and internal control index. Since the application of EVA is still relatively rare at present and is more widely used in state-owned enterprises, this paper uses Tobin's Q value instead of EVA as the measurement index of enterprise value. As CSR score may be affected by industry factors and varies in different years, this paper makes adjustments to the continuous variable of CSR based on the median of the year and industry. If the score is greater than or equal to the median, take 1; if it is less than the median, take 0. At the same time, this paper also made corresponding adjustments to internal control according to the annual and industry median. If the score is greater than or equal to the median, take 1; if it is less than the median, take 0. The above tests are performed using the adjusted

results, as shown in **Table 7**. It can be seen from **Table 7** that the CSR coefficients of model 1, model 2 and model 3 are all significant, and the IC coefficient in model 3 is also significant, and the CSR coefficient of model 3 is less than the CSR coefficient of model 1 ($1.920 < 2.180$), which indicates that the internal control has some mediating effect in the process of corporate social responsibility affecting enterprise value.

Table 6. Regression results based on different property rights.

Variable	State-Owned			Private		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
	Coefficient	Coefficient	Coefficient	Coefficient	Coefficient	Coefficient
	(T value)	(T value)	(T value)	(T value)	(T value)	(T value)
CSR	1.152*** (5.25)	0.291*** (11.73)	0.568*** (2.61)	1.081*** (10.80)	0.217*** (11.83)	0.871*** (8.98)
IC			2.001*** (11.02)			0.971*** (11.27)
Size	3.747*** (12.21)	0.211*** (14.64)	3.103*** (10.79)	0.658*** (4.86)	0.098*** (6.02)	0.562*** (4.27)
Con	3.591** (2.29)	0.103 (0.98)	3.277** (2.16)	1.678*** (3.09)	0.356*** (3.44)	1.332** (2.50)
Board	-2.827** (-2.20)	-0.154* (-1.72)	-2.356** (-1.91)	0.510 (0.88)	-0.001 (-0.01)	0.511 (0.91)
DD	6.134 (1.21)	-0.386 (-1.10)	7.310* (1.51)	3.450* (1.49)	-0.191 (-0.52)	3.636* (1.60)
Risk	-1.100*** (-9.92)	-0.020* (-1.89)	-1.038*** (-9.53)	-0.363*** (-6.11)	-0.036** (-2.27)	-0.328*** (-5.62)
Growth	0.621* (1.33)	0.492*** (10.10)	-0.883** (-1.95)	0.684*** (3.43)	0.345*** (8.31)	0.349* (1.71)
Dual	1.309* (1.77)	-0.043 (-0.80)	1.441** (2.02)	-0.175 (-1.28)	-0.024 (-0.77)	-0.152 (-1.13)
Constant	-79.496*** (-11.14)	-4.049*** (-11.93)	-67.143*** (-9.91)	-16.684*** (-4.97)	-1.794*** (-3.98)	-14.941*** (-4.59)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3768	3768	3768	3804	3804	3804
F Value	24.83***	70.50***	27.26***	21.60***	53.18***	26.64***
R ²	0.191	0.202	0.233	0.126	0.158	0.161

Table 7. Statistical results of caution test.

Variable	Model 1	Model 2	Model 3
	Coefficient	Coefficient	Coefficient
	(T value)	(T value)	(T value)
CSR	2.180*** (7.44)	0.108*** (8.54)	1.920*** (6.57)
IC			2.398*** (12.60)
Constant	-59.804*** (-12.06)	-0.638*** (-5.32)	-58.274*** (-11.90)
Year	Yes	Yes	Yes
Observations	7572	7572	7572
F Value	30.69***	89.19***	35.55
R ²	0.157	0.121	0.169

2) Changing the intermediary inspection method. In this paper, Sobel, Goodman-1 (Aroian) and Goodman-2 statistics are used to test the mediating effect, and the results are shown in **Table 8**. From **Table 8**, the regression results of the whole sample, state-owned group and non-state-owned group are all significant. The ratio of intermediary effect to total effect is 0.3921 in the whole sample, 0.4831 in the sample of state-owned enterprises, and 0.2185 in the sample of non-state-owned enterprises. This shows that internal control plays an intermediary role in the process in which corporate social responsibility affects enterprise value. Meanwhile, the intermediary effect is more obvious in state-owned enterprises, that is to say, state-owned enterprises improve internal control and further enhance enterprise value by assuming corporate social responsibility. The results of the caution test are consistent with the above, indicating the robustness of the research conclusions obtained in this paper.

5. Conclusions and Suggestions

5.1. Conclusions

This paper uses the data of listed companies in China to study the relationship among corporate social responsibility, enterprise value and internal control, and draws the following conclusion: 1) corporate social responsibility has a significant positive effect on enterprise value. The higher the level of corporate social responsibility, the greater the enterprise value; 2) corporate social responsibility has a significant positive effect on internal control, that is, the performance of corporate social responsibility is conducive to the improvement of internal control; 3) internal control plays an intermediary role in the process in which corporate social responsibility affects enterprise value. That is to say, there are two ways for corporate social responsibility to affect enterprise value. On the one

Table 8. Sobel-mediating effect test.

	Whole Sample	State-Owned	Private
Mediating Effect (Internal Control)	0.829***	1.236***	0.281***
Sobel Test	(17.98)	(14.03)	(10.44)
Goodman-1 (Aroian) Test	(17.97)	(14.02)	(10.43)
Goodman-2 Test	(17.99)	(14.04)	(10.45)
Direct Effects (Social Responsibility)	1.285***	1.322***	1.005***
	(11.07)	(6.54)	(12.60)
Total Effect	2.114***	2.558***	1.286***
	(18.37)	(12.63)	(16.37)
The Ratio of Mediating Effects to Total Effects	0.392	0.483	0.219

hand, it can enhance enterprise competitiveness through good reputation; on the other hand, it can improve enterprise value through improving internal control. After grouping according to the property right nature of enterprises, it is found that the effect of corporate social responsibility on the value of enterprises in state-owned enterprises is more obvious by improving internal control, which to some extent indicates that the improvement of enterprise value of state-owned enterprises is easier to be achieved by assuming social responsibility.

The contributions of this paper are as follows: 1) it increases the research on the corporate social responsibility, expands the research scope of corporate social responsibility and enriches the existing research results; 2) it takes corporate social responsibility as a kind of enterprise behavior and internal control level as the internal environment of the enterprise. It has great help to analyze the influence of the two on the enterprise value, and deepen managers' understanding of the role of internal control; 3) it provides a reference for investors to evaluate enterprises and help investors to make investment decisions. Because the corporate social responsibility behavior can be used as a basis for whether an enterprise has investment prospects, while internal control provides a guarantee for the social responsibility behavior of enterprises, and investors can make investment decisions accordingly.

However, this paper still has some limitations. First, there may be insufficient in the balance of social responsibility index. The corporate social responsibility score published by HeXun is only based on the corporate social responsibility report disclosed by listed companies, but the rating agency does not evaluate the actual corporate social responsibility activities of listed companies. In the future, it is necessary to use more suitable measurement method for empirical research. Secondly, the sample selected in this paper accounts for a relatively low proportion of the whole listed company, so the research sample should be expanded to all listed companies in the future. Finally, there are many ways for corporate social responsibility to affect corporate value. This paper only studies internal control, so it is necessary to further study the mechanism between social responsi-

bility and corporate value, and investigate more external factors that affect this relationship.

5.2. Suggestions

Based on the above research conclusion, this paper puts forward the following Suggestions:

For the enterprise managers, first of all, changing the traditional view of corporate social responsibility. Corporate social responsibility behavior will produce a certain amount of cost, but the economic benefits of it are higher than its cost. It means that corporate social responsibility will not reduce the value of the company, on the contrary, will maximize the value of the enterprise. Therefore, enterprises should actively undertake corporate social responsibilities. Only in this way can the long-term maximization of enterprise value be realized. Second, strengthening the understanding of internal control. The economic role of internal control has beyond the scope of the COSO proposed. It not only can improve the company's internal management, but also a guarantee for enterprises to show their corporate social responsibility behavior to stakeholders. While undertaking corporate social responsibilities, enterprises should improve their internal control. The combination of the two can give full play to the "halo effect" of corporate social responsibility, which is conducive to the realization of their business objectives, and promote the sustainable development of enterprises.

For investors, the corporate social responsibility behavior can be used as a reference to judge the enterprise value. Companies with a sense of corporate social responsibility also have a more complete internal corporate governance system, and the more high-quality financial reports they can provide, the more responsible they are to investors.

For regulators, the implementation environment of corporate social responsibility should be improved. From the current performance of corporate social responsibility in China, government departments should actively assume the responsibility of guiding enterprises and urge enterprises to deepen their awareness of corporate social responsibility. The low enthusiasm of enterprises to fulfill corporate social responsibility mainly increases the cost of enterprises in the short term. From this point of view, the government can give enterprises that actively fulfill corporate social responsibility a certain incentive, such as tax incentives, priority in government procurement, etc. At the same time, a blacklist will be set up to punish enterprises unwilling to fulfill their corporate social responsibilities. Incentive and punishment should be combined to force enterprises to fulfill their corporate social responsibilities, so as to deepen the concept of corporate social responsibility and transform it into spontaneous behavior.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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