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ESG Quality, Attention, and Enterprise Value: An Empirical Analysis of Chinese A-Share Listed Companies

Jiaxin Wei*, Yuanhua Yang

International Business School, Guangdong University of Finance and Economics, 510000 Guangzhou, China

* Correspondence: Jiaxin Wei (jex@student.gdufe.edu.cn)

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Abstract: With the growing prominence of environmental issues, sustainable development has become a global consensus. Environmental, social, and governance (ESG) factors have emerged as key focal points for companies and their stakeholders. Using a sample of Chinese A-share listed companies from 2011 to 2022, a comprehensive indicator of attention was constructed from a stakeholder perspective to examine the interactions and mechanisms among ESG quality, attention, and enterprise value. Findings indicate that enhanced ESG performance significantly contributes to increased enterprise value, with attention serving as a critical mediating factor in the relationship between ESG performance and enterprise value. Furthermore, notable differences were observed in this process based on firm ownership, with ESG performance exerting a more substantial impact on enterprise value within state-owned enterprises. These insights offer valuable perspectives for companies on how to leverage improved ESG performance to enhance enterprise value.

Keywords: Environmental, social, and governance (ESG); Enterprise value; Attention; Sustainable development; Chinese A-share companies

1. Introduction

In the context of globalisation, a green, low-carbon economy is gradually emerging as a model for economic development worldwide. Facing numerous challenges, including environmental pollution, resource scarcity, and regional conflicts, the establishment of China's "14th Five-Year Plan" and "carbon peaking and carbon neutrality" goals has outlined a new development framework for corporate growth. Under this framework, it is essential for companies to maintain a competitive edge within both macroeconomic policies and meso-level market competition to secure investor trust and establish a sustainable, long-term development mechanism. The ESG evaluation system, encompassing environmental, social, and governance factors, not only aligns with contemporary development ideologies but also contributes to achieving the "dual-carbon" objectives (Conca et al., 2020). Corporate ESG performance and capabilities in sustainable development have gained increasing attention. However, ESG practices in China remain in a nascent stage, and existing research has yet to reach a consensus on the value-creation effects of ESG performance. In examining the impact of ESG on corporate development, differing perspectives have emerged among scholars. Regarding the outcomes of ESG impact, some scholars argue that ESG practices enhance enterprise value, while others contend that, under certain circumstances, ESG may reduce enterprise value. Mendiratta et al. (2023) further found that in situations of high media coverage, ESG practices may even decelerate the enhancement of enterprise value. Concerning the mechanisms of influence, most studies have explored the pathways and moderating effects of ESG on enterprise value. From a corporate governance perspective, some scholars posit that ESG performance can alleviate financing constraints, thereby facilitating enterprise value realisation. Other researchers, taking a broader organisational perspective, suggest that increased corporate visibility, in the context of separated ownership and management, mitigates issues of information asymmetry and thus supports the role of attention as an intermediary or moderating factor (Di Giuli & Kostovetsky, 2014; Mendiratta et al., 2023; Velte, 2017).

Although the research on ESG performance has gained momentum, the majority of studies remain focused on single aspects of attention, with limited examination of the combined influence of media, market, and government attention factors. High-quality ESG performance is believed not only to enhance corporate reputation and meet stakeholder expectations but also to increase attention, thereby supporting long-term corporate development. Previous studies largely suggest that improved ESG performance reduces information asymmetry, increases transparency, and establishes a positive corporate image, consequently enhancing enterprise value. With the advancement of the big data era and the evolution of information dissemination patterns enabled by the internet, attention has become increasingly influential in corporate development. Improved ESG performance can attract heightened attention from media, institutions, and the public, thereby enhancing transparency and fostering greater trust among consumers. Additionally, higher-quality information is made available to both large and small investors, stimulating investment interest and facilitating the realisation of enterprise value.

In this study, an empirical analysis was conducted using a sample of Chinese A-share listed companies from 2011 to 2022 to examine the impact of ESG performance on enterprise value, its operational mechanisms, and the effect of attention. This study provides new perspectives and evidence for a deeper understanding of ESG performance's value and mechanisms, offering crucial theoretical support for the promotion and dissemination of the ESG concept. Furthermore, this study aims to guide companies in aligning their development with national strategic objectives. The primary contributions of this research are as follows: an innovative improvement was made in the selection of proxy variables by incorporating a comprehensive indicator—attention—as a mediating variable to address potential collinearity issues in existing research on the relationship between attention and enterprise value. Moreover, the analysis incorporates a novel perspective on the effect of ESG performance on enterprise value and examines the heterogeneity of this effect across different company sizes, as well as between state-owned and non-state-owned enterprises, thereby enriching the relevant body of research. Overall, this study, grounded in both theory and practice, investigates the influence of ESG quality on enterprise value through the lens of investor relevance. The findings provide new insights and evidence for a deeper understanding of the value of ESG performance. Additionally, this research presents a viable pathway for enhancing enterprise value and development, while also offering theoretical support for promoting the ESG concept and encouraging corporate alignment with national strategic priorities.

2. Theoretical Analysis and Research Hypotheses

2.1 The Impact of ESG Quality on Enterprise Value

The relationship between ESG and enterprise value is rooted in neoclassical theory (Conca et al., 2020), which advocates maximising shareholder interests as the primary objective for corporations. ESG represents an investment philosophy prioritising environmental responsibility, stronger social responsibility, and long-term governance effectiveness, aligning closely with China's sustainable development needs. In recent years, substantial research on the relationship between corporate ESG performance and enterprise value has emerged both domestically and internationally. However, a consensus has yet to be reached on whether ESG enhances enterprise value, with views generally falling into three categories: positive impact, negative impact, and no impact. Some scholars suggest a negative correlation between ESG performance and enterprise value, proposing that ESG initiatives may impact short-term resource allocation, potentially leading to temporary reductions in stock returns, business performance, and growth, ultimately impeding the enhancement of enterprise value. For example, Di Giuli & Kostovetsky (2014) studied the relationship between corporate ESG performance, stock returns, and corporate performance over a three-year period, finding a significant negative correlation between ESG performance and both stock returns and corporate performance. Mendiratta et al. (2023), using a comprehensive dataset from 2007 to 2016, concluded that high media coverage of ESG controversies could reduce enterprise value.

Conversely, some researchers argue that ESG performance does not have a significant effect on enterprise value. They contend that while ESG is a composite metric evaluating social, environmental, and governance aspects, enterprise value reflects both market value and the replacement cost of assets, with no direct relationship between the two. For instance, Velte (2017), studying a sample of 412 German companies between 2010 and 2014, found no significant impact of ESG performance on enterprise value. The majority of empirical studies, however, support a positive correlation between ESG performance and enterprise value. This positive association is particularly evident among companies highly engaged in corporate social responsibility, which often report lower marketing expenditure ratios and higher market values. Al-Issa et al. (2022) showed that companies with stronger ESG performance tend to exhibit higher enterprise value, with greater participation in corporate social responsibility associated with lower marketing costs and higher market valuations. Additional findings indicate that board size, board diversity, and social engagement significantly enhance a company's market value.

Research on the economic outcomes of ESG performance among Chinese companies remains in its exploratory stages, and the continuous refinement of domestic regulatory policies is advancing the development of ESG governance. Strong ESG performance has been shown to alleviate financing constraints, enhance operational efficiency, and reduce financial risk, thereby increasing enterprise value (Avramov et al., 2022). The enhancement of enterprise value through ESG is influenced by multiple factors, with some Chinese scholars examining this relationship from an innovation perspective. Corporate production and operational activities are inherently linked to technological innovation, which is viewed as a key factor in achieving long-term strategic development and value enhancement. Avramov et al. (2022) found that ESG ratings have a positive effect on green innovation within companies. Enterprise value is closely associated with the risks encountered in business operations. Shanaev & Ghimire (2022) demonstrated that ESG performance affects customer default risk, with strong ESG practices found to reduce such risk to a certain extent, thereby stabilising corporate operations. Additionally, Wong et al. (2021) explained the positive impact of ESG on enterprise value from an investment perspective, asserting that strong ESG performance attracts greater investment in physical assets, contributing to sustainable growth. With the implementation of the "dual-carbon" policy, consumer and investor focus on environmental issues has intensified. Positive ESG performance enables companies to gain public trust and secure capital support, which is of substantial importance in today's business environment (Tang, 2022; Wright & Ferris, 1997). Therefore, based on the current context in China, it is posited that ESG performance significantly promotes enterprise value. Strong ESG performance not only aids companies in earning recognition from consumers and investors but also enhances corporate reputation and long-term sustainability. In sum, ESG factors play a critical role in long-term value creation, providing essential support for companies to succeed within the framework of new environmental policies and social demands. Accordingly, the following hypothesis was proposed:

Hypothesis 1: ESG performance positively promotes the realisation of enterprise value.

2.2 ESG Performance, Attention, and Enterprise Value

ESG serves as an evaluation framework and investment philosophy that assesses corporate sustainability through the dimensions of environmental, social, and governance (ESG) factors. Stakeholder attention to ESG directly influences investment behaviours, subsequently impacting the realisation of enterprise value. Therefore, in examining the effect of corporate ESG on enterprise value, attention is a noteworthy intermediary and influencing mechanism.

Current research predominantly focuses on the impact of singular dimensions of attention on enterprise value, lacking comprehensive studies on the relationship between multidimensional attention and corporate innovation performance. Scholars, based on stakeholder theory, have explored this relationship through three aspects: media attention, individual attention, and institutional investor attention. Broadstock et al. (2021) argued that media attention encourages platform companies to fulfil social responsibilities, thereby enhancing enterprise value. In addition, they elucidated the mediating role of media attention in the impact of corporate social responsibility on enterprise value for platform enterprises. Other scholars, adopting the perspective of individual investors, have investigated the relationship between attention and enterprise value. Cheng & Liu (2018) used the Baidu Index as a measure of online attention and demonstrated a significant positive relationship between online attention and corporate market value. From the perspective of institutional ownership, the attention of institutional investors has also been shown to impact the ESG practices of companies. Le & Ngo (2024) noted that institutional investor attention affects corporate ESG practices, with institutional investors possibly favouring companies with higher levels of ESG practices in their portfolio selection, thereby influencing enterprise value. Thus, a multidimensional investigation of attention contributes to a more comprehensive understanding of the mechanisms by which enterprise value is formed.

Based on an analysis of existing research findings, it is suggested in this study that attention has a positive impact on enterprise value. Increased attention directly influences investor attitudes and corporate image, subsequently affecting market share, financing activities, and ultimately, the realisation of enterprise value (Bhushan, 1989). In today's information-rich environment, shifts in attention not only reflect public perceptions and awareness of companies but may also impact their standing in market competition and financing opportunities. According to resource dependence theory and stakeholder theory, corporations must acquire external resources to ensure long-term survival and development (Barney, 1991). Under conditions of ownership-management separation, distorted information flows along supply chains (Wang et al., 2022), and the "information silos" effect characteristic of the big data era, information asymmetry has become a critical issue in realising enterprise value. Enhancing attention effectively contributes to the achievement of enterprise value. Firstly, from an internal governance perspective, companies with higher levels of attention tend to attract more talented employees, thereby strengthening the company's talent pool. Additionally, companies receiving higher levels of public scrutiny are subject to more rigorous oversight. To maintain a positive public image, they often improve internal management standards and adopt advanced management practices. Secondly, from the perspective of external resource acquisition, higher levels of attention increase information transparency and reduce investment uncertainty, thereby partially alleviating financing constraints. Lastly, in terms of political connections, companies with high attention often benefit from a stronger corporate reputation and demonstrate a higher commitment to social responsibility, which may lead to policy support. In recent years, with environmental performance increasingly integrated into government evaluations and the promotion of green finance policies, companies with strong environmental performance find it easier to obtain preferential loans from banks. Accordingly, the following hypothesis was proposed in this study:

Hypothesis 2: Attention positively influences the realisation of enterprise value.

This study further posits that attention serves as a mediating factor in the impact of ESG performance on enterprise value. ESG performance, to some extent, reflects a company's overall development and level of social responsibility fulfilment. Strong ESG performance can attract greater investor interest, thus affecting enterprise value. The mechanism by which ESG performance enhances value through attention is realised through three specific channels. First, the fulfilment of corporate social responsibility enhances enterprise value by increasing attention. This is evident in the boost to consumer trust, improved creditworthiness with banks to satisfy financial liquidity needs, and influence on market value, attracting more investor interest to meet capital accumulation and financing needs, ultimately enhancing enterprise value. Second, from the perspective of corporate governance, companies with strong ESG performance often demonstrate higher quality information disclosure and sound governance structures, which attract greater attention from media, institutions, and individuals, thereby fostering value enhancement. Third, in terms of environmental responsibility, previous research has demonstrated that a company's commitment to environmental responsibility significantly increases attention, subsequently promoting corporate green innovation, financing capabilities, and overall performance. Therefore, the following hypothesis was proposed in this study:

Hypothesis 3: Attention mediates the effect of ESG performance on enterprise value.

3. Research Design

3.1 Variable Definition and Measurement

(1) Explained variable: enterprise value

Enterprise value represents the market's perception and assessment of a company and is a crucial indicator of its economic performance and future growth potential. Tobin's Q is a commonly used method for evaluating enterprise value, aiming to determine a company's value level by comparing its market value with its net asset value. Referring to the study by Tang (2022), Tobin's Q was adopted to evaluate enterprise value in this study. Tobin's Q is calculated as the ratio of a company's market value (total market capitalisation) to its net asset value (total assets minus liabilities), specifically Q = market value / net asset value. If Q exceeds 1, it indicates that the company's market value is higher than its net asset value, possibly reflecting a high market expectation for future growth, and thereby suggesting a higher enterprise value. Conversely, if Q is less than 1, it suggests that the company's market value is below its net asset value, indicating a potentially lower market expectation for growth and thus a lower enterprise value.

(2) Explanatory variable: corporate ESG score

The ESG score is a rating system used to assess a company's performance in environmental, social, and governance aspects. Through a comprehensive evaluation of a company's practices and achievements in environmental protection, social responsibility, and sound governance, an ESG score is assigned. ESG scores can be calculated based on various standards and assessment methods, typically taking into account metrics such as environmental impact, social responsibility, employee welfare, human rights protection, anti-corruption measures, and board independence. Drawing from the methodology of Wen et al. (2024), the Sino-Securities ESG Rating Index was selected as a proxy variable for assessing corporate ESG performance. This rating categorises companies into levels of "C, CC, CCC, B, BB, BBB, A, AA, AAA," with each level corresponding to a percentage score. The composite score from the Sino-Securities ESG Rating was used as the proxy for the corporate ESG variable in this study.

(3) Mediating variable: attention

Attention encompasses not only the breadth and depth of interest in a company or organisation but also reflects the degree and attitude of attention toward corporate affairs, products, services, or events. With the advancement of the internet era, the lowered barriers to information dissemination and the increased level of information integration have led to an increasingly interwoven influence across various dimensions of attention. Under these circumstances, the dynamic changes in attention reveal not only societal interest and perception of companies but also the role of the information environment in shaping public attitudes and behaviours (Aouadi et al., 2013). Consequently, research focusing on a single dimension of attention may overlook essential factors, resulting in a lack of multidimensional representation. According to stakeholder theory, companies, in pursuing their interests, tend to focus on overall benefits rather than the interests of specific groups. Investors, institutions, media, and government entities are all stakeholders significantly influencing corporate innovation decisions. Therefore, studying these groups individually may fail to fully capture the broader attention effect.

Based on the above considerations, this study examines individual investors, institutional investors, and media as the primary subjects, selects corresponding indicators, employs principal component analysis (PCA) to construct a measure of attention, and studies its role in the impact of ESG performance on enterprise value. PCA, as a dimensionality reduction technique, enables the transformation of multiple related variables into a few uncorrelated principal components, thereby reducing data complexity. Through PCA, variables reflecting attention are synthesised into a single representative measure.

The three proxy variables selected for this study are shown in Table 1. Individual attention is measured by the average daily Baidu search index for the year; institutional attention is proxied by the number of analysts following a given company; and media attention is represented by the volume of new media reports (Aliano et al., 2023; Lins et al., 2017; Velte, 2017). Kaiser-Meyer-Olkin (KMO) and Bartlett's tests were conducted to determine the suitability of each dimension of attention for factor analysis. The KMO value was 0.598, exceeding 0.5, and the Bartlett test was significant, indicating the presence of collinearity among the variables, necessitating PCA. The composite indicator derived from the variance contribution of each variable was used as a proxy for attention.

(4) Control variables

Based on previous research, several control variables were included in the model estimation: firm size, leverage (lev), growth, return on assets (ROA), ownership concentration of the top ten shareholders (top10), proportion of independent directors (indep), whether the CEO and board chair roles are combined (dual), year and industry effects. Table 1 presents all variables and their definitions.

Table 1. Variable setting

Variable Type	**Variable Name**	**Calculation**			
Explained variable	Enterprise value (EV)	Tobin's Q			
Explanatory variable	ESG	ESG score			
Mediating variable	Attention	Derived from the following proxies through PCA			
		Individual investor attention	M1	Baidu Index	Annual average of daily Baidu search index
		Media attention	M2	Media coverage	Volume of new media reports
		Institutional investor attention	M3	Analyst coverage	Number of analysts following the company
Control variables	Size	Natural logarithm of total assets			
	Lev	Total liabilities / total assets			
	ROA	Net profit / total assets			
	Growth	(Current year revenue - Previous year revenue) / Previous year revenue			
	Top10	Shareholding of top 10 shareholders / total shares			
	Indep	Number of independent directors / total board members			
	Dual	Coded as 1 if CEO and board chair roles are combined, otherwise 0			
	Year	Year dummy variable			
	Ind	Industry dummy variable			

3.2 Model Construction

To test Hypothesis 1, Model 1 was constructed to focus on the coefficient (α_1) measuring the impact of ESG performance on enterprise value:

$$EV_{it} = \alpha_0 + \alpha_1 ESG_{it} + CV + \sum year + \sum ind + \varepsilon_{it} \tag{1}$$

To verify Hypothesis 2, which posits that attention positively affects enterprise value, Model 2 was specified as follows:

$$Attention_{it} = \alpha_0 + \alpha_1 ESF_{it} + CV + \sum year + \sum ind + \varepsilon_{it} \tag{2}$$

To examine whether the explanatory and mediating variables influence enterprise value, thereby testing the validity of Hypothesis 3, Model 3 was constructed as follows:

$$EV_{it} = \alpha_0 + \alpha_1 ESG_{it} + \alpha_2 Attention_{it} + CV + \sum year + \sum ind + \varepsilon_{it} \tag{3}$$

where, α_0 represents the constant term; α_i denotes the coefficients that determine the direction of variable influence; *i* denotes the *i*-th company; *t* represents the *t*-th year; ε_{it} signifies the random error term, indicating the difference between the actual values of the model and the predicted values derived through estimation; *CV* represents the control variables chosen for this study; and *year* and *ind* account for year and industry effects, respectively, controlling for the impact of time and industry effects to enhance the accuracy of model estimates.

3.3 Sample Selection and Data Sources

The sample for this study comprises A-share listed companies in China from 2011 to 2022. To ensure data accuracy, the raw sample was filtered according to the following steps: (1) financial and insurance samples and abnormal samples with total operating income of zero, a debt-to-asset ratio greater than one, or changes in listing status during the year, were excluded; (2) samples under ST, *ST, and PT categories were excluded; and (3) samples with missing values in relevant variables were removed. To mitigate the influence of outliers, continuous variables were winsorised at the 1% and 99% levels, resulting in a final sample of 4,130 annual observations of enterprises and 29,810 valid data points. ESG ratings were obtained from the WIND database, while other data were sourced from the CSMAR database.

4. Empirical Analysis

4.1 Descriptive Statistics

Table 2 presents the descriptive statistics for the variables. For enterprise value, the mean is 2.2713, with a standard deviation of 1.2479, a minimum of 0.9220, and a maximum of 7.9519, indicating a notable variation in enterprise value across the sample. The mean ESG score is 73.2245, with a standard deviation of 5.3336, a minimum of 57.0400, and a maximum of 84.3400, reflecting diverse ESG performance among companies in the sample. Regarding attention, the mean value is 8.25e-11, with a standard deviation of 1.3149, a minimum of -1.6855, and a maximum of 7.6785. This suggests overall low levels of attention, with significant variation and the majority of companies receiving below-average attention. This phenomenon may be explained by the "siphon effect," whereby heightened attention brings increased exposure and support, creating a positive feedback loop. Firm size also exhibits variability in mean, standard deviation, minimum, and maximum values, providing opportunities for future heterogeneity research. The statistical results for other control variables fall within reasonable ranges and were not further discussed in this study.

Table 2. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
EV	29810	2.2713	1.2479	0.9220	7.9519
ESG	29810	73.2245	5.3336	57.0400	84.3400
Attention	29810	8.25e-11	1.3149	-1.6855	7.6785
Size	29810	22.2090	1.2809	19.9906	26.0379
Lev	29810	0.4164	0.2050	0.0564	0.8835
ROA	29810	0.0438	0.0613	-0.1941	0.2095
Growth	29810	0.1675	0.3543	-0.4973	1.8956
Top10	29810	0.5901	0.1521	0.2437	0.9027
Indep	29810	0.3760	0.0534	0.3333	0.5714
Dual	29810	0.2888	0.4532	0.0000	1.0000

4.2 Regression Analysis

4.2.1 Main effect regression analysis

The impact of ESG on enterprise value has been widely discussed; however, potential endogeneity issues may arise. Endogeneity generally refers to issues in evaluating the effect of ESG on enterprise value due to omitted variables, simultaneity bias, or measurement error. The increase in enterprise value may coincide with ESG practices but may not necessarily result from ESG practices. A company with high enterprise value may have more resources to invest in ESG initiatives, rather than the improvement in enterprise value being driven by ESG practices (Da et al., 2011). To address potential endogeneity issues among certain explanatory variables in the model, a Hausman test was conducted before hypothesis testing. The test yielded a P-value of 0.0000, strongly rejecting the null hypothesis, indicating that a fixed effects model should be applied in the regression analysis.

Table 3 reports the regression results of corporate ESG performance and enterprise value. Column (1) includes fixed effects without control variables, while column (2) includes control variables based on column (1). According to the regression analysis in Table 3, the impact of ESG on enterprise value is significant (0.0135***). This suggests that an improvement in ESG quality has a positive impact on enterprise value, aligning with previous research findings summarised earlier. Based on stakeholder theory, corporate decision-making is influenced by both internal and external stakeholders, requiring companies to balance the maximisation of shareholder wealth with the interests of various stakeholders (Wang & Yao, 2024). The promotion of ESG values emphasises a coordinated development across economic, environmental, and social dimensions. Actively fulfilling ESG responsibilities assists in meeting stakeholder demands, promotes sustainable development, and enhances earnings quality (Choi & Um, 2024). Strong ESG performance reduces financing constraints, improves corporate reputation, and lowers capital costs. By fulfilling ESG responsibilities, companies can optimise their relationships with financial institutions and investors, increasing financing capacity, reducing financing costs, and obtaining more support for development. This relationship is reflected in how ESG reporting can reduce information asymmetry, enabling investors to assess risks and returns more comprehensively, thereby reducing monitoring costs, attracting stakeholder attention, and securing financial support. Additionally, ESG investments can improve long-term returns and proactively manage risks, making third-party financial resources more inclined toward companies with high ESG transparency. Thus, Hypothesis 1 was validated.

Table 3. Regression analysis

Variables	**(1) EV**	**(2) EV**
ESG	0.0135***	0.0196***
	(9.4018)	(15.6789)
Size		-0.3274***
		(-43.2300)
Lev		0.0231
		(0.4618)
ROA		4.0135***
		(23.5205)
Growth		0.0990***
		(4.5216)
Top10		-0.7280***
		(-16.8852)
Indep		1.1833***
		(9.7166)
Dual		-0.0559***
		(-3.8070)
2012.year	-0.0316	0.0243
	(-1.3548)	(1.0976)
Constant	1.0413***	7.4376***
	(9.0328)	(40.5636)
Year fixed effects	Controlled	Controlled
Industry fixed effects	Controlled	Controlled
Observations	29,810	29,810
R-squared	0.1544	0.2891
F	170.1408***	274.7645***

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively; values in parentheses represent t-statistics.

The realisation of enterprise value depends on effective risk assessment and control, and investors' perceptions and preferences regarding corporate risk directly influence their investment decisions. According to signalling theory, a strong ESG rating enables a company to convey positive signals of operational stability to stakeholders through its products and market, thereby enhancing stakeholder recognition. Furthermore, by improving ESG performance, companies can boost social reputation and brand value, increasing resilience against adverse events and reducing overall risk levels. In further analysis, based on information asymmetry theory, high-quality performance in environmental, social, and governance aspects contributes to improved information disclosure in capital markets, enhancing the external information environment of the company and alleviating information asymmetry between investors and financiers to some extent. Superior ESG performance often signals a greater willingness for transparency, thereby increasing information visibility and attracting more investors, which supports the realisation of enterprise value. With the advent of the big data era, investors and stakeholders now have access to an expanding array of channels and methods for obtaining corporate information, and public and media evaluations of companies can significantly influence corporate reputation. Combined, these factors underscore the importance of attention to enterprise value. Given that attention affects external governance, enabling the monitoring of corporate behaviour and promoting improvements in the internal information environment, it serves to alleviate financing constraints. Thus, attention was introduced as a mediating variable in this study to explore the pathway mechanism by which corporate ESG performance influences enterprise value.

4.2.2 Mediation effect test

Table 4 reports the regression results for the mediating effect of attention. In column (1), the results indicate a significant positive impact of ESG performance on attention (0.0058***), suggesting that, with other variables controlled, an increase in ESG performance may enhance attention toward a company. ESG serves as a crucial signal in contemporary capital markets, not only representing corporate social responsibility but also functioning as an enhancer of information transparency in capital markets. Through adherence to ESG standards, companies demonstrate their performance in environmental, social, and governance areas, thus reducing information asymmetry and increasing market transparency and efficiency. ESG performance, as a prominent positive signal, is vital in improving the information environment of capital markets, effectively mitigating the challenges posed by information asymmetry (Wright & Ferris, 1997). ESG performance is closely related to the actual disclosure of relevant information by companies. As the quantity and authenticity of disclosed ESG information improve, the degree of information asymmetry in capital markets is expected to decrease progressively. By fully disclosing ESG information, companies enhance transparency, build trust with investors, and increase attention, thereby unlocking broader investment opportunities. In column (2), the results indicate that attention has a significant positive effect on enterprise value (Tobin's Q) (0.3397***). This suggests that, controlling for other variables, an increase in attention is likely to positively impact enterprise value. Companies with high levels of attention are able to attract more investment and interest, thereby enhancing enterprise value. Both Hypothesis 2 and Hypothesis 3 were thus validated.

Table 4. Sub-index regression

Variables	**(1)** **Attention**	**(2)** **EV**
ESG	0.0058***	0.0238***
	(3.8205)	(16.6563)
Attention		0.3397***
		(38.7412)
Size	0.6656***	-0.4698***
	(66.4861)	(-50.8656)
Lev	-0.4721***	-0.0860
	(-9.7038)	(-1.6274)
ROA	4.4921***	4.1824***
	(26.3593)	(21.5293)
Growth	0.0558***	0.0828***
	(2.6280)	(3.9075)
Top10	-0.8089***	-0.5216***
	(-15.0351)	(-10.7793)
Indep	1.0602***	0.6073***
	(7.1538)	(4.5917)
Dual	0.1589***	-0.0843***
	(10.1528)	(-5.2126)
Constant	-14.6961***	10.3289***
	(-58.5040)	(46.9132)
Year fixed effects	Controlled	Controlled
Industry fixed effects	Controlled	Controlled
Observations	20,948	20,948
R-squared	0.4271	0.4077
F	234.2280***	247.8076***

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively; values in parentheses represent t-statistics.

Given the substantial asymmetry in information access among different stakeholders, increasing attention is particularly crucial, as it helps alleviate information asymmetry and plays an indispensable role in the impact of corporate ESG performance on enterprise value. The growth of enterprise value is influenced by multiple factors, including cost savings, increased transactions, and improved financing levels (Wright & Ferris, 1997). From an operational perspective, attention can act as a constraint on managerial behaviour through capital market scrutiny, promoting transaction volume and business scale, thereby driving enterprise value growth. Strong ESG performance significantly raises attention, intensifies competitive market pressures, and increases stock price sensitivity, all of which have a profound impact on enterprise value. Regarding cost savings, superior ESG performance leads to higher attention, which reduces the cost of equity capital. Companies that receive greater attention typically enjoy wider recognition and a better reputation, which stimulates consumer purchasing interest and supports enterprise value growth. In terms of financing, higher corporate ESG levels increase attention, making it easier to obtain bank credit support and meet liquidity requirements for financial resources. Excellent ESG performance effectively attracts more investor interest, reduces financing constraints, enhances financing efficiency, and supports the long-term development of the company.

4.3 Heterogeneity Analysis

The analysis above reveals a close relationship between enterprise value and ownership structure. Previous studies have indicated that in the relationship between socially responsible investment and enterprise value, state-owned platform companies demonstrate a more pronounced enhancement in enterprise value through social responsibility fulfilment compared to non-state-owned platforms. In the broader context of the rule of law, strong ESG performance is crucial for state-owned enterprises to build a reputable brand image. With significant shifts in the operating environment, corporate culture, and values, a new generation influenced by concepts of the rule of law and sustainable development holds higher expectations for corporate conduct, particularly in areas of legal compliance, social responsibility, fairness, and justice. These evolving values and societal expectations increasingly shape corporate trajectories. Companies that align with these new values are more likely to gain public recognition and support, resulting in significant economic returns; conversely, failure to meet these expectations may lead to severe penalties and public backlash. As this generation gradually assumes leadership positions, these values are expected to permeate corporate strategy and operations. As unique entities, state-owned enterprises should adapt to these shifts by embracing principles of compliant governance. This commitment goes beyond corporate reputation, reflecting national image and responsiveness to the compliance trend. The factors influencing state-owned enterprise development can be categorised as "internal forces" and "external forces". The "global landscape" and the "compliant development of non-state-owned enterprises" are two key external forces driving the compliant governance of state-owned enterprises, while "economic responsibility" and "social responsibility" are the primary internal drivers (Habib & Hasan, 2019). Social responsibility, a component of the ESG framework, focuses on corporate obligations toward society and the environment. Specifically, social responsibility highlights the positive societal role of corporations, including employee welfare, community support, sustainable practices, and ethical operations. Therefore, it is worth exploring whether the ESG performance of state-owned platform companies might have a more substantial impact on their overall enterprise value. Accordingly, this study divides companies into state-owned and non-state-owned categories to conduct a heterogeneity analysis based on ownership structure.

Table 5. Heterogeneity analysis

	State-Owned	**Non-State-Owned**
Variables	EV	EV
ESG	0.0331***	0.0149***
	(17.2694)	(9.2024)
Size	-0.3636***	-0.3600***
	(-31.8435)	(-32.3121)
Lev	-0.2411***	0.1454**
	(-3.3342)	(2.1684)
ROA	3.8925***	4.2276***
	(11.8807)	(21.1224)
Growth	-0.0031	0.1443***
	(-0.1080)	(4.9899)
Top10	0.1613**	-1.1094***
	(2.4924)	(-18.8050)
Indep	1.0988***	1.1103***
	(6.1492)	(6.9293)
Dual	-0.0287	-0.0261
	(-0.9560)	(-1.5409)
Constant	7.0931***	8.5682***
	(29.0230)	(29.9682)
Year fixed effects	Controlled	Controlled
Industry fixed effects	Controlled	Controlled
Observations	10,269	19,541
R-squared	0.3515	0.2680
F	101.4152***	164.6036***

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively; values in parentheses represent t-statistics.

Table 5 reports the results of the heterogeneity analysis, indicating that the impact of ESG performance on enterprise value is more pronounced in state-owned enterprises compared to non-state-owned enterprises. For state-owned enterprises, the effect of ESG performance on enterprise value is significantly positive (0.0331***), suggesting that ESG initiatives have a favourable impact on enterprise value. While ESG performance in non-state-owned enterprises also has a significant effect on enterprise value, the magnitude is smaller (0.0149***).

This disparity may be attributed to differences in institutional environment, unique operational models, decision-making behaviours, and resource constraints between state-owned and non-state-owned enterprises. Non-state-owned enterprises typically prioritise value appreciation and profit maximisation, whereas state-owned enterprises must balance profitability with market demands and government policy considerations, including political objectives. As a fundamental component of the socialist economy, state-owned enterprises are tasked with enhancing economic competitiveness through growth and value preservation, making economic responsibility their foremost priority. Although ESG performance may not yield immediate economic benefits, within the context of the rule of law and the modernisation of the national governance system, ESG efforts emphasise the long-term interests and value realisation of enterprises. Unlike traditional performance metrics, ESG performance provides a more comprehensive representation of corporate sustainability. Consequently, state-owned enterprises with strong ESG performance are more likely to secure government support, granting them access to additional resources for growth. It is noteworthy that for both state-owned and non-state-owned enterprises, firm size exhibits a significant negative effect on enterprise value (-0.3636*** and -0.3600***, respectively). This finding aligns with the previous descriptive and correlation analyses, indicating that as firm size increases, the impact of ESG performance on enterprise value weakens.

The influence of ESG performance on enterprise value may vary across different stages of a company's life cycle, exhibiting a boundary effect. According to corporate life cycle theory, development can be categorised into three stages: growth, maturity, and decline. In the growth stage, companies have achieved a certain scale compared to their start-up phase but still face intense market competition. To establish a differentiated competitive advantage, managers are required to possess a strong willingness to take on risk. At this stage, to attract more investor interest, increase capital accumulation, and improve financing levels, companies are likely to enhance their ESG performance to increase attention and, consequently, enterprise value. Thus, when firm size is relatively small, the impact of ESG performance on enterprise value is more significant. During the maturity stage, as market share and growth rate gradually slow down, sustainable development becomes a primary objective. In this phase, ESG information disclosure, built upon the early accumulation of reputation and corporate image, may bring additional reputational resources that yield returns exceeding the costs of disclosure, facilitating high-quality corporate growth. However, as companies enter the decline stage, operational and profitability capacities tend to weaken, with challenges arising from capital shortages and shrinking market share. Under such circumstances, survival becomes the priority, and the impact of ESG performance on enterprise value may be reduced (Liu & Jin, 2023).

4.4 Robustness Test

4.4.1 One-period lag robustness test

Table 6. One-period lag robustness test

Variables	(1) EV	(2) EV
ESG	0.0070***	0.0122***
	(4.4230)	(8.7997)
Size		-0.3375***
		(-40.7172)
Lev		-0.1344**
		(-2.4627)
ROA		4.9790***
		(26.6380)
Growth		0.0689***
		(2.8900)
Top10		-0.3034***
		(-6.3786)
Indep		1.2283***
		(9.2175)
Dual		-0.0233
		(-1.4198)
Constant	1.4904***	8.0330***
	(11.5531)	(40.0438)
Year fixed effects	Controlled	Controlled
Industry fixed effects	Controlled	Controlled
Observations	24,949	24,949
R-squared	0.1554	0.3100
F	150.6263***	244.2938***

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively; values in parentheses represent t-statistics.

Based on the results of the one-period lag robustness analysis in Table 6, Model 1 shows that the one-period lagged ESG performance has a significant positive impact on enterprise value (0.0070***). This finding suggests that improved ESG quality in the previous period positively influences current enterprise value and has predictive power for future enterprise value. In Model 2, the impact of lagged ESG performance on enterprise value remains significantly positive (0.0122***), underscoring the importance of ESG quality improvement in sustaining a positive effect on enterprise value. In both models, the effects of other variables, including growth, top10, indep, and dual, exhibit consistent directionality and significance in their influence on enterprise value.

4.4.2 Robustness test with an altered sample period

Data prior to 2020 were utilised to conduct the analysis, performing a robustness test on an altered sample period.

Based on the robustness analysis with an altered sample period shown in Table 7, Model 1 indicates a significant positive impact of ESG performance on enterprise value (0.0089***). This finding suggests that improved ESG quality has a positive effect on enterprise value, further supporting the robustness of the impact of ESG quality on enterprise value. In Model 2, the effect of ESG performance on enterprise value remains significantly positive and is even more pronounced (0.0190***). This result further underscores the positive influence of ESG quality on enterprise value, reinforcing the robustness of the previous analytical conclusions.

Table 7. Robustness test with an altered sample period

Variables	**(1)** **EV**	**(2)** **EV**
ESG	0.0089***	0.0190***
	(5.3756)	(13.8267)
Size		-0.3666***
		(-42.7963)
Lev		0.0953*
		(1.6918)
ROA		3.5119***
		(18.1601)
Growth		-0.0064
		(-0.2761)
Top10		-0.6853***
		(-14.7126)
Indep		1.2576***
		(9.6224)
Dual		-0.0831***
		(-5.2750)
Constant	1.3652***	8.2676***
	(10.5302)	(39.8968)
Year fixed effects	Controlled	Controlled
Industry fixed effects	Controlled	Controlled
Observations	22,168	22,168
R-squared	0.1907	0.3431
F	151.5577***	242.2762***

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively; values in parentheses represent t-statistics.

5. Conclusion

5.1 Key Findings and Discussion

As global consensus around the principles of sustainable development continues to strengthen, ESG performance has become a core issue of interest for stakeholders, including governments, regulatory bodies, companies, and investors. Strong ESG performance has a multifaceted impact on enterprise value realisation. First, good ESG performance can enhance a company's reputation, making it more attractive to stakeholders such as investors, thereby facilitating the acquisition of stakeholder recognition and trust. Robust ESG performance helps mitigate risks faced by companies. In the event of negative incidents, this established trust can buffer stakeholder reactions and provide companies with opportunities to correct course. Additionally, ESG performance yields tangible benefits, such as reduced financing costs, improved employee morale and loyalty, and greater adaptability to market and regulatory changes, all of which contribute to long-term competitiveness and sustainability. Under the impetus of the "dual carbon" policy, the impact of ESG performance on corporate reputation and financing activities has become even more pronounced. To achieve long-term value appreciation, companies are increasingly focused on compliance with policy and environmental requirements, actively fulfilling ESG responsibilities rather than merely maximising short-term profits. This study, based on a sample of A-share listed companies from 2011 to 2022, examines the enhancing effect of ESG performance on enterprise value and its associated mechanisms.

The findings were summarised below. First, strong ESG performance significantly promotes enterprise value realisation, and this result remains robust and reliable after a series of endogeneity tests and robustness checks. Second, attention serves as a mediating factor in this process. By increasing attention, ESG performance helps to establish favourable stakeholder relationships, thereby facilitating enterprise value realisation. Good ESG performance enables companies to secure high-quality transactions and profitability through consumer and supply chain channels, obtain low-cost financing from investors and creditors, and receive support and subsidies from government channels, thus promoting value appreciation and long-term development. Finally, the impact of ESG performance on enterprise value exhibits heterogeneity, with different types of companies experiencing varying effects. Specifically, state-owned enterprises, subject to more stringent government regulation, benefit from enhanced attention and reputation through improved ESG performance, thereby promoting enterprise value.

5.2 Implications of This Study

This study provides several implications. At the corporate level, companies are advised to embrace ESG principles actively, deepen internal ESG practices, continuously improve ESG performance, and voluntarily fulfil ESG disclosure obligations, aiming to enhance resource consolidation capacity and lay a solid foundation for sustainable development. For investors, attention should be given to evaluating corporate ESG performance, translating complex ESG information into clear, practical investment guidance. Through ESG investing, investors can increase market awareness and usability of ESG information, acting as promoters of ESG information while pursuing long-term investment returns and fostering a positive ESG development cycle. At the information dissemination level, relevant platforms should strengthen information transmission channels to ensure that investors across different channels can access accurate, authoritative information, thereby supporting rational investment decisions. Regulatory agencies should refine the oversight framework to support the promotion of ESG practices, establish unified evaluation standards, and guide and monitor corporate ESG disclosures, thus facilitating a well-functioning market in line with the efficient market hypothesis. Additionally, educational institutions, workplaces, and media platforms should increase the availability of ESG-related courses to raise public awareness and understanding of ESG concepts, thereby enhancing societal emphasis on ESG. At the governmental level, active fiscal policies play a significant role in encouraging companies to assume ESG responsibilities. It is recommended that differentiated structural monetary policies be implemented, offering targeted support based on companies' ESG performance, type, industry, and scale (Liu & Zhang, 2023). For example, enterprises with outstanding performance could be provided with customised financial services to incentivise their commitment to ESG responsibilities. The policy framework should be improved to accelerate the development of an ESG disclosure system for enterprises under the "dual carbon" targets, ensuring the standardisation of ESG information disclosure to enhance the comparability of ESG data. Furthermore, companies should integrate ESG development principles into their corporate culture and business strategies, leveraging positive media exposure to build their corporate image, enhance brand promotion, and consistently improve service quality for external stakeholders, including suppliers and customers. This approach fosters a gradual strengthening of responsibility awareness and motivation. Collaborative efforts among companies across various industries are encouraged to share resources and leverage respective strengths in order to address the shared challenges associated with sustainable industry development.

In summary, the government should strengthen the policy framework to promote the establishment of a comprehensive ESG disclosure system within the "dual carbon" goals, ensuring the standardisation of corporate ESG disclosure practices to enhance the scientific and objective nature of ESG ratings. Companies should incorporate ESG principles into their organisational culture and long-term business strategies, aligning ESG responsibilities with long-term strategies to shape corporate identity, cultivate a sense of responsibility, and strengthen internal drivers for fulfilling ESG commitments.

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Data Availability

The data used to support the research findings are available from the corresponding author upon request.

Conflicts of Interest

The authors declare no conflict of interest.

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