

ESG and firm performance: The moderating role of gender diversity



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ABSTRACT

Disclosure of ESG from companies around the world has experienced a drastic increase, this phenomenon is also accompanied by an increase in socially responsible investment. This study investigates the moderating role of gender diversity in the relationship between the individual dimensions of ESG (environmental disclosure, social disclosure, and governance disclosure) and the company's performance (Tobin's Q) in IDX companies. The research design is causal-explanatory. Based on the theory of previous findings, hypotheses were developed and tested by applying panel data regression to 42 IDX companies in the period of 2017 to 2021. The results found that disclosure of governance had a significant negative effect on company performance as measured by Tobin's Q. Moderation of gender diversity plays a role in weakening the relationship between governance disclosure with company performance. Several managerial implications are proposed based on this research. Managers may consider other ways to address stakeholder concerns about environmental and social performance. Indonesian policymakers can authorize regulations regarding ESG disclosure requirements to boost firm performance and lead to economic stability.

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1. Introduction

In recent years, ESG disclosures from companies across the globe have experienced a rapid increase. The growth is due to the increasing studies that have found a positive relationship between ESG disclosure and company performance (Buallay, 2019; Alareeni & Hamdan, 2020; Bahadori et al., 2021; Kumar & Firoz, 2022; Gholami et al., 2022). However, several studies have also found a negative or insignificant relationship between the two variables (Velte, 2017; Atan et al., 2018; Buallay et al., 2020). The adoption of ESG practices and disclosures in a company carries certain risks. The study by Nguyen et al (2022) strengthened the statement by revealing that the initial costs of practicing ESG will be greater than the benefits received. However, in the long term, the benefits received can offset the costs of investing in these ESG practices. Regardless of the risks, ESG disclosure has become an essential strategy for companies to survive amid market competition today. Since global issues have driven increased community activism and commitment to ESG practices, stakeholders such as customers, investors, and governments have shifted their focus toward more sustainable goals (Pulino et al., 2022). Therefore, companies are constantly under pressure to comply with the demands and regulations of ESG disclosure (Alareeni & Hamdan, 2020; Huang, 2021). Over the past 30 years, Web of Science research has collected 7,485 publications related to the relationship between ESG and company performance (Huang, 2021). Nonetheless, a study in the context of emerging markets is rarely adopted (Hardiningsih et al., 2020; Buallay, Fadel, et al., 2020; Mohammad & Wasiuzzaman, 2021; Zarefar et al., 2022) Indonesia is an emerging market followed

by an above-average SDG Index score of 69.2 in 2022 (Sachs et al., 2022). Meanwhile, the average score of countries on the SDG index is 67.2. Figure 1 shows a significant increase in the issuance of Indonesia sustainability reports from 2017 to 2021. Within five years, there has been a tremendous increase in IDX companies' sustainability reports by 827%.

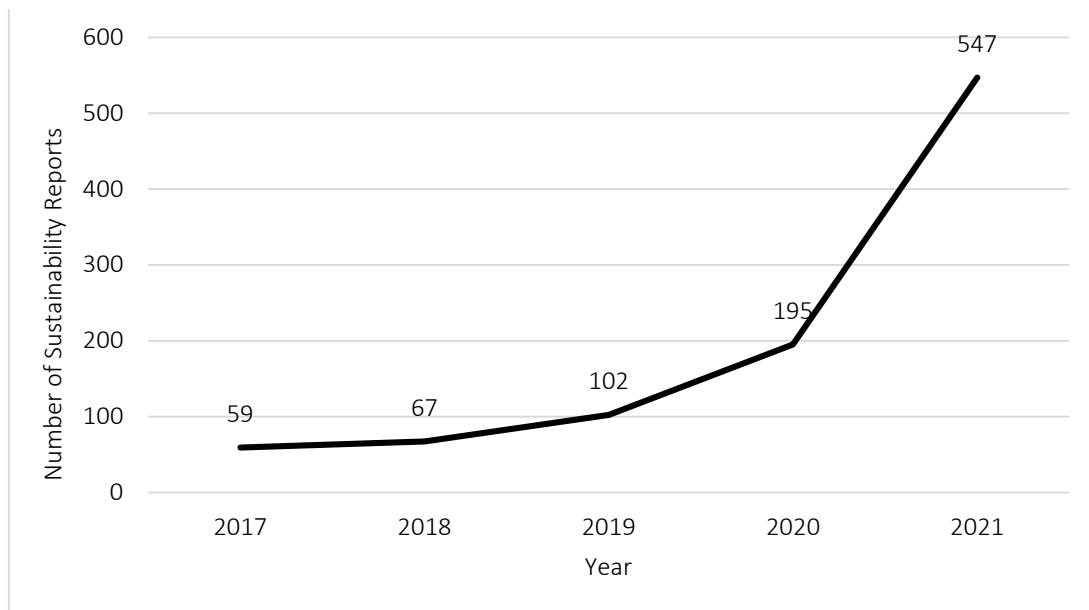


Figure 1. Firms that published sustainability report in 2017-2021

Studies exploring the relationship between ESG disclosure and company performance in Indonesia have increased along with the growth of sustainability reports. However, the majority of research in Indonesia focuses on the overall disclosure of ESG (Zarefar et al., 2022). Alareeni & Hamdan (2020) states that each dimension of ESG has a different effect on company performance. When the ESG dimensions consisting of environmental, social, and governance are combined, the associated effect will cancel out the effect of other ESG dimensions in determining the combined ESG effect. Therefore, it is essential to study the disclosure of environmental, social, and governance dimensions to identify the influence of individuals on company performance. Several studies have found diverse results regarding the relationship between ESG disclosure and company performance. Pu (2023) found that ESG activities can improve stakeholder trust in company policies, increase brand awareness, and build a good brand image. Thus, provide a competitive advantage that can lead to increased sales. In contrast, research from Shaikh (2022) found a negative effect between ESG disclosure and company performance. The study states that companies that decide to implement sustainability must empower more financial resources in the form of non-monetary assets, thus leading to a great deal of operational costs. Research from Atan et al (2018) also found other results with an insignificant relationship between ESG disclosure and company performance. These results suggest that companies with more or less ESG information exhibit similar performance.

Company performance is an economy that reflects the company's ability to use available resources to achieve goals (Nguyen et al., 2022). In general, company performance is divided into two, namely accounting-based measurements (ROA and ROE) and market-based (Tobin's Q) (Boakye et al., 2021). This study uses Tobin's Q market-based measurements for the following reasons a). Tobin's Q is not fully based on accounting data which has the possibility of bias; b). Tobin's Q is equipped with systematic risk that accounting-based measurements fail to consider; c). Tobin's Q is a better choice to identify the risks faced by shareholders regarding whether the company's share is overvalued or undervalued (Batae et al., 2021; Mohammad & Wasiuzzaman, 2021; Boakye et al., 2021). In addition, this study uses gender diversity moderation. Women on the board of directors can provide multiple perspectives in decision-making, including decisions regarding ESG practices and disclosure (Husted & Sousa-Filho, 2019). Indonesia is a country where the majority of company activities are dominated by men, but in recent years there has also been an increase in women's managerial positions. Figure 2 shows an increase in the number of women serving as managers in Indonesia by 2.34 percent from 2017 to 2018 and an increase of 1.66 percent from 2018 to 2019. Increasing of women serving as managers affect the decreasing of men serving as managers in Indonesia by 73.37 percent 2017 an

decrease periodically to 71.03 percent 2018 and 69.37 percent 2019. Gender has playing role important for ESG and firm performance.

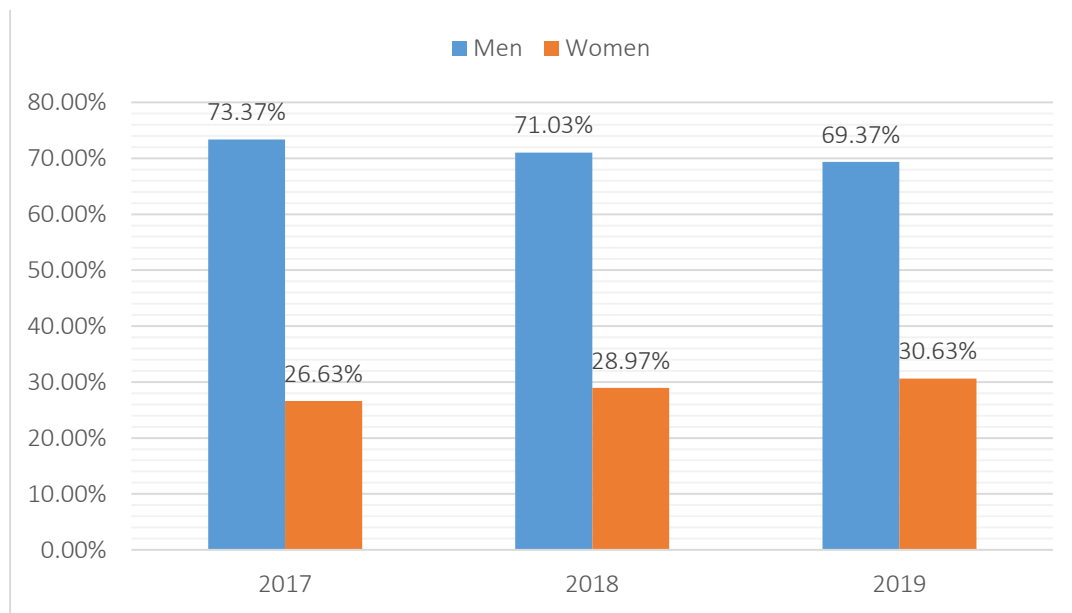


Figure 2. Distribution of managerial position by gender

This paper offers several new perspectives. First, this paper provides evidence on the impact of ESG disclosure on company performance in Indonesian listed firms. Most of the studies similar to this topic have been conducted in developed countries (Buallay, 2019; Albitar et al., 2020; Giannopoulos et al., 2022). The results of this study will increase the awareness of Indonesian scholars, company shareholders, and policymakers to incorporate ESG disclosure in all aspects. Second, this paper tested the impact of three ESG sub-components on company performance. Many studies only consider ESG as a whole, potentially overlook the main drivers affecting company performance. Third, the moderating variable of this paper focuses on internal factors, specifically gender diversity, whereas most paper focuses on external factor such as industry sensitivity which could not be controlled by human interference. In addition, three theories have been applied to explain the relationship between variables, specifically stakeholder theory, agency theory, and signaling theory.

2. Literature Review

Three theories support the relationship between ESG disclosure and company performance. Those theories are stakeholder theories, agency theories, and signaling theories. Firstly, the stakeholder theory highlights the importance of managing relationships with stakeholders for a company's survival (Buallay, Kukreja, et al., 2020). For decades, socially responsible investment has been gaining traction (Xie et al., 2019). Therefore, ESG disclosure can attract investors who emphasize sustainability. Secondly, agency theory emphasizes the conflict of interest between the agency and the principal. This theory states that managers act as agents who should maximize shareholder wealth (Al Hawaj & Buallay, 2022). Thirdly, signaling theory emphasizes on reducing information asymmetry between two parties. This theory is concerned with the mitigation of risk through organizational signals that communicate public and private information, which are costly to imitate (Naveed et al., 2020). Environmental disclosure is information transparency regarding the impact of a company's production activities on the environment (Hardiningsih et al., 2020). Boakye et al (2021) revealed an inverted U-shaped relationship between environmental performance management and financial performance. Environment sustainability practices at a reasonable level can improve financial performance compared to excessive involvement of environmental aspects in the business. Redundant environmental maintenance practices can lead to wastage of resources. Contradictorily, involving environmental elements at a reasonable level in business practices can generate optimal profits. The results of this study are similar to Zhang et al (2020) in China. However, a study conducted by Chouaibi et al (2022) states a significant positive effect between environmental disclosure and company performance. The study explains that information asymmetry can lead to conflicts of

interest, while disclosures of good environmental information can encourage managers to control their decisions. Thus, companies can minimize agency costs while improving company performance. Aside from aligning information, environmental disclosure can help companies manage resources more efficiently (Mohammad & Wasiuzzaman, 2021). Another advantage obtained from environmental disclosure is that companies will receive government subsidies or tax deductions (Wang et al., 2020). Partalidou et al (2020) states environmental practices and disclosures are a competitive advantage because companies can build relationships with stakeholders who care about the environment and attract investors who emphasize green investment practices. The results of this study are also similar to Boulhaga et al (2023) in France, Kumar & Firoz (2022) in India, Alareeni & Hamdan (2020) in United States and Menike (2020) in Colombia.

Social disclosure is the transparency of information related to the impact of company operations on the community. The social elements disclosed usually include product responsibility, human rights, employment, and job eligibility. Research by Thuy et al (2021) found that there is a significant positive effect between social disclosure on company performance. Social disclosure assists companies in building a reliable image, enhancing their reputation, and attracting new customers. The results are similar to research by Hongming et al (2020) in Pakistan. In contrast, research by Abdi et al (2020) found that social disclosure practices appear to be a financial burden in the short term. The profits obtained by the company fail to cover the costs of social practices. Customers and investors tend to ignore social aspects when doing business or investing, so they buy more products or services from institutions that do not comply with the highest quality standards (Bátae et al., 2021). The same circumstance occurs in research by Buallay, Kukreja, et al (2020) on companies in Mediterranean countries, which finds that investors do not pay a premium price for shares of companies that disclose more non-financial information. These results are in line with research by Wijayanti & Setiawan (2022) on Islamic banks, Zraqat et al (2021) in Jordan and Buallay, Fadel, et al (2020) in the MENA (Middle East and North Africa) region.

Disclosure of governance is the transparency of information on the human resource governance system in the company. A well-functioning corporate governance system prevents companies from engaging in activities detrimental to shareholder welfare, which may ultimately adversely impact the company's performance (Widyasari & Marheni, 2022). Azzam et al (2020) found that governance disclosure presents a significant positive relationship with financial performance (ROA). This is because high-quality governance structures can raise funds and attract investors. Companies with a high level of board independence and non-dual leadership are capable of putting pressure on management to disclose more qualified governance information and increase investor and stakeholder confidence. These results are similar to research on the financial sector by Gholami et al (2022) in Australia, Gholami, Murray, et al (2022) and Ullah et al (2021) in UK and Germany, Cek & Eyupoglu (2020) in the United States and Khanifah et al (2020) in Iran, Saudi Arabia and Malaysia.

Gender diversity on the board of directors is a company strategy for encouraging investors and other stakeholders to be more informed about sustainability issues (Nicolò et al., 2022). According to Albitar et al (2020) the gender diversity of the board of directors influences the relationship between ESG disclosure and company performance (Tobin's Q) because the more diverse the board of directors or the more women on the board of directors can provide new ideas or perspectives in decision making, and can encourage managers to be more involved in ESG disclosure. Similarly, the study by Zhu et al (2022) has stated that gender diversity on boards can enhance productivity, creativity, and innovation by providing a new perspective that benefits both social justice and corporate governance. The results of this study are similar to those of Duppati et al (2020) in Singapore and India and Fernando et al (2020) in the United States.

3. Method

This is a causal-explanatory research using quantitative approach with secondary data. Purposive sampling was employed with the following criteria for data sampling: a). companies listed on the Indonesia Stock Exchange; b). complete financial statements are published in rupiah currency every year from 2017 to 2021; c). companies publish sustainability reports following GRI standards every year from 2017 to 2021; d). the company publishes an annual report showing the board members from 2017 to 2021. A total of 42 companies on the IDX could be used as research samples. In summary, a total of 210 observations data has been collected during the study period of 2017 to 2021. The dependent variable in this study is the company's performance measured by Tobin's Q obtained

in the financial statements. Tobin's Q is the number of liabilities with the market value of share capital compared to total assets in a certain period (Alareeni & Hamdan, 2020; Brahma et al., 2021). The independent variable is the disclosure of individual ESG dimensions comprising environmental, social, and governance disclosures. Disclosure of environmental, social, and governance are respectively obtained through a comparison between the number of relevant items in the sustainability report with the number of items in the GRI Standard 300, GRI Standard 400, and GRI Standard 102 (Hongming et al., 2020; Thuy et al., 2021). The moderating variable used is gender diversity within the board of directors as measured by the Blau index. The Blau index is formulated as one minus the sum of the squared results for the proportion of men and women (Romano et al., 2020; Arvanitis et al., 2022). The control variable used in this study is firm size which uses measurement in the form of the logarithm of total assets owned by the company (Bätae et al., 2021).

The research data analysis method is in the form of regression. Panel data is a combination of cross-section and time series data. Panel data is appropriate and benefits this research for the following reasons a). this method helps avoid results that are skewed due to the heterogeneity of individual firms; b). providing more informative data to reduce collinearity between variables; and c). the methods are very efficient in identifying and assessing the effects between variables. The data that has been collected and the best tool for analyzing large spatial panel data (Moundigbaye et al., 2018). The equation for large spatial panel data as follows:

$$\begin{aligned} \text{Tobin's } Q = & \alpha_0 + \beta_1 ED + \beta_2 SD + \beta_3 GD + \beta_4 BLAU + \beta_5 ED * BLAU + \beta_6 SD * BLAU \\ & + \beta_7 GD * BLAU + \beta_8 FS + \varepsilon \end{aligned} \quad (1)$$

Where *Tobin's Q* is the number of liabilities with the market value of share capital compared to total assets in a certain period or company performance; *ED* is environment disclosure; *SD* is social disclosure; *GD* is the governance disclosure; *BLAU* is the gender diversity; *FS* is firm size; α_0 is constant; β_1 - β_8 is the coefficient of independent variables and ε is the error term.

4. Results and Discussion

There are 769 companies listed on the Indonesia Stock Exchange until 2021. Among the 769 companies, 727 companies did not meet the criteria, leaving 42 companies behind. The research used five years sample ranging from 2017 to 2021. Thus, 210 research samples were collected. Table 1 shows that the average value of company performance (Tobin's Q) is 1.8035 with a standard deviation of 2.8246, indicating that it is higher than the average value. The number shows that the financial data collected varies from 0.6465 to 23.2858. Next, the Environmental, social, and governance disclosures correspondingly have an average value of 0.2457 (ED), 0.3288 (SD), and 0.2061 (GD), which indicates a low level of transparency compared to the highest disclosure with a value of 1. Despite the increase in sustainability reports issued by Indonesian companies, the ESG disclosure of Indonesian firms is still insufficient with 24% reporting on ED, 32% reporting on SD, and 20% reporting on GD. The table found the lowest value for environmental and governance disclosure is 0, where up to 7 companies did not disclose environmental practices in 2017, while one company in 2018 did not carry out governance disclosures.

Table 1. Descriptive Statistics

Variables	N	Min	Max	Mean	Std Deviation
TQ	210	0.6465	23.2858	1.8035	2.8246
ED	210	0	0.7838	0.2457	0.1690
SD	210	0.25	1	0.3288	0.1685
GD	210	0	1	0.2061	0.3023
BLAU	210	0	0.5	0.1811	0.1945
FS	210	28.5513	35.0844	31.5592	1.5303

Source: data processed

Table 2 shows the correlation between variables. The results found that there was a positive correlation between environmental (0.0087) and social (0.0040) disclosures with company performance (Tobin's Q). The more environmental and social disclosures, the higher the company's market value. Conversely, disclosures of governance (-0.1299) are negatively correlated with company performance (Tobin's Q), implying that a higher level of governance disclosures reduces a company's market value. Social disclosure and environmental disclosure show the strongest

correlation (0.6846). There was no correlation value over 0.9. So, multicollinearity is not present. The highest correlation among variables only social disclosure (SD) to environment disclosure (ED) and the lowest correlation is governance disclosure (GD) to Tobin's Q.

Table 2. Correlation Matrix

	TQ	ED	SD	GD	BLAU	FS
TQ	1.0000					
ED	0.0087	1.0000				
SD	0.0040	0.6846	1.0000			
GD	-0.1299	0.2850	0.3363	1.0000		
BLAU	0.1924	-0.1781	-0.1683	0.0885	1.0000	
FS	-0.2469	-0.1947	-0.1595	0.1098	0.2456	1.0000

Source: data processed

Table 3 shows the adjusted r-square model 8 of 12.41%. This means that there is still an 87.59% variance in the company's performance variables which can be explained by other independent variables. The estimation result of the regression as follows:

$$\begin{aligned} \text{Tobin's } Q = & 17.2533 + 0.0409ED + 0.0427SD + 0.0720GD + 3.8109BLAU \\ & + 5.0566ED*BLAU + 1.0058SD*BLAU + 5.8366GD*BLAU + 0.5118FS \end{aligned} \quad (2)$$

In Indonesia, environmental disclosure was found to have a significant and positive effect on company performance (Hardiningsih et al., 2020). However, the regression results in this study show that environmental disclosure is insignificant to company performance with a p-value greater than 0.05. This result is not in line with stakeholder theory which implements stakeholder-oriented operations. The results suggest that stakeholders in Indonesia are not too concerned about environmental practices when purchasing products or investing. One of the reasons is that activities carried out by companies in Indonesia several years ago, such as forest fires, not only does it damaged the environment but also disrupted people's social life with the resulting toxic haze. As a result of these activities, the reputation of Indonesian companies, especially those in the plantation sector, suffered a downturn. Research from Abdullah et al (2019) states a no significant relation between the two variables because the environmental disclosures are still insufficient to compensate for the reputation damage of Indonesia's companies. Thus, investors do not react to the disclosure of environmental information. These results are in line with research by Muslichah (2020) in Indonesia, Petitjean (2019) in Australia and Atan et al (2018) in Malaysia. It is also essential to heed that this research utilizes data from 2017-2021. From 2019 to 2021, the Covid-19 pandemic occurred, resulting in a financial crisis in Indonesia. This explanation is supported by research from Muhammad et al (2015) who examined the relationship between environmental performance and company performance in Australia before (2001-2007) and during (2008-2010) the financial crisis. The study found no significant influence between environmental performance and company performance (Tobin's Q) during the 2008 financial crisis. During the crisis, companies tended to reduce spending on environmental programs. This result is similar to Hoang et al (2020) in Australia from 2007-2016.

In the regression results, the impact of social disclosure on company performance (Tobin's Q) is not significant, with a p-value greater than 0.05. The research results are not in accordance with stakeholder theory. These results reveal that customers and investors tend to ignore corporate social practices, which include product responsibility, human rights, employment, and job eligibility when purchasing a product or investing. Raja Ahmad et al (2021) explained that the majority of social information disclosures had some similarities with the previous year. Investors can predict environmental information in the months leading up before its disclosure, so investors do not react much when the information is disclosed. Thus the company's performance in the market appears not to be affected by social disclosure. The results of this study are similar to the following research by Muslichah (2020) in Indonesia, Petitjean (2019) in Australia and Atan et al (2018) in Malaysia. Regulations regarding corporate social responsibility in Indonesia are still not explicitly regulated. Firmansyah et al (2021) revealed that Indonesia's corporate social responsibility regulations have a strong link with corporate environmental responsibility. Therefore, investors view corporate social disclosure as only a unilateral statement. Companies can choose to disclose or reserve an information because regulations in Indonesia are not strict enough. Therefore, disclosure of social information is not responded by investors when making investment decisions.

Regression results in model 3 and model 4 show (Table 3) that governance disclosure has a significant negative effect on company performance (Tobin's Q) with a p-value less than 0.05. The results of this study contradict to agency theory which aims to reduce information asymmetry arising from the separation of ownership and control over company operations. High transparency of corporate governance information does not necessarily reflect the quality of the information (Zhang et al., 2020). If there is unclear information, it will cause misunderstandings among investors. This misunderstanding can result in a downturn in the company's performance. These results indicate that as disclosure of corporate governance increases, the company's performance will be less conducive (Tobin's Q). Similar results were found in a study by Duque-Grisales & Aguilera-Caracuel (2021) in Latin America.

Table 3. Regression Result

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ED	0.1453 (0.27)	0.1884 (0.32)	0.4464 (0.75)	0.9709 (1.36)	-0.0364 (-0.04)	0.0848 (0.12)	0.3473 (0.54)	0.0409 (0.06)
SD		-0.0632 (-0.06)	0.6034 (0.54)	1.1177 (1.00)	1.2644 (1.09)	1.0864 (0.91)	-0.0905 (-0.07)	0.0427 (0.03)
GD			-1.3981 (-3.52)**	-1.7688 (-3.43)**	-1.9250 (-3.52)**	-1.9107 (-3.41)**	-0.2620 (-0.43)	-0.0720 (-0.12)
BLAU				3.3498 (2.25)*	1.7045 (0.96)	1.5157 (0.58)	1.4856 (0.57)	3.8109 (1.30)
ED*BLAU					7.1346 (1.37)	6.3020 (0.96)	8.8720 (1.23)	5.0566 (0.74)
GD*BLAU						1.2266 (0.13)	4.0673 (0.43)	1.0058 (0.10)
FS							-7.1994 (-2.23)**	-5.8366 (-1.98)*
Constanta	1.7678 (6.92)**	1.7780 (5.06)**	1.7835 (5.12)**	0.9554 (3.15)**	1.2089 (4.83)**	1.2348 (4.64)**	1.2760 (5.15)**	17.2533 (3.58)**
Adj R ²	-0.0047	-0.0096	0.0055	0.0516	0.0530	0.0484	0.0615	0.1241
Obs	210	210	210	210	210	210	210	210

Noted: * p<0.10, ** p<0.05, *** p<0.01

Another possible explanation is the implementation of corporate governance that has not been carried out optimally. The practice of corporate governance in the company is indeed implemented, but its implementation is not entirely by the principles of corporate governance transparency, accountability, responsibility, independence, and fairness. In other words, the practice of corporate governance is carried out by the company only as a formality or fulfilment of the company's obligations towards the regulations set by the government (Suretno et al., 2022). This phenomenon indeed will reduce investor trust in governance disclosure. Through the data from descriptive statistics, 42 of the Companies only disclose their corporate governance as far as 20%, with 21 observation data fully disclosing their corporate governance, while 126 of the data disclose one to none. The standard deviation of 3 shows that the governance disclosure of companies deviates from the mean, which is 2. As stated by Triani & Tarmidi (2019) information issued by companies is very important because it impacts the investor's reaction and decision on the market. The less information received by investors the lower the confidence level of investors towards the company. This phenomenon has been explained by signaling theory. Signaling theory is primarily attributed to mitigating uncertainty created by information asymmetry (Naveed et al., 2020). Uncertainty will reduce the value of companies in the market. Eventually, those companies will be undervalued.

The regression results on model 8 reveal that gender diversity of the board of directors (BLAU) does not affect the relationship between environmental disclosure and company performance (Tobin's Q) and the relationship between social disclosure and company performance (Tobin's Q). Table 1 shows the average value of gender diversity (BLAU) of 0.181553. Data reveals that the proportion of women and men serving on the board of directors is still uneven. The majority of elected company boards of directors in Indonesia are still dominated by men. Gender diversity can provide a new perspective in corporate decision-making (Zhu et al., 2022). Nicolò et al (2022) explain that women have communal characteristics exclusive to social and environmental issues. Therefore, a small proportion of women are unable to influence the relationship between environmental and social

disclosure with company performance (Tobin's Q). On the other hand, the gender diversity of the board of directors (BLAU) plays a role in weakening the relationship between corporate governance disclosure and company performance (Tobin's Q). Model 8 shows a decrease in the governance disclosure coefficient to -0.0720. This number indicates that for every increase of one unit of governance disclosure, the company's performance (Tobin's Q) will decrease by 0.0720. Di Tommaso & Thornton (2022) explain that disclosure of governance supported by gender diversity within the board can reduce risk and support financial stability. However, these actions can reduce company performance (Tobin's Q) by diverting scarce resources from investment. The results of this study are in contrast with the research by Albitar et al (2020) in England.

5. Conclusion

This study aims to investigate the relationship between the individual dimensions of ESG (environmental disclosure, social disclosure, and governance disclosure) and company performance (Tobin's Q) in IDX companies from 2017 to 2021. The results declare that the relationship between environmental and social disclosure appeared insignificant to the company's performance. There are several reasons for the insignificant relationship between the two variables. Firstly, the outbreak of Covid-19 between 2019 to 2021 causes a global financial crisis. Secondly, the social information disclosed in the sample companies is similar to the previous year. Third, there is still an inadequacy in the explicitness and firmness of social and environmental disclosure regulations. Contrarily, the study found that corporate governance disclosures appeared to indicate a significant negative effect on company performance. An explanation for these results is that high governance disclosure does not necessarily guarantee good disclosure quality. Low-quality information can cause misunderstandings between investors. Another core point is the differences between the disclosed information and the actual implementation. Furthermore, the results are also affected by the small quantities of governance disclosure, which will increase uncertainty among investor. Uncertainty will reduce the value of companies in the market. In addition to the relationship between the dependent and independent variables, this study also examines the moderating role of the board of directors' gender diversity in the association of each dimension of ESG with company performance. The study found that gender diversity does not moderate the relationship between environmental-social disclosures and company performance. However, gender diversity moderates the relationship between corporate governance disclosure and the company's performance by weakening it.

This study consists of several limitations. The research data was taken from 2017 to 2021. During those five years, there was a Covid-19 pandemic for three years from 2019 to 2021. Therefore, further research can use Covid-19 as a moderating variable. Furthermore, ESG data is obtained from sustainability reports that follow the GRI standard. Because Indonesia's regulations are not explicit enough regarding ESG disclosure, sustainability report data can be biased. It is recommended for further research to add the quality of ESG disclosure as a mediating variable. In addition, this research has two implications for managers and policymakers. First, environmental and social disclosure is not sufficient to change stakeholder concerns about environmental and social performance. Therefore, Indonesian policymakers need to consider other ways to overcome these problems. Second, Indonesia's regulations are still not detailed and assertive enough regarding ESG disclosure, which causes the quality of non-financial information disclosure to be low. So, Indonesian policymakers need to draft regulations regarding ESG disclosure requirements.

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Declarations

Author contribution : Marheni D.K, leading the research team, played a key role in problem identification, model creation, and analysis, as well as in compiling research articles. Sherry focused on literature review, gathered sampling data, conducted data processing using STATA version 17.0, and interpreted the data. Yulfiswandi contributed to the discussion of research results and assisted in composing research articles.

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