Research on the impact of ESG performance on corporate market value

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Abstract. Amidst the global emphasis on sustainable development and the deepening.The incorporation of Environmental, Social, and Governance (ESG) considerations into a company's strategic framework, this study examines The correlation between a company's ESG (Environmental, Social, and Governance) performance and its market standing/performance valuation using Shanghai and Shenzhen firms from 2013 to 2024. Empirical evidence confirms a statistically significant positive effect of robust ESG practices on enhancing corporate market value.Key findings are summarized as follows:Baseline Regression Analysis: A significant positive correlation exists between ESG performance and corporate market value (measured by Tobin′s Q) at the 1% significance level.Robustness Validation: The positive linkage persists under rigorous testing conditions, including one-period lagged ESG variables and substitution of dependent variables (e.g.,alternative market value metrics).Heterogeneity Insights: ESG performance positively influences market value for both state-owned enterprises (SOEs) and non-state-owned enterprises (non − SOEs).The impact is markedly stronger for non − SOEs compared to SOEs, likely attributable to differences in resource flexibility and stakeholder responsiveness.This research extends Research on the economic impacts stemming from ESG factors performance, offering actionable insights for:Corporations: Optimizing ESGintegration into long-term strategic planning;Investors: Enhancing decision-making frameworks through ESG risk-return assessments;Policymakers: Designing incentives to accelerate sustainable business practices.

Keywords: Esg Performance, Corporate Market Value, Signaling Theory, Ownership Nature.

1. Introduction

In recent years, as the global understanding of sustainable development has deepened, Environmental, social, and governance (ESG) performance has progressively emerged as a crucial metric for evaluating a company's overall standing strength and sustainable development capabilities[1].

From the perspective of actual operations, a company's initiatives in ESG not only affect its own reputation and risk control capabilities, but may also directly impact its corporate market value[2]. Specifically, companies that proactively take on environmental responsibilities often reduce operating costs through energy conservation and emission reduction, avoid penalties for environmental violations, and win recognition and favor from consumers. Companies that prioritize fulfilling social responsibilities help enhance employees' sense of belonging and team cohesion, thereby improving the brand's positive image and expanding market share. An effective corporate governance framework can effectively reduce agency costs and improve decision-making efficiency, laying a solid foundation for the stable operation of the company. Conversely, companies with poor ESG performance may face risks such as lawsuits related to environmental pollution, criticism from public opinion, or internal governance issues, leading to a decline in market confidence and ultimately Exerting an adverse effect on their company's market worth[3].

Numerous studies have explored the relationship between ESG and corporate market value. However, some literature overly relies on mediating variables such as innovation capability and financing constraints when analyzing the transmission path between the two, while ignoring the possible direct link between ESG performance and corporate market [4]. making decisions, market investors often directly use corporate ESG performance as an important basis for evaluating their

investment value, without the need for transformation through intermediate variables. Therefore, this paper investigates the direct impact of ESG performance on corporate market value, which can more clearly reveal the inherent logic between the two and provide a more direct reference for companies to formulate ESG strategies and for investors to make decisions. Through empirical analysis, this paper strives to provide clearer ESG value evaluation criteria for companies and investors, while also providing theoretical support for policymakers to promote sustainable development. The research results are expected to reveal the role of ESG factors in the capital market and provide important insights for companies to optimize their ESG strategies and achieve long-term value growth.

2. Literature review

2.1. Economic consequences of ESG performance

Currently, many academic studies have shown that listed companies that perform well in ESG often have a tangible increase in corporate value and a reduction in debt financing costs. As Wang Hanzhi (2024) proposed, the outstanding performance of enterprises in the ESG field can accumulate a higher quality social reputation for themselves, thereby strengthening the trust and recognition of stakeholders such as shareholders, employees, and consumers towards the enterprise. This process will continue to drive the growth of corporate market value and provide solid support for its long-term stable operation[5]. Secondly, Ren Guangqian et al. (2023) believe that good ESG performance can effectively enhance a brand's premium ability, increase its market share, and thereby enhance its corporate market value by increasing revenue[6]. Especially in emerging consumer markets, Wang Dan and Zhang Ding (2023) found that ESG performance has become a key consideration factor for consumers when choosing brands, when studying manufacturing enterprises. This has formed a positive cycle of ESG performance "reputation consumption preference market share", which has significantly improved corporate market value[7]. In terms of the cost of corporate debt financing, Zhao Na and He Yu (2025) believe that in the circulation field, not only promote the improvement of their brand image and the deepening of market recognition, but also help to enhance market competitiveness by lowering debt financing costs[8]. Yang Deli et al. (2025) view a company's ESG performance as an intrinsic mechanism, whereby the company's own efforts are used to improve operational performance and gain market recognition, resulting in lower debt financing costs[9].

2.2. Factors influencing corporate market value

The corporate market value is the result of multiple factors working together. From a financial perspective, profitability and capital structure are important aspects that affect its corporate market value. Generally speaking, companies with high Tobin′s Q are often considered toDemonstrate higher profitability and exhibit a greater propensity to attract investors' attention, resulting in relatively higher corporate market value[10]. The asset liability ratio reflects a company's ability to repay its debts. If this ratio is too high, it may increase the company's financial risk and lower its corporate market value[11]. From the perspective of company size, large enterprises have more advantages in market competition, stronger risk resistance, and are more likely to enjoy the benefits of economies of scale, so their corporate market value is relatively higher. From the perspective of equity nature, there are differences between state-owned holding enterprises and private enterprises in terms of channels for obtaining resources and decision-making mechanisms, which may lead to different market evaluations of the value of these two types of enterprises. The proportion of independent directors in the board of directors can reflect the independence of corporate governance. When this proportion is relatively high, it helps to improve the scientific and fair decision-making of the company, thereby playing a positive role in enhancing corporate market value[12].

2.3. Literature Review

Prior research has examined the economic implications of ESGperformance and key determinants of corporate market value. Research has shown that ESG performance can have a positive impact on corporate value through the accumulation of social reputation and the formation of differentiated competitive advantages. This effect is significant in emerging consumer markets and manufacturing industries. At the same time, the corporate market value is influenced by various factors such as profitability, company size, and industry characteristics. However, it should be noted that there is still room for further research on the direct impact of ESG performance on corporate value, and the results provide a foundation for subsequent related studies.

3. Theoretical analysis and research hypotheses

This article argues tThe correlation between performance and a company's market valuation can be explained through stakeholder theory, signaling theory, and resource-based theory. According to the stakeholder theory, as an important member of the socio-economic system, enterprises have close connections with numerous stakeholders, and their ESG performance directly affects whether the rights and interests of stakeholders can be realized. When a company meets the reasonable needs of various stakeholders, it often gains broader support, such as customers may increase their consumption, shareholders are more willing to hold shares for the long term, and creditors are more willing to provide financing. All of these will promote the stable development of the company, thereby increasing its corporate market value.

The signal transmission theory reveals the relationship between corporate ESG performance and corporate market value from the perspective of information asymmetry. ESGperformance can serve as an effective signal to the market, conveying a company's operational quality, development strategy, and risk management capabilities. If a company performs well in ESG, it indicates that it focuses on long-term sustainable development and has a sound system to deal with environmental and social risks. This positive signal will enhance investors' confidence, attract more capital attention, thereby increasing the company's recognition in the capital market and ultimately promoting the increase of corporate market value.

The resource-based theory further points out that a company's competitive advantage comes from its unique resources and capabilities, and outstanding ESG performance is often accompanied by the accumulation of resources in technology, talent, and governance. In the environmental dimension, developing environmental protection technologies can reduce operating costs; In the social dimension, caring for employees can attract outstanding talents and thus improve operational efficiency; In terms of governance, optimizing the structure can make resource allocation more efficient. These unique resources and capabilities can help businesses gain an advantage in market competition, thereby driving the increase of their corporate market value.

Based on the above theoretical analysis, this article proposes the following hypotheses:

H1: ESG performance can significantly enhance a corporate market value.

4. Research design

4.1. Sample selection and data processing

This paper selects Shanghai and Shenzhen A-share listed companies from 2013 to 2024 as the research sample. In order to ensure the data quality and comparability, the following data processing was carried out in the research process: first, the listed companies in the financial industry were eliminated; Secondly, companies with abnormal financial conditions such as St, *st, and samples with missing or discontinuous financial data are eliminated; Finally, the observation values with missing ESG total score and itemized score were eliminated, and the relevant data were truncated by 1% and 99% quantiles. Finally, the panel data containing 24552 observations was obtained. The ESG data

of this study is from Huazheng ESG rating agency, and other financial data are from guotai'an database (CSMAR).

4.2. Model construction and variable definition

4.2.1 Model construction

To test the impact of ESG performance on corporate market value, this paper constructs the following empirical model:

$$\begin{aligned} \text{Tobin' sQ}_{it} &= \alpha + \beta_1 ESG_{it} + \beta_2 Lev_{it} + \beta_3 SOE_{it} + \beta_4 Indep_{it} + \\ &\beta_5 Size_{it} + \beta_6 AR\_Turnover_{it} + \sum Year + \sum Ind + \in_{it} \end{aligned} \quad (1)$$

Tobin's Q_{it} is the explained variable, ESG_{it} is the core explanatory variable, Lev_{it}, SOE_{it},$Indep_{it}$,$Size_{it}$and $AR\_Turnover_{it}$ are the control variables, which are constant terms, β_1-β_6 is the coefficient to be estimated, i is the enterprise, t is the time, Ind and Year are the fixed effect of the enterprise and year respectively, and $\in_{it}$is the random error term.

4.2.2 Variable definition

The explained variable is corporate market value. By referring to Guan Botao's (2025) research, this paper chooses Tobin's Q_{it} to measure corporate market value[13]. The specific calculation method is the ratio of corporate market value to asset replacement cost.

The explanatory variable is ESG performance. This indicator is determined based on the ESG rating results of enterprises. By referring to the research of Guan Xiaoyan et al. (2025), the rating system is divided into nine grades, which are arranged in the order of AAA, AA, a, BBB, BB, B, CCC, CC and C, corresponding to a score of 9 to 1 respectively. The ESG performance of enterprises is measured by comprehensive score. The higher the score, the better the ESG performance of enterprises[14].

Referring to the research of lijiaojiao and Zhang Ying (2025), Sunna and quweihua (2024), this paper selects the asset liability ratio, equity nature, proportion of independent directors, company size, and accounts receivable turnover rate as control variables. See Table 1 for the definition of specific variables[15][16].

Table.1. Variable Definition

Variable type	Variable name	Variable symbol	Variable definition
Explained variable	corporate market value	Tobin's Q	The ratio of corporate market value to asset replacement cost
Explanatory variable	ESG performance	ESG	Evaluate according to the ESG evaluation system of Huazheng Index
Control variable	Asset liability ratio	Lev	Total liabilities/total assets
	Nature of equity	SOE	State owned holding enterprises have a value of 1, while non-state-owned holding enterprises have a value of 0
	Proportion of independent directors	Indep	Number of independent directors/total number of board members
	Company size	Size	Measuring using the total assets of the enterprise
	Accounts receivable turnover rate	AR_Turnover	Operating revenue/average accounts receivable balance

5. Empirical analysis

5.1. Descriptive statistics

Table 2 presents the descriptive statistics for all variables in model (1). The corporate market value exhibits a wide range, with a maximum of 18.72 and a minimum of 0.08, highlighting significant disparities in market valuations among different companies. The mean market value, at 1.748222, along with a standard deviation of 1.750207, suggests that the market-to-asset replacement cost ratio for the sample firms is generally moderate, albeit with considerable variation. The ESG score averages 4.165934, with a standard deviation of 1.371934, indicating that the overall ESG performance of the sample companies is relatively low to medium, with a moderate degree of dispersion. Overall, these descriptive findings align with previous scholarly research, confirming their relevance to the current landscape.

Table.2. Descriptive statistical results

Variable	Observations	average value	standard deviation	minimum value	maximum value
Tobin's Q	24552	1.748222	1.750207	0.08	18.72
ESG	24552	4.165934	1.371934	1	9
Lev	24552	45.58496	20.72163	4.66	97.76
Indep	24552	37.57032	5.48159	30	60
Size	24552	1978401	4821892	32337.56	46100000
AR_Turnover	24552	31.10288	102.4784	0.57	1462.54
SOE	24552	0.483871	0.49975	0	1

5.2. Correlation analysis

Table 3 displays the outcomes of the correlation analysis conducted among the variables. The findings reveal a notably strong positive correlation between ESGperformance (ESG) and corporate market value (Tobin's Q); The control variables asset liability ratio (Lev), company size (Size), nature of equity (SOE), accounts receivable turnover ratio (AR_Turnover) and corporate market value (Tobin's Q) show a significant negative correlation, and the proportion of independent directors (Indep) and corporate market value (Tobin's Q) show a significant positive correlation. In conclusion, there are significant differences among explanatory variables, control variables and explained variables, which preliminarily supports hypothesis H1.

Table.3. Correlation analysis results

Variable	Tobin'sQ	ESG	Lev	Indep	Size	AR_Turnover	SOE
Tobin'sQ	1						
ESG	0.1448627***	1					
Lev	-0.0325257***	-0.0113912***	1				
Indep	0.0141892***	0.0122699***	0.0281542	1			
Size	-8.40e-08***	1.23e-08***	1.19e-06***	1.03e-07***	1		
AR_Turnover	-0.0006012***	0.0001992**	0.0149314***	0.00011	1878.098***	1	
SOE	-0.7422165***	-0.0277725	9.659775***	-0.1915064***	1653844**	20.62154***	1

Note: * * *, * * and * are significant at the levels of 1%, 5% and 10%, respectively.

5.3. Multicollinearity test

Table 4 shows the multicollinearity results between explanatory variables and control variables. It can be seen from the data in Table 4 that the VIF values of all variables are less than 5 and close to 1, indicating that the correlation between the explanatory variables is relatively weak, mutual independence is relatively strong, and there is no serious multicollinearity. The average VIF is 1.07, which is far below the critical value of 5, which further verifies that the model as a whole is not affected by serious collinearity. This result ensures that the estimated coefficient of each variable in the regression model is stable and reliable, and will not lead to invalid results due to the high correlation between variables, which lays the foundation for subsequent empirical analysis.

Table.4. Multicollinearity results

Variable	VIF	1/VIF
ESG	1.04	0.958649
Lev	1.17	0.852614
Indep	1.01	0.988642
Size	1.12	0.895564
AR_Turnover	1.01	0.986489
SOE	1.08	0.925521
Mean VIF	1.07	

5.4. Benchmark regression analysis of ESG performance and corporate market value

5.4.1 Hausman test

Given that the dataset employed in this study consists of panel data, a specific test is utilized to ascertain the most suitable model. Table 5 presents the outcomes of this test. As evident from the results in Table 5, the P-value stands at 0.0000, which is below the 0.01 threshold, leading to the rejection of the null hypothesis. This suggests that the fixed effects model is the optimal selection. Taking into account the influence of both year-specific and individual-specific effects, this study opts for the two-way fixed effects model for conducting regression analysis.

Table.5. Hausman test results

	Prob>chi2	Conclusion
Hausman test	0.0000	Fixed effects model adaptation

5.4.2 Benchmark regression analysis

Table 6 presents the baseline regression findings concerning the relationship between performance and corporate market value. As evident from the data in Table 6, there exists a statistically significant positive correlation at the 1% level between performance and corporate market value. Specifically, enhanced performance contributes markedly to an increase in corporate market value, thereby substantiating the hypothesis put forth in this study.

Table.6. Benchmark regression results

Variable	Tobin's Q
ESG	0.0789404***
	(10.51)
Lev	-0.0262976***
	(-49.87)
Indep	0.0171672***
	(9.27)
Size	-0.0000000483***
	(-21.82)
AR_Turnover	0.0000627
	(0.63)
SOE	-4.041972***
	(-19.26)
Constant	2.262253***
	(28.02)
N	24552
Ind	YES
Year	YES
Adj-R^2	0.1842

Note: * * *, * * and * are significant at the levels of 1%, 5% and 10%, respectively.T value in parentheses. The same below.

5.5. Robustness test

5.5.1 Delayed phase I

Table 7 shows the regression analysis results of ESG performance and corporate market value with a lag of one period. It can be seen from table 7 that the coefficient between the ESG performance and the corporate market value of the first lag period is 0.0230256, and both are significantly positive at the 1% level, indicating that the positive impact of the corporate ESG performance on the corporate market value has a lag effect, which further indicates that the conclusion of this paper has a strong robustness.

Table.7. Regression results of lagging ESG performance

Variable	Tobin's Q
L.ESG	0.0230256***
	(3.10)
Lev	-0.0245437***
	(-34.18)
Indep	0.0061273***
	(2.69)
Size	-0.0000000477***
	(-13.77)
AR_Turnover	0.0004527***
	(3.30)
SOE	-0.4328162***
	(-8.84)
Constant	2.836273***
	(27.94)
N	22506
Ind	YES
Year	YES
Adj-R^2	0.1728

5.5.2 Replacement of explained variables

Table 8 shows the regression results after replacing the explained variables. In order to further verify the robustness of the benchmark regression analysis results, referring to the research of Heweibin (2024), this paper selects return on assets (ROA) instead of Tobin's Q to measure corporate market value, and then carries out the regression analysis again. The findings depicted in Table 8 indicate that the regression coefficient for the relationship between ESG performance and corporate market value (ROA) is still significantly positive, indicating that the benchmark regression result is reliable, and the conclusion of this paper is relatively robust.

Table.8. Replace explained variable results

Variable	ROA
ESG	0.6333893***
	(11.32)
Lev	-0.1176721***
	(-29.96)
Indep	-0.0391001***
	(-2.84)
Size	0.000000165***
	(9.99)
AR_Turnover	0.0054078***
	(7.32)
SOE	0.0724959
	(0.46)
Constant	6.617772***
	(11.01)
N	24552
Ind	YES
Year	YES
Adj-R^2	0.0490

5.6. Heterogeneity test

Table 9 presents the heterogeneity test outcomes categorized by equity type. The findings reveal that the regression results for both state-owned and non-state-owned enterprises are consistent with those of the overall sample. Regardless of whether an enterprise is state-owned or not, there exists a significant positive correlation between ESGperformance and corporate market value. From an equity nature standpoint, the regression coefficient linking ESG performance to corporate market value is higher for non-state-owned enterprises compared to their state-owned counterparts. This suggests that ESGperformance is more tightly connected to corporate market value in non-state-owned enterprises, highlighting that the effectiveness of ESG performance in enhancing corporate market value varies depending on the equity nature of the enterprise. This provides a practical direction for enterprises to optimize ESG strategy, and also provides a reference for investors to make decisions and policy makers to make policies.

Table.9. Heterogeneity test results

Variable	State-owned enterprises	Non-state-owned enterprises
	Tobin's Q	Tobin's Q
ESG	0.1044035***	0.1743839***
	(10.37)	(14.58)
N	11880	12672
Adj-R^2	0.0089	0.0164
Ind	YES	YES
Year	YES	YES

6. Research conclusion

Amid the growing momentum of global sustainable development efforts and the rising prominence of Environmental, Social, and Governance (ESG) considerations, this research examines how corporate ESG performance affects market valuation. By analyzing panel data from companies listed on the Shanghai and Shenzhen A-share markets from 2013 to 2024, the empirical findings demonstrate that strong ESG performance substantially boosts corporate market value.

Robustness checks reinforce these results, showing that the positive link persists even when the ESG performance variable is lagged by one period or when different measures of market value (such as Tobin′s Q) are used. These tests affirm the dependability of the primary conclusions.

Further heterogeneity analysis reveals that ESG performance has a positive impact on market value for both state-owned enterprises (SOEs) and non-state-owned enterprises ($\mathrm{non}-\mathrm{SOEs}$). Interestingly, the regression coefficient for $\mathrm{non}-\mathrm{SOEs}$ is higher than that for SOEs, suggesting that ownership structure plays a moderating role in the relationship between ESG performance and market value.

To sum up, the better the ESG performance of enterprises, the higher corporate market value (Tobin's Q), indicating that enterprises do well in environmental management, actively fulfill social responsibilities, have perfect corporate governance, can effectively obtain market recognition, and then improve their corporate market value. This result is also in line with the stakeholder theory, signal transmission theory and resource-based theory: good ESG performance can meet the needs of different stakeholders, send a positive signal to the capital market that enterprises have the ability of sustainable development, enable enterprises to accumulate unique resources to form competitive advantages, and ultimately promote the growth of corporate market value.

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