

Internal Control, Corporate Performance and Social Responsibility: A Study Based on Manufacturing Enterprise Data

Jiahao Zhao

College of Business and Economics, Australian National University, Canberra, Australia

Abstract. This paper examines the links between internal control, corporate performance, and corporate social responsibility (CSR) in Chinese manufacturing firms. Based on principal-agent theory and mediation analysis, it considers whether CSR acts as a channel through which internal control affects performance. Using financial data from listed manufacturing enterprises and applying Stata for empirical tests, the results show that stronger internal control improves financial performance and that CSR plays a mediating role in this process. The study suggests that well-designed internal control not only raises efficiency and resource use but also supports firms in meeting their social responsibilities. In practice, companies are encouraged to clarify the roles of principals and agents, strengthen safety and quality management, and pursue industrial upgrading to meet demand for green and sustainable products. At the policy level, governments are advised to refine regulations and provide guidance that motivates firms to combine economic outcomes with social contributions.

Keywords: internal controls, enterprise performance, corporate social responsibility.

1. Introduction

The continuous development of globalization and the intensification of international competition have increased the importance of corporate governance in enterprises in developing countries. As the largest developing country, China faces significant challenges in corporate governance, and poor governance structures and internal control systems remain major obstacles to enterprise development. In China's manufacturing sector, particularly among small and medium-sized enterprises, some managers do not attach sufficient importance to internal control. This negligence has led to disorganized and unsystematic management, which over time undermines firm performance and weakens their ability to assume social responsibility. At the macro level, such deficiencies hinder the development of the market economy, limit the integration of Chinese enterprises into the global economy, and threaten the protection of stakeholders' interests. Moreover, some firms hold limited perceptions of internal control, believing it is confined to financial management, while others regard it as a restriction that hampers decision-making. These views are misguided; in reality, it is the inadequacy and poor implementation of internal control systems that constrain corporate development.

As business operations expand, the separation of ownership and management creates conflicts of interest between owners and managers, giving rise to agency problems. To mitigate these conflicts, firms employ internal control mechanisms to regulate managers' behavior. In order to strengthen information management and improve corporate structures, Chinese enterprises have followed the *Company Law of the People's Republic of China* and the *Basic Standards for Enterprise Internal Control*, which provide guidance for the application of internal control. Guideline No.2 offers direction for corporate strategic development, while Guideline No. 4 emphasizes the importance of social responsibility, encouraging firms to balance economic and social benefits. This paper focuses on the relationship and transmission mechanisms between internal control, corporate performance, and corporate social responsibility (CSR).

From a theoretical perspective, most studies in China have examined either the effect of internal control on corporate performance or the effect of CSR on performance, with little research exploring the logical relationships among all three. This study introduces CSR as a mediating variable, linking internal control and performance to CSR, and thereby providing a new analytical perspective. By



constructing a mediation effect model, this research verifies that internal control influences corporate performance through its effect on CSR. The transmission chain and logic among the three are clear and reasonable, offering theoretical support for improving internal control and encouraging enterprises to actively engage in CSR.

From a practical perspective, there is a strong correlation between internal control, corporate performance, and CSR. All business activities depend on effective internal control. Optimizing internal management can facilitate enterprise growth, improve efficiency and resource allocation, and enhance organizational structure by clarifying rights and responsibilities and optimizing profit distribution. This creates greater value for all stakeholders.

Although China has issued numerous policies and guidelines to strengthen internal control systems, there is still no explicit theoretical framework that explains the relationship and transmission mechanisms among internal control, corporate performance, and CSR. Based on mediation effect theory and agency theory, this study examines these three factors in an integrated manner. It particularly emphasizes how the introduction of CSR alters the impact of internal control on financial performance and how CSR itself contributes positively to enhancing corporate performance. The three are closely interlinked, transmitting their effects in ways that ultimately encourage firms to assume greater social responsibility, thereby benefiting society as a whole [1].

2. Literature Review

Internal control has gone through a long process of development, evolving with the continuous progress of the market economy, internationalization, and changes in corporate organizational structures. The relationship between internal control and corporate performance has become increasingly close.

International studies have summarized various performance evaluation methods. Performance evaluation refers to the use of mathematical statistics and operations research, with specific indicators and unified standards, to objectively and fairly assess the value of corporate operations and actual results during a given management stage. For instance, Sink (2001) and Tuttle (2001) applied a six-step framework to structure performance evaluations; Keegan (1997) used a performance evaluation matrix; and Lockamy (1999) adopted a four-theory evaluation model. Beni, Lauterbach, Joseph Vu, and Jacob Weisberg (2004), using survey data from 165 U.S. listed companies between 1989 and 1991, found that both internal and external successors affect performance evaluations, with external successors showing greater effectiveness.

In China, performance evaluation methods often draw on Western approaches such as the DuPont financial analysis system, the balanced scorecard, and economic value added. However, based on the realities of Chinese enterprises, domestic scholars have also offered alternative perspectives. Ruizhi Liu and Chaoyang Xu (2008), using data from Chinese listed companies between 2002 and 2006, applied factor analysis to construct two indicators reflecting diversification versus low-cost strategies, and examined their impact on both short-term and long-term performance [2].

International literature on internal management can be traced back to 1936, when U.S. federal authorities issued standards for independent auditors, marking the first definition of internal control. Subsequent revisions by national auditing conventions developed the concept through five stages: internal control, management systems, internal control structures, comprehensive frameworks, and enterprise risk management. Hermanson (2000), through empirical analysis, affirmed the necessity of internal control and its role in safeguarding long-term operations. Newson and Deegan (2002) argued that voluntary disclosure by listed firms primarily reflects competitive advantage and globalization strategies. Udi Hoitash et al. (2009), analyzing data from over 5,480 firms, confirmed a link between weaknesses in financial reporting and deficiencies in corporate governance and internal control.

In China, research on internal management since the 1990s has mainly focused on finance and auditing, with emphasis on accounting methods, quality improvement, and risk management. Jifu Cai (2005), through long-term empirical study, pointed out that the disclosure of internal control information by Chinese listed companies is significantly influenced by profitability, financial reporting quality, and financial condition. However, disclosure remains largely voluntary, and negative information is often withheld [3]. Zhonggao Lin et al. (2007) showed that the establishment and improvement of internal control systems significantly promote corporate value, and with the deepening of state-owned enterprise reforms and market regulation in China, internal control has gradually matured [4]. Wang Dong and Hanwen Chen (2011) highlighted that more efficient content management improves information transmission, while stronger internal control enhances earnings response coefficients, confirming its relevance for financial reporting [5]. Other studies, such as Karen Hopper Wuck (1989) [6], Deumes, Ragier, and Knechel (2008), and Ashbaugh & Doyle (2007), also stressed the growing importance of internal management for performance assessment. Lirong Chen and Shuguang Zhou (2008) examined internal control reports of listed firms in 2008, finding that disclosure, defect reporting, and periodic evaluations are key measures of internal control quality [7]. Shuangpeng Zhang and Benyuan Hu (2011) studied environmental contingency factors, showing that corporate adaptation to such conditions improves performance [8]. Fanlin Wang and Zhounan Yang (2012) analyzed IT governance and internal control as resources for corporate adjustment, confirming that information technology management reduces risks and improves overall performance [9].

International research on corporate social responsibility (CSR) dates back to Clark at the University of Chicago in 1916. Early debates questioned whether CSR harmed corporate interests, with some arguing that firms are only accountable to shareholders. However, others adopted the opposite stance. The U.S. National Business Development Council categorized CSR into three levels: basic, integrative, and advanced responsibilities. The basic level reflects obligations that all firms must assume. With rising societal expectations, CSR has become an important benchmark for evaluating corporate quality. Despite ongoing debate about its definition, the concept is now widely recognized, largely because of differing understandings of its essence (Shuanglian Hua, 2011) [10].

In China, research shows that CSR is influenced by both internal and external institutional conditions as well as managerial behavior. A sound internal control environment positively contributes to CSR engagement (Halebian & Finkelstein, 1993) [11]. Jianqiong Wang and Jingyi He (2009) and Zhaoguo Zhang et al. (2013) found that firms with strong performance are more willing to fulfill CSR obligations [12][13]. Haidong Zheng (2007) emphasized that managerial perceptions, firm performance, and government responses influence CSR implementation, with public expectations also shaping firms' willingness to assume responsibility [14]. Other studies argue that stakeholder participation becomes more decisive when firms are underperforming (Jo et al., 2015). Ying Chu (2014), Zhi Chen, and Guangcheng Xu (2011) confirmed through regression analysis that stronger internal and external governance significantly improves CSR practice [15]. Liyang Lin and Hua Li (2013), focusing on the renewable energy sector, found that the financial condition of private enterprises provides the main basis and guarantee for CSR engagement [16].

Due to differences in academic perspectives, research conclusions on internal control, corporate performance, and CSR vary considerably. While international scholars have conducted systematic studies on internal control, more recent attention has shifted to CSR as an emerging area. International CSR theories have provided reference points for enterprises in China, enabling them to develop methods and standards suited to the local context. Overall, effective internal control is essential for strong corporate performance, while good performance forms the foundation for CSR engagement. In the long run, assuming greater social responsibility also exerts a positive influence on corporate performance.

3. Theoretical Analysis and Research Hypotheses

3.1 The Impact of Internal Control on Corporate Performance

Internal control refers to the standardized management processes that a company undertakes in collaboration with its internal stakeholders to meet control requirements. These processes rely on the firm's inherent strengths to regulate, constrain, and evaluate operations across different levels of stakeholder engagement. The formulation of internal control procedures focuses on the methods and measures that ensure their effective implementation. In essence, internal control serves to protect the interests of stakeholders by functioning as an internal supervisory mechanism. It should ultimately be directed toward achieving the company's long-term operational strategies and management objectives, relying on the orderly interaction of various control and management elements. The goals of internal management reflect the expectations of diverse stakeholders, and compared with standardized internal control objectives, managerial requirements are often more varied, representing the unique characteristics of each enterprise. Corporate management thus operates as a behavioral norm that not only safeguards the rights and interests of stakeholders but also ensures the company's harmonious development. By integrating internal control elements with strategic objectives, firms can ensure both the achievement of long-term goals and the effective execution of control measures.

Internal control functions both as an audit tool and as a managerial tool. From an audit perspective, it secures corporate assets and ensures the accuracy of financial statements. From a managerial perspective, it balances internal rights and responsibilities, reflecting the trend of internal control moving increasingly toward management-oriented functions. As a collective organization, a company's efficiency is determined by the productivity of each employee; greater employee initiative translates into higher performance and stronger outcomes. Moreover, internal control helps to check the dominance of large shareholders, protect the interests of minority shareholders, and reduce the risk of managerial opportunism. It also minimizes major errors, strengthens compliance, and improves productivity.

Based on the above analysis, this study proposes the following hypothesis:

H1: Higher quality internal control is associated with better corporate performance.

3.2 The Indirect Impact of Internal Control on Corporate Social Responsibility: Introducing CSR

Improving internal control enables firms to better comply with and implement national policies on energy conservation, emission reduction, and environmental protection. Companies that neglect environmental protection not only contribute to pollution but may also incur substantial remediation costs, while negative media exposure can further damage their reputation. Strengthened internal control facilitates the transformation of growth drivers, promotes equipment renewal, and encourages greater investment in environmental technologies. This, in turn, fosters the development of high-tech industries and drives industrial restructuring and upgrading. Firms that actively assume environmental responsibilities are more likely to gain consumer recognition and trust, thereby enhancing their reputation and visibility, which ultimately contributes to better corporate performance.

Enhanced internal control also ensures higher product quality, fairer pricing, and greater alignment with consumer demand. As a result, companies gain stronger consumer approval, improve brand awareness and competitiveness, and ultimately strengthen performance. Moreover, robust internal control safeguards employee rights and interests, strengthens corporate cohesion, and enhances worker motivation. It also helps ensure workplace safety, protecting employees' lives and property, which further improves productivity and overall performance.

Based on the above analysis, this study proposes the following hypothesis:

H2: Higher quality internal control is associated with stronger corporate social responsibility.

3.3 The Mediating Effect

The effect of an independent variable XXX on a dependent variable YYY may occur through a mediating variable MMM. In this case, MMM is a function of XXX, and YYY is a function of MMM (i.e., $X \rightarrow M \rightarrow YX \rightarrow M \rightarrow Y$). This phenomenon is referred to as a mediating effect. A mediating variable is used in research to describe and explain the relationship between two variables, indicating that there is an indirect link between the factor under study and its outcome. When examining the impact of XXX on YYY, if the influence is exerted through MMM, then MMM is regarded as a mediator.

Corporate activities often achieve their objectives through mediating factors, which makes the study of firm performance and management inseparable from such mechanisms. In this study, we explore the indirect effect of internal control on corporate performance by introducing corporate social responsibility (CSR) as a mediating variable. Stronger internal control improves a firm's capacity and willingness to undertake CSR, and the positive dissemination of CSR-related information enhances consumer trust and recognition. Such firms are more likely to be favored in the market, which in turn strengthens corporate performance.

Based on the above analysis, this study proposes the following hypothesis:

H3: Higher quality internal control enhances corporate social responsibility, which in turn improves corporate performance. CSR plays a mediating role in this relationship.

4. Research Design

4.1 Sample Selection and Data Sources

This study selects listed companies in China's A-share market from 2010 to 2021 in industries that are relatively large in scale and closely related to people's daily lives. The sample covers firms in agricultural and sideline food processing, food manufacturing, tobacco, alcohol and tea production, textiles, leather manufacturing, wood processing, furniture manufacturing, paper and paper products, printing, cultural and entertainment products, chemical raw materials and products, pharmaceuticals, rubber and plastics, and automobile manufacturing. Firms that engaged in mergers and acquisitions (M&A) during this period were used as the observation sample, with multiple M&A events within the same year consolidated into a single observation.

Following the research objective and prior studies, the sample was screened according to the following criteria: (1) excluding firms designated as *ST or ST due to abnormal financial conditions; (2) excluding observations with missing data. Furthermore, all continuous variables (except dummy variables) were winsorized at the 1% level in both tails. After applying these filters, a final sample of 7,029 firm-year observations was obtained. All financial data were collected from the CSMAR database.

4.2 Model Specification

To examine the role of internal control in corporate performance, this study constructs the following model to test the hypotheses:

$$ROA_{it} = \alpha_0 + \alpha_1 \times IC_{it} + \alpha_2 \times Control_{it} + ind + year + \varepsilon_{it} \quad (1)$$

To test whether internal control affects corporate performance through corporate social responsibility (CSR), the following mediation model is constructed for hypothesis testing, where CSR denotes corporate social responsibility:

$$ROE_{it} = \alpha_0 + \alpha_1 \times IC_{it} + \alpha_2 \times Control_{it} + year + Industry + \varepsilon_{it} \quad (2)$$

$$CSR_{it} = \beta_0 + \beta_1 \times IC_{it} + \beta_2 \times Control_{it} + year + Industry + \varepsilon_{it} \quad (3)$$

$$ROE_{it} = \delta_0 + \delta_1 \times IC_{it} + \delta_2 \times CSR_{it} + \delta_3 \times Control_{it} + year + Industry + \varepsilon_{it} \quad (4)$$

4.3 Variable Definitions

Following prior studies, control variables such as firm size (Size), financial leverage (Lev), growth (Growth), firm age (Age), ownership concentration (Top1), board size (Board), and managerial shareholding ratio (MSH) are included. The definitions of these variables are presented in Table 1.

Table 1. Variable Definitions

Variable Type	Variable Name	Symbol	Definition
Dependent Variable	Corporate Performance	ROA	Net profit / Total assets
Independent Variable	Internal Control	IC	DIB Internal Control Index / 100
Mediating Variable	Corporate Social Responsibility (CSR)	CSR	Hexun CSR Score / 100
Control Variables	Firm Size	Size	Natural logarithm of total assets
	Financial Leverage	Lev	Total liabilities / Total assets
	Growth	Growth	(Current year operating revenue – Last year operating revenue) / Current year operating revenue
	Firm Age	Age	Current year – Year of establishment
	Ownership Concentration	TOP1	Shareholding of the largest shareholder / Total shares
	Board Size	Board	Number of board members
	Managerial Shareholding Ratio	MSH	Number of shares held by management / Total shares

5. Empirical Analysis and Results

5.1 Descriptive Statistics

Table 2 reports the descriptive statistics of the key variables. The mean value of ROA is 0.053, with a median of 0.046, a maximum of 0.204, and a minimum of -0.168, indicating substantial variation in financial performance across firms. The mean value of IC is 6.357, which is broadly consistent with the findings of Xiaorong Li et al. (2021).

Table 2. Descriptive Statistics

Variables	N	Mean	Median	Std. Dev	Minimum	Maximum
ROA	7029	0.053	0.046	0.053	-0.168	0.204
IC	7029	6.357	6.69	1.502	0	8.537
CSR	7029	0.25	0.225	0.145	0.008	0.749
Size	7029	21.989	21.871	1.082	19.472	27.298
Lev	7029	0.379	0.359	0.193	0.054	0.947
Growth	7029	0.244	0.109	0.897	-0.738	10.301
Age	7029	17.307	17	5.226	5	32
TOP1	7029	0.34	0.321	0.139	0.085	0.747
Board	7029	8.579	9	1.628	5	15
MSH	7029	0.135	0.006	0.198	0	0.672

Table 3 reports the Pearson correlation matrix. We find that the correlation coefficient between IC and ROA is 0.315 and significantly positive, providing preliminary evidence that internal control promotes corporate performance. The correlation coefficient between IC and CSR is 0.280 and also significantly positive, suggesting that internal control facilitates corporate social responsibility. Moreover, the correlation coefficient between ROA and CSR is 0.436 and significantly positive, indicating that CSR contributes to corporate performance. At the same time, IC, CSR, and ROA are all significantly correlated with the control variables, which highlights the need for multiple regression analysis to further test the effect of internal control on corporate performance.

Table 3. Correlation Analysis

	<i>ROA</i>	<i>IC</i>	<i>CSR</i>	<i>Size</i>	<i>Lev</i>	<i>Growth</i>	<i>Age</i>	<i>TOP1</i>	<i>Board</i>	<i>MSH</i>
<i>ROA</i>	1									
<i>IC</i>	0.315***	1								
<i>CSR</i>	0.436***	0.280***	1							
<i>Size</i>	0.045***	0.165***	0.210***	1						
<i>Lev</i>	-0.408***	-0.158***	-0.136***	0.375***	1					
<i>Growth</i>	-0.020*	-0.093***	-0.026**	-0.047***	0.066***	1				
<i>Age</i>	-0.054***	-0.160***	-0.122***	0.168***	0.096***	0.0130	1			
<i>TOP1</i>	0.158***	0.141***	0.141***	0.105***	-0.068***	-0.0140	-0.117***	1		
<i>Board</i>	0.00600	0.051***	0.130***	0.250***	0.139***	-0.025**	0.0140	-0.075***	1	
<i>MSH</i>	0.145***	0.100***	-0.00300	-0.247***	-0.272***	-0.029**	-0.205***	-0.0120	-0.179***	1

t-statistics in parentheses

***p<0.01, **p<0.05, *p<0.1

5.2 Multiple Regression Analysis

5.2.1 Internal Control and Corporate Performance

Table 4 presents the empirical results on the relationship between internal control and corporate performance. When internal control is examined independently, the coefficient of IC is 0.011 and significant at the 1% level, indicating that internal control exerts a significant positive effect on corporate performance. After including control variables, the coefficient of IC decreases to 0.007 but remains significant at the 1% level, further confirming the positive role of internal control in enhancing performance. With the additional inclusion of year and industry fixed effects, the coefficient of IC remains at 0.007 and significant at the 1% level, which again demonstrates the robustness of the result. These findings suggest that internal control is one of the key drivers of corporate performance. Moreover, the evidence supports the “insider” hypothesis in corporate governance theory, indicating that the internal governance mechanisms of Chinese listed firms significantly improve performance.

Table 4. Internal Control and Corporate Performance

	(1)	(2)	(3)
		ROA	
IC	0.011***(28.07)	0.007***(18.82)	0.007***(17.68)
Size		0.008***(13.83)	0.009***(14.74)
Lev		-0.117***(-36.43)	-0.119***(-35.75)
Growth		0.002***(3.77)	0.002***(3.94)
Age		0(1.22)	0.000***(2.67)
TOP1		0.034***(8.28)	0.034***(8.43)
Board		0.001***(2.80)	0.001***(2.03)
MSH		0.016***(5.44)	0.019***(6.28)
Cons	-0.033***(-3.65)	-0.156***(-13.01)	-0.165***(-11.62)
Ind	NO	NO	YES
Year	NO	NO	YES
N	7029	7029	7029
Adj R ²	0.120	0.266	0.277

t-statistics in parentheses

***p<0.01, **p<0.05, *p<0.1

5.2.2 Internal Control, Corporate Social Responsibility, and Corporate Performance

In the empirical tests, corporate social responsibility (CSR) is measured using the Hexun CSR index divided by 100. Table 5 shows that in column (2), internal control significantly enhances CSR. In column (3), the coefficient of CSR is significantly positive, indicating that CSR improves corporate performance. At the same time, the coefficient of IC in column (3) also remains significantly positive, suggesting that CSR plays a partial mediating role, whereby internal control enhances corporate performance through its effect on CSR.

Table 5. Internal Control, Corporate Social Responsibility, and Corporate Performance

	(1)	(2)	(3)
	ROA	CSR	ROA
IC	0.007***(17.68)	0.014***(12.40)	0.005***(14.03)
CSR			0.129***(32.10)
Size	0.009***(14.74)	0.042***(24.54)	0.004***(6.11)
Lev	-0.119***(-35.75)	-0.187***(-20.27)	-0.095***(-29.65)
Growth	0.002***(3.94)	0.00200(0.87)	0.002***(3.89)
Age	0.000***(2.67)	0.000(0.81)	0.000** (2.55)
TOP1	0.034***(8.43)	0.067***(5.88)	0.026***(6.75)
Board	0.001** (2.03)	0.004***(4.11)	0(0.59)
MSH	0.019***(6.28)	0.025***(2.99)	0.016***(5.57)
Cons	-0.165***(-11.62)	-0.702***(-17.82)	-0.074***(-5.49)
Ind	NO	NO	YES
Year	NO	NO	YES
N	7029	7029	7029
Adj R ²	0.277	0.243	0.370

t-statistics in parentheses

***p<0.01, **p<0.05, *p<0.1

5.3 Robustness Tests

5.3.1 Replacing the Dependent Variable

Table 6. Alternative Measure of the Dependent Variable

	(1)	(2)	(3)
	ROE	CSR	ROE
IC	0.013***(17.05)	0.014***(12.40)	0.010***(13.54)
CSR			0.238***(30.27)
Size	0.017***(14.13)	0.042***(24.54)	0.007***(5.83)
Lev	-0.094***(-14.42)	-0.187***(-20.27)	-0.049***(-7.70)
Growth	0.005***(3.88)	0.00200(0.87)	0.004***(3.83)
Age	0.000*(1.94)	0(0.81)	0.000*(1.77)
TOP1	0.055***(7.00)	0.067***(5.88)	0.039***(5.29)
Board	0.001(1.52)	0.004***(4.11)	0(0.13)
MSH	0.032***(5.39)	0.025***(2.99)	0.026***(4.64)
Cons	-0.363***(-13.13)	-0.702***(-17.82)	-0.194***(-7.29)
Ind	NO	NO	YES
Year	NO	NO	YES
N	7003	7029	7003
Adj R ²	0.142	0.243	0.242

t-statistics in parentheses

***p<0.01, **p<0.05, *p<0.1

In the baseline analysis, return on assets (ROA) was used as the measure of corporate performance. For the robustness test, return on equity (ROE) was further employed as an alternative measure, and the regression was re-estimated accordingly. The results, reported in Table 6, show no substantial differences from the baseline findings.

5.3.2 Excluding the Impact of the COVID-19 Pandemic

Considering that investor sentiment and corporate financing and investment activities were significantly affected during the COVID-19 pandemic, the years 2020–2021 were excluded from the sample in the robustness test to eliminate the potential impact of the pandemic. The regression was re-estimated, and the results, reported in Table 7, show no substantial differences from the baseline findings.

Table 7. Excluding the Impact of the COVID-19 Pandemic

	(1)	(2)	(3)
	ROE	CSR	ROE
IC	0.007***(16.55)	0.015***(11.53)	0.005***(13.29)
CSR			0.113***(27.91)
Size	0.009***(14.22)	0.046***(23.69)	0.004***(6.31)
Lev	-0.122***(-35.05)	-0.195***(-18.74)	-0.100***(-29.65)
Growth	0.003***(4.14)	0.00200(1.01)	0.002***(4.03)
Age	0.000***(2.64)	0(0.87)	0.000** (2.49)
TOP1	0.033***(7.66)	0.063***(4.93)	0.026***(6.36)
Board	0.001** (2.07)	0.005***(4.27)	0(0.67)
MSH	0.018***(5.50)	0.023** (2.40)	0.015***(4.98)
Cons	-0.169***(-11.38)	-0.801***(-18.14)	-0.078***(-5.43)
Ind	NO	NO	YES
Year	NO	NO	YES
N	6062	6062	6062
Adj R ²	0.292	0.243	0.373

t-statistics in parentheses

***p<0.01, **p<0.05, *p<0.1

6. Conclusions and Recommendations

6.1 Conclusions

Based on the empirical tests and analyses of corporate performance, internal control indices, and corporate social responsibility (CSR) scores for a large sample of manufacturing firms, and by constructing models to examine the relationships among these variables, the following conclusions are drawn.

(1) Improving the quality of internal control has a positive impact on corporate financial performance, and the two are positively correlated. To stand out in an increasingly competitive market, corporate leaders must actively gather information, particularly financial data, to maintain sharp insights. This enables firms to effectively respond to external risks while also addressing internal challenges. As a managerial instrument, internal control plays an essential role in enhancing corporate governance. Effective implementation of internal control significantly improves the accuracy and timeliness of accounting information, thereby providing reliable support for managerial decision-making. This study highlights the importance of strengthening internal control in China's state-owned enterprises (SOEs) by analyzing the key issues they face and the necessity of building robust internal control systems. Effective internal control ensures smooth production and operational activities, prevents unnecessary errors, and helps enterprises comply with established standards. It also promotes compliance with national regulations while safeguarding financial resources and physical assets, thereby reducing the risk of theft and misuse and ensuring efficient management of income, expenses, and resources.

(2) Enhancing the quality of internal control also facilitates better fulfillment of corporate social responsibility. Chinese laws and regulations stipulate that enterprises should actively assume social responsibility and give back to society. Firms are expected to shoulder economic responsibility by contributing to people's material well-being and playing an indispensable role in the stable and rapid development of the national economy. Economic responsibility audits serve as both a supervisory and evaluative mechanism, ensuring profitability, maximizing sales, reducing costs, and making sound decisions to protect stakeholder interests. Companies must comply with laws and regulations such as the *Environmental Protection Law*, the *Consumer Rights Protection Law*, and the *Labor Protection Law*, thereby safeguarding environmental standards, consumer rights, and labor rights. They are also required to adhere to national industrial policies, contractual obligations, and principles

of integrity, ensuring lawful operations while refraining from harming customer interests, public welfare, or shareholder rights. Moreover, enterprises should embrace moral responsibilities associated with their activities, products, and services to prevent negative societal impacts. By accelerating technological upgrading, optimizing industrial structures, advancing green enterprise development, and expanding employment opportunities, firms can strengthen their societal contributions.

(3) CSR acts as a mediating factor in the relationship between internal control and corporate performance. Specifically, internal control enhances corporate performance by improving CSR. Hence, firms should place greater emphasis on fulfilling their social responsibilities. By actively engaging in CSR, firms build strong brand reputations, thereby improving their market position. At the same time, CSR initiatives elevate managerial standards, promote better corporate governance structures, and reduce operational risks, which in turn increase enterprise value. Over time, these improvements translate into sustained growth in corporate performance.

6.2 Recommendations

(1) Enterprises should improve their internal control systems by clarifying the relationship between principals and agents, and clearly defining rights and responsibilities. Corporate operations should be regulated through laws, regulations, and internal company rules to improve efficiency and ensure that each department fulfills its role. While management enjoys certain decision-making power and autonomy, effective internal control can also reduce conflicts of interest with shareholders. Furthermore, building a sound internal environment, corporate culture, and ethical climate is essential for long-term sustainable development.

(2) To safeguard the safety and interests of both enterprises and employees, firms must strengthen routine production safety inspections, identify and eliminate operational risks in a timely manner, and establish comprehensive safety regulations, management systems, and emergency response plans to prevent accidents. A robust quality assurance system should be implemented to ensure that every process uses qualified materials, thereby improving efficiency in raw material utilization and reducing resource waste. Strict quality checks must be conducted throughout all production stages to guarantee that products meet established standards. In addition, enterprises should enhance after-sales services to protect consumer rights and ensure a high-quality customer experience. Continuous improvement in managerial capacity and operational strength will allow enterprises to provide better products and services. Enterprises are also encouraged to promote industrial upgrading by phasing out outdated production capacity, improving efficiency, and meeting the growing demand for environmentally friendly, healthy, and green products. Through these measures, China's green manufacturing sector will be better positioned to adapt to societal development requirements, gradually achieving a balance between economic growth and ecological sustainability.

(3) Enterprises should actively assume social responsibility, as empirical evidence indicates that CSR has a significant positive effect on corporate performance. Firms, which grow with the support of society, should ultimately return value to society. They should actively respond to the needs and expectations of employees, consumers, and government bodies by producing high-quality products and protecting employee rights. At the same time, governments should strengthen relevant laws, regulations, and guiding policies to encourage more enterprises to engage actively in CSR practices.

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