Does the Imbalance of ESG Activities Affect Company Performance? -- Evidence from Chinese A-share Listed Companies from 2018-2022

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Abstract. In recent years, the concept of sustainable development has progressively gained traction among the populace, with the performance of enterprises in environmental, social, and corporate governance (ESG) aspects attracting widespread attention from various sectors of society. The weighting of E, S, and G components varies across domestic and international ESG rating agencies, often resulting in significantly divergent weighted ESG scores. Leveraging the theory of organizational ambidexterity, this paper empirically investigates the impact of discrepancies between institutional ESG scores and equally weighted ESG scores on company performance, utilizing a sample of Chinese A-share listed companies spanning the years 2018 to 2022. Our findings reveal that equally weighted ESG scores exhibit a correlation with company performance, and a higher positive percentage difference between a company's rating agency ESG scores and its equally weighted ESG scores is associated with lower performance. This suggests that the rating agency weighting method may inadvertently encourage companies to engage in "greenwashing." This conclusion remains consistent after conducting robustness tests. Heterogeneity analysis further indicates that the negative impact of this difference on company performance is more pronounced among non-state-owned companies, manufacturing companies, and small companies. The mechanism of action test reveals that this difference negatively affects company performance by exacerbating financing constraints and reducing operating efficiency.

Keywords: ESG, ESG Ratings, Company performance, Greenwashing.

1. Introduction

ESG (Environmental, Social, and Governance) represents an investment philosophy that incorporates corporate environmental, social, and governance performance into investment decision-making processes. As the concept of corporate social responsibility gains traction, ESG has emerged as a crucial indicator of corporate sustainability. Consequently, companies face ongoing pressure to engage, communicate, and disclose their E, S, and G activities in order to demonstrate the sustainability of their performance [1].

According to the China ESG30 Forum's China ESG Development White Paper (2021) report, a notable surge was observed in the publication of Environmental, Social, and Governance (ESG) reports among A-share listed companies in Shanghai and Shenzhen, with over 1,100 companies disclosing such reports in 2020. This figure represents approximately 27% of all A-share listed companies. Notably, the disclosure rate of ESG reports experienced a significant increase, rising from 27.1% in 2020 to 36.4% in 2023. The growing emphasis on ESG is further exemplified by the actions of investors and regulators in the United States, where an impressive number of 4,375 investors, managing assets exceeding $121 trillion, had co-signed the Principles for Responsible Investment by 2021. This commitment underscores their strategic decision-making process, which is based on ESG impacts and links executive compensation to these factors [2]. Furthermore, data obtained from the Business Way Rong Green Organization reveals that by the end of the third quarter of 2023, China's ESG investment had reached a record high of 33.06 trillion yuan. This represents a substantial

increase of 34.4% from the previous year and indicates a compound growth rate of 34.02% over the past three years.

However, investors remain partially unconvinced that the emphasis on ESG will necessarily result in enhancements to corporate ESG performance and subsequent company performance. Typically, investors rely on ESG scores provided by third-party rating agencies as a metric for corporate performance, assuming that companies with high scores will exhibit strong performance. This perspective held by investors today is akin to the viewpoints presented in the Sustainability Investing White Paper (2019) published by the Morgan Stanley Research Institute, which asserts that ESG-focused funds did not demonstrate significantly different performance from the traditional economy between 2004 and 2018. Given that the weighted ESG scores reported by third-party rating agencies do not exhibit a significant correlation with company performance in practical scenarios, investors appear to harbor doubts about whether these scores accurately reflect true ESG performance.

There exist three distinct perspectives on the relationship between companies' ESG scores and their performance. The first viewpoint asserts that ESG has a positive effect on company performance, as it encourages companies to increase their investment in research and development (R&D) while simultaneously enhancing their ESG ratings. This, in turn, leads to improved sustainability and an enhanced brand image [3]. The second viewpoint contends that an increase in ESG scores may result in unnecessary expenses for companies, ultimately having a negative impact on their performance [4]. The third viewpoint suggests that ESG does not significantly impact company performance due to a multitude of complex influences that render it impracticable to generalize the impact of ESG ratings on company performance. Friede et al. [5] conducted a synthesis of the results from approximately 2,200 individual studies and discovered that 90% of the studies exhibited a "nonnegative" relationship, with a positive relationship over time and a positive correlation with company performance. Although the positive relationship appears to be stable over time, factors such as portfolio studies, region, and asset class have a significant impact on the results. Lee & Suh [6][7] analyzed the literature post-2015 and observed that previous studies did not identify or explain the mechanisms and processes operating between ESG activities, scores, disclosures, and financial performance, which is commonly referred to as the "black box".

To overcome the discrepancy caused by the different weights of independent third-party rating agencies, this paper extends the theory of organizational ambidexterity by combining ESG activities with the equally weighted E, S, and G metrics to compute a corporate ESG score. Existing theories suggest that high-performing companies are "ambidextrous". These companies can improve existing business activities and balance innovation by exploring new ways of realizing existing activities [8] [9]. Companies that are unable to adapt and achieve this balance in their business activities are usually considered as laggards in the industry [10]. Currently, the theory of organizational ambidexterity gives companies the right to interpret and define the scope of these activities themselves.

Given the near obligation of companies to engage, communicate, and disclose their Environmental, Social, and Governance (ESG) activities, this paper posits the hypothesis that "ambidextrous" companies will also strive to balance the trade-offs between E, S, and G activities as an integral part of their "adaptive systems" [11]. Conceptually, achieving a harmonious equilibrium between protecting the natural environment, treating internal and external stakeholders equitably, and adopting effective, transparent, and ethical corporate structures and operating models can potentially lead to a nirvana in terms of company performance and investment value [12]. While most existing studies rely on agency ratings without critically examining the weights assigned to E, S, and G by these rating agencies, ideally, "ambidextrous" companies would aspire to achieve a balanced weighting of E, S, and G in order to attain sustainable company performance. Therefore, this paper focuses on examining the relationship between the weighted ESG scores provided by independent third-party agencies, the equally weighted ESG scores, and company performance.

In light of the aforementioned research background, this paper is primarily concerned with two focal points. Firstly, by adopting the research methodology employed in cutting-edge literature within the field of Environmental, Social, and Governance (ESG), we aim to construct metrics that assess

the degree of balanced and unbalanced development of corporate ESG performance. This will serve as empirical evidence for conducting relevant analyses. Secondly, leveraging the practical application of ESG scores, we will examine the transmission mechanism of corporate ESG unbalanced development performance on overall corporate performance. Specifically, we will elucidate the reasons behind the emergence of corporate ESG unbalanced development performance and its subsequent impact on corporate financing constraints and operational efficiency, thereby analyzing the underlying mechanism through which it affects company performance.

1.1. Rating Agency ESG Scores and Company Performance

Given the inconclusive nature of the relationship between Environmental, Social, and Governance (ESG) performance, as quantified by ESG scores reported by independent third-party rating agencies, and company performance, researchers have posed a crucial question regarding the completeness of the weighted ESG scores utilized in previous studies [12] [13-15]. These ESG scores, which encompass E, S, and G dimensions, are derived from a multitude of sources, including independently issued corporate reports, stock exchange filings, research databases, news media and press releases from around the globe, as well as publicly available information that supplements rating agency data. However, these reports are often cluttered and ambiguous with respect to ESG information, frequently resulting in inconsistent scores among different rating agencies. As suggested by [7] and [16], the inconsistency in rating agencies' ESG scores can be attributed to "differences in scope and metrics."

Reference [12] revealed that the correlation of ESG scores among rating agencies (Asset4/Refinitiv, KLD, Moody's, MSCI IVA, S&P Global, Sustainalytics) ranged between 0.38 and 0.71, indicating significant variation and suggesting substantial disagreement among ESG rating agencies in most instances. Furthermore, Reference [13] conducted an analysis of ESG scores assigned to 924 companies by these six independent third-party rating agencies, sampling scores from the period between 2014 and 2017. The study found that the range of ESG scores and disagreement accounted for 44% and 53% of the variation in the ratings agencies' scores, respectively. This variation can be perplexing and may obscure the relationship between a company's ESG score assigned by a rating agency and its performance, posing challenges for investors in identifying reputable companies and potentially leading to distrust in rating agency ESG scores. Additionally, such disagreement may also confound companies regarding their own ESG issues and the path for improvement, thereby diminishing their motivation to advance sustainability efforts. Reference [17] proposes the use of average scores to represent consensus in the stock market and advocates that investors either select the agency that aligns with their objectives and trusts the scoring process or construct their own ESG scores based on raw data from various sources. Moreover, Reference [18] questions whether the current approach employed by ESG rating agencies in assigning weights to the three-factor pairs inadvertently favors large companies that are already resource-rich, potentially granting them an advantage in scoring without necessarily providing investors with the information they require to make informed decisions.

Thus, variations in the weighting methodologies employed by ESG rating agencies can impose constraints on the examination of the relationship between ESG performance and company performance. When companies are guided by the scoring approaches of these agencies, their ESG development may exhibit imbalances. Furthermore, companies possess the ability to manipulate ESG scores by influencing publicly accessible information, selectively emphasizing the environmental (E), social (S), or governance (G) components in order to mislead users regarding the correlation between their ESG performance and company performance. This manipulation can ultimately skew the results in favor of the ESG scores that are assigned the most favorable weighting.

2. The Relationship Between ESG and Company Performance Under the Theory of Organisational Ambidexterity

The concept of organizational ambidexterity has its roots in early organizational studies and contingency theory, which suggests that a company will be most efficient when its strategic arrangements can be adapted to the nature of both its primary business and its external environment [19-21]. When the nature of the external environment changes, companies need to change with the times and achieve organizational ambidexterity by balancing routine and innovative tasks to remain efficient [22]. Scholars have emphasized the concept of adaptive systems in this process, whereby companies must exploit old certainties and explore new possibilities, where exploitation focuses on production and efficiency, and innovation focuses on flexibility and adaptability. However, the resources needed to achieve the goals of exploitation and exploration and the demands placed on the company are very different, giving rise to the most famous "balancing act" related to organizational ambidexterity, the balance between exploitation and exploration [23] [24].

It has been found that the relationship between the ratio of exploration to exploitation activities and company performance is an inverted U-shaped curve. Therefore, a balance in exploitation and exploration maximises firm performance [25] [26]. The most important feature of this balancing act is simultaneity and synchronization, i.e., matching today's business needs while adapting to changes in the environment under the efficient management of the corporation [27-29].

3. Research Hypotheses

Currently, the theory of organizational ambidexterity primarily emphasizes the equilibrium between developmental and exploratory activities, yet it remains unspecified regarding the precise scope of these activities. In the context of companies, ESG activities constitute both an integral part of ongoing strategic management and a significant source of innovation. Companies have the potential to augment ESG innovation while simultaneously enhancing their overall ESG performance. However, there exists a notable disagreement within the academic community concerning the relationship between rating agency-weighted ESG scores and company performance. When extending the concept of organizational ambidexterity to ESG activities, it is postulated that companies exhibiting ambidexterity should ideally achieve a balance between each of the activities encompassed within the E, S, and G dimensions [6]. Building upon this theoretical foundation, this paper poses the following question: Are companies that prioritize a balanced approach to ESG activities most likely to maximize their overall company performance [25] [26]?

H1: Equally weighted ESG scores and company performance are positively related and weighted ESG scores and company performance are unclear.

Based on the aforementioned hypotheses, it can be inferred that the level of emphasis a corporation assigns to individual E, S, or G components has a discernible impact on company performance. Given the diverse range of metrics, measures, and weights selected by rating agencies, companies possess the capability to manipulate their E, S, and G components in order to attain the highest ratings, which essentially constitutes a form of "greenwashing" behavior [2] [6]. The weighted scores assigned by rating agencies are computed using multiple metrics that exhibit similarity but are not identical, and they rely on different data sources to assess analogous ESG characteristics. Consequently, companies are presented with the opportunity to enhance their weighted ESG scores by exercising their freedom to select various regulatory and voluntary disclosures through multiple channels.

The magnitude of manipulation aimed at enhancing ESG scores is directly proportional to the disparity observed between the rating agency's weighted ESG score and the equally weighted ESG score. Typically, companies whose rating agency ESG scores exceed their equally weighted ESG scores exhibit inferior performance. However, owing to the greenwashing effect, companies with larger positive disparities are perceived as prioritizing metrics that are more favorable to ratings. Notably, only positive disparities between rating agency ESG scores and equally weighted ESG scores are more likely to exhibit an association with company performance [2]. Conversely,

disparities where rating agency ESG scores are lower than equally weighted ESG scores may not demonstrate a significant correlation with company performance, as these lower scores do not effectively convey ESG performance [2]. Consequently, in relation to our research question, we propose the following hypothesis:

H2: The positive gap between weighted and equally weighted ESG scores is negatively related to company performance.

Regarding the mechanism underlying the impact of balanced ESG activities on company performance, a positive disparity between the weighted ESG score and the equally weighted ESG score initially exacerbates the challenges faced by company management in enhancing operational efficiency. Subsequently, this disparity amplifies financing constraints, ultimately exerting an influence on company performance.

The level of management represents a crucial factor in ascertaining the efficiency of a company. As the positive disparity between the weighted ESG score and the equally weighted ESG score augments, the complexity of managing the company escalates correspondingly. Principally, a greater positive disparity between these two scores exacerbates the variation in the measurement of a specific metric by different rating agencies for the same company. In their pursuit of elevated ESG scores, companies may resort to manipulating disclosures in order to engage in practices akin to "greenwashing". Such conduct hinders the ability of rating agencies to dynamically adjust the settings of ESG metrics and weights, ultimately impeding the achievement of a more scientific evaluation [7]. Consequently, this leads to a scarcity of objective criteria and a diminution in managerial efficiency when it comes to identifying and addressing corporate issues. Conversely, companies can adopt a more transparent and comprehensive approach to disclosing information, taking into account the diverse criteria and standards of different organizations. However, it is incontrovertible that this process inevitably augments the cost and complexity of information disclosure for companies [30].

Second, the increased positive difference between weighted and equally weighted ESG scores means that it is difficult for the company to reach a consensus with various stakeholders. To meet the criteria of different rating methods, companies need to communicate and coordinate with various stakeholders. However, achieving the goal of "balanced behavior" requires almost different organizational structures and resource allocations, which may lead to contradictions and conflicts within the company [[31] [32]. This difficult state of coordination may lead to the inability of the company to make timely and effective decisions, which may lead to missed market opportunities, which in turn negatively affects company performance. For example, investors, creditors, and other stakeholders may have different expectations and requirements for the same corporate ratings, and this conflict of interest may increase the corporate agency problem, thus affecting its normal operation and development.

As a result, the greater the positive difference between the weighted ESG and equally weighted ESG scores, the more difficult it is for the company to manage and harmonize the interests of multiple parties, which in turn reduces company performance. Based on this, this paper proposes the following hypothesis:

H3: The positive difference between weighted ESG and equally weighted ESG scores affects company performance by affecting company efficiency and thus company performance.

In addition, from the perspective of financing constraints, the larger the positive difference between weighted ESG and equally weighted ESG scores, the higher the degree of information asymmetry between companies and investors [33]. For one thing, the rating information provided by rating agencies is an important reference for investors; however, if there is a large difference between the weighted ESG and equally weighted ESG scores of the rating agencies, the difference in the ESG scores of a corporate between different agencies may also be larger, thus increasing the uncertainty of the information. This may affect its reputation and credibility, and investors will find it difficult to judge the true creditworthiness of the company, which in turn will affect its business expansion and market position, and have a direct impact on the corporate performance.

Second, the larger this positive variance is, it also indicates that the information transparency of the company is lower, further exacerbating the information asymmetry between the company and the investors, thus weakening the investors' trust and understanding of the company's information [34], and negatively affecting the financing constraints of the companies and the company's performance. For example, as some wise individual or institutional investors interpret the positive difference between rating agency ESG and equally weighted ESG scores as greenwashing behavior of the company, or even this greenwashing effect as a threat, and thus are cautious about trading and investing, their transactions and investments with these companies decline, which ultimately leads to a decline in company performance.

In summary, the greater the difference in rating agency ratings, the more likely it is to increase information asymmetry thereby increasing company financing constraints and decreasing company performance. Therefore, this paper proposes the following hypothesis:

H4: Financing constraints reinforce the negative effect of a positive gap between weighted ESG and equally weighted ESG scores on company performance.

4. Method

4.1. Data and Institutional Background

The samples of this paper come from all A-share listed companies in China from 2018 to 2022, and a total of 19,030 valid samples are obtained. At the same time, this paper excludes the samples of enterprises labeled with the ST category as well as companies in the financial industry, and shrinks the tails of all continuous variables with upper and lower 1% quartiles to reduce the potential impact of extreme values of variables on the regression of this paper, and ultimately obtains more than 19,000 samples of enterprise observations in 2018-2022. In analyzing enterprise performance, due to the lack of an authoritative list that ranks the performance of enterprises in the whole industry, this paper refers to the indexes and methods used in the Forbes 2000 list to rank enterprise performance for ranking. Based on the publicly disclosed data of A-share listed companies, the four indicators of operating revenue, net profit, total assets enterprise size, and total annual individual stock market capitalization of the sample companies in 2018-2022 are selected, and the final calculation of China's A-share enterprise performance and ranking in 2018-2022 is made. In data processing, samples with missing values of variables are deleted.

Currently, a common way to quantify ESG ratings is to assign scores to the ESG ratings published by the relevant rating agencies. The first tier of the Wind rating agency's ESG scores includes environmental, social, and governance indicators, while the lowest tier includes more than 1,000 indicators. In terms of structure, Wind's ESG rating system includes a Management Practices Score, which is designed to reflect the impact of ESG performance on fundamentals from a long-term perspective, and a Controversial Events Score, which is designed to supplement a corporate ESG risk information with an Environmental Risk Exposure Rating. By including an examination of China's ESG investments and the characteristics of different industries, and thanks to Wind's years of database construction in finance and economics and other areas, Wind's evaluation indicators are more quantitative, guaranteeing the scientific, comprehensive, and accurate nature of the data. As of 2022, the Wind Rating Agency's ESG ratings have covered all A-share and Hong Kong-listed companies, and it has cooperated with several third-party agencies to provide relevant financial services, which has a certain influence in the field.

Therefore, authoritative and transparent performance measures and ESG rating data provide an ideal data source to test the hypotheses of this paper. On this basis, this paper uses a quantitative approach and specifies a fixed-effects model to test the hypotheses, illustrating the relationship between the positive percentage difference between Wind ESG scores and equally weighted ESG score ratings and the performance of listed companies, with industry and year selected as fixed effects.

5. Variables and Models

5.1. Explained Variables:

The calculation method of enterprise performance score references the Forbes 2000 calculation method [2]. Select the four indicators of operating income, net profit, total assets enterprise size, and annual total market value of individual stocks of China's industry-wide listed enterprises from 2018 to 2022, each indicator is individually ranked, and the data with the lowest numerical value is ranked and assigned a value of 1, and so on. Finally, the values obtained from the assignment of the four indicators for each variable are summed to obtain the enterprise performance score, the larger the value of the enterprise performance score is, the better the performance.

5.2. Explanatory Variables:

Wind Rating Agency ESG scores from Shanghai Wind Information Technology Co., Ltd. include the rating results of environmental, social, and corporate governance dimensions. Wind Rating Agency has been researching ESG rating systems and frameworks since 2018, focusing on the measurement of corporate ESG performance from the perspective of financial significance by synthesizing the experience of ESG ratings in foreign countries and the domestic situation. ESG performance. Wind Rating Agency's ESG composite score consists of a management practice score (total score of 7) and a controversial event score (total score of 3), while different ESG composite scores correspond to different ESG ratings (AAA-CCC).

The ESG management practice score is calculated by summing the bottom-up weighted scores in the index system, i.e., *management practice score = 70% * ∑ (E/S/G dimension scores* E/S/G dimension weights)*, of which the formula for each dimension score is calculated by summing the weighted scores of each issue, i.e., *E/S/G dimension scores= ∑ (issue scores * weights of each issue)/the dimension weight.* The controversial event score is first obtained by weighting the total deduction points for the three types of controversial or risky events under the E, S, and G dimensions, i.e., news and public opinion, regulatory penalties, and lawsuits, and then by subtracting those from the controversial event score (3 points).

Equally weighted ESG score evaluation score is calculated from the weighted average of the individual scores of E, S, and, G for 2018-2022 provided by Shanghai Wind Information Technology Co. The comprehensive evaluation of ESG consists of the three indicators of E, S, and G. In this paper, the three indicators are given the same weight, i.e., each of them is assigned 1/3 of the weight, i.e., *equally weighted ESG score= (0.3333*E_score)+(0.3333*S_score) +(0.3333*G_score)* . Since the Wind rating agency ESG score and the evaluation scores of other ESG rating agencies in the market have their system unique weights, we can get the size of the difference between the equally weighted ESG score evaluation score and the Wind rating agency ESG score as well as the positive and negative of the difference, to get the positive percentage difference between the Wind ESG score and the equally weighted ESG score rating..

5.3. Control Variables:

Drawing on the relevant studies of scholars such as [35] and [36], this paper selects the gearing ratio (lev), profitability of total assets (roa), current ratio (liq), two-employer (chairmanM), fixed asset ratio (fix), growth rate of operating income (growth), equity concentration (top1), and board independence (*directorR*) as control variables in the regression analysis to control the company's solvency, operating ability, management ability, cash liquidity, asset allocation ability, growth, equity concentration and independence. In addition to this, industry effects and time effects are also controlled.

6. Empirical Model: This paper constructs the following model for the benchmark regression test:

Where *i* denotes the company, *t* denotes the year, and $perf\ ormance_{i,t}$ is the performance of company *i* in year *t*. *WindESG*, *average_score*, and *gap* denote the company's Wind institutional ESG score, equally weighted ESG score, and the positive percentage difference between the two for the current year, respectively, *Controls* denote the set of control variables, and *Year* and *Industry* represent the year and industry fixed effects, respectively.

Table 1. Variable Description.

	Variables	Symbol	Variable Metric
Explained Variable	Company Performance	*performance*	Refer to the Forbes 2000 calculation
Explanatory Variable	Agency ESG Ratings	*WindESG*	Shanghai Wind Information Technology Corporate Limited 2018-2022 Ratings Data
		SSI	provided by Shanghai Sino-Securities Index Information Service
	Equally Weighted ESG score	*average_score*	*(0.3333*E_score)+(0.3333*S_score)+(0.3333*G_score)*
	Differences in Agency ratings	*gap*	Positive Percentage Difference between Wind Rating Agency Weighted ESG Rating Scores and Equally Weighted ESG Scores
Mechanisms	Corporate Efficiency	*LP*	The ratio of actual output volume to the model-predicted output volume
	Financing Constraints	*FC*	The probability of a company's financing constraint occurring each year
Control Variable	Asset-liability Ratio	*lev*	Solvency: total liabilities/total assets
	Net Profit Margin on Total Assets	*roa*	Operating performance: net profit/average balance of total assets
	Current Ratio	*liq*	Liquidity: current assets/current liabilities
	Dual Role of the Board Chairman	*chairmanM*	1 if the chairman and general manager are held by the same person, otherwise 0
	Fixed Asset Ratio	*fix*	Asset allocation: total fixed assets/total assets
	Revenue Growth Rate	*growth*	Growth: (current operating income - previous operating income) / previous operating income
	Equity Concentration	*top1*	Shareholding concentration: number of shares held by the largest shareholder/total number of shares
	Board Independence	*directorR*	Independence: number of independent directors/directors

7. Benchmark Regression Analysis

To test the impact of weighted ESG rating scores from Wind rating agencies versus equally weighted ESG rating scores on the performance of listed companies, we report the benchmark regressions in TABLE 2.

Table 2. Benchmark Regression Results.

	(1)	(2)	(3)	(4)	(5)	(6)
	performance	performance	performance	performance	performance	performance
WindESG	-243.826***	-249.277***	-15.527			
	(-10.91)	(-11.78)	(-0.97)			
average_score	385.635***	389.504***	101.680***			
	(24.80)	(26.44)	(9.00)			
gap				-2,464.348***	-2,477.004***	-884.254***
				(-37.50)	(-40.09)	(-18.29)
lev		1,138.203***	430.771***		1,139.297***	416.241***
		(20.85)	(10.25)		(20.97)	(9.92)
roa		2,927.775***	2,607.017***		2,924.900***	2,609.896***
		(43.28)	(52.90)		(43.29)	(52.92)
liq		-29.095***	-22.618***		-29.169***	-22.689***
		(-7.34)	(-7.41)		(-7.37)	(-7.43)
chairmanM		-69.740***	-48.466***		-68.152***	-48.733***
		(-4.61)	(-4.25)		(-4.50)	(-4.26)
fix		-497.032***	-429.581***		-506.024***	-443.795***
		(-6.97)	(-7.63)		(-7.10)	(-7.88)
growth		169.298***	214.886***		169.806***	215.887***
		(14.04)	(24.17)		(14.10)	(24.26)
top1		-452.390***	470.352***		-459.849***	477.203***
		(-6.16)	(7.50)		(-6.26)	(7.60)
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	-	-	YES	-	-	YES
Constant	1,826.056***	1,550.089***	1,925.884***	2,763.436***	2,481.912***	2,537.594***
	(5.95)	(5.66)	(7.12)	(9.25)	(9.35)	(9.54)
Observations	19,029	19,029	19,029	19,029	19,029	19,029

Z-statistics in parentheses;*** p<0.01, ** p<0.05, * p<0.1

In specifically, columns (1) through (3) present the outcomes of a sequential inclusion of fixed effects alongside control variables. Initially, an examination of the results in Column (1) reveals that, after accounting for industry-specific fixed effects, the coefficient of the equally weighted ESG score exhibits a significant positive relationship at the 1% test level. This finding indicates a positive correlation between the equally weighted ESG score and the performance of listed companies. Subsequently, Column (2) incorporates additional controls, namely the asset-liability ratio (lev), return on assets (roa), current ratio (liq), dual role of the board chairman (chairmanM), fixed asset ratio (fix), operating income growth rate (growth), equity concentration (top1), and board independence (directorR). The results demonstrate that the coefficient pertaining to the ESG rating scores, uninfluenced by favoritism, remains positive. Lastly, Column (3) integrates all control variables and accounts for both industry-fixed effects and time-fixed effects. The resultant analysis indicates that, even after controlling for various unobserved fixed effects and other potential influences, the coefficients of the non-preference ESG scores continue to contribute positively to the performance of listed companies. Conversely, the coefficients related to the Wind ratings agencies do not exhibit statistical significance. This outcome suggests that the relationship between ESG scores assigned by rating agencies and company performance may not be universally positive, as suggested by a majority of studies. Its positive impact on company performance warrants further investigation, thereby reinforcing the veracity and validity of Hypothesis H1.

Meanwhile, Columns (4) to (6) of TABLE 2 test the impact of the percentage difference between the weighted ESG and the equally weighted ESG of rating agencies and the performance of listed companies by gradually adding fixed effects and control variables. First, the results in Column (4) show that after controlling for industry fixed effects, we can find that the coefficient of the percentage difference between weighted ESGs and equally weighted ESGs is significantly negative at the 1% test level, which indicates that the percentage difference between weighted ESGs and equally weighted ESGs (*gap*) is negatively correlated with the performance of listed companies, which preliminarily proves that Hypothesis 2 is valid. Second, columns (5) and (6) sequentially add all the control variables and time-fixed effects on this basis, and the results show that the coefficient of the percentage difference between weighted ESG and no preference ESG is still significantly negative. This indicates that when the institutional ESG rating is greater than the no preference ESG rating, the higher the institutional ESG rating score is compared to the no preference ESG score, the worse the company's performance is, thus better proving the truth of Hypothesis H2.

8. Robustness Checks

The selection of variables and different measures easily led to differences in the regression results, to verify the robustness of the conclusions of this paper, the method of replacing the explanatory variables, explanatory variables and adding control variables were used for the test respectively, and the endogeneity test was carried out.

Replacement of Explanatory Variables: First, concerning the relevant studies of [37] [38] and other scholars, the natural logarithm of enterprise value is selected to replace the explanatory variables, in which the enterprise value is the total market capitalization plus the total liabilities. The better the corporate performance, the greater the enterprise value should be. Second, according to the research of scholars such as [35] and [39], the return on equity (ROE) is utilized as a proxy variable for corporate performance. The test results are shown in TABLE 3.

Table 3. Robustness Tests-Replacement of Explained Variables.

VARIABLES	(1)	(2)	(3)	(4)
	Enterprise size	Enterprise size	ROE	ROE
WindESG	-0.029**		0.009**	
	(-2.36)		(2.26)	
gap		-0.545***		-0.048***
		(-14.18)		(-4.26)
average_score	0.074***		-0.000	
	(8.38)		(-0.00)	
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Observations	14,187	14,187	14,101	14,101

Z-statistics in parentheses;*** p<0.01, ** p<0.05, * p<0.1

8.1. Endogeneity Test

8.1.1. Lagged Explanatory Variables

There may be an endogeneity problem between ESG ratings of agencies and company performance, considering that there is a delay in the process of feedback of the results from information disclosure transmission to rating agencies to company performance, this paper makes a one-period lag of the explanatory variables, and the results are as follows The results are shown in TABLE 4. Comparing the results shown in TABLE 2 and TABLE 3, it is found that the results obtained by lagging one period are consistent with the results before replacement, which supports the hypothesis of this paper.

Table 4. Endogeneity Test-Lagged Explanatory Variable.

VARIABLES	(1)	(2)
	L.performance	L.performance
WindESG	-31.518	
	(-1.63)	
gap		-968.916***
		(-16.28)
average_score	118.783***	
	(8.68)	
Industry FE	YES	YES
Year FE	YES	YES
Observations	14,216	14,216

Z-statistics in parentheses;*** p<0.01, ** p<0.05, * p<0.1

9. Heterogeneity Analysis

9.1. Forms of Enterprise Ownership.

The existence of factors such as relational credit and policy support often confers certain advantages to state-owned enterprises (SOEs) in securing bank credit resources, granting them a prioritized credit rationing status relative to non-state-owned enterprises (non-SOEs). This form of credit discrimination can result in non-SOEs facing higher financing constraints than SOEs [40], implying that the percentage difference between institutional ESG scores and equal-weight ESG score ratings may differentially impact the performance of SOEs and non-SOEs. In this study, the data sample is stratified into SOEs and non-SOEs based on the distinct forms of enterprise ownership. A dummy variable, Var, is utilized to designate the state-owned attributes of listed companies, where Var=1 indicates SOEs, and Var=0 denotes non-SOEs. The specific regression results are presented in column (1) of TABLE 5. The regression outcomes reveal that the coefficient of the interaction term of Var is significantly positive at the 1% level, indicating that the positive percentage difference between institutional ESG scores and equally weighted ESG scores exerts a weaker negative influence on the performance of SOEs compared to non-SOEs. In other words, the "greenwash effect" has a more pronounced negative impact on the performance of non-SOEs. This finding is congruent with our hypothesis that, given the relatively higher financing constraints faced by non-SOEs, the augmented financing constraints associated with the disparity between institutional ESG scores and equally weighted ESG scores have a greater deterrent effect on the performance of non-SOEs.

9.2. Nature of the Industry.

As In the context of environmental pollution prevention and control, manufacturing companies are prime targets for governmental regulations, rendering their green transformation needs particularly urgent. Consequently, these companies may resort to manipulating their performance or weight in the Environmental, Social, or Governance (ESG) components when publishing or submitting their ESG information to rating agencies, ultimately creating the aforementioned "greenwashing effect" [2][6]. Hence, the percentage difference between institutional ESG ratings and equally weighted ESG scores may exert a differential effect on the performance of manufacturing and non-manufacturing companies. In this paper, to investigate this phenomenon, the variable Var is assigned a value of 1 for sample companies belonging to the manufacturing industry, and 0 otherwise, based on the nature of their industry. The specific regression results are presented in TABLE 5, column (2). The regression outcomes reveal that the coefficient of the interaction term of the variable Var is significantly negative at the 1% level, indicating that the positive percentage difference between institutional ESG scores and no-preference ESG scores has a more pronounced negative impact on the performance of manufacturing companies. As certain astute individual or institutional investors gain increased awareness of this greenwashing phenomenon, they perceive it as a threat and

subsequently adopt a cautious approach to trading and investing. Consequently, their trading and investing activities with these companies decline, ultimately leading to a deterioration in company performance [2]. Thus, the disparity between institutional ESG scores and equally weighted ESG scores exerts a greater negative impact on the performance of manufacturing companies.

9.3. Company Size.

Large-scale companies have high market share, wide financing channels, and strong competitive advantages, and their incentives to obtain external resources through ESG performance are relatively weak [41]; in contrast, small-scale companies usually face serious financing constraints and are more likely to manipulate their ESG performance to obtain key resource support from stakeholders. Second, large-scale companies are well-developed and have relatively well-developed corporate operating mechanisms, while small-scale companies have relatively weak operating mechanisms. Therefore, the percentage difference between institutional ESG ratings and equally weighted ESG scores may differ for the performance of large-scale companies versus small-scale companies. When the sample companies belong to large-scale enterprises, this paper assigns a value of 1 to the variable Var, otherwise, it is assigned a value of 0. The specific regression results are reported in TABLE 5 column (3). The regression results show that the coefficient of the interaction term of variable Var is significantly positive at the 1% level, indicating that the positive percentage difference between institutional ESG scores and no preference ESG scores has a much weaker negative impact on the performance of manufacturing companies. In other words, the "greenwashing effect" has a greater negative impact on the performance of small-scale companies, which may be explained by the fact that the "greenwashing effect" has a stronger effect on the degree of financing constraints of small-scale companies, which in turn has a more negative impact on their performance.

Table 5. Heterogeneity Analysis.

VARIABLES	(1)	(2)	(3)
	forms	nature	size
	performance	performance	performance
gap	-888.205***	-600.699***	-2,217.414***
	(-18.09)	(-8.11)	(-44.43)
Var_gap	356.629***	-435.793***	2,330.473***
	(7.14)	(-4.60)	(67.71)
Industry FE	YES	YES	YES
Year FE	YES	YES	YES
Constant	2,480.846***	2,370.988***	2,532.758***
	(9.36)	(8.88)	(13.01)
Observations	18,531	18,531	19,029

Z-statistics in parentheses;*** p<0.01, ** p<0.05, * p<0.1

10. Discussion

As the impact of corporate performance in ESG on its business performance and sustainable development capability continues to come to the fore, market players such as governments, regulators, financial institutions, investors, and the general public have become increasingly concerned about the ESG performance of listed companies. Based on the extension of the theory of organizational ambidexterity, this paper provides a quantitative analysis of 19,030 A-share-listed companies in China from 2018 to 2022.

The findings of this paper include

1) The relationship between Wind agency's weighted ESG scores and company performance is not significant while equally weighted ESG scores show a significant positive correlation with company performance, indicating that the positive effect of rating agency's weighted ESG scores on company performance remains to be investigated while good equally weighted ESG scores can enhance

company performance. On this basis, the larger the positive percentage difference between rating agency weighted ESG scores and equally weighted ESG scores, the lower the company's performance, indicating that the more the weighted scores deviate from the unweighted scores at higher levels than the unweighted scores, the greater the negative impact on company performance. Therefore, when the weighted ESG scores of the rating agencies are higher than the equally weighted ESG scores, companies are likely to have ESG "greenwashing".

2) Heterogeneity analysis reveals that compared with SOEs, nonmanufacturing companies, and large-scale companies, part of the "greenwashing phenomenon" represented by the positive percentage difference in the negative impact on company performance between the rating agency's weighted ESG score and the equally weighted ESG score is stronger in the case of nonSOEs, manufacturing companies, and small-scale companies.

The conclusions of this paper shed light on promoting the improvement and healthy development of China's ESG system. Focusing on ESG ratings, ESG disclosure, and ESG investment practices, this paper puts forward the following suggestions:

1) First, accelerate the promotion of systemic and holistic financial regulation. International ESG disclosure standards are not fully in line with China's national conditions and ESG practices; and unlike the development of the international ESG system, China's ESG system is formed and developed under the guidance of the government. Therefore, national regulators should urge active legislation to accelerate the improvement of scientific and systematic disclosure standards, improve ESG disclosure mechanisms, and enhance the quality of ESG data acquisition, including improving the consistency, reliability, comparability, and quality of ESG rating data, to enhance the quality of disclosure of listed companies, especially nonstate-owned enterprises, manufacturing enterprises, and small-scale enterprises. On the one hand, enterprises should establish long-term and stable cooperative relationships with stakeholders to obtain more resource support and alleviate the problem of financing constraints; on the other hand, they should continue to improve the internal operational efficiency of enterprises and increase efficient investment, to improve performance. In addition, besides the ESG disclosure of listed enterprises, nonlisted enterprises with obviously insufficient ESG disclosure also need to be regulated more vigorously. Given this, this paper suggests constructing a perfect ESG information disclosure mechanism, unifying ESG information disclosure standards, optimizing the quality of ESG data acquisition, and promoting the construction of a sound ESG rating index system. In addition, the government must provide supervision and management standards for the disclosure of information of listed and unlisted enterprises, to prevent enterprises from utilizing the concept of ESG to over-package themselves to fit the preferences of the market and the rating agencies, and to mislead market participants.

2) Second, this paper provides recommendations for senior managers and decision-makers of companies in developing and implementing ESG activities. To give full play to company performance, companies should strengthen the improvement of ESG governance mechanisms and organizational structures, invest in ESG professional capacity building, and pay attention to the quality of ESG report disclosure. At the same time, companies should pay attention to the comprehensiveness of ESG activities to avoid the negative impact on company performance due to the differences in ESG ratings of different rating agencies. In addition, for enterprises with "greenwashing" behavior, resisting "greenwashing" behavior and truly promoting ESG implementation to fundamentally improve the corporate ESG is more conducive to long-term company performance. At the same time, if we fully consider the scoring principles and methods that may cause bias in rating agencies' scores, and try to fundamentally improve the problem, we suggest that companies provide greater transparency and completeness in their public information.

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