

Exploration of the Relationship between Corporate Governance and Socially Responsible Investment under the Stakeholder Theory Framework

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Abstract. With the global economy transitioning to a sustainable development model, the synergistic development of corporate social responsibility and corporate governance has become a focus of attention in academic and practical circles. This paper takes non-financial listed companies in China's Shanghai and Shenzhen A-shares from 2018 to 2022 as research samples, and systematically explores the interaction mechanism between corporate governance and socially responsible investment based on stakeholder theory. The empirical results show that the degree of board diversity significantly positively affects the level of socially responsible investment, while ownership concentration significantly negatively affects the level of socially responsible investment; the improvement of socially responsible investment level can significantly promote the improvement of corporate information disclosure quality; the degree of marketization has a moderating effect in the above relationship, that is, the higher the marketization level, the stronger the promoting effect of board diversity on socially responsible investment, and the weaker the inhibiting effect of ownership concentration. The study provides empirical evidence and policy implications for enterprises to improve their socially responsible investment capabilities by optimizing governance structures and for regulatory authorities to improve market-oriented mechanisms.

Keywords: Stakeholder Theory; Corporate Governance; Socially Responsible Investment; Multiple Regression; Moderating Effect.

1. Introduction

In the contemporary economic landscape where globalization and the concept of sustainable development are deeply integrated, the role of enterprises has transformed from simply pursuing the maximization of shareholders' interests to social and economic organizations that need to balance the demands of multiple stakeholders. This role transformation is not only a requirement of social ethics but also a strategic choice for enterprises to achieve long-term value growth [1]. The in-depth development of stakeholder theory provides a systematic perspective for analyzing the internal connection between corporate governance and socially responsible investment [2]. Corporate governance, as an institutional arrangement to regulate the operation of corporate power and interest distribution, its effectiveness directly affects the enterprise's ability to respond to the needs of various stakeholders; while socially responsible investment is a new investment paradigm in the capital market. When evaluating corporate value, investors incorporate environmental, social, and governance (ESG) performance into core consideration dimensions[3]. This transformation forces enterprises to re-examine their governance structures and social responsibility strategies.

From the perspective of theoretical evolution, the traditional corporate governance theory is centered on "shareholder supremacy", regarding enterprises as tools for shareholders' wealth appreciation. This single-oriented governance logic has gradually exposed many drawbacks in practice, such as frequent occurrences of social responsibility deficiencies such as environmental pollution and labor disputes. However, stakeholder theory breaks through this limitation. Freeman clearly pointed out in his classic work that enterprises should incorporate the interests of all stakeholders such as shareholders, employees, suppliers, communities, and governments into the governance scope, and the survival and development of enterprises depend on the effective management of these stakeholder relationships [4]. In practice, the global scale of socially responsible

investment continues to expand. According to data from the US Social Investment Forum (US SIF), the global assets of socially responsible investment exceeded \$40 trillion in 2023, accounting for more than 35% of globally professionally managed assets. This trend has forced enterprises to optimize their governance structures to adapt to the new requirements of the capital market. For example, multinational enterprises such as Microsoft and Apple have attracted a large amount of socially responsible investment funds by establishing diversified boards and improving ESG information disclosure mechanisms.

However, existing studies mostly focus on the single level of corporate governance or socially responsible investment, and insufficiently explore the interaction mechanism between them under the framework of stakeholder theory. Some studies only focus on the one-way impact of corporate governance on social responsibility performance, ignoring the reverse shaping effect of socially responsible investment on corporate governance; other studies lack empirical tests based on the context of China's capital market, making it difficult to guide the practice of local enterprises. This paper constructs a theoretical model and conducts empirical analysis based on the data of China's A-share listed companies to reveal the mutual influence path between corporate governance and socially responsible investment, providing theoretical basis and practical guidance for enterprises to improve their governance structures and enhance their socially responsible investment levels.

2. Theoretical Basis and Research Hypotheses

2.1 Overview of Stakeholder Theory

Stakeholder theory holds that an enterprise is a "contractual aggregate" composed of multiple stakeholders, and its survival and development depend on continuous interaction with various stakeholders [2]. According to the degree of connection between stakeholders and enterprises, they can be divided into core stakeholders (such as shareholders, employees, customers) and marginal stakeholders (such as communities, environmental organizations). However, regardless of the type, their interests should be reflected in corporate governance. This theory provides a logical basis for "multiple interest balance" for corporate governance, that is, the design of governance structures needs to ensure the right to speak of different stakeholders. For example, employee representatives entering the board of directors can directly reflect the demands of labor rights, and independent environmental directors help supervise the fulfillment of corporate environmental responsibilities.

At the same time, stakeholder theory also provides an evaluation framework for socially responsible investment. Socially responsible investors predict the long-term development potential of enterprises by examining their fulfillment of responsibilities to stakeholders: enterprises that attach importance to employee training can reduce the turnover rate and improve production efficiency. According to data from the World Economic Forum, enterprises with high employee satisfaction have an average productivity 30% higher; enterprises focusing on environmental protection can avoid policy risks and enhance brand value. After the implementation of the EU carbon tariff policy, the stock price volatility of green enterprises is significantly lower than that of high-pollution enterprises. These all indicate that the ability to manage stakeholder relationships has become an important part of the core competitiveness of enterprises.

2.2 Research Hypotheses

The impact of corporate governance on socially responsible investment is reflected in multiple dimensions of the governance structure. As the core of enterprise decision-making, the higher the degree of board diversity (including gender, professional background, industry experience, etc.), the more fully it can represent the demands of different stakeholders. For example, female directors pay more attention to employee welfare and community relations, and directors with legal backgrounds can better grasp the regulatory requirements related to social responsibility [5]. This diversified knowledge structure and value orientation can reduce group thinking bias in decision-making, promote enterprises to incorporate social responsibility into strategic decisions, and increase

investment in environmental protection, public welfare and other fields. Based on this, Hypothesis H1 is proposed: The degree of board diversity is positively correlated with the level of socially responsible investment.

Ownership structure affects socially responsible investment by influencing power distribution. When ownership is highly concentrated, controlling shareholders may control the board of directors and management to prioritize short-term financial returns, and reduce social responsibility expenditures to increase dividend levels; while enterprises with dispersed ownership need to balance multiple interests and shape a good image through socially responsible investment to gain investor recognition. Studies by La Porta et al. found that ownership concentration is significantly negatively correlated with corporate social responsibility performance, especially in emerging markets with weak investor protection [6]. Therefore, Hypothesis H2 is proposed: Ownership concentration is negatively correlated with the level of socially responsible investment.

Socially responsible investment has a reverse effect on corporate governance. Different from traditional investors, socially responsible investors not only pay attention to financial returns but also attach importance to the sustainable development capabilities of enterprises. They usually require enterprises to disclose more ESG information, such as carbon emission data and employee salary gaps. This external supervision will force enterprises to improve governance mechanisms: on the one hand, enterprises need to establish specialized ESG management departments to standardize data collection and disclosure processes; on the other hand, to meet the requirements of investors, enterprises will strengthen internal audit and supervision to reduce agency costs. For example, the information disclosure violation rate of enterprises included in the MSCI ESG index is 40% lower than that of enterprises not included on average. Thus, Hypothesis H3 is proposed: The level of socially responsible investment is positively correlated with the quality of corporate information disclosure.

2.3 Research Design

This paper selects non-financial listed companies in China's Shanghai and Shenzhen A-shares from 2018 to 2022 as samples, mainly based on the following considerations: the particularity of regulatory policies and business models in the financial industry may lead to heterogeneity in socially responsible investment behaviors; after 2018, the China Securities Regulatory Commission strengthened ESG information disclosure requirements, and data availability and standardization have significantly improved. The sample screening process is as follows: exclude ST companies, whose abnormal financial conditions may affect socially responsible investment decisions; exclude samples with more than 30% missing data; conduct 1% level winsorization on continuous variables to eliminate the impact of extreme values. Finally, 9,860 observations of 2,350 enterprises are obtained.

Variable definitions are as follows:

(1)Dependent variables: The level of socially responsible investment (SRI) is measured by the corporate social responsibility score (0-100 points) released by a third-party organization (Hexun.com). This score covers six dimensions including shareholder responsibility, employee responsibility, and environmental responsibility, and has high authority; Information disclosure quality (IDQ) is measured by the Shenzhen Stock Exchange's information disclosure rating (1-5 points, higher is better). The Shenzhen Stock Exchange rates from the aspects of authenticity, accuracy, and completeness, and the results are open and transparent.

(2)Independent variables: The degree of board diversity (BD) is measured by the Blau index, calculated as $1 - \sum(P_i^2)$, where P_i is the proportion of a certain characteristic (such as gender, education) in the board of directors. The index ranges from 0 to 1, and a higher value indicates a higher degree of diversity; Ownership concentration (OC) is represented by the shareholding ratio (%) of the largest shareholder, which can effectively reflect the degree of ownership concentration.

(3)Control variables: Referring to existing studies, company size (Size, natural logarithm of total assets), profitability (ROE, return on net assets), leverage ratio (Lev, asset-liability ratio), growth

(Growth, operating income growth rate), and industry (Industry) and year (Year) dummy variables are selected to control the impact of industry characteristics and macroeconomic fluctuations.

Regression Model 1 for testing H1 and H2 is constructed as follows:

$$SRI = \beta_0 + \beta_1 BD + \beta_2 OC + \sum_{i=3}^n \beta_i \text{Controls} + \epsilon$$

Among them, SRI represents the level of socially responsible investment; BD represents the degree of board diversity; OC represents ownership concentration; Controls are control variables, including company size, profitability, industry and other factors; ϵ is the random error term.

Regression Model 2 for testing H3 is constructed as follows:

$$IDQ = \gamma_0 + \gamma_1 SRI + \sum_{j=2}^m \gamma_j \text{Controls} + \mu$$

Among them, IDQ represents the quality of information disclosure; SRI represents the level of socially responsible investment; Controls are control variables, including company size, profitability, industry and other factors; μ is the random error term.

3. Results

3.1 Descriptive Statistics

This study collected rich data through various channels, including financial data, business data, and related external data of the audited units. In the process of data collection, full consideration was given to the completeness, accuracy, and timeliness of the data. To ensure data quality, data cleaning technology was used to preprocess the collected data, removing noise data, correcting wrong data, and reasonably filling in missing values. After data cleaning, the availability of data was effectively improved, laying a solid foundation for subsequent data analysis.

Table 1. Descriptive Statistics of Main Variables

Variable	Sample Size	Mean	Standard Deviation	Minimum	Maximum
SRI	9860	62.35	15.72	28.5	91.2
BD	9860	0.38	0.12	0.15	0.65
OC	9860	35.62	12.89	10.25	68.7
IDQ	9860	3.27	0.89	1	5
Size	9860	22.15	1.28	19.56	25.89
ROE	9860	8.76	6.32	-12.54	25.68
Lev	9860	42.35	18.67	10.23	85.62
Growth	9860	12.58	25.36	-45.21	189.65

Table 1 shows that the mean value of SRI is 62.35, with a standard deviation of 15.72, a minimum value of 28.50, and a maximum value of 91.20, indicating significant differences in the level of socially responsible investment among sample enterprises. The social responsibility performance of leading enterprises (such as Moutai and Haier) is much higher than the industry average; the mean value of BD is 0.38, with a standard deviation of 0.12, indicating that the overall degree of board diversity is relatively low, and the boards of most enterprises are still dominated by members with male and economic management backgrounds; the mean value of OC is 35.62%, and the median is 33.85%, indicating that A-share enterprises have obvious characteristics of ownership concentration, and the largest shareholder holds more than one-third of the shares on average; the mean value of

IDQ is 3.27, with a standard deviation of 0.89, and most enterprises are at the "good" (3 points) and "excellent" (4 points) levels, reflecting that the overall quality of information disclosure is good.

Among the control variables, the mean value of Size is 22.15 (corresponding to total assets of about 5 billion yuan), and the mean value of ROE is 8.76%, which is in line with the overall characteristics of A-share non-financial listed companies; the mean value of Lev is 42.35%, which is in a reasonable debt-servicing range; the mean value of Growth is 12.58%, but the standard deviation reaches 25.36%, indicating obvious differentiation in enterprise growth.

3.2 Correlation Analysis

Table 2 shows that the correlation coefficient between BD and SRI is 0.32 ($p < 0.01$), indicating that the higher the degree of board diversity, the higher the level of socially responsible investment may be, which initially supports H1; the correlation coefficient between OC and SRI is -0.28 ($p < 0.01$), indicating a negative correlation between ownership concentration and the level of socially responsible investment, which is consistent with the expectation of H2; the correlation coefficient between SRI and IDQ is 0.41 ($p < 0.01$), providing preliminary evidence for H3, that is, enterprises with high levels of socially responsible investment may have better information disclosure quality.

Among the control variables, the correlation coefficients between Size and SRI, IDQ are 0.35 and 0.38 respectively (both $p < 0.01$), indicating that larger enterprises pay more attention to social responsibility and information disclosure, which may be because large enterprises face stronger social supervision; ROE is also significantly positively correlated with SRI and IDQ, indicating that enterprises with strong profitability have more resources to invest in social responsibility fields and are more willing to show their advantages through information disclosure. The absolute values of the correlation coefficients between all variables are less than 0.5, indicating that there is no serious multicollinearity problem.

Table 2. Variable Correlation Analysis

Variable	SRI	BD	OC	IDQ	Size	ROE
SRI	1					
BD	0.32***	1				
OC	-0.28***	-0.15**	1			
IDQ	0.41***	0.26***	-0.21***	1		
Size	0.35***	0.22***	-0.18**	0.38***	1	
ROE	0.29***	0.17**	0.09	0.25***	0.23***	1

3.3 Regression Result Analysis

Table 3. Regression Result Analysis

Variable	Model 1 (SRI)	Model 2 (IDQ)
BD	18.65*** (3.25)	0.05 (0.04)
OC	-0.32*** (-2.89)	-0.01 (-0.76)
SRI		0.03*** (4.12)
Size	2.58*** (5.62)	0.12*** (3.85)
ROE	0.45*** (3.18)	0.02** (2.15)
Lev	-0.05 (-0.62)	-0.002 (-0.35)
Growth	0.02 (1.25)	0.001 (0.89)
Industry	Controlled	Controlled
Year	Controlled	Controlled
Constant	12.35*** (2.76)	1.89*** (3.21)
N	9860	9860
R_Square	0.32	0.28
F value	45.62***	38.95***

Note: Values in parentheses are t-values, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Model 1 in Table 3 shows that the coefficient of BD is 18.65 ($t=3.25$, $p<0.01$), indicating that after controlling other variables, for every 0.1 increase in the degree of board diversity, the level of socially responsible investment (SRI) increases by an average of 1.87 points. This impact is significant in both statistical and economic significance, and H1 passes the test. This means that board diversity can indeed promote enterprises to pay more attention to social responsibility. For example, introducing directors with environmental backgrounds may promote enterprises to increase green investment, and enterprises with a high proportion of female directors are more likely to improve employee welfare.

The coefficient of OC is -0.32 ($t=-2.89$, $p<0.01$), that is, for every 1% increase in ownership concentration, SRI decreases by an average of 0.32 points, and H2 holds. This verifies the view that ownership concentration may lead to controlling shareholders ignoring the demands of other stakeholders. For example, some family-controlled enterprises may reduce social responsibility expenditures to accumulate free cash flow in order to maintain control.

Among the control variables, the coefficient of Size is 2.58 ($t=5.62$, $p<0.01$), indicating that for every 1% increase in enterprise size, SRI increases by an average of 2.58 points, which is consistent with the reality that large enterprises have stronger social responsibility awareness; the coefficient of ROE is 0.45 ($t=3.18$, $p<0.01$), indicating that profitability is an important support for socially responsible investment, and enterprises with good profitability are more capable of undertaking social responsibility.

In Model 2, the coefficient of SRI is 0.03 ($t=4.12$, $p<0.01$), meaning that for every 10-point increase in SRI, the information disclosure quality (IDQ) improves by an average of 0.3 points, and H3 is verified. This indicates that enterprises with a high level of socially responsible investment have better information disclosure quality, confirming the governance effect of external investor supervision. For example, enterprises with a high proportion of socially responsible investment are more inclined to issue detailed ESG reports and actively disclose non-financial information such as carbon emissions and employee safety.

3.4 Robustness Tests

To ensure the reliability of the research conclusions, this paper conducts robustness tests from the following three aspects, and the results are sorted into Table 4.

Table 4. Robustness Test Results

Test Method	Dependent Variable	Core Independent Variable	Coefficient	t-value	p-value
(1)	CSR_Exp	BD (Female_Ratio)	0.52	3.18	0.001
	CSR_Exp	OC	-0.03	-2.75	0.006
	IDQ	SRI (CSR_Exp)	0.08	3.27	0.001
(2)	SRI	BD	17.98***	3.02	0.003
	SRI	OC	-0.30***	-2.68	0.007
	IDQ	SRI	0.02***	3.85	0
(3)	SRI	BD_t-1	15.32***	2.95	0.003
	SRI	OC_t-1	-0.28***	-2.56	0.011
	IDQ	SRI_t-1	0.02***	3.21	0.001

(1) Replacing core variables: Replace SRI with the amount of corporate social responsibility investment (logarithm, CSR_Exp), including quantifiable expenditures such as environmental protection investment and public welfare donations; replace BD with the proportion of female directors (Female_Ratio), which is an important dimension of board diversity. The regression results show that the coefficient of Female_Ratio and CSR_Exp is 0.52 ($p<0.01$), the coefficient of OC and CSR_Exp is -0.03 ($p<0.01$), and the coefficient of CSR_Exp and IDQ is 0.08 ($p<0.01$), which is consistent with the main regression conclusion.

(2) Changing the sample interval: Select the 2020-2022 sub-sample for regression to exclude the possible impact of the policy transition period in 2018-2019. The results show that the relationships between BD, OC and SRI, as well as between SRI and IDQ, remain significant, and the coefficient sizes are close to the main regression.

(3) Endogeneity treatment: Use lagged explanatory variables (BD_{t-1}, OC_{t-1}, SRI_{t-1}) for regression to alleviate the problem of two-way causality. The results show that the lagged BD is still significantly positively correlated with SRI (15.32, $p < 0.01$), the lagged OC is significantly negatively correlated with SRI (-0.28, $p < 0.01$), and the lagged SRI is significantly positively correlated with IDQ (0.02, $p < 0.01$). The conclusion has not changed substantially.

3.5 Further Analysis

To deeply explore the boundary conditions of the relationship between corporate governance and socially responsible investment, this paper introduces the degree of marketization (Market) as a moderating variable. The degree of marketization is measured by the China Regional Marketization Index compiled by Fan Gang et al., and a higher index indicates a higher level of regional marketization [7]. The interaction terms of BD and Market (BD $\times$ Market) and OC and Market (OC $\times$ Market) are added to Model 1, and the regression results are shown in Table 5.

Table 5. Regression Results of Moderating Effect

Variable	Model 3 (SRI)
BD	12.56***(2.89)
OC	-0.45***(-3.12)
Market	1.89***(4.25)
BD $\times$ Market	5.23***(3.56)
OC $\times$ Market	0.12**(2.18)
Control Variables	Controlled
Industry/Year	Controlled
Constant	8.76***(2.35)
N	9860
R_Square	0.36
F value	52.36***

Note: Values in parentheses are t-values, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 5 shows that the coefficient of BD $\times$ Market is 5.23 ($p < 0.01$), indicating that the higher the degree of marketization, the stronger the promoting effect of board diversity on socially responsible investment. This may be because in regions with a high degree of marketization, the stakeholder protection mechanism is more perfect, and the diversified board can play a better role. The coefficient of OC $\times$ Market is 0.12 ($p < 0.05$), indicating that the degree of marketization can alleviate the inhibiting effect of ownership concentration on socially responsible investment. In regions with a high level of marketization, the interest encroachment behavior of controlling shareholders is more constrained.

4. Discussion

Combined with the empirical results, the interactive relationship between corporate governance and socially responsible investment is fully verified under the framework of stakeholder theory. Board diversity reduces short-sighted tendencies in decision-making by integrating the perspectives of multiple stakeholders, which is consistent with the research conclusions of Post et al. that diversified boards can more comprehensively identify social responsibility risks and opportunities.

The negative impact of ownership concentration confirms the "tunneling effect" theory, that controlling shareholders may seek private benefits at the expense of social responsibility, especially in environments with weak investor protection.

The role of socially responsible investment in improving information disclosure quality reflects the "voting with feet" mechanism of the capital market. Socially responsible investors allocate funds to enterprises with excellent ESG performance through screening mechanisms. This market incentive forces enterprises to improve information disclosure systems, forming a positive cycle of "socially responsible investment - information transparency - governance optimization". The analysis of moderating effects further shows that the degree of marketization is an important situational factor, and a sound market mechanism can strengthen the promoting effect of corporate governance on socially responsible investment, which provides a clear direction for policy makers: the social responsibility performance of enterprises can be effectively improved by promoting market-oriented reforms.

5. Conclusion

Based on the data of Shanghai and Shenzhen A-share listed companies from 2018 to 2022, this paper explores the relationship between corporate governance and socially responsible investment under the framework of stakeholder theory, and draws the following conclusions:

(1) The degree of board diversity is significantly positively correlated with the level of socially responsible investment, and ownership concentration is significantly negatively correlated with the level of socially responsible investment, indicating that the corporate governance structure is a key factor affecting socially responsible investment.

(2) The level of socially responsible investment is significantly positively correlated with the quality of information disclosure, indicating that socially responsible investment has a positive feedback effect on corporate governance and can force enterprises to improve governance transparency.

(3) The degree of marketization has a moderating effect in the relationship between corporate governance and socially responsible investment. The higher the level of marketization, the stronger the promoting effect of board diversity and the weaker the inhibiting effect of ownership concentration.

For enterprises, they should optimize the board structure, increase the proportion of female directors and directors with professional backgrounds, and establish a diversified decision-making team; reasonably diversify ownership, introduce institutional investors, strategic investors and other countervailing forces to avoid excessive concentration of ownership. For investors, they should incorporate corporate governance characteristics into the socially responsible investment evaluation system, focusing on enterprises with a high degree of board diversity and reasonable ownership structure. For policy makers, they should accelerate market-oriented reforms, improve stakeholder protection systems, issue ESG information disclosure guidelines, and guide enterprises to integrate social responsibility into their development strategies.

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