

The Impact of ESG Performance on Corporate Value: An Empirical Analysis Based on A-share Listed Companies

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ABSTRACT

With the deepening discussion of environmental, social, and governance issues on a global scale, enterprises, as an important part of the social economy, have attracted increasing attention to their own ESG performance. This article is based on data from Chinese A-share listed companies from 2013 to 2023. Through a fixed effects model, empirical research has found that the ESG performance of a company has a significant positive impact on its value, that is, as the ESG performance of a company improves, its value also increases. Enterprises can enhance their competitiveness by improving their ESG performance, gain recognition from more investors and stakeholders, and achieve sustainable development goals.

KEYWORDS

ESG; Enterprise value; A-share listed companies

1. INTRODUCTION

ESG is an abbreviation of three English words: E (Environment) S (Society) G (Governance). It evolved from CSR to a certain stage of development, driven by the information needs of the United Nations environmental protection and capital markets. It has evolved from a CSR with strong ethical and philanthropic colors to an ESG focused on sustainable economic, social, and environmental development. From the perspective of CSR, incorporating environmental protection and social responsibility, measuring the sustainable development of enterprises from multiple dimensions, reflects a "win-win" concept. The ESG performance is highly aligned with China's high-quality development task, and is a powerful lever for China's economy to shift from pursuing single high-speed development to high-quality and sustainable development. Clarifying the impact of ESG on corporate value has important theoretical and practical significance.

As an important entity in the market economy, the business activities of enterprises will have a huge impact on society. Negative news such as Formaldehyde room of ZiroomCompany, Changsheng Biotoxin Vaccine, and Evergrande's debt crisis have frequently emerged, which has attracted public attention to the ESG of enterprises. In 2018, the China Securities Regulatory Commission required listed companies to disclose ESG related information. In 2022, the State owned Assets Supervision and Administration Commission proposed the requirement of "implementing the new development concept and exploring a sound ESG system". In 2023, the State owned Assets Supervision and Administration Commission issued a notice on forwarding the research on the preparation of ESG

special reports for listed companies controlled by central enterprises, further standardizing ESG information disclosure work. At the same time, in response to the requirements of "carbon peak", "carbon neutrality" and the new quality productivity proposed in the 2024 government work report, enterprises are also increasingly valuing their own ESG performance to maintain their company image. In the pursuit of ESG, the corresponding measures taken by enterprises to improve resource utilization efficiency, reduce environmental damage, and attach importance to business ethics and morality will affect the development plan of the enterprise, thereby affecting its value. On the contrary, will the ESG performance of a company affect its value?

2. LITERATURE REVIEW AND RESEARCH HYPOTHESES

According to stakeholder theory, enterprises should comprehensively balance the requirements of various stakeholders and pay attention to their own social benefits. Wang Xiaowei and Chen Hui (2011) empirically concluded through structural equation analysis that there is a positive correlation between the social responsibility of enterprises towards different stakeholders and their corporate value. Wang Qinggang and Xu Xinyu (2016) found that fulfilling social responsibility towards employees can create value for the enterprise throughout its entire lifecycle. Zhang Lin and Zhao Haitao (2019) empirically analyzed that ESG performance has a significant positive effect on corporate value, and the effect is more pronounced for non-state-owned enterprises and non polluting enterprises [5]. A stable supply chain relationship is crucial for the development of enterprises. Li Gang et al. (2024) found that the quality of supplier social responsibility information disclosure is significantly positively correlated with customer stability. Improving the quality of information disclosure can enhance customer stability. Xu Guanghua et al. (2022) found that good ESG can change the current situation of information asymmetry and improve enterprise value [7].

However, based on a cost perspective, some scholars believe that enterprises bear high costs to improve the quality of ESG information disclosure, which in turn restricts production and is not conducive to the enhancement of enterprise value. Stefan and Frank (2000) argue that the impact of environmental protection on shareholder value depends on the implementation of corporate environmental management [8]. Wang Rong (2022) found from a cost-benefit perspective that ESG information disclosure will reduce corporate value in the short term. Giuli and Kostovetsky believe that ESG will have a negative impact on corporate value, and as the ESG level increases, the ROA level of the enterprise decreases [10].

Based on the above analysis, this article proposes the following assumptions:

H_{1a}: ESG performance is positively correlated with enterprise value.

H_{1b}: ESG performance is negatively correlated with enterprise value.

3. RESEARCH DESIGN

3.1. Data Source

Taking Chinese listed companies from 2013 to 2023 as the research object, except for ESG data from Wind database, all other empirical data are from CSMAR database. Referring to the common practices in existing literature, the data is processed as follows: (1) ST data and financial enterprises are excluded; (2) data is truncated at the 1% level; (3) missing values of related variables are removed; There are a total of 30897 samples.

3.2. Model Setting And Variable Definition

To study the impact of ESG ratings on corporate value, this article constructs the following model:

$$ROA_{i,t} = \beta_1 ESG_{i,t} + \beta_2 Size_{i,t-1} + \beta_3 TOP10_{i,t-1} + \beta_4 Ctop5_{i,t-1} + \beta_5 Indep_{i,t} + \beta_6 CF_{i,t-1} + \varepsilon_{i,t} \quad (1)$$

Among them, i represents different individual businesses, and t represents the year, $\varepsilon_{i,t}$ represents a random disturbance term that varies with time and individuals. Considering the inertia of economic activities in enterprises, it takes some time for the relevant information disclosed by enterprises to be interpreted by stakeholders. This article draws on the approach of Wang Yiqiu and Xie Meng (2022) to lag the control variables by one period [11]. However, considering the small inertia of *Indep*, it was not lagged behind. The explanations for each variable in the model are as follows:

(1) The dependent variable. Enterprise Value (ROA). By measuring the return on total assets and calculating it as net profit/total assets, the profitability of a company's total assets can be measured, thereby reflecting its value.

(2) Explanatory variables. Enterprise ESG Performance (ESG). There are multiple ESG rating agencies such as SynTao Green Finance, CSI, and FTSE Russell. This article adopts the commonly used Huazheng rating system, which assigns C to 1, CC to 2, CCC to 3, B to 4, BB to 5, BBB to 6, A to 7, AA to 8, and AAA to 9. A total of nine levels are measured [12].

(3) Control variables. On the basis of explaining the variable ESG, this article controls for other factors that may affect the value of the enterprise, mainly including enterprise size (Size), equity concentration (TOP10), customer concentration (Ctop5), independent director proportion (Indep), and total cash assets ratio (CF).

Table 1. Variable Definition Table

Variable type	variable name	variable symbol	variable definition
Dependent variable	Enterprise Value	ROA	Net profit/total assets
Explanatory variables	EnterpriseESG Performance	ESG	Huazheng rating, assigning 1-9 points to C~AAA
Control variable	Enterprise size	Size	The logarithm of total assets
	Equity concentration	TOP10	The shareholding ratio of the top ten shareholders
	Customer concentration	Ctop5	Top n sales amount/annual sales revenue of the enterprise
	Idependent director proportion	Indep	Number of independent directors/number of board members
	Total cash assets ratio	CF	Net cash flow generated from operating activities/total assets at the end of the year

4. EMPIRICAL RESULTS

4.1. Descriptive Statistical Analysis

The statistical results in Table 2 can be obtained by truncating data below 1% and above 99%. The average ROA of the sample enterprises is 0.0374, slightly lower than the median of 0.0382, with a maximum value of 0.223 and a minimum value of -0.447, indicating that there is not much difference in enterprise value. The maximum ESG value of the sample enterprises is 7, the minimum value is 1, and the maximum value has not reached the best level of AAA, indicating that there are fewer

enterprises with good ESG performance; Furthermore, at the 50th and 25th percentiles, both are 4, with a mean of 4.111, indicating that the ESG performance of most companies is at a moderate level.

Table 2. Descriptive Statistical Results

Variable	N	Mean	Max	SD	p75	p50	p25	Min
ROA	30,897	0.0374	0.223	0.0665	0.0694	0.0382	0.0139	-0.447
ESG	30,897	4.111	7	0.909	5	4	4	1
Size	30,897	22.22	27.24	1.302	22.94	22.03	21.29	19.38
TOP10	30,897	58.79	92.54	15.18	70.52	59.63	47.80	21.71
Ctop5	30,897	32.79	157.9	22.93	46.14	27.01	14.99	0
Indep	30,897	0.377	0.600	0.0538	0.429	0.364	0.333	0.286
CF	30,897	0.0492	0.265	0.0681	0.0887	0.0479	0.0108	-0.204

4.2. Correlation And Collinearity Analysis

According to Table 3, the coefficient between the dependent variable ROA and ESG is 0.192, which is significant at the 1% level, and the correlation coefficient values of other variables are all less than 0.5, mostly significant at the 0.1% level. It is preliminarily believed that there is no collinearity problem. To further determine that the model has multicollinearity issues, this paper uses the VIF method for testing. As shown in Table 4, the variance inflation factor (VIF) values of the explanatory variable and the control variable are both less than 1.1, with a maximum of only 1.070, indicating that the model does not have multicollinearity issues.

Table 3. Correlation Analysis Results

ROA	ESG	Size	TOP10	Ctop5	Indep	CF	
ROA	1						
ESG	0.192***	1					
Size	0.00100	0.173***	1				
TOP10	0.244***	0.142***	0.092***	1			
Ctop5	-0.041***	-0.100***	-0.170***	0.038***	1		
Indep	-0.013**	0.070***	-0.00200	0.022***	-0.00400	1	
CF	0.410***	0.096***	0.084***	0.134***	-0.082***	0.00100	1

Table 4. Collinearity Analysis

Variable	VIF	1/VIF
Size	1.070	0.938
ESG	1.060	0.940
TOP10	1.050	0.956
Ctop5	1.050	0.957
CF	1.030	0.967
Indep	1.010	0.995
Mean	VIF	1.040

4.3. Regression Results

This article uses F-test, LM test, and Hausman test, and the results show that fixed effects are better than ordinary least squares and random effects. Therefore, a fixed effects model is used for regression. As shown in column 5 (1) of Table 5, the coefficient of the explanatory variable ESG is 0.002, with a p-value of 0.001, which is significant at the 1% level. This indicates that ESG performance has a significant positive impact on firm value. The higher the ESG score, the greater the firm value, which

is consistent with hypothesis H1a. Hypothesis H1b is rejected. The small coefficient of ESG is due to the fact that the data of the dependent variable ROA is already small, with an average value of only 0.0374, indicating that ESG has a significant impact on the enterprise value ROA. This may be due to measures such as production adjustments and management reforms taken by enterprises to improve their ESG levels, resulting in increased production efficiency.

Table 5. Regression Results and Robustness Test

	(1)	(2)
	ROA	ROA
ESG	0.002***	0.002***
	(0.001)	(0.001)
L.Size	-0.018***	-0.020***
	(0.001)	(0.001)
L.TOP10	0.001***	0.001***
	(0.000)	(0.000)
L.Ctop5	0.000**	0.000**
	(0.000)	(0.000)
Indep	-0.029**	-0.032***
	(0.012)	(0.012)
L.CF	0.138***	0.133***
	(0.007)	(0.007)
_cons	0.382***	0.424***
	(0.020)	(0.022)
N	25017	24055
R2	0.058	0.052
adj. R2	-0.136	-0.152
F	211.787	180.484
p	0.000	0.000

Note: Standard errors in parentheses; *p< 0.1, **p< 0.05, ***p< 0.01.

4.4. Robustness Testing

To further verify the reliability of the research results, this article uses sample adjustment method to narrow the sample range and see if it is still significant and if the results are valid. The test results are shown in column 5 (2) of Table 5. After reducing the year from 2013-2023 to 2014-2023, the coefficient of the explanatory variable ESG remained unchanged and remained significant at the 1% level, while all other control variables were significant at the 5% level, consistent with the initial results, indicating that the model is considered stable.

5. CONCLUSION AND SUGGESTIONS

This article takes A-share listed companies from 2013 to 2023 as research samples and empirically tests the positive correlation between ESG performance of listed companies and corporate value. Based on this, the following suggestions are given in this article:

5.1. Enterprises Should Strive To Improve ESG Performance And Consciously Disclose ESG Information

Enterprises play an important role in social and economic development, not only focusing on economic benefits, but also on environmental benefits and social responsibility. The coordination of the three is conducive to the sustainable development of enterprises. When formulating development

plans, enterprises should take ESG standards into consideration and formulate and implement sustainable development strategies. Enterprises should consciously disclose ESG information for public supervision, abandon the outdated idea of sacrificing the environment and blindly pursuing the economy, strive to develop a green economy, improve resource utilization efficiency, take effective environmental protection measures, reduce negative impacts on the environment, and contribute to achieving the goals of "carbon peak" and "carbon neutrality" as soon as possible. At the same time, enterprises should actively shoulder social responsibility, care for employees, be responsible to consumers, and give back to the community, establish a good corporate image, strive to improve governance level, improve enterprise management system, and thus reap positive feedback and benefits.

5.2. The Government Needs To Improve The ESG Disclosure System

The government should continue to improve relevant laws, regulations, and policies, and can cooperate with enterprises and the public to jointly formulate the content and standards for ESG information disclosure by listed companies, ensuring that the information disclosed by enterprises is reasonable and comparable. This makes policies easier to implement, and also makes the public and enterprises pay more attention to ESG, urging enterprises to consciously improve their ESG performance. At the same time, corresponding reward and punishment measures should also be formulated to encourage enterprises to voluntarily disclose more ESG information, and tax incentives should be given to enterprises with excellent ESG performance. Punish companies with poor performance to a certain extent.

5.3. Investors Should Pay Attention To ESG Performance

The ESG performance of a company can reflect its sustainable development ability. Investors can understand the environmental, social, and governance risks of the company by consulting its ESG reports, and make more accurate choices. As more and more investors use ESG performance as a criterion for investment evaluation, it motivates companies to take on social responsibility, strive to improve their ESG performance, and actively give back to investors.

5.4. Evaluation Agencies Should Adhere To The Principles Of Objectivity, Public Participation, And Transparency

ESG assessment agencies should follow the principles of science, objectivity, transparency, and sustainability when conducting ESG assessments, collect and verify enterprise data based on unified ESG standards, ensure the authenticity and accuracy of data sources, continuously track enterprises, and update enterprise information in a timely manner. And the evaluation agency should publicly and transparently disclose the evaluation methods and processes, accept public supervision, ensure the accuracy and credibility of the evaluation results, and avoid one-sided and misleading.

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