

The Impact of ESG on Corporate Performance: A Review and Empirical Analysis of Firms in Emerging Markets

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Abstract. As global environmental and social challenges, such as climate change and poor labor conditions, become more pressing, the need for a green, low-carbon, and sustainable development path has gained widespread acceptance across the international community. In recent years, the concept of Environmental, Social, and Governance (ESG) has garnered increasing attention from various stakeholders, including investors, companies, governments, and broader society. ESG serves as a framework for evaluating a company's overall performance across three key dimensions: environmental responsibility, social impact, and corporate governance. This paper aims to conduct a comprehensive review of the existing literature on the relationship between ESG and corporate outcomes. While numerous scholars have explored both theoretical and empirical perspectives on this relationship, there remains ambiguity regarding the specific impact of ESG on corporate value. By synthesizing various studies and analyzing points of agreement and divergence, this paper aims to reveal the underlying connections between ESG practices and corporate performance.

Keywords: ESG, Corporate performance, Information disclosure, Greenwashing.

1 Introduction

At present, ESG is an important reference indicator for evaluating corporate sustainable development capabilities worldwide. According to stakeholder theory, companies disclosing high levels of ESG performance can enhance stakeholders' identification with the company, reduce the company's agency costs, and thus meet the requirements of various stakeholders [1]. In addition, current research shows that non-financial information disclosure can effectively reduce investor uncertainty and information asymmetry and can play a complementary role in financial information, while financial information is closely related to the company's performance and investment performance. Investors are particularly concerned about whether the company can achieve a win-win situation in environmental protection and performance [2].

Some studies have found a positive correlation between ESG and company performance. For example, the research by He et al. found that the ESG strategies of Chinese listed companies can improve the company's long-term performance and ability to respond to risks, and also particularly emphasized the role of information transparency and corporate governance [3]. However, the results of other studies are negative or uncertain [4]. In addition, to gain more support from stakeholders, some company managers will try to exaggerate data through opportunistic behavior to improve ESG ratings. Therefore, this means that ESG may be detrimental to corporate performance and even damage shareholder rights.

2 Definition and Theoretical Framework

As the concept of green development continues to spread and practice around the world, companies follow environmentally related practices to achieve various business goals. As a corporate investment strategy, ESG has quickly become a focus of sustainable development. It focuses on the ability of companies to assume social responsibility and their awareness of environmental protection, which is different from the previous financial standards for measuring companies. ESG originated from the concept of "responsible investment" and has developed rapidly around the world in recent years and has gradually been regarded. This means that the scope of global attention to corporate social responsibility (CSR) and sustainable development has begun to expand to a more comprehensive and systematic dimension.

2.1 Environmental, Social, and Governance (ESG)

ESG is composed of three primary aspects: environmental performance, social responsibility, and corporate governance [5]. Over time, systematic standards for information disclosure and performance evaluation have been developed for these dimensions, creating a comprehensive ESG framework. Figure 1 illustrates the components of each ESG dimension as outlined by the CFA Institute. The environmental (E) dimension focuses on how effectively a company manages its impact on the natural environment. The social (S) dimension assesses how the company handles relationships with key stakeholders, including employees, suppliers, customers, and the wider community. The governance (G) dimension evaluates leadership practices, internal controls, auditing, executive compensation, and the protection of shareholder rights.

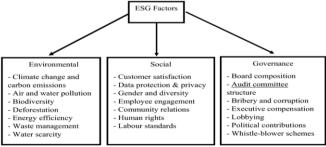


Fig. 1. Three aspects of ESG [6].

The framework of ESG is based on three main theories. The first is the institutional theory, where companies should establish and improve institutional standards to operate within ethical norms and social boundaries. The production and development of an enterprise depends on its legal activities in the external and internal environment.

The second theory that constitutes the ESG framework is the stakeholder theory, based on stakeholder values and institutional theory. A company's sustainable development and decision-making are interdependent on its stakeholders. The theory emphasizes that companies should shift from their own financial performance to comprehensively balancing the interests of all stakeholders and consider the social benefits that may be brought about by decision-making and business activities. Finally, the third theory in the ESG framework is the resource-driven perspective theory. Since resources are irreplaceable, it means that resources help companies achieve highly competitive advantage and financial performance. One reason for the increasing popularity of the ESG concept is that maximizing stakeholder interests replaces the goal of maximizing shareholder profits [7].

2.2 Corporate Performance

Performance can be defined as the ability of an organization to achieve its goals within a certain period, reflecting the economic benefits and operational efficiency of the enterprise [8]. Performance evaluation is a corporate regulatory system that can measure the company's financial performance, operating performance and other aspects from a qualitative or quantitative perspective by using certain methods, models and evaluation criteria. For enterprises, measuring corporate performance means being more intentional about obtaining the information needed to determine strategies and coordinate management processes. Performance measurement includes both financial performance measurement, such as net profit, return on net assets and core business profit; and non-financial performance measurement, such as innovation capability, corporate culture, social reputation, and customer service and satisfaction. These are all important indicators for measuring company-level performance. Ittner and Larcker believe that non-financial performance indicators are the product of a company's total quality management [9], provides a way to transform a company's strategy and vision into a way to convey strategic intent and motivate performance. The use of non-financial performance indicators helps companies achieve performance goals, and companies that can track key success factors through them have better financial performance [10]. This means that the original performance measurement method based on financial performance evaluation has many problems, which hinders the further development of the company.

With the changes of the times, performance management concepts and tools have continued to improve. The birth of key performance indicators (KPI) and balanced scorecard (BSC) has promoted the development of enterprises. KPI is a bridge connecting corporate performance and personal performance. It can combine corporate strategic goals with personal goals and determine performance goals at all levels from top to bottom. BSC is a new type of strategic performance management method that measures performance in four dimensions: financial perspective, customer perspective,

internal process perspective, and learning and development perspective. Through the balanced development assessment indicators of the four dimensions, the situation dominated by a single financial indicator has been changed; helping organizations establish long-term development plans has improved the coordination of corporate development and helped organizations establish sustainable development plans. Therefore, the performance evaluation at this stage is combined with the company's overall strategy and vision goals, focusing on evaluating the company's operating performance, including the evaluation of the company's economic benefits and the evaluation of the operator's performance.

3 Methodology

This study will analyze the relationship between ESG (Environmental, Social, and Governance) and corporate performance based on literature data. Previous research indicates that empirical studies primarily use data from companies in emerging markets, such as China, and perform regression analysis using SPSS software. The data typically comes from publicly listed companies, with the sample spanning from 2010 to 2023, focusing on A-share manufacturing firms in China. ESG ratings are sourced from the Wind database, while other key indicators are obtained from the CSMAR (China Stock Market & Accounting Research) database. After the initial data processing—such as removing companies with missing data and excluding ST-listed companies—continuous variables are winsorized at the 1% and 99% levels, ultimately generating multiple research samples.

3.1 Research Design

This paper will review historical literature to analyze how ESG impacts corporate performance, categorizing the effects into positive and negative impacts. The goal is to provide scholars entering this research field with a clearer understanding of current trends and to highlight areas for future improvement. Therefore, the study will first employ a literature analysis method to examine the current state of the relationship between ESG and corporate performance in emerging economies, identifying existing issues and proposing future development suggestions. The focus will then shift to how empirical analyses substantiate the extent and specific findings of this relationship (e.g., heterogeneity analysis). Finally, both qualitative and quantitative analyses will be used to determine the relationship between ESG and corporate performance.

3.2 Variable Selection

Based on the analysis in this paper, the primary data sources come from publicly listed company databases, which typically include indicators of both ESG and corporate financial performance. The ESG data will focus on ratings provided by various databases, considering the three pillars of Environmental, Social, and Governance scores to evaluate their impact on corporate performance. For corporate performance, current

trends predominantly rely on metrics such as Tobin's Q, Return on Assets (ROA), and Return on Equity (ROE), as these metrics reflect a company's financial health and offer long-term relevance. The selection of these variables will further enhance our understanding of the underlying mechanisms, contributing to future research in this area.

4 Analysis

In recent years, with the development of the ESG concept, the research literature on corporate ESG has increased dramatically. For China, an emerging market, research on ESG is still in its infancy. However, as China proposes the goal of "carbon peaking and carbon neutrality", more and more scholars have begun to research the impact of ESG in China. The number of documents on ESG on CSSCI increased from 1 article in 2016 to 194 articles in 2023 [11]. Scholars have conducted research on how ESG affects corporate performance through two aspects: performance evaluation and information disclosure.

4.1 Data and Sample Selections

This study will reference multiple database indicators, such as the Wind database and Hexun database metrics, to mitigate the issue of common bias. The data is derived from publicly listed companies and has been reviewed by professional third-party agencies, ensuring its suitability for scientific research. Furthermore, the ESG data will be comprehensively assessed from the Environmental, Social, and Governance dimensions to facilitate a more granular analysis. For corporate performance, the study will also use publicly listed company data to conduct subsequent empirical research, employing metrics such as Tobin's Q, Return on Assets (ROA), and Return on Equity (ROE).

4.2 ESG Performance and Corporate Performance

As society pays more attention to ESG, more and more scholars are studying the impact of ESG performance on corporate financial performance from various angles. Judging from the research results shown in Table 1, it can be found that enterprises E, S, and G all have a positive impact on corporate performance or company value, and the long-term impact is more significant.

| AUTHORS | DISCOVER AND RELATIONSHIP |
|--------------------|---|
| Wu and Zhang [12] | Corporate environmental protection behavior will promote the rise of corpo- |
| | rate stock prices and form long-term corporate value. |
| Wang and Zhao [13] | Through model testing, it was found that the company's environmental |
| | performance and financial performance significantly promote each other |

Table 1. The impact of various dimensions of ESG on company performance

| Wen and Fang [14] | They conclude from the stakeholder perspective that a company's social responsibility has a positive impact on financial performance. |
|-------------------|---|
| Cui and Li [15] | Corporate strategic social responsibility and altruistic social responsibility are both significantly and positively related to corporate financial performance. |
| Liu and Zhu [16] | The level of corporate governance has a significant positive correlation with financial performance value, and a company's short-term performance will have a greater impact than its long-term performance |
| Ren et al. [17] | Taking heavy-polluting industries as the starting point, through empirical analysis, it is concluded that the environmental, social and governance performance of enterprises are positively related to the company's financial performance |

4.2.1. Positive Relationship.

Friede et al. conducted a review of relevant literature and found that 90% of the studies indicated a non-negative correlation between ESG performance and financial outcomes, with this relationship strengthening over time [18]. This trend holds true even in emerging markets like China, where most researchers support the idea that ESG and corporate performance are positively linked. Peng, Chen and Yin using data from listed companies in Shanghai and Shenzhen between 2015 and 2020, explored how ESG performance impacts corporate results, identifying innovation capability as a key mediating factor in this relationship [19]. Wei, drawing on stakeholder theory, examined the dynamics between internal and external stakeholders, asserting that higher ESG scores tend to enhance corporate performance [20]. Zhang and Zhao employed a two-way fixed effects model with data from 417 listed firms and found that ESG performance significantly boosts corporate value, particularly in industries dealing with waste pollution, where the positive impact is more pronounced [21].

4.2.2. Negative Relationship.

While many studies highlight the positive influence of ESG performance on corporate outcomes, some researchers have identified either a negative relationship or an insignificant link between ESG activities and company performance. Ruan and Liu analyzed data from Chinese A-share listed companies with ESG ratings in Shanghai and Shenzhen from 2015 to 2019, focusing on the impact of ESG efforts on financial performance while accounting for unobservable factors [22]. Their empirical study revealed that a one-level increase in ESG ratings led to a 4.3% decline in company performance. This decline was attributed to the high costs associated with ESG initiatives, which negatively affected performance. The findings indicate a significant short-term negative correlation between ESG activities and company performance. Furthermore, additional regression analysis revealed that non-state-owned enterprises and those in environmentally sensitive sectors experienced greater cost pressures, resulting in a more pronounced negative impact of ESG on their performance.

Similarly, Li started from the stakeholder theory and empirically analyzed the relationship between the fulfillment of social responsibilities and financial performance of

49 listed companies in China's transportation industry [23]. Research shows that when sustainable growth is not considered, there is a positive correlation between CSR and sustainable growth indicators and a negative correlation with financial performance. When sustainable growth indicators are considered, CSR indicators are positively related to financial performance, but not significantly. This means that although corporate social responsibility contributes to long-term sustainable growth, it will increase costs in the short term and lead to reduced financial performance.

These studies indicate that in the context of the Chinese market, there may be a negative impact or an insignificant correlation between ESG performance and corporate financial performance. This is mainly because companies need to invest a lot of resources when implementing ESG strategies, especially in the early stages. These investments face higher financial costs and may not be immediately converted into financial benefits in the short term, reducing the company's profitability. Therefore, there may be a negative correlation or an insignificant correlation between ESG and corporate performance, and it is difficult to see significant performance improvement in the short term. These findings provide empirical evidence that ESG performance may have a negative impact on corporate performance, especially in non-state-owned enterprises or resource-intensive industries.

4.3 ESG Disclosure and Corporate Performance

The development history of ESG information disclosure in China is very short, and regulatory authorities have not yet formulated a mandatory ESG disclosure policy that combines local characteristics and international experience. This means that China does not have a unified standard for ESG information disclosure, which is voluntarily disclosed by each company.

4.3.1. Positive Impact of ESG Disclosure.

As international investors increasingly focus on the sustainable development performance of Chinese companies, ESG disclosure has gained significant attention from regulators, managers, and scholars. Wang, Zhang and Wang investigated the relationship between the quality of ESG information disclosure, debt financing costs, and corporate performance, using unbalanced panel data from listed pharmaceutical manufacturing companies in China from 2011 to 2020 [24]. Their findings indicate that in this industry, high-quality ESG disclosures can significantly reduce debt financing costs and positively impact corporate performance. Additionally, their analysis of property rights heterogeneity showed that non-state-owned enterprises benefit more from improving the quality of ESG disclosures, which plays a key role in reducing debt financing costs and boosting corporate performance.

An, Ran and Gao further verified this conclusion. This article finds through empirical research that proactive disclosure of ESG can significantly enhance corporate value, especially through the intermediary role of easing financing constraints [25]. Subsample analysis points out that non-state-owned enterprises, non-heavy polluting industries and companies with high transparency have particularly significant im-

provements in their corporate value when disclosing ESG information. The reason is that ESG disclosure improves investors' understanding of a company's financial and non-financial conditions and reduces information asymmetry in the capital market. This means that by disclosing more ESG information, companies not only reduce information asymmetry, but also reduce financing costs and improve market confidence, thereby promoting the company's long-term performance.

4.3.2. Negative Effects.

Although most studies show that transparent ESG disclosure has a positive impact on corporate performance, inadequate or untrue disclosure (i.e., the phenomenon of "greenwashing") can have a negative impact on a company's long-term performance. From the perspectives of signaling theory and reputation theory, some scholars have found that in the case of soft market regulation, companies' symbolic disclosure of ESG performance information will increase the company's risks. Since China currently does not have a mandatory ESG disclosure policy and relies on companies' self-reporting, this may lead to corporate greenwashing. Yu, Luu and Chen define "greenwashers" as companies that make ESG reports look very transparent and high-quality through whitewashing and exaggeration, but actually perform poorly [26]. Zou and Xiao used China's A-share listed companies from 2011 to 2021 as a sample to analyze the impact of ESG "greenwashing" on corporate performance and its impact mechanism, and constructed the following regression model [27]:

$$Value_{it} = \alpha_0 + \alpha_1 ESGg_{i,t-1} + \sum_i \alpha_i Control_{ii,t-1} + \mu_t + \nu_i + \varepsilon_{it}$$
 (1)

$$Med_{it} = \beta_0 + \beta_1 ESGg_{i,t-1} + \sum_i \beta_i Control_{ii,t-1} + \mu_t + \nu_i + \varepsilon_{it}$$
 (2)

Among them, Value represents company performance, including financial performance (ROA) and market performance (TobinQ), ESGg is is the ESG "greenwashing" index, Control is the control variable group, j is the number of control variables, i and t are the enterprise and time respectively, μ and ν are time fixed effects and industry fixed effects respectively, Med is the intermediate mechanism variable, and ε is the error term.

Research has found that ESG "greenwashing" will reduce a company's operating capabilities, damage its reputation, and increase its financing constraints. Therefore, ESG "greenwashing" will reduce a company's performance. In addition, heterogeneity analysis found that among non-state-owned enterprises and companies with high analyst attention, ESG "greenwashing" has a greater impact on reducing corporate performance. This article provides support for the negative impact of ESG disclosure on corporate performance through research on ESG "greenwashing". It reveals that if companies cover up their true ESG performance through false disclosures, they will not only fail to enhance market trust, but will increase operating costs and difficulty in financing, ultimately weakening company performance and market performance.

5 Conclusion

This study systematically analyzes the dual impact of ESG on corporate performance by combining the dual perspectives of ESG performance and information disclosure, revealing the positive and negative research results of ESG. Overall, the importance of ESG in promoting corporate sustainable development has been widely recognized, especially in the fields of environmental protection and social responsibility. Companies can improve financial performance through effective ESG practices and transparent disclosures. However, the costs that companies face when implementing ESG and the trust crisis caused by ESG "greenwashing" may weaken their short-term and long-term financial performance. This study only focused on the emerging market of China, which still has limitations. Future research can explore the differences in the impact of ESG on corporate performance in different countries and regions, especially the comparison between developed markets and emerging markets.

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