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The Moderating Effect of Corporate Reputation: An ESG Performance Evaluation Perspective

기업 평판의 조절효과: esg 성과 평가 측면에서

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Abstract : This study investigates the impact of corporate ESG activities on firm value, focusing on the moderating role of ESG reputation. We distinguish ESG reputation from ESG performance and propose that it influences how information users interpret ESG information. Some users view ESG information positively as a long-term investment indicator, while others dismiss it as greenwashing. We argue that ESG reputation moderates the acceptance of ESG performance information, leading to either more receptive or critical interpretations. Using web crawling techniques to collect news reports as a measure of ESG reputation, we conduct a comprehensive assessment of public perception and media coverage of companies' ESG efforts. This research contributes to a more nuanced understanding of the complex dynamics between ESG activities, corporate reputation, and firm value, offering insights into how ESG reputation shapes the relationship between ESG performance and firm value.

Key Words : ESG, ESG performance, ESG reputation, firm value, web crawling

국문초록 : 이 연구는 기업의 ESG 활동이 기업 가치에 미치는 영향을 조사하며, ESG 평판의 조절 역할에 초점을 맞추고 있습니다. 우리는 ESG 평판을 ESG 성과와 구별하고, ESG 평판이 정보 이용자들의 ESG 정보 해석에 영향을 미친다고 제안합니다. 일부 이용자들은 ESG 정보를 장기 투자 지표로 긍정적으로 보는 반면, 다른 이들은 그린워싱으로 간주합니다. 우리는 ESG 평판이 ESG 성과 정보의 수용을 조절하여 더 수용적이거나 비판적인 해석으로 이어진다고 주장합니다. ESG 평판을 측정하기 위해 웹 크롤링 기술을 사용하여 뉴스 보도를 수집하고, 기업의 ESG 노력에 대한 대중의 인식과 미디어 보도를 종합적으로 평가합니다. 이 연구는 ESG 활동, 기업 평판, 기업 가치 간의 복잡한 역학 관계에 대한 더 미묘한 이해를 제공하며, ESG 평판이 ESG 성과와 기업 가치 사이의 관계를 어떻게 형성하는지에 대한 통찰을 제공합니다.

주제어 : ESG, ESG 성과, ESG 평판, 기업가치, 웹 크롤링 기법

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I. Introduction

ESG (Environmental, Social, and Governance) has emerged as a significant topic in contemporary business management. ESG management refers to the pursuit of sustainable business practices that emphasize corporate social responsibility across three non-financial domains: environmental stewardship, social responsibility, and corporate governance.

Historically, ESG activities were perceived as disconnected from traditional value creation mechanisms and were considered ineffective in enhancing shareholder value [1]. However, recent literature suggests that ESG initiatives positively impact corporate value creation through various channels and effectively enhance shareholder value. A growing body of research posits that ESG activities transcend mere normative responsibilities and function as value-enhancing mechanisms for corporations.

ESG initiatives have been shown to contribute to revenue growth by enhancing consumer preferences (Lev et al. 2010) and to promote long-term stability and efficiency by facilitating stable workforce supply and attracting high-caliber talent (Lazear and Shaw 2007). Furthermore, proactive ESG engagement has been associated with positive impacts on corporate reputation[1] and improved access to capital at lower costs and with fewer constraints[2].

Conversely, some scholars argue that ESG activities may act as detriments to corporate value enhancement. These activities may be exploited as tools for managerial reputation-building[3] and could potentially compromise corporate competitiveness through inefficient resource allocation[4]. Moreover, the diverse and subjective nature of ESG activities[5] presents challenges for managers in identifying and implementing ESG initiatives that align with investor expectations[6]. Additionally, some research highlights the existence of superficial ESG activities, often termed "greenwashing," which lack substantive impact[7,8].

The present study aims to investigate the impact of corporate ESG activities on firm value, with a particular focus on analyzing this relationship through the lens of corporate ESG reputation.

As previous research indicates, some corporate ESG activities may be limited to superficial declarations or constitute greenwashing practices that deviate from their intended purpose. Even when the objectives are sound and clearly defined, the implementation methods may be suboptimal. In such instances, when evaluated using the ESG ratings provided by the Korea Corporate Governance Service (KCGS), a commonly employed metric in academic research, the performance may be assessed as subpar. However, when corporate ESG activities are disseminated to information users through mass media, they are not constrained by specific evaluation criteria but are communicated in real-time according to journalistic reporting practices. This distinction forms the basis for differentiating between ESG reputation and ESG performance.

ESG reputation can be conceptualized as the collective perception of a company's ESG efforts shared among general information users, while ESG performance represents the relatively objective measurement of a company's ESG initiatives as assessed by institutional entities. Even if an ESG activity does not meet the criteria for ESG performance measurement, positive media portrayal can engender a favorable ESG reputation among information users. This positively constructed reputation may influence investors to adopt a more lenient interpretation of non-financial information such as ESG performance. Conversely, when a company possesses a negative reputation, even high levels of ESG performance may not receive full recognition for the company's efforts.

Empirical studies have examined the impact of corporate ESG-related news on various stakeholder behaviors. Following the release of ESG-related news, stock markets exhibited a 0.1% decrease in corporate value for negative news, while positive news did not result in a significant increase in corporate value. Market participants demonstrated responsiveness to media-reported news but showed no significant reaction to company-issued press releases or disclosures from non-governmental organizations (NGOs)[9]. Investors have been observed to react negatively to adverse ESG news[3-10]. One study reports that ESG-related news media coverage can influence stock market price fluctuations and corporate strategic decisions, with differential effects across ESG domains[11,12].

In light of this context, the present study proposes that when analyzing the relationship between ESG performance and corporate value, it is imperative to consider the investor perspective on the company that is potentially shaped through mass media, referred to as ESG reputation.

This research extends the existing literature by introducing and distinguishing between two constructs: ESG reputation and ESG performance. By proposing that these elements should be treated as distinct rather than inclusive concepts, this study offers a novel perspective. The findings of this research may provide insights into the inconsistent results observed in previous studies examining the relationship between ESG performance and corporate value.

II. Hypothesis

[Hypothesis1] Correlation between ESG reputation, ESG performance, and firm value

First, we examine whether positive (negative) ESG reputation formed by ESG-related news about a company positively (negatively) affects firm value, as claimed by previous studies. We also compare ESG reputation with actual ESG performance to verify the information. Regarding ESG reputation and firm value, previous studies argue the following: For positive reputation, investors may simply view it as greenwashing and not consider it as positive information for investment. Another argument suggests that investors react to negative ESG reputation, which is negatively reflected in stock prices, i.e., firm value. Therefore, we propose Hypothesis 1.1, which can be interpreted from two perspectives:

Hypothesis1.1. The more positive (negative) a company's reputation, the higher (lower) its firm value.

Regarding the relationship between a company's ESG reputation and ESG performance, we expect no specific correlation. This is because reputation is a limited perception held by information users based on news reports, while performance is the overall level of a company evaluated by institutions according to specific criteria. With this understanding, we propose Hypothesis 1-2:

Hypothesis1.2. When a company's reputation is positive (negative), its ESG performance level is also high (low).

[Hypothesis2] The impact of ESG reputation on the correlation between ESG performance and firm value

Many existing studies claim that high-level ESG performance significantly affects firm value. This is considered from both positive and negative perspectives. Studies arguing for a positive impact suggest that companies achieving high performance through ESG activities are interpreted as pursuing sustainable management with a long-term perspective that does not avoid social responsibility. Consequently, these companies can achieve more efficient financing and management based on credit trust. However, studies arguing for a negative impact claim that such activities hinder the efficiency of the most crucial production activities for value creation, and the resulting costs do not exceed the benefits, ultimately impeding the company's value creation. Considering these two aspects, we propose the following hypothesis:

Hypothesis 2.1. The higher (lower) the level of ESG performance, the higher (lower) the firm value.

Finally, we address the main purpose of our research. We examine whether a company's ESG reputation, i.e., the public perception of its ESG level, influences how information users interpret actual ESG performance. When a company's ESG reputation is positive, can information users be more lenient in related investments even if the company's ESG performance is poor? Also, when ESG reputation is negative, will information users fully recognize the performance and make appropriate investment decisions if the company's ESG performance is good? Considering these factors, we propose the following hypothesis:

Hypothesis 2.2. When a company's ESG reputation is negative (positive), ESG performance is negatively (positively) reflected in firm value.

III. Method of Research

The variables and research methods used in this study are as follows.

1. ESG evaluation ratings

In extant ESG-related research, the ESG evaluation ratings provided by the Korea Corporate Governance Service (KCGS) are commonly employed as a measure of corporate ESG performance. Since 2011, KCGS has been publishing annual ESG evaluation grades to promote sustainable management among domestic listed companies and to enable capital market participants to recognize and assess corporate ESG levels. These grades are categorized into seven levels: S (Excellent), A+ (Very Good), A (Good), B+ (Satisfactory), B (Average), C (Weak), and D (Very Weak). In order to distinguish the level of excellent esg performance, it is classified based on the B+ grade, which is generally used as a standard in research[14,15].

2. ESG reputation

For the measurement of ESG reputation, this study utilizes data collected from news articles published within the past five years, sourced from the Naver News portal (https://news.naver.com) for companies listed on the KOSPI and KOSDAQ markets in South Korea. We selected 9 keywords associated with positive reputation ("environmental protection initiatives", "clean technology investment", "energy efficiency improvement", "employee safety enhancement", "diversity promotion programs", "community development contribution", "corporate transparency enhancement", "board independence improvement", "shareholder rights protection policies") and 18 keywords related to negative reputation ("corporate fraud", "corporate lawsuit", "corporate scandal", "corporate allegations", "corporate transparency", "labor rights discrimination", "corporate fines", "environmental pollution company", "worker rights", "embezzlement bribery", "product safety", "accounting fraud", "tax avoidance company", "labor-management conflict", "price fixing cartel", "worker abuse", "company, unfair practices", "corporate penalty"). Using Python-based web-crawling techniques, we collected news information searchable by these keywords from various news outlets reported through Naver News. The content was manually verified to determine whether the news affects the company's reputation related to ESG. News articles were categorized by these keywords, and the frequency for each company was calculated to serve as a measure of ESG reputation. [14-15]

As previously mentioned, this study utilized the

Naver news portal to secure ESG news articles related to the analyzed companies. To prevent exposure to duplicate articles, this study targeted only print articles among the news DB services provided by Naver. The collection method employed quotation marks ("") for company names to target only exactly matching articles, and used quotation marks for ESG keywords combined with "+" to collect articles where both company names and ESG keywords appear simultaneously. However, even if they appear simultaneously, if they do not appear in the same paragraph, they may not be related articles. Therefore, for the collected articles, we divided them into paragraphs and only extracted paragraphs where both elements appeared simultaneously.

3. Corporate Value

For the measurement of corporate value, we utilize the Book Value per Share (BPS) ratio as an indicator, derived from investment indicator data provided by TS-2000 and Naver. Additionally, to control for the impact on the financial factor MTB (Market-to-Book ratio), we included the following control variables [15]:

Total Asset Growth Rate (AGR), Equity Capital Ratio (ECR), Total Asset Turnover (TAT), Net Profit Margin (NPR)

These control variables were incorporated to account for their potential influence on the Market-to-Book ratio, which is a key financial indicator.

This study designs a research model based on hypotheses, focusing on variables defined as follows. Using a structural equation model through Python, we examine the correlations between each variable.

VI. Conclusion

This study presents an additional perspective to the existing literature on the impact of corporate ESG activities on firm value. It proposes that when corporate ESG issues are conveyed to the public through media, an ESG reputation is formed. Furthermore, it argues that this reputation can have a moderating effect on the relationship between firm value and ESG performance. This assertion may provide insight into the multifaceted nature of the results from previous studies on the correlation between ESG performance and firm value. Additionally, in the global trend of mandatory ESG disclosure, it can offer a perspective on what should be considered for information to be conveyed rationally and efficiently to information users.Moreover, the study suggests elements that should be considered for future research, thereby proposing directions for expanding research. These elements are as follows:

This study also suggests the possibility of extending the research by considering a company's position within its industry.

In competitive environments, the likelihood of engaging in ESG activities may be influenced by the practices of peer companies, as firms strive to maintain or enhance their competitive edge. For instance, SK Group, widely recognized as a pioneer in ESG initiatives within South Korea, implemented aggressive ESG strategies. However, these efforts did not necessarily translate into improved ESG performance or increased corporate value. Research findings indicate that even with a positive reputation, ESG activities beyond an optimal level may have limited effects [13].

Furthermore, ESG initiatives present significant challenges for small and medium-sized enterprises (SMEs) in terms of costs and benefits, especially when compared to larger corporations that often lead in this area. In such scenarios, latecomers may be inclined to emulate the ESG strategies of industry leaders rather than developing their own approaches. However, these imitative ESG activities might not garner the same level of attention as those of the frontrunners, potentially resulting in minimal reputational benefits[14].

Consequently, when evaluating ESG reputation from various perspectives, it becomes necessary to consider a company's standing within its industry. However, due to methodological limitations, this aspect has been identified as an area for future research, highlighting the potential for further investigation into this topic.

Another consideration is that more specific guidelines are now being provided for ESG information disclosure compared to when previous studies were conducted. On April 22, 2024, KSSB released a draft of domestic ESG disclosure standards. This draft reflects global alignment with major countries and standards, proposing mandatory disclosure starting from the climate sector where international consensus has been formed. Accordingly, along with the move towards mandatory ESG disclosure, its importance is being further emphasized.

The fact that companies above a certain size will have comparability in their ESG activities based on consistent standards implies that this has become more significant in investment decisions. From this perspective, the limited mandatory disclosure in climate-related areas is particularly sensitive news for certain industry groups. Specific manufacturing sectors and energy industries that have more direct relevance to the environmental sector are likely to respond quickly.

We can expect that ESG research, which has been limited by the absolute volume of fundamental samples so far, will be partially accelerated. This is particularly true for industries directly affected by the new climate-related disclosure requirements, potentially providing more robust data for analysis in these sectors.

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