

The Impact of ESG Performance on Corporate Foreign Shareholding: Empirical Evidence from Chinese A-Share Listed Companies on the Shanghai and Shenzhen Stock Exchanges

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Abstract: Against the backdrop of the mainstreaming of ESG principles, ESG performance is becoming one of the important factors influencing investors' investment decisions. Using Chinese A-share listed companies on the Shanghai and Shenzhen Stock Exchanges from 2012 to 2024 as the research sample, this study empirically examines the impact of ESG performance on corporate foreign shareholding. The results show that firms with strong ESG performance can promote corporate foreign shareholding behavior. Mechanism analysis reveals that ESG performance promotes foreign shareholding behavior mainly by improving information disclosure quality and enhancing internal control quality. Heterogeneity analysis indicates that the promoting effect of ESG performance on foreign shareholding is more pronounced in the subsamples of non-state-owned enterprises, firms with lower financial flexibility, firms with poorer annual report readability, and firms audited by non-Big Four auditors. The conclusions have positive implications for gaining a deeper understanding of how ESG performance affects foreign shareholding ratios, better improving the ESG information disclosure policy framework, and deepening foreign investment.

Keywords: ESG Performance; Foreign Shareholding; Information Disclosure Quality; Internal Control Quality.

1. Introduction

As the concept of global sustainable development gains increasing traction and China's capital market accelerates its two-way opening-up, foreign capital has become an important force driving China's economic transformation and upgrading and advancing sustainable development, and foreign-invested enterprises are important participants in Chinese modernization. In recent years, the Chinese government has intensively introduced a series of policies aimed at attracting and utilizing foreign investment. From the State Council's issuance of the Opinions on Further Optimizing the Foreign Investment Environment and Increasing Efforts to Attract Foreign Investment in 2023, which emphasized guaranteeing national treatment for foreign-invested enterprises in factor acquisition, qualification licensing, and standard setting, to the joint revision and issuance of the Measures for the Administration of Strategic Investment in Listed Companies by Foreign Investors by six departments including the Ministry of Commerce and the China Securities Regulatory Commission in 2024, which significantly lowered the access threshold for foreign strategic investment, and further to the 2025 Action Plan for Stabilizing Foreign Investment issued by the General Office of the State Council in 2025, which explicitly proposed expanding pilot opening-up in sectors such as telecommunications and healthcare and allowing foreign investment to engage in equity investment, these institutional opening-up measures indicate that China is committed to building a more transparent, convenient, and internationally aligned investment environment. However, behind institutional opening-up and scale expansion, foreign shareholding still faces multiple practical challenges. According to official data on foreign shareholding in 2025 released by three authoritative institutions—the State

Administration of Foreign Exchange, the People's Bank of China, and the China Securities Regulatory Commission—the total market value of A-shares held by foreign investors is approximately RMB 3.0–3.5 trillion, accounting for about 4% of the total A-share market capitalization, which remains a relatively low overall level. This can be attributed to the more salient problems faced by foreign investors in cross-border investment, including information asymmetry, insufficient governance transparency, and elevated agency risks. Therefore, how to effectively increase the proportion of foreign shareholding in permitted sectors, through what mechanisms investors' decision-making behavior is affected, and what role ESG performance plays, as corporate non-financial information, together with financial information such as annual reports, have become core questions.

In recent years, attention to the concept of Environmental, Social and Governance (ESG) has continued to grow, and ESG performance has gradually become a core dimension for investors to assess corporate sustainability. A large body of literature indicates that existing studies have focused on the economic consequences of ESG, such as its impact on corporate value[1], financial performance[2], operational risk [3], stock price volatility[4], and financing costs[5]. However, few existing studies have explored the impact of ESG performance on foreign shareholding.

This study takes A-share listed companies on the Shanghai and Shenzhen Stock Exchanges from 2012 to 2024 as the research sample to examine the impact of corporate ESG performance on foreign shareholding. The marginal contributions of this paper are mainly reflected in the following aspects. First, in terms of research perspective, it examines the impact of ESG on foreign shareholding and its underlying mechanisms from the dual perspectives of information transparency and governance quality. Second, in terms of research method, drawing on information asymmetry

theory, signaling theory, principal-agent theory, and stakeholder theory, it empirically analyzes the influence paths of ESG performance on foreign shareholding. Third, in terms of research content, it explores the heterogeneous characteristics of the relationship between ESG performance and foreign shareholding across subsamples grouped by firm ownership type, financial flexibility, annual report readability, and audit firm. The conclusions have positive implications for gaining a deeper understanding of how ESG performance affects foreign shareholding ratios, better improving the ESG information disclosure policy system, and deepening foreign investment.

2. Theoretical Analysis and Research Hypotheses

2.1. ESG Performance and Foreign Shareholding

Foreign shareholding, as the investment decision-making behavior of cross-border institutional investors, is driven not only by corporate financial performance but also highly dependent on assessments of corporate information transparency, governance quality, and long-term risk management capabilities. ESG performance provides a comprehensive evaluation across three dimensions—environmental sustainability, the degree of fulfillment of social responsibility, and governance effectiveness—thereby compensating for the limitations of traditional financial information in characterizing corporate sustainable development capacity. At the same time, the concept of sustainable development aligns with the going-concern accounting premise underlying corporate financial information; reducing information disclosure asymmetry and improving financial reporting quality can create a favorable investment environment. According to signaling theory, firms convey signals of sound governance, controllable risks, and sustainable operations to the capital market through voluntary disclosure or certification of strong ESG performance, thereby reducing information asymmetry between firms and investors. In countries where sustainability disclosure is incorporated into annual reports, investors can more systematically and comprehensively consider corporate non-financial and financial information, which helps attract foreign shareholders who focus on long-term value [6]. Stakeholder theory further indicates that a firm's long-term value creation capacity fundamentally depends on the stability of its relationships with diverse stakeholders. Firms with better ESG performance place greater emphasis on maintaining relationships with stakeholders and reducing hidden conflict costs. Firms with genuine ESG practices can enhance stakeholder trust, improve efficiency, and increase corporate value [7], thereby providing foreign investors with more stable long-term return expectations. Based on this, this paper proposes the following hypothesis:

H1. All else being equal, there is a positive relationship between corporate ESG performance and foreign shareholding; that is, the better a firm's ESG performance, the higher its foreign shareholding ratio.

2.2. The Mechanism Through Which ESG Performance Affects Foreign Shareholding

Information disclosure quality is a core channel of information transmission in capital markets, determining the

timeliness and sufficiency with which external information users obtain corporate information. According to information asymmetry theory, there exists an inherent information gap between corporate managers and external investors, and external investors can only make decisions based on information publicly disclosed by firms. Information asymmetry faced by foreign investors due to geographical, cultural, and market differences is even more pronounced. Strong ESG performance, as non-financial information disclosure, can provide external information users with a more user-friendly and transparent information environment, thereby improving information disclosure quality [8]. High-quality information disclosure can substantially reduce investors' evaluation costs, perceived risks, and biases [9]. Investors are more inclined to rely on public information disclosed prior to transactions, because such information reduces risk premiums and enables investors to more accurately assess a firm's true value and potential risks [10]. Financial reports are an important source for foreign investors in assessing corporate value, and sophisticated foreign institutional investors tend to avoid firms with poor financial statement information quality [11]. Accordingly, this paper proposes the following hypothesis:

H2. All else being equal, ESG performance promotes foreign shareholding by improving information disclosure quality.

As a core component of a firm's internal governance mechanism, internal control quality reflects, to a certain extent, the firm's operating conditions and governance quality. Firms with better ESG performance possess stronger ethical cultures and governance capabilities, which foster a sound internal control environment and thereby reduce internal control deficiencies [12]. The ESG philosophy prompts firms to optimize internal management processes and governance structures, thereby improving internal control quality [13]. According to principal-agent theory, establishing sound and scientific internal management systems can effectively mitigate agency problems. Strengthening the development of internal control quality helps protect investor interests [14]. High-quality internal control inhibits corporate earnings management and mitigates the principal-agent problem between principals and agents [15]. Managerial opportunism reduces foreign investors' willingness to hold shares [16]. Based on this, this paper proposes the following hypothesis:

H3. All else being equal, ESG performance promotes foreign shareholding by improving internal control quality.

3. Research Design

3.1. Sample Selection and Data Processing

This study takes Chinese A-share listed companies on the Shanghai and Shenzhen Stock Exchanges from 2012 to 2024 as the research sample, and the raw data are processed as follows: (1) Samples with missing values in relevant data are excluded; (2) Listed companies in the financial industry and abnormal companies such as ST and PT firms are excluded; (3) To avoid the influence of outliers, all continuous variables are winsorized at the 1st and 99th percentiles. ESG performance data are obtained from the Wind database, internal control quality data from the DIB database, and the remaining firm-level financial data mainly from the China Stock Market and Accounting Research (CSMAR) database. Finally, this study obtains 29,123 observations.

3.2. Variable Definitions

3.2.1. Dependent Variable

Foreign shareholding (FS). Drawing on the research method of Song Deyong et al. (2023)[17], foreign shareholding is measured as the sum of the shareholding ratios of shareholders classified as foreign legal persons and foreign natural persons among the top ten shareholders.

3.2.2. Explanatory Variable

ESG performance (ESG). Drawing on ESG-related research, the Huazheng ESG index system integrates international ESG rating methodologies with the realities of China's capital market with Chinese characteristics, and this indicator has been widely used in both industry and academia. The Huazheng ESG rating consists of nine levels from low to high—C, CC, CCC, B, BB, BBB, A, AA, and AAA—which are assigned values from 1 to 9, respectively, with higher ratings indicating better ESG performance.

3.2.3. Mediating Variables

Information disclosure quality (Quality). Drawing on the research of Jin Tingting et al. (2025)[18], this study measures information disclosure quality using the stock exchange's

assessment results of listed companies' information disclosure. This assessment result is a comprehensive evaluation of the timeliness and accuracy of listed companies' information disclosure. Information disclosure quality is classified into four grades—excellent, good, qualified, and unqualified—which are assigned values from 4 to 1, respectively; the larger the value, the more transparent the firm's information disclosure.

internal control quality (IC). Drawing on the research of Lu Dong et al. (2014)[19], this study selects the internal control index in the DIB database divided by 100 as the proxy variable for internal control quality.

3.2.4. Control Variables

Drawing on the research of Zhang Yue et al. (2025)[20], the control variables selected in this study include firm size (Size), debt-to-asset ratio (Lev), operating cash flow (Cflow), firm growth (TobinQ), board size (Board), profitability (Roe), ownership concentration (Top1), and ownership nature (Soe). The definitions and measurement methods of the relevant variables are presented in Table 1.

Table 1. Variable Definitions

Type of Variable	Variable Name	Variable Metric
dependent variable	FS	The sum of the shareholding ratios of foreign shareholders among the top ten shareholders
Explanatory variable	ESG	Huazheng ESG Rating
Moderating variable	Quality	Excellent, Good, Qualified, and Unqualified, assigned values from 4 to 1, respectively
	IC	Internal control index score divided by 100
control variable	Size	Natural logarithm of total assets at year-end
	Lev	Year-end total liabilities divided by year-end total assets
	Cflow	Net cash flow from operating activities divided by total assets
	TobinQ	Market value divided by total assets
	Board	Natural logarithm of the number of board members
	Roe	Net income divided by the balance of shareholders' equity
	Top1	Shareholding ratio of the largest shareholder
	Soe	Equals 1 for state-owned enterprises and 0 otherwise
	Firm	Individual dummy variables
	Year	Year dummy variables

3.3. Model Specification

To investigate the relationship between ESG performance

and foreign shareholding, the model is specified as shown in Equation (1):

$$FS_{i,t} = \alpha_0 + \alpha_1 ESG_{i,t} + \alpha \sum Controls_{i,t} + \sum Firm_i + \sum Year_t + \varepsilon_{i,t} \quad (1)$$

Where FS denotes foreign shareholding, ESG denotes ESG performance, i and t represent different firms and years, respectively, Controls denotes the control variables, Firm and Year denote the control of individual fixed effects and year fixed effects, and ε is the random disturbance term.

To examine the mechanisms through which information

disclosure quality and internal control quality operate in the relationship between ESG performance and foreign shareholding, this paper draws on the research of Wen Zhonglin et al. [21] and constructs Models (2) and (3) based on Model (1):

$$M_{i,t} = \delta_0 + \delta_1 ESG_{i,t} + \delta \sum Controls_{i,t} + \sum Firm_i + \sum Year_t + \varepsilon_{i,t} \quad (2)$$

$$FS_{i,t} = \eta_0 + \eta_1 ESG_{i,t} + \eta_2 M_{i,t} + \eta \sum Controls_{i,t} + \sum Firm_i + \sum Year_t + \varepsilon_{i,t} \quad (3)$$

Where M denotes the mediating variable, namely, information disclosure quality (Quality) and internal control quality (IC).

4. Analysis of Empirical Results

4.1. Descriptive Statistics

Descriptive statistics for the full sample are presented in

Table 2. The mean value of FS for the sample firms is 4.549, with a standard deviation of 11.395, indicating that the overall level of foreign shareholding is relatively low and that the disparity among firms is considerable. The mean value of ESG is 4.251, with a median of 4, suggesting that most listed firms have not yet reached the average level and that there is substantial room for improvement. The distributions of the other control variables are also relatively reasonable and

basically consistent with expectations.

Table 2. Descriptive statistics

Variables	N	Mean	Median	Std	Min	Max
FS	29123	4.549	0	11.395	0	64.13
ESG	29123	4.251	4	1.090	1	9
Quality	29123	3.124	3	0.576	1	4
IC	29123	6.525	6.615	0.720	2.975	8.082
Size	29123	22.28	22.05	1.264	20.20	26.39
Lev	29123	0.393	0.385	0.189	0.056	0.833
Cflow	29123	0.053	0.050	0.063	-0.123	0.236
TobinQ	29123	1.974	1.610	1.152	0.823	7.354
Board	29123	2.099	2.197	0.193	1.609	2.565
Roe	29123	0.056	0.066	0.111	-0.522	0.296
Top1	29123	0.331	0.308	0.145	0.083	0.728
Soe	29123	0.272	0	0.445	0	1

4.2. Baseline Regression Analysis

Table 3. Regression Results

	(1)	(2)
	FS	FS
ESG	0.130*** (4.653)	0.084*** (3.105)
Lev		-1.377*** (-4.047)
Size		0.532*** (4.447)
Cflow		1.720*** (3.486)
TobinQ		0.126*** (2.855)
Board		0.326 (0.978)
Roe		0.038 (0.147)
Top1		8.343*** (9.760)
Soe		-1.285*** (-5.566)
Constant	3.997*** (33.051)	-10.553*** (-4.011)
Firm	Yes	Yes
Year	Yes	Yes
N	29123	29123
Adj.R ²	0.912	0.914

Notes: t-values are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. The same convention applies to the following tables.

The empirical regression results for the research hypotheses of this paper are presented in Table 3. Regarding the impact of ESG performance on foreign shareholding proposed in Hypothesis H1, Column (1) of Table 3 shows that when only firm and year fixed effects are controlled, the regression coefficient of ESG is 0.130, with a t-value of 4.653, which is significantly positive at the 1% level. Further examination of Column (2) in Table 3 shows that after adding control variables, the regression coefficient of ESG is 0.084, with a t-value of 3.105, which remains significantly positive at the 1% level, indicating that ESG performance can increase corporate foreign shareholding ratios, thereby verifying Hypothesis H1 of this paper.

4.3. Endogeneity Test

4.3.1. Instrumental Variable Method

There may be an endogeneity problem of bidirectional causality between ESG performance and foreign shareholding. Drawing on the research of Qian Li et al.[22], this study uses the average ESG score of other firms in the same province and year (ESG_IV) as an instrumental variable to conduct an endogeneity test. The ESG performance of other firms in the same province is correlated with the firm's ESG performance, whereas the ESG performance of other firms should not have a direct impact on the firm's foreign shareholding ratio; therefore, the relevance and exogeneity conditions of the instrumental variable are satisfied. The statistical results show that the Kleibergen-Paap rk Wald F statistic is far above the 10% significance threshold for the weak identification test (16.38), and the p-value of the Kleibergen-Paap rk LM statistic is significant at the 1% level, indicating that the instrumental variable satisfies the relevance and exclusion restrictions.

Table 4. Instrumental Variable Method Test Results

	(1)	(2)
	First Stage	Second Stage
	ESG	FS
ESG_IV	0.541*** (9.626)	
ESG		0.562* (1.683)
Controls	Yes	Yes
Firm	Yes	Yes
Year	Yes	Yes
Kleibergen-Paap rk LM		104.764(0.00)
Kleibergen-Paap rk Wald F		92.659
N	29123	29123

The test results in Table 4 show that in the first-stage regression of the instrumental variable in Column (1), the coefficient of the instrumental variable on ESG is 0.541, which is significantly positive at the 1% level. In the second-stage regression in Column (2), the coefficient of ESG is 0.562, which is significantly positive at the 10% level, consistent with the baseline regression results, indicating that the research findings remain robust after alleviating endogeneity.

4.3.2. Entropy Balancing Method

To mitigate the potential impact of endogeneity arising from sample selection bias on the conclusions, this paper employs entropy balancing to re-match the sample for testing. Following the approach of Xu Sheng et al. [23], based on the mean ESG performance of the sample, firms are assigned a value of 1 if their ESG performance exceeds the mean and 0 otherwise. Weights are assigned to all control variables, including firm size, debt-to-asset ratio, and cash flow, using

interaction terms, quadratic terms, and cubic terms, so that the means, variances, and skewness of the control variables are similar between the two groups. Model (2) is then re-estimated using the matched sample. As shown in Column (1) of Table 5, the coefficient of ESG is 0.076 and remains significantly positive, and the regression results are consistent with those reported above.

4.3.3. One-Period Lagged Treatment of the Explanatory Variable

To verify the lagged effect of the variable and the endogeneity problem caused by reverse causality, this paper applies a one-period lag to ESG and then re-estimates the model. The data in Column (2) of Table 5 show that after the one-period lag treatment, the coefficient of L.ESG is 0.060, which is significantly positive at the 10% level, further supporting Hypothesis H1 proposed in this paper. This also implies that corporate ESG performance has a long-term impact on foreign shareholding.

Table 5. Test Results of Entropy Balancing and the One-Period Lagged Explanatory Variable

	(1)	(2)
	FS	FS
ESG	0.076*** (2.603)	
L.ESG		0.060* (1.892)
Constant	-10.771*** (-3.830)	-12.071*** (-4.016)
Controls	Yes	Yes
Firm	Yes	Yes
Year	Yes	Yes
N	29123	25033
Adj.R ²	0.921	0.920

4.4. Robustness Tests

4.4.1. Replacing the Explanatory Variable

To avoid the potential influence of variable measurement on the results, this paper conducts a robustness test by replacing the measurement indicator of the explanatory variable. Drawing on the research of Ye Yingying et al.[4], the explanatory variable is replaced with the Huazheng ESG composite score and the Wind ESG rating. The data in Column (1) of Table 6 show that the coefficient of ESGZH is 0.021, which is significantly positive at the 1% level. The data in Column (2) of Table 6 show that the coefficient of Wind ESG is 0.199, which is significantly positive at the 1% level. The regression results remain unchanged, further confirming the robustness of the conclusions of this paper.

4.4.2. Changing the Sample Period

Considering the fluctuations during the COVID-19 prevention and control period, and to mitigate the uncertainty that abnormal years may introduce into the research conclusions, this paper excludes the data from 2020 to 2022 and conducts the regression analysis again. The data in Column (3) of Table 6 show that the coefficient of ESG is 0.130, which remains significantly positive at the 1% level, and Hypothesis 1 is verified again.

4.4.3. High-Dimensional Fixed Effects

To mitigate the influence of macroeconomic and policy factors arising from year-to-year variation at different industry and city levels, this paper controls the interaction

fixed effects of industry–year and city–year. Columns (5) and (6) of Table 6 respectively include the interaction fixed effects of industry and year and of city and year. The data show that the coefficients of ESG are 0.110 and 0.063, respectively, which remain significantly positive, further demonstrating the robustness of the research conclusions.

4.5. Mechanism Test

After conducting the baseline regression and analyzing the results, mechanism tests are performed using information disclosure quality (Quality) and internal control quality (IC) as mediating variables.

From the perspective of information transparency, firms with better ESG performance exhibit higher information disclosure quality. Firms with high ESG levels are more willing to disclose accounting information in a timely, accurate, and comprehensive manner, thereby improving the quality of accounting information disclosure, effectively reducing information asymmetry between foreign investors and firms, and alleviating the information risk faced by foreign investors. This enhances foreign investors' access to corporate information, thereby increasing their willingness to hold shares and their shareholding ratios. The data in Columns (1) and (2) of Table 7 show that the coefficients of ESG and Quality are both significantly positive, indicating that ESG promotes foreign shareholding by improving information disclosure quality. The z-statistic of the Sobel test for information disclosure quality is 2.556, with a significance

level of 5%, further confirming that improving information disclosure quality is an effective mediating variable.

Table 6. Robustness Test Results

	(1)	(2)	(3)	(4)	(5)
	FS	FS	FS	FS	FS
ESG			0.130*** (3.788)	0.110*** (3.946)	0.063*** (2.134)
ESGZH	0.021*** (3.678)				
Wind ESG		0.199*** (4.227)			
Constant	-11.638*** (-4.400)	-11.639*** (-3.336)	-1.974 (-0.624)	-14.960*** (-5.679)	-11.095*** (-3.851)
Controls	Yes	Yes	Yes	Yes	Yes
Firm	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	NO	NO
Ind*Year	NO	NO	NO	Yes	NO
City*Year	NO	NO	NO	No	Yes
N	29123	21963	20067	29123	29123
Adj.R ²	0.914	0.945	0.905	0.917	0.918

From the perspective of governance quality, firms with better ESG performance have better internal governance quality. Firms with better ESG performance tend to place greater emphasis on sustainable development capacity, which helps improve their internal governance processes and enhance their ability to guard against risks. High internal control quality can reduce managerial opportunism and agency costs. This enhances foreign investors' trust in corporate governance, thereby increasing foreign investors' shareholding ratios. As can be seen from Columns (3) and (4)

of Table 7, the coefficient of ESG on internal control quality and the coefficient of internal control quality on foreign shareholding are both significantly positive, thereby establishing the mediating effect through which ESG indirectly affects foreign shareholding by improving internal control quality. The z-statistic of the Sobel test for internal control quality is 1.988, which is significant at the 5% level, demonstrating the validity of internal control quality as a mediating variable.

Table 7. Regression Results of the Mediating Mechanism Analysis

	(1)	(2)	(3)	(4)
	Quality	FS	IC	FS
ESG	0.048*** (13.830)	0.078*** (2.859)	0.069*** (13.871)	0.079*** (2.898)
Quality		0.137*** (2.601)		
IC				0.077** (2.009)
Media				
Constant	0.271 (1.160)	-10.590*** (-4.024)	5.728*** (18.225)	-10.996*** (-4.135)
Controls	Yes	Yes	Yes	Yes
Firm	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
N	29123	29123	29123	29123
Adj.R ²	0.434	0.914	0.304	0.914

4.6. Heterogeneity Analysis

4.6.1. Heterogeneity Analysis Based on Ownership Nature

To investigate differences in foreign investment decisions arising from ownership nature, this paper divides the sample firms into two categories: state-owned enterprises and non-state-owned enterprises. State-owned enterprises have inherent advantages in market access and financing[24] . Compared with state-owned enterprises, private enterprises have a greater need to fulfill ESG responsibilities in order to project an image of actively assuming social responsibility to the outside world and attract the attention of external investors. The results in Columns (1) and (2) of Table 8 show the following. Among state-owned enterprises, the regression

coefficient of ESG on FS is not significant. Among non-state-owned enterprises, the regression coefficient of ESG on FS is 0.122, which is significantly positive at the 1% level, and the Chow test for between-group coefficient differences is significant at the 1% level. This indicates that ESG performance has a pronounced enhancing effect on foreign shareholding in non-state-owned enterprises.

4.6.2. Heterogeneity Analysis Based on Financial Flexibility

Corporate financial flexibility is a comprehensive financial adjustment capability that enables firms to effectively manage financial risks [25] . High financial flexibility indicates that a firm has sufficient cash reserves and greater room for debt financing. External investors tend to hold shares in firms with strong risk resistance, and therefore rely less on ESG signals.

Following the approach of Wang Jinghua and Bi Chao, this paper classifies the sample firms into low and high financial flexibility groups based on the median financial flexibility within the same year and industry. The data in Columns (3) and (4) of Table 8 show the following. Among firms with low financial flexibility, the regression coefficient of ESG on FS is 0.122, which is significantly positive at the 1% level.

Among firms with high financial flexibility, the regression coefficient of ESG on FS is not significant, and the Chow test for between-group coefficient differences is significant at the 5% level. This indicates that the promoting effect of ESG performance on foreign shareholding is more pronounced in the low financial flexibility subsample.

Table 8. Test Results of Heterogeneity Analysis Based on Ownership Nature and Financial Flexibility

	(1)	(2)	(3)	(4)
	State-owned enterprises	Non-state-owned enterprises	Low financial flexibility	High financial flexibility
	FS	FS	FS	FS
ESG	-0.055 (-1.524)	0.122*** (3.527)	0.122*** (3.354)	-0.039 (-0.901)
Constant	-7.885** (-2.314)	-16.419*** (-5.069)	-7.215* (-1.953)	-21.113*** (-4.480)
Controls	Yes	Yes	Yes	Yes
Firm	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
N	7926	21197	14557	14566
Adj.R ²	0.940	0.931	0.940	0.938
Between-group coefficient difference	-0.190*** (0.000)		-0.120** (0.015)	

4.6.3. Heterogeneity Analysis Based on Annual Report Disclosure Complexity

Annual reports are an important source for external investors to learn about corporate information. Compared with high annual report readability, low annual report readability implies higher costs for investors to obtain financial report information and greater information asymmetry. Following the approach of Lin Le et al. [26], this paper classifies the sample firms into low and high annual report readability groups based on the median annual report readability within the same year and industry. The results in Columns (3) and (4) of Table 9 show the following. Among firms with low annual report readability, the regression

coefficient of ESG on FS is 0.156, which is significantly positive at the 1% level. Among firms with high annual report readability, the regression coefficient of ESG on FS is not significant, and the Chow test for between-group coefficient differences is significant at the 1% level. This indicates that the promoting effect of ESG performance on foreign shareholding is more pronounced among firms with low annual report readability. As non-financial information, ESG performance complements the financial information in annual reports, offsetting the deficiency of poor financial information readability; therefore, the marginal effect of ESG performance is stronger.

4.6.4. Heterogeneity Analysis Based on Audit Quality

Table 9. Test Results of Heterogeneity Analysis Based on Annual Report Disclosure Complexity and Audit Quality

	(1)	(2)	(3)	(4)
	Low annual report readability	High annual report readability	Big Four	Non-Big Four
	FS	FS	FS	FS
ESG	0.156*** (3.597)	-0.026 (-0.729)	0.178 (1.443)	0.068** (2.455)
Constant	-18.989*** (-4.037)	-11.269*** (-2.859)	13.342 (0.911)	-10.792*** (-3.900)
Controls	Yes	Yes	Yes	Yes
Firm	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
N	14558	14565	1820	27303
Adj.R ²	0.932	0.943	0.963	0.917
Between-group coefficient difference	0.169*** (0.001)		0.352*** (0.006)	

Following the approach of Lei Guangyong et al. [27], this paper measures corporate audit quality by whether a firm is audited by a Big Four accounting firm. This paper divides the sample firms into two categories: those audited by Big Four firms and those audited by non-Big Four firms. The Big Four represent high audit quality; corporate accounting information quality is often more reliable, and foreign

investors show greater recognition of such firms. The results in Columns (5) and (6) of Table 9 show the following. Among firms audited by Big Four firms, the regression coefficient of ESG on FS is not significant. Among firms audited by non-Big Four firms, the regression coefficient of ESG on FS is 0.068, which is significantly positive at the 5% level, and the Chow test for between-group coefficient differences is

significant at the 1% level. This indicates that the promoting effect of ESG performance on foreign shareholding is more pronounced among firms audited by non-Big Four firms. When audit quality is insufficient, ESG performance serves as a supplementary mechanism that compensates for the disadvantage of insufficient endorsement by non-Big Four audits.

5. Conclusion and Implications

This paper selects relevant data from Chinese A-share listed companies on the Shanghai and Shenzhen Stock Exchanges from 2012 to 2024 as the research sample and empirically examines the relationship between ESG performance and corporate foreign shareholding. The research conclusions indicate the following: First, firms with strong ESG performance have a significant positive impact on corporate foreign shareholding, and this conclusion remains valid after various endogeneity and robustness tests. Second, information disclosure quality and internal control quality mediate the relationship between ESG performance and corporate foreign shareholding; ESG performance promotes corporate foreign shareholding through two paths: improving information disclosure quality and enhancing internal control quality. Firms with strong ESG performance provide more comprehensive financial and non-financial information, which can effectively reduce information asymmetry for external investors, thereby increasing foreign shareholding ratios. Internal control quality reflects whether a firm's internal system is sound; a sound internal system can enhance corporate stability and gain the trust of external investors, thereby promoting foreign shareholding. Third, the promoting effect of ESG performance on foreign shareholding behavior is more pronounced in non-state-owned enterprises, firms with lower financial flexibility, firms with poorer annual report readability, and firms audited by non-Big Four auditors. The conclusions of the heterogeneity analysis further substantiate the mechanism through which ESG performance promotes foreign shareholding by improving information disclosure quality and enhancing internal control quality.

Based on the above research conclusions, this paper proposes the following policy recommendations: First, regulatory authorities should continue to promote and improve the construction of corporate ESG systems. A unified and standardized ESG rating system should be formed by combining international standards with China's local characteristics, so as to meet the needs of both domestic and foreign investors and reduce rating bias caused by methodological differences among rating agencies. In addition, supervision and penalties for violations such as false disclosure and ESG greenwashing should be intensified, and a more stringent accountability mechanism should be established to reduce the risk of information distortion and strengthen positive market incentives for firms with high ESG performance. Second, governance mechanisms play a key facilitating role between corporate fulfillment of ESG responsibilities and foreign investment decisions. In terms of internal governance, the standardization and effectiveness of internal control systems should be improved. It is recommended that regulatory authorities strengthen requirements for internal control evaluation and internal control audits of listed companies, and reduce the noise in corporate ESG information through standardized internal governance mechanisms. Third, information transparency is a bridge between firms and external investors. In the

investment decisions of foreign institutions, corporate information transparency and financial reporting quality also play an irreplaceable role. Therefore, regulatory authorities should continuously optimize the stock exchange's information disclosure assessment system, enhance the transparency, quantifiability, and sustainability of corporate disclosure quality evaluation, and guide firms to focus on the completeness and timeliness of disclosure. At the same time, regulatory authorities can strengthen monitoring of financial reporting quality, promote oversight of audit firm independence, and form a multi-party oversight system for financial reporting quality.

References

- [1] Wang, B., & Yang, M. (2022). A study on the mechanism of ESG performance on corporate value—Empirical evidence from A-share listed companies in China. *Soft Sci*, 36(6), 78–84.
- [2] Wang, S. J., Tian, Y., & Dang, L. L. (2022). ESG implementation, competition strategy and financial performance of industrial enterprises. *Accounting Research*, (3), 77–92.
- [3] Lin, B. H., & Li, B. X. (2024). Influence of ESG responsibility fulfillment on enterprise business dilemma: "Giving charcoal in the snow" or "adding insult to injury"? *China Soft Science*, (6), 121–130.
- [4] Ye, Y. Y., & Wang, X. L. (2024). How ESG performance affect stock return volatility: Evidence from listed companies in China. *Accounting Research*, (1), 64–78.
- [5] Wang, Y. Q., & Xie, M. (2022). The impact of ESG information disclosure on corporate financing costs: Based on the empirical evidence of listed companies in China. *Nankai Economic Studies*, (11), 75–94.
- [6] DeFond, M., Hung, M., & Wang, E. J. (2026). The impact of mandatory sustainability reporting on institutional investment: The role of reporting location. *The Accounting Review*, 101(1), 285–313. <https://doi.org/10.2308/tar-2023-0191>.
- [7] Ramli, J., Shafie, R., & Ku Ismail, K. N. I. (2025). The bright side and the dark side of ESG practices: A systematic review and future research. *PaperASIA*, 41(6b), 158–169.
- [8] Xu, K., Jin, T., & Cheng, J. (2025). How does corporate ESG rating affect audit quality: An external information mechanism or an internal governance mechanism? *Auditing Research*, (6), 111–123.
- [9] Abdioglu, N., Bamiatzi, V., Cavusgil, S. T., et al. (2015). Information asymmetry, disclosure and foreign institutional investment: An empirical investigation of the impact of the Sarbanes-Oxley Act. *International Business Review*, 24(5), 902–915. <https://doi.org/10.1016/j.ibusrev.2015.04.003>.
- [10] Ball, R., Hofmann, C., & Löffler, A. (2025). The role of public information in capital markets with investors of unknown risk attitudes. *European Accounting Review*, 34(4), 1529–1553. <https://doi.org/10.1080/09638180.2024.2389768>.
- [11] Gopikumar, V., Nair, S., & Sisodia, G. S. (2023). The effect of financial reporting quality on institutional ownership. *Applied Economics Letters*, 30(15), 2020–2023. <https://doi.org/10.1080/13504851.2022.2107440>.
- [12] Moffitt, J. S., Patin, J. C., & Watson, L. (2023). Corporate environmental, social, and governance (ESG) performance and the internal control environment. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4422272>.
- [13] Shen, Z., & Zhang, K. P. (2024). Corporate ESG performance and audit opinion shopping. *Journal of Shanxi University of Finance and Economics*, 46(1), 114–126.

- [14] Li, W. F., Lin, B., & Song, L. (2011). The role played by the internal control in companies' investment: Is it a promotion of efficiency or a repression thereof? *Management World*, (2), 81–99, 188.
- [15] Fang, H. X., & Jin, Y. N. (2011). Can high quality internal control reduce earnings management? — An empirical research based on voluntary internal control audits reporting. *Accounting Research*, (8), 53–60, 96.
- [16] Chen, C. L., Weng, P., & Chen, M. Y. (2024). Do foreign institutional investors vote with their feet when firms engage in distinctive characteristics of real earnings management. *Asia-Pacific Journal of Accounting & Economics*, 32(3), 1–19. <https://doi.org/10.1080/16081625.2024.2332477>.
- [17] Song, D. Y., Wang, Y., & Hu, Y. (2023). A study of supply chain decarbonization effects of foreign ownership. *China Industrial Economics*, (11), 155–173.
- [18] Jin, T. T., Bai, X. Y., & Han, L. (2025). Does supply chain finance improve the quality of corporate disclosure? — An analysis based on the perspectives of internal incentives and external monitoring. *Accounting Research*, (6), 47–59.
- [19] Lu, D., Wang, Y. C., & Fu, P. (2014). Do CEO incentives improve the effectiveness of internal control? — Empirical evidence from listed state-owned enterprises. *Accounting Research*, (6), 66–72.
- [20] Zhang, Y., Fan, C. L., & Gao, J. C. (2025). ESG performance and foreign ownership of Chinese companies. *Journal of Zhongnan University of Economics and Law*, (3), 29–41.
- [21] Wen, Z. L., & Ye, B. J. (2014). Analyses of mediating effects: The development of methods and models. *Advances in Psychological Science*, 22(5), 731–745. <https://doi.org/10.3724/SP.J.1042.2014.00731>.
- [22] Li, Q., Yan, R. Y., & Xiao, R. Q. (2025). The impact of enterprise ESG performance on the quality of green innovation and its mechanisms. *Science & Technology Progress and Policy*, 42(15), 103–115.
- [23] Xu, S., Hasmuqier, Liang, F. Y., & Shen, X. F. (2024). Corporate ESG performance and capital markets: Evidence from stock liquidity. *Scientific Decision-Making*, (4), 42–60.
- [24] Tang, Y. J., Ma, W. C., & Xia, L. (2021). Quality of environmental information disclosure, internal control "level" and enterprise value: Empirical evidence from listed companies in heavy polluting industries. *Accounting Research*, (7), 69–84.
- [25] Zhao, H., & Zhang, D. Z. (2010). A research on the essential characteristics of corporate financial flexibility. *Accounting Research*, (6), 62–69.
- [26] Lin, L., & Zhang, X. (2025). Does corporate ESG performance affect investor risk concerns? *Systems Engineering — Theory & Practice*.
- [27] Lei, G. Y., Qiu, B. Y., & Wang, W. Z. (2014). Social trust, auditor choice and investment efficiency. *Auditing Research*, (4), 72–80.