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The Moderating Role of Governance Mechanisms on the Relationship Between ESG Disclosure and Firm Value

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ABSTRACT

Recently, as the business environment has changed rapidly in the global market, companies have been interested in sustainable management. ESG management is now emerging as a keyword for evaluating individual companies and countries. ESG is to make a company sustainable development through eco-friendly, social responsibility, and transparent governance. Therefore, this study aims to investigate the relationship between ESG disclosure and firm value and the moderating role of governance mechanisms in this relationship. The results show that ESG disclosure positively affects firm value. Also, board size, board independence, and audit quality significantly moderate the relationship between ESG disclosure and firm value. However, there is no moderating effect of ownership concentration. Stakeholder and signaling theories are used as a theoretical lens to determine these relationships. This study enables companies to increase stakeholders' interest in the capital market and induce socially responsible investments through ESG introduction.

Keywords: ESG Disclosure; Firm Value; South Korea.

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1. INTRODUCTION

Recently, as the global business environment and management methods have changed rapidly, such as COVID-19, the threat of continuous management of companies is intensified. As a result, corporate sustainability management has emerged. Corporate sustainability management refers to continuously improving firm value through management that considers financial (e.g., revenue, sales) and non-financial performance (e.g., social, environmental, moral). The most important keyword of corporate sustainability management is ESG (Environmental, Social, and Governance), which requires transparent management, such as environmental and social responsibility management and governance, to achieve sustainable development. ESG management is now emerging as a keyword for evaluating individual companies and countries.

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In South Korea, Financial Services Commission (2021) informs that ESG disclosure will also be mandatory for KOSPI-listed companies with over 2 trillion assets by 2025. By announcing that it will expand to all KOSPI-listed companies in 2030, it expects that corporate non-financial environmental and social responsibility activities will become a significant indicator of firm value (Financial Services Commission, 2021). In addition, ESG leads to good investment, reflecting ESG in the capital market, socially responsible investment, and increasing investors' interest in ESG companies and consumers. ESG management is an essential issue in South Korea, and academic research is also needed. Therefore, this study conducts based on ESG disclosure of Korean companies.

Lately, many researchers have conducted studies on ESG disclosure and corporate performance (Albitar *et al*., 2020; Al-Hiyari & Kolsi, 2021). Previous studies prove ESG performance significantly affects corporate value (Alsayegh *et al*., 2020; Liang, Xue, & Zhang, 2023; Velte, 2017; Yoon *et al*., 2018). For instance, Verbeeten, Gamerschlag, and Möller (2016) posit that the market participants positively rate the value of CSR disclosure in the German context. Consistent with this argument, Lu, Oh, Kleffner, and Chang (2021) assert the effect of ESG on firm value. As a result, when a company faces a high financial threat, shareholders recognize ESG performance as an improvement in firm value.

On the other hand, some researchers argue that ESG disclosure has a negative or no effect on firm performance (Landau *et al*., 2020; Li *et al*., 2020; McWilliams & Siegel, 2001). For example, Hassel, Nilsson, and Nyquist (2005) confirm that environmental performance has a negative effect on corporate value through the Swedish context. Also, other research shows that ESG practices negatively affect firm performance in Latin America (Grisales & Caracuel, 2019). Moreover, another study concludes that voluntary disclosures and corporate value have no relationship (Hassan *et al*., 2009). As aforementioned, the results of previous studies are different. Therefore, this study aims to help research by analyzing the relationship between ESG disclosure and firm value.

As mentioned in previous studies, even companies with high ESG ratings do not always increase their corporate value. Therefore, there is a need for a connection mechanism that makes their relationship positive. Previous studies also reveal that various internal and external moderating variables in this relationship, such as CEO power (Velte, 2019), product market competition (Vural-Yavaş, 2021), green innovation (Khan *et al*., 2022), board gender diversity (Shakil, 2021), etc. Despite the existence of various moderating variables, there is a lack of research necessary for the Korean business situation. In particular, the importance of governance mechanisms has already been verified in many studies, but it is insufficient to explain the relationship between ESG and firm value. From the perspective of Korean companies, governance mechanisms are more crucial because only Korean society calls the conglomerates' chaebol' in the world, and small and medium enterprises are primarily family-owned. These situations show Korean companies' structure at a glance. Therefore, this study verifies the moderating effect of governance mechanisms (board size, board independence, audit quality, and ownership concentration) on the relationship between ESG disclosure and firm value based on Korean companies.

Lastly, this research uses stakeholder theory (Freeman, 1984) and signaling theory (Spence, 1973) as theoretical lenses. Based on the stakeholder theory perspective, businesses should consider all stakeholder needs before legalizing their operations (Deegan, 2002). As aforementioned, signaling theory has also been fundamentally concerned with reducing information asymmetry between stakeholders and firms (Spence, 2002). One of the stakeholders' demands is to obtain information from a firm's disclosure.

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When stakeholders' desires are satisfied, pressures put on firms are dispersed. Besides, decreasing the information gaps between firms and stakeholders will directly or indirectly affect firms' sustainability (Al Amosh & Mansor, 2020). Thus, stakeholders remain interested in the firms' sustainability (Khatib *et al*., 2021). Furthermore, it gives firms an excellent opportunity to increase legitimacy and obtain the trust of stakeholders (Al Amosh & Mansor, 2020).

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Relationship between ESG Disclosure and Firm Value

In a rapidly changing business environment, companies are doing their best to introduce ESG. Currently, ESG is a means of sustainable management of a company, and for stakeholders, ESG is considered non-financial information for investment. Many scholars examine the effect of ESG disclosure on firm value. However, their research results are diverse (Albitar *et al*., 2020; Alsayegh *et al*., 2020; Landau *et al*., 2020). For instance, Yoon *et al*. (2018) confirm that ESG disclosure can increase a firm's cost, which leads to economic disadvantage. Moreover, Atan, Alam, Said, and Zamri (2018) find a relationship between ESG performance and firm value in the Malaysian context. They conclude that there is no relationship between them.

Despite that, other previous studies conclude that ESG disclosure positively affects firm value directly and indirectly; therefore, it can increase firms' shareholder value and competitive advantages (Bernardi & Stark, 2018; Li *et al*., 2020). Furthermore, ESG-disclosed companies improve their reputation in the capital market (Li*et al*., 2020; Yoon *et al*., 2018) because stakeholders consider ESG disclosure the source of potential value creation (Tantalo & Priem, 2016). Therefore, managing non-financial information and stakeholder relationships is essential to improving the value of a company.

From a stakeholder theory perspective, an entity can benefit indirectly from a good relationship with stakeholders to improve financial performance (Hamman *et al*., 2010). ESG management companies will meet stakeholder interests and enhance firm value (Aboud & Diva, 2018). Moreover, the signaling theory explains that companies with good ESG disclosure can reduce information asymmetry (Li *et al*., 2020). Investing in ESG disclosure may help firms improve their value to new investors and generate corporate reputation. Thus, ESG disclosure is the essential criterion for firm value. Therefore, this research suggests the following hypothesis:

H1: ESG disclosure positively affects firm value.

2.2 Moderating Effect of Governance Mechanisms

Belkhir (2009) defines board size as an essential factor affecting the effectiveness of the board of directors. Jilani and Chouaibi (2021) also find that the larger the board size, the more effective it is in alleviating the agency problem and has a significant effect on corporate value. Besides, Sundarasen *et al*. (2016) state that board independence is a control tool that reduces agent conflict and information asymmetry. In particular, the higher the ratio of board independence, the more expertise and monitoring functions are provided to help increase the company's market value (Fama, 1980; Fama & Jensen, 1983; Widyatini, 2019).

Meanwhile, Saidud and Aifuwa (2020) explain audit quality as an auditor's activity that effectively and efficiently performs audit functions to benefit managers and stakeholders. In addition, Dakhli (2021) finds that improvements in CSR are more

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effective if the auditor is Big4. Previous studies also posit that audit quality moderates the relationship between CSR disclosure and corporate performance (Dewi & Monalisa, 2016), governance and management performance (Foong *et al*., 2019), IFRS introduction and profit adjustment (Hasan, 2020).

For instance, Rossi, Chouaibi, Chouaibi, Jilani, and Chouaibi (2021) conclude that the board characteristics (board size, board independence, and CEO duality) have a partially moderating effect on the relationship between CSR practices and financial performance in European firms. Also, Gerged *et al*. (2021) argue that managerial and institutional ownership, the largest shareholder, and foreign ownership moderate the relationship between environmental disclosure and earnings management. Furthermore, the governance mechanisms (gender diversity, ownership concentration, and board size) moderate the relationship between ESG disclosure and firm performance (Albitar *et al*., 2020). Therefore, this research suggests the following hypotheses:

H2a: Board size positively moderates the relationship between ESG disclosure and firm value.
H2b: Board independence positively moderates the relationship between ESG disclosure and firm value.
H2c: Audit quality positively moderates the relationship between ESG disclosure and firm value.
H2d: Ownership concentration positively moderates the relationship between ESG disclosure and firm value.

3. RESEARCH MODEL AND METHODOLOGY

3.1 Research Model

Figure 1 shows the proposed model for the effect of ESG disclosure on firm value. Also, it includes the moderating effect of governance mechanisms on the relationship between ESG disclosure and firm value.

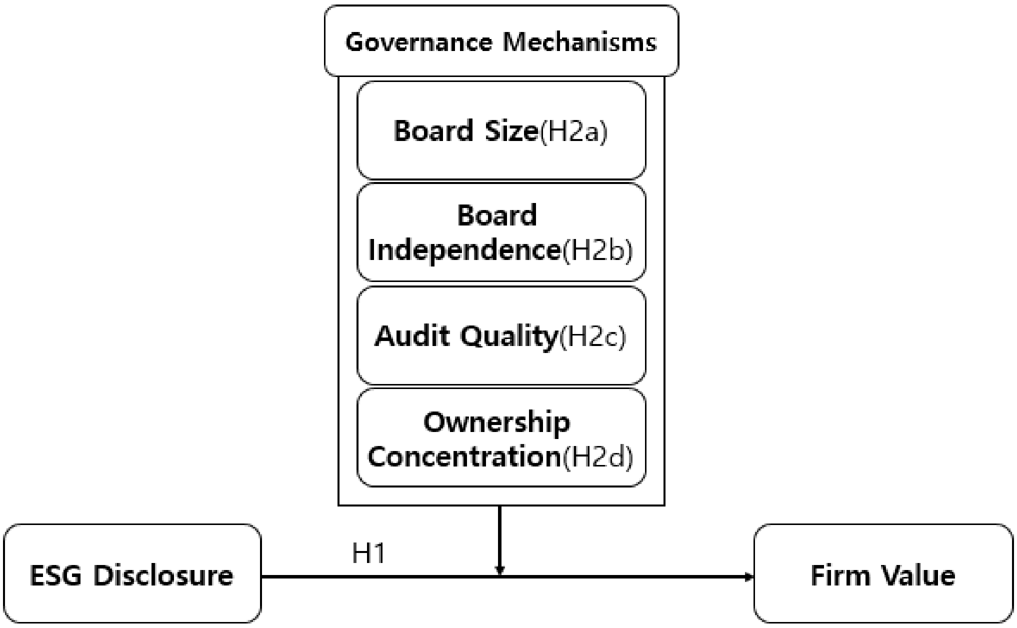

Figure 1. Research Model

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3.2 Sample and Data Collection

This study used panel data based on 2019 and 2020, and the sample is 428 listed companies in South Korea. This study collects data on ESG disclosure by Korea Corporate Governance Service to grasp listed companies' information. Also, data on governance mechanisms and ROA are collected through KisValue and Dart.

3.3 Measurement of Variables

Specifically, the number of board members measures board size, and the ratio of board independence to the total of board members measures board independence. Audit quality is divided by Big4(Samil, Ernst & Young, Samjong, and Anjin) and non-Big4, and ownership concentration is measured by the ratio of the top three major shareholders. Firm value is measured by ROA.

The control variables in this study are firm size and industry type. First, previous research has shown that size significantly impacts company performance (Wu, 2011). The scale has been used to measure the total number of employees. Moreover, company success differs by manufacturing and service sector (Kotabe & Swan, 1995). Thus, this research uses firm size and industry type as control variables.

4. EMPIRICAL RESULTS

4.1 Descriptive Statistics

Table 1 presents a summary of descriptive statistics for the variables in this model. The total number of samples is 428, and the number for employees in the firm’s average is 348. Also, the mean of board member is 5, and board independence’s average is 2. Moreover, the range of ratio of top three major shareholders is 3.2 to 88, and the mean is 42. Furthermore, it shows that range of firm value is -82 to 50.

Table 1. Descriptive Statistics

Variable	N	Min	Max	Mean	SD
Firm Size	428	4.00	979.00	347.81	241.78
Industry Type	428	.00	1.00	.687	.46
ESG Disclosure	428	1.00	10.00	2.60	.91
Board Size	428	1.00	15.00	5.34	1.89
Board Independence	428	.00	10.00	2.14	1.17
Audit Quality	428	.00	1.00	.45	.56
Ownership Concentration	428	3.20	88.00	42.43	16.24
Firm Value	428	-82.21	50.00	-.017	11.67

4.2 Correlations Analysis

Table 2 shows the mean, standard deviation, and correlation of each variables. Firm value is significant and positive relationship with firm size, ESG disclosure, board independence, audit quality, and ownership concentration.

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Table 2. Correlation Analysis

	Mean	SD	1	2	3	4	5	6	7	8
1. Firm Size	.43	2.39	1							
2. Industry Type	.46	.69	.084	1						
3. ESG Disclosure	.91	2.60	.140**	-.064	1					
4. Board Size	1.89	5.34	.136**	-.077	.154**	1				
5. Board Independence	1.17	2.14	.125**	-.106*	.215**	.774**	1			
6. Audit Quality	.56	.45	.099*	-.101*	.342**	.036	.131**	1		
7. Ownership Concentration	16.24	42.43	.056	-.025	.135**	-.010	.075	.253**	1	
8. Firm Value	11.67	-.017	.206**	-.006	.310**	.081	.155**	.368**	.253**	1

Note: $^{*}p < .05$, $^{**}p < .01$.

4.3 Hypotheses Test

This study aims to find the effect of ESG disclosure on firm value. Moreover, it determines the moderating effects of governance mechanisms on this relationship. Also, it is controlled by firm size and industry type. This study uses mean-centering for regression analysis because it solves the standard errors and enhances accuracy. Therefore, the multicollinearity problem does not occur.

4.3.1 Relationship between ESG Disclosure and Firm Value

As shown in Table 3, Model 1 includes the effect of control variables on firm value. The research model is significant (F = 9.539, $p < .01$), and adjusted R^2 is .038. Also, Model 2 examines the relationship between ESG disclosure and firm value. The model is significant (F = 19.884, $p < .01$), and the adjusted R^2 is .117. Furthermore, R^2 is significantly increased compared to Model 1 ($\Delta R^2 = .080$, $p < .01$). ESG disclosure positively and significantly affects firm value ($\beta = .287$, $p < .01$). Thus, hypothesis 1 is supported.

Table 3. Regression Result 1

	Model 1	Model 2
Firm Size	.208**	.166**
Industry Type	-.024	-.002
ESG disclosure		.287**
Regression Result	F = 9.539** R^2 = .043 Adjusted R^2 = .038	F = 19.884** R^2 = .123 Adjusted R^2 = .117 Model 1 ΔR^2 = .080**

Notes: $^{*}p < .05$, $^{**}p < .01$.
Dependent variable: Firm value, Independent variable: ESG disclosure.

4.3.2 Moderating Effect of Board Size

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According to Table 4, Model 2 introduces the effect of ESG disclosure and board size on firm value with control variables. The model is significant (F = 14.906, $p < .01$), and the adjusted R^2 is .124. ESG disclosure significantly and positively affects firm value ($\beta = .285$, $p < .01$). However, there is no significant relationship between board size and firm value ($\beta = .015$).

Model 3 introduces the interaction term between ESG disclosure and board size. Model 3 is significant (F = 15.703, $p < .01$), and the adjusted R^2 is .157. Also, compared to Model 2, Model 3 is increased significantly ($\Delta R^2 = .033$, $p < .01$). However, board size negatively and significantly affects firm value ($\beta = -.260$, $p < .01$). The moderating effect of board size on the relationship between ESG disclosure and firm value ($\beta = .410$, $p < .01$). Therefore, hypothesis 2a is supported.

Table 4. Regression Result 2

	Model 1	Model 2	Model 3
Firm Size	.208**	.164**	.141**
Industry Type	-.024	-.001	.001
ESG disclosure		.285**	.088
Board Size		.015	-.260**
ESG * BS			.410**
Regression Result	F = 9.539** R^2 = .043 Adjusted R^2 = .038	F = 14.906** R^2 = .124 Adjusted R^2 = .115 Model 1 ΔR^2 = .081**	F = 15.703** R^2 = .157 Adjusted R^2 = .147 Model 2 ΔR^2 = .033**

Notes: $^{*}p < .05$, $^{**}p < .01$.
Dependent variable: Firm value, Independent variable: ESG disclosure.

4.3.3 Moderating Effect of Board Independence

As shown in Table 5, Model 2 introduces the effect of control variables, ESG disclosure, and board independence on firm value. The model is significant (F = 15.649, $p < .01$), and the adjusted R^2 is .121. ESG disclosure significantly and positively affects firm value ($\beta = .272$, $p < .01$). However, there is no significant relationship between board independence and firm value ($\beta = .077$).

Model 3 introduces the interaction term between ESG disclosure and board independence. Model 3 is significant (F = 16.652, $p < .01$), and the adjusted R^2 is .155. Also, compared to Model 2, Model 3 is significantly increased ($\Delta R^2 = .036$, $p < .01$). Although board independence has a negative and significant effect on firm value ($\beta = -.260$, $p < .01$). Moreover, board independence positively and significantly moderates the relationship between ESG disclosure and firm value ($\beta = .471$, $p < .01$). Therefore, hypothesis 2b is supported.

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Table 5. Regression Result 3

	Model 1	Model 2	Model 3
Firm Size	.208**	.158**	.142**
Industry Type	-.024	.006	.012
ESG Disclosure		.272**	.106
Board Independence		.077	-.282**
ESG * BI			.471**
Regression Result	F = 9.539** R^2 = .043 Adjusted R^2 = .038	F = 15.649** R^2 = .129 Adjusted R^2 = .121 Model 1 ΔR^2 = .086**	F = 16.652** R^2 = .165 Adjusted R^2 = .155 Model 2 ΔR^2 = .036**

Notes: $^{*}p < .05$, $^{**}p < .01$.
Dependent variable: Firm value, Independent variable: ESG disclosure.

Table 6. Regression Result 4

	Model 1	Model 2	Model 3
Firm Size	.208**	.148**	.106*
Industry Type	-.024	.023	.038
ESG Disclosure		.192**	-.245**
Audit Quality		.290**	-.234**
ESG * AQ			.852**
Regression Result	F = 9.539** R^2 = .043 Adjusted R^2 = .038	F = 25.870** R^2 = .197 Adjusted R^2 = .189 Model 1 ΔR^2 = .154**	F = 34.152** R^2 = .288 Adjusted R^2 = .280 Model 2 ΔR^2 = .092**

Notes: $^{*}p < .05$, $^{**}p < .01$.
Dependent variable: Firm value, Independent variable: ESG disclosure.

4.3.4 Moderating Effect of Audit Quality

According to Table 6, Model 2 introduces the effect of ESG disclosure and audit quality on firm value with control variables. The model is significant (F = 25.870, $p < .01$), and the adjusted R^2 is .197. ESG disclosure significantly and positively affects firm value (β = .192, $p < .01$). Also, firm value is positively and significantly affected by audit quality (β = .290, $p < .01$).

Model 3 introduces the interaction term between ESG disclosure and audit quality. Model 3 is significant (F = 34.152, $p < .01$), and the adjusted R^2 is .288. More so, compared to Model 2, Model 3 is increased significantly (ΔR^2 = .092, $p < .01$). Firm size positively and significantly affects firm value (β = .106, $p < .01$). Firm value is negatively

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affected by ESG disclosure (β = -.245, p < .01) and audit quality (β = -.234, p < .01). Audit quality moderates the relationship between ESG disclosure and firm value (β = .852, p < .01). Therefore, hypothesis 2c is supported.

4.3.5 Moderating Effect of Ownership Concentration

As shown in Table 7, Model 3 introduces the interaction term between ESG disclosure and audit quality. Model 3 is significant (F = 17.616, p < .01), and the adjusted R^2 is .173. More so, compared to Model 2, Model 3 is significantly increased (ΔR^2 = .006, p < .01). However, the moderating effect of ownership concentration on the relationship between ESG disclosure and firm value is not significant (β = .195). Thus, hypothesis 2d is not supported.

Table 7. Regression Result 5

	Model 1	Model 2	Model 3
Firm Size	.208**	.158**	.150**
Industry Type	-.024	.002	.008
ESG Disclosure		.260**	.174**
Ownership Concentration		.210**	.067
ESG * OC			.195
Regression Result	F = 9.539** R^2 = .043 Adjusted R^2 = .038	F = 21.102** R^2 = .166 Adjusted R^2 = .158 Model 1 ΔR^2 = .123**	F = 17.616** R^2 = .173 Adjusted R^2 = .163 Model 2 ΔR^2 = .006**

Notes: *p < .05, **p < .01.
Dependent variable: Firm value, Independent variable: ESG disclosure.

4.3.6 Moderating Effect of Governance Mechanisms

As shown in Table 8, Model 3 introduces the interaction term between ESG disclosure and governance mechanisms. Model 3 is significant (F = 18.168, p < .01), and the adjusted R^2 is .307. More so, compared to Model 2, Model 3 is significantly increased (ΔR^2 = .101, p < .01). Moreover, the moderating effects of board independence and audit quality on the relationship between ESG disclosure and firm value are positively significant. Also, ownership concentration negatively moderates this relationship (β = -.496, p < .01). However, unlike previous result 2, there is no moderating effect of board size (β = -.087).

Table 8. Regression Result 6

	Model 1	Model 2	Model 3
Firm Size	.208**	.140**	.103*
Industry Type	-.024	.028	.034
ESG Disclosure		.174**	-.199**
Board Size		-.039	.053
Board Independence		.089	-.306

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Audit Quality		.248**	-.318**
Ownership Concentration		.153**	.474**
ESG * BS			-.087
ESG * BI			.480*
ESG * AQ			.919**
ESG * OC			-.496**
Regression Result	F = 9.539** R^2 = .043 Adjusted R^2 = .038	F = 17.260** R^2 = .223 Adjusted R^2 = .210 Model 1 ΔR^2 = .180**	F = 18.168** R^2 = .325 Adjusted R^2 = .307 Model 2 ΔR^2 = .101**

Notes: $^{*}p < .05$, $^{**}p < .01$.
Dependent variable: Firm value, Independent variable: ESG disclosure.

5. CONCLUSION

5.1 General Discussion

In a global business environment, ESG disclosure is essential for companies. From stakeholders, non-financial information of a firm is a factor of investment or interest. For various reasons, especially global warming, human rights guarantee, and transparent management, stakeholders state that ESG management is essential to a company. Therefore, the better the ESG evaluation, the higher the corporate value through good awareness, investment, and consumption to stakeholders. Existing studies have also confirmed that the higher the ESG, the higher the firm value (Liang *et al*., 2023; Yoon *et al*., 2018), firm performance (Al-Hiyari & Kolsi, 2021), etc. Therefore, this study confirmed once again that ESG disclosure positively and significantly affects firm value.

Even though ESG disclosure enhances firm value, different results may appear depending on the role of governance mechanisms in the relationship between ESG disclosure and corporate value (Jilani & Chouaibi, 2021; Puni & Anlesinya, 2020). The responsible behavior of major shareholders has a positive impact on the corporate image (Gerged *et al*., 2021), and the board's role in leading the proper decision-making is also important (Rossi, *et al*., 2021; Karim, Manab, & Ismail, 2023; Zaid, Abuhijleh, & Pucheta-Martínez, 2020). In addition, the expertise of audit quality to ensure that the company's direction is correct is also needed (Saidud & Aifuwa, 2020). Existing studies have also revealed that governance mechanisms are important in increasing corporate value (Albitar *et al*., 2020; Ross *et al*., 2021). Therefore, this study confirmed that governance mechanisms moderate the relationship between ESG disclosure and corporate value.

5.2 Theoretical and Practical Implications

The research findings have important implications: First, this study demonstrates that ESG disclosure by domestic listed companies positively affects firm value. This result verifies the results of existing studies (Alsayegh *et al*., 2020; Lu *et al*., 2021; Yoon *et al*., 2018; Velte, 2017; Verbeeten *et al*., 2016). Therefore, to improve performance, companies should pay attention to various aspects such as eco-friendly, employee welfare, and transparent governance, unlike in the past. In particular, introducing ESG is essential

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because Korea has a large proportion of exports. However, SMEs lack resources compared to large companies, so external cooperation, such as institutional, technical, and financial, is required. Since the world will continue to trade based on ESG evaluation in the future, various types of people, including researchers, policymakers, institutions, and governments, should help companies by creating ESG evaluation plans that meet international standards.

Second, the results show that the governance mechanisms positively moderate the relationship between ESG and corporate value, confirming the importance of governance mechanisms in creating corporate value. Also, the results of this study confirmed once again that studies related to existing governance mechanisms are factors that positively affect corporate value (Albitar *et al*., 2020; Amosh *et al*., 2021; Jilani & Chouaibi, 2021; Rehman *et al*., 2022; Ross *et al*., 2021; Puni & Anlesinya, 2020). In particular, these results contribute academic field by providing new insight into the role of governance mechanisms in ESG research.

To explain specifically the moderating effects of governance mechanisms, it shows that if the size of the board of directors increases, it can be a resource to improve the financial performance of domestic listed companies (Belkhir, 2009; Jilani & Chouaibi, 2021). We would like to alert listed companies to be moderate about the board size, as the excessive increase in board members beyond a certain point could lead to serious coordination and communication problems. Therefore, it is proposed to benchmark the size of the board of directors of some listed companies with high performance to maintain the size of the board at an optimal level.

Moreover, the high proportion of outside directors suggests it can significantly improve firm value (Sundarasen *et al*., 2016; Karim *et al*., 2023; Zaid *et al*., 2020). Board independence is when members of the board who are not affiliated with management contribute to improving corporate performance by utilizing experience and expertise in improving board decision-making, accountability, and voluntary disclosure. Therefore, an appropriate proportion of outside directors is required to form an effective board. In particular, effective balancing between insiders and outsiders on listed boards is essential to improving a company's performance, as the board of directors can benefit enormously from utilizing the unique contributions of outsiders.

Furthermore, audit quality is also another factor in increasing firm value (Dakhli, 2021; Saidud & Aifuwa, 2020). This study examines the difference between Big4 and non-Big4. As a result, listed companies audited by Big4 can be a reasonable basis for building trust in stakeholders. In particular, a good company for investors means a company with no financial problems and high non-financial performance. The fact that Big4 audited itself can be seen as an attractive investment destination for investors. Therefore, listed companies are encouraged to pay attention to audit quality to receive stakeholders' trust and investment.

Lastly, previous studies conclude that ownership concentration plays a crucial role in improving corporate value (Akben-Selcuk, 2019; Albitar *et al*., 2020). However, the result of this study shows that ownership concentration does not moderate the relationship between ESG disclosure and firm value. According to Ngatno, Apriatni, and Youlianto's (2021) study, they conclude that agency problems may occur between the shareholders and board members because if shareholders' decision-making authority is not strong, the board can lead them in the direction they want rather than shareholders' opinions. Thus, the effectiveness of firm performance can be less while top management is struggling. To overcome this problem, decision-makers of listed companies need to collect various opinions based on plenty of information to determine the company's

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direction. In particular, in an uncertain business environment, companies with higher ownership concentration can make faster decisions, which can increase the competitiveness of companies. However, since there is no clear possibility of success, careful decisions should be made to enable corporate growth.

5.3 Limitations and Future Research Directions

Notwithstanding the significant theoretical and managerial implications highlighted above, this study has a few limitations that can help guide future research. This study uses governance mechanisms as a moderator, but governance mechanisms can be an explanatory variable in other ESG-related research. Therefore, future research could examine the relationship between governance mechanisms and ESG through different contexts.

Moreover, previous studies mention that the results differ depending on industry type so that future research can divide the sample group based on industry type (Koundouri *et al*., 2022). In particular, since the manufacturing and service industries have different characteristics, different results may appear in the innovative performance. Finally, this study uses the firm value as the performance of ESG disclosure. Previous studies used different variables to measure performance (Duque-Grisales *et al*., 2020; Khalil & Nimmanunta, 2022). Thus, future studies can use innovative, non-financial, and organizational performance instead of firm value.

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REFERENCES

[1] Aboud, A. & Diab, A. (2018). The impact of social, environmental and corporate governance disclosures on firm value: Evidence from Egypt. *Journal of Accounting in Emerging Economies, 8*(4), 442-458.

[2] Akben-Selcuk, E. (2019). Corporate social responsibility and financial performance: The moderating role of ownership concentration in Turkey. *Sustainability, 11*(13), 3643.

[3] Al Amosh, H. & Mansor, N. (2020). The implications of ownership structure on the environmental disclosure in Jordan. *International Journal of Academic Research in Business and Social Sciences, 10*(3), 330-346.

[4] Albitar, K., Hussainey, K., Kolade, N., & Gerged, A. M. (2020). ESG disclosure and firm performance before and after IR: The moderating role of governance mechanisms. *International Journal of Accounting and Information Management*, 28(3), 429-444.

[5] Al-Hiyari, A. & Kolsi, M. C. (2021). How do stock market participants value ESG performance? Evidence from Middle Eastern and North African Countries. *Global Business Review*, 1-23.

[6] Alsayegh, M. F., Abdul Rahman, R., & Homayoun, S. (2020). Corporate economic, environmental, and social sustainability performance transformation through ESG disclosure. *Sustainability, 12*(9), 3910.

[7] Atan, R., Alam, M. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance: Panel study of Malaysian companies. *Management of Environmental Quality: An International Journal, 29*(2),

ISSN: 2304-1013 (Online); 2304-1269 (CDROM); 2414-6722 (Print)

182-194.

[8] Bernardi, C. & Stark, A. W. (2018). Environmental, social and governance disclosure, integrated reporting, and the accuracy of analyst forecasts. *The British Accounting Review, 50*(1), 16-31.

[9] Deegan, C. (2002). Introduction: The legitimizing effect of social and environmental disclosures. *Accounting, Auditing and Accountability Journal, 15*(3), 282-311.

[10] Financial Services Commission (2021). Retrieved from https://www.fsc. go.kr/no010101/7 5176

[11] Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston, MA: Pitman.

[12] Grisales, E. D. & Caracuel, J. A. (2019). Environmental, social and governance (ESG) scores and financial performance of multilatinas: Moderating effects of geographic international diversification and financial slack. *Journal of Business Ethics, 168,* 315-334.

[13] Hamman, J. R., Loewenstein, G., & Weber, R. A. (2010). Self-interest through delegation: An additional rationale for the principal-agent relationship. *American Economic Review, 100*(4), 1826-1846.

[14] Hassan, O. A. G., Romilly, P., Giorgioni, G., & Power, D. (2009). The value relevance of disclosure: Evidence from the emerging capital market of Egypt. *International Journal of Accounting, 44*(1), 79-102.

[15] Hassel, L., Nilsson, H., & Nyquist, S. (2005). The value relevance of environmental performance. *European Accounting Review, 14*(1), 41-61.

[16] Jilani, W. & Chouaibi, J. (2021). To what extent does CEO behavior enhance risk-taking? A banking sector related evidence. *Scientific Annals of Economics and Business, 68*(3), 309-332.

[17] Karim, S., Manab, N. A., & Ismail, R. B. (2023). Assessing the governance mechanisms, corporate social responsibility and performance: The moderating effect of board independence. *Global Business Review, 24*(3), 550-562.

[18] Khan, P. A., Johl, S. K., & Akhtar, S. (2022). Vinculum of sustainable development goal practices and firms' financial performance: A moderation role of green innovation. *Journal of Risk and Financial Management, 15*(3), 96.

[19] Khatib, S. F. A., Abdullah, D., Hendrawaty, E., & Elamer, A. A. (2021). A bibliometric analysis of cash holdings literature : Current status, development, and agenda for future research. *Management Review Quarterly*, 1-38.

[20] Korea Corporate Governance Service (KCGS). Retrieved from http://www.cg s.or.kr/main /main.jsp

[21] Landau, A., Rochell, J., Klein, C., & Zwergel, B. (2020). Integrated reporting of environmental, social, and governance and financial data: Does the market value integrated reports?. *Business Strategy and the Environment, 29*(4), 1750-1763.

[22] Li, Z., Liao, G., & Albitar, K. (2020). Does corporate environmental responsibility engagement affect firm value? The mediating role of corporate innovation. *Business Strategy and the Environment, 29*(3), 1045-1055.

[23] Liao, L., Chen, G., & Zheng, D. (2019). Corporate social responsibility and financial fraud: evidence from China. *Accounting and Finance, 59*(5), 3133-3169.

[24] Liang, Y., Xue, C., & Zhang, J. (2023). The impact of ESG ratings on stock liquidity risk: Evidence from the Chinese market. *Review of Integrative Business and Economics Research, 12*(4), 1-16.

[25] Lu, H., Oh, W. Y., Kleffner, A., & Chang, Y. K. (2021). How do investors value corporate social responsibility? Market valuation and the firm specific contexts.

ISSN: 2304-1013 (Online); 2304-1269 (CDROM); 2414-6722 (Print)

Journal of Business Research, 125, 14-25.
[26] McWilliams, A., Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review, 26*(1), 117-127.
[27] Ngatno, Apriatni, E. P., & Youlianto, A. (2021). Moderating effects of corporate governance mechanism on the relation between capital structure and firm performance. *Cogent Business & Management, 8*(1), 1866822.
[28] Rossi, M., Chouaibi, J., Chouaibi, S., Jilani, W., & Chouaibi, Y. (2021). Does a board characteristic moderate the relationship between CSR practices and financial performance? Evidence from European ESG firms. *Journal of Risk and Financial Management*, *14*(8), 354.
[29] Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics, 87,* 355-374.
[30] Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *American Economic Review, 92,* 434-459.
[31] Tantalo, C. & Priem, R. L. (2016). Value creation through stakeholder synergy. *Strategic Management Journal, 37*(2), 314-329.
[32] United Nations Principles for Responsible Investment (UNPRI). (2006). Received from https://ww w.unpri.org/
[33] Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. *Journal of Global Responsibility, 8*(2), 169-178.
[34] Velte, P. (2019). Does CEO power moderate the link between ESG performance and financial performance? A focus on the German two-tier system. *Management Research Review, 43*(5), 497-520.
[35] Verbeeten, F. H. M., Gamerschlag, R., & Möller, K. (2016). Are CSR disclosures relevant for investors? Empirical evidence from Germany. *Management Decision, 54*(6), 1359-1382.
[36] Vural-Yavaş, Ç. (2021). Economic policy uncertainty, stakeholder engagement, and environmental, social, and governance practices: The moderating effect of competition. *Corporate Social Responsibility and Environmental Management, 28*(1), 82-102.
[37] Widyatini, I. R. (2019). Financial inclusion for economic sustainability through the implementation of good corporate governance. *Review of Integrative Business and Economics Research, 8*(s3), 122-130.
[38] Yoon, B., Lee, J. H., & Byun, R. (2018). Does ESG performance enhance firm value? Evidence from Korea. *Sustainability, 10*(10), 3635.
[39] Zaid, M. A., Abuhijleh, S. T., & Pucheta-Martínez, M. C. (2020). Ownership structure, stakeholder engagement, and corporate social responsibility policies: The moderating effect of board independence. *Corporate Social Responsibility and Environmental Management, 27*(3), 1344-1360.

ISSN: 2304-1013 (Online); 2304-1269 (CDROM); 2414-6722 (Print)