

The Impact of Gender Diversity and Political Connections on Sustainability Reporting Disclosure

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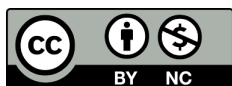
Abstract. Today, society demands greater accountability from companies to control their impact on the environment. Sustainability reporting disclosure helps investors, civil society organizations, consumers, and other stakeholders evaluate companies' sustainability performance. This study aims to determine the effect of gender diversity and political connections on sustainability report disclosure by mining companies in Indonesia. The population of this study is all mining companies listed on the Indonesia Stock Exchange (IDX) during the period 2019-2023. Along with the main variables, this study also uses control variables such as CEO narcissism, audit committee, firm size, and CEO characteristics to ensure accurate and reliable results. For data analysis, the panel data regression analysis is carried out with the help of the Eviews-13 application. This study's stages of analysis are descriptive statistical analysis, classical assumption tests, panel data regression analysis, and hypothesis testing. The study results show that gender diversity on the board of directors has a positive and significant effect on sustainability reporting disclosure in Indonesian companies during the 2019–2023 period, where the presence of women on the board enhances the quality and transparency of sustainability reporting. Conversely, political connections do not significantly affect sustainability reporting disclosure. Additionally, control variables such as CEO narcissism and the presence of an audit committee have a positive and significant effect on sustainability reporting disclosure. In contrast, CEO characteristics and firm size do not show substantial influence. These findings highlight the importance of gender diversity and internal corporate governance in promoting transparency and accountability in sustainability reporting.

Keywords: sustainability reporting disclosure, gender diversity, political connections, CEO narcissism, audit committee, firm size.

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Вплив гендерної різноманітності та політичних зв'язків на розкриття інформації про сталий розвиток

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Анотація. Сьогодні суспільство вимагає від компаній більшої підзвітності, щоб контролювати їх вплив на довкілля. Розкриття інформації про сталий розвиток допомагає інвесторам, громадським організаціям, споживачам та іншим зацікавленим сторонам оцінювати показники сталого розвитку компаній. Мета дослідження – визначити вплив гендерної різноманітності та політичних зв'язків на розкриття інформації про сталий розвиток гірничодобувними компаніями в Індонезії. Вибірка цього дослідження включає гірничодобувні компанії, що котирувалися на Індонезійській фондовій біржі (IDX) протягом 2019-2023 років. Поряд з основними змінними, це дослідження також використовує контрольні змінні, такі як нарцисизм генерального директора, аудиторський комітет, розмір компанії та характеристики генерального директора, щоб забезпечити точні та надійні результати. Для аналізу зібраних даних використано регресійний аналіз панельних даних проведений за допомогою програми Eviews-13. В цьому дослідженні етапи аналізу включають: описовий статистичний аналіз, класичні тести припущень, регресійний аналіз панельних даних та перевірку гіпотез. Результати дослідження показують, що гендерна різноманітність у раді директорів має позитивний та значний вплив на розкриття інформації про сталий розвиток в індонезійських гірничодобувних компаніях, де присутність жінок у раді директорів підвищує якість та прозорість звітності про сталий розвиток. І навпаки, політичні зв'язки не суттєво впливають на розкриття інформації у звітності про сталий розвиток. Крім того, такі контрольні змінні, як нарцисизм генерального директора та наявність аудиторського комітету, мають позитивний та значний вплив на розкриття інформації у звітності про сталий розвиток. Натомість характеристики генерального директора та розмір компанії не мають суттєвого впливу. Ці результати підкреслюють важливість гендерної різноманітності та внутрішнього корпоративного управління у підвищенні підзвітності компаній в контексті звітування про сталий розвиток.

Ключові слова: розкриття інформації у звітності про сталий розвиток, гендерна різноманітність, політичні зв'язки, нарцисизм генерального директора, аудиторський комітет, розмір компанії.

INTRODUCTION

Mining companies' activities are closely related to the direct use of natural resources and, therefore, affect the environment. In early 2024, a case of collusion between PT Timah (Persero) and several unscrupulous private companies in Bangka Belitung was revealed. The environmental damage caused by this collusive tin mining is estimated to amount to 271 trillion IDR. This incident sparked protests from the public and highlighted the need for stricter enforcement of environmental regulations in the mining sector (Arifianto, 2024).

Offshore tin mining in Bangka Belitung has caused significant damage to the marine ecosystem, including water pollution and damage to important coral reef habitats (Saefullah, 2024). This activity is a clear example of environmental damage caused by a lack of transparency and corporate accountability. This case shows that the low level of disclosure in sustainability reports often results in severe environmental damage and loss of life.

LITERATUR REVIEW

Several studies reveal the phenomenon of the low disclosure and readability of sustainability reports in Indonesia (Adhariani & du Toit, 2020; Harymawan et al., 2020). The Indonesian government has issued a mandatory regulation on sustainability reports, POJK No. 51/POJK.03/2017, which regulates the implementation of sustainable finance for financial

services institutions, issuers, and public companies. Sustainability reporting, also called environmental reporting, includes the disclosure and accountability of the board of directors to internal and external stakeholders for the organization's performance towards sustainable development (Oware et al., 2023).

The board of directors is a key element of any corporate governance structure because it monitors and oversees management practices. The board is expected to improve the company's and its stakeholders' dialogue by promoting greater accountability and transparency on financial and non-financial issues (Nicolò et al., 2023). Research shows that more gender-diverse boards tend to be more responsive to stakeholder demands for sustainability information (Martínez-Ferrero et al., 2021). Women on boards have more democratic and participatory leadership styles, bringing different perspectives, experiences and networks that improve internal decision-making and the company's ability to meet the needs of diverse stakeholders (Zaid et al., 2020).

From the legitimacy theory perspective, corporate activities must reflect society's values, norms and social expectations (Dowling & Pfeffer, 1975). Appointing women to the board increases the company's legitimacy by sending a positive message to female employees, the market, potential new employees, and the community at large that they are making every effort to meet society's expectations and norms. The presence of women on the board helps the company close the legitimacy gap by

demonstrating that the company is making every effort to meet society's expectations and norms. This can increase the company's legitimacy in the eyes of female employees, the market, potential recruits and the wider community, thereby strengthening the company's license to operate. In addition, research shows that companies with gender-diverse boards are more likely to improve the quality of their sustainability disclosures.

Consistently, several researchers provide empirical evidence that the more women on the board, the greater the company's responsibility for environmental, social and governance (ESG) issues (Issa et al., 2022; Rao & Tilt, 2016; Wasiuzzaman & Wan Mohammad, 2020). This is relevant to stakeholder theory, which emphasizes the importance of companies considering the interests of various groups involved in or affected by the company's operations, including employees, customers, suppliers, local communities, and shareholders (Freeman et al., 2010).

Companies can also gain legitimacy through their political connections by actively participating in the public policy-making process and demonstrating a commitment to the public interest, such as adopting environmentally friendly technologies, implementing stricter safety standards, and mitigating pollution (Faccio & HSU, 2017). The legitimacy gained through the company's social activities can be replaced by the benefits of the company's political connections (Muttakin et al., 2018). Through strong relationships with government officials and regulators, companies can gain better access to the information and resources needed to produce comprehensive sustainability reports (Du et al., 2019; Muliawati & Hariyati, 2021).

Politically connected companies support strategic cooperation with governments and other institutions on sustainability projects and reduce public pressure on the company's sustainability performance (Luo & Kaul, 2019). Politically connected companies can increase transparency to inform external investors that they are not misusing corporate resources for political purposes (Guedhami et al., 2014). In addition, corporate lobbying has been associated with increased accounting conservatism, suggesting that companies with extensive political involvement are more likely to provide timely information (Kong et al., 2017). Therefore, politically connected firms may promote sustainability disclosure to maintain legitimacy and meet the expectations of external stakeholders.

This study aims to determine the effect of gender diversity and political connections on sustainability report disclosure. Previous literature has discussed political connections to CSR, tax aggressiveness, and firm value. Meanwhile, this study examines political connections to sustainability reports, which have been very rarely researched. Research Sutawan & Sisdyani (2022), using multiple linear regression analysis techniques, obtained results that political connections have a positive effect on the disclosure of sustainability reports, while Wallad & Darniaty (2023) also used multiple linear regression analysis techniques to find that political connections do not affect the quality of sustainability reports. Due to inconsistencies in the results of previous research, this

study analyzes data using panel data regression techniques because they can obtain better estimation results. This is because as the number of observations increases, it automatically implies an increase in the degree of freedom and avoids the omitted variable problem, thus hopefully obtaining more accurate results (Hsiao, 2003).

From a methodological point of view, the analyzed data is different from previous research that used the implementation of POJK No. 51. This research uses the GRI 2021 standard to measure the disclosure of the sustainability report, which is the latest standard that has never been used by previous researchers (Purnomo et al., 2023). In POJK No. 51, there are limitations in providing specific and consistent guidelines for sustainability reporting, and there is a lack of an internationally recognized framework (SAL POJK 51 – Keuangan Berkelanjutan, 2017). POJK No. 51 tends to provide general guidelines without clear standards for measuring and reporting social, environmental and corporate governance impacts. In contrast, GRI Standards 2021 provides a comprehensive, internationally recognized framework with specific indicators. Using the GRI Standards, companies in Indonesia can overcome this weakness by adopting a more structured, credible and materiality-focused approach to reporting sustainability information, which can increase corporate transparency and accountability to stakeholders.

In this study, adding control variables such as CEO narcissism, CEO characteristics, audit committee, and firm size is crucial to ensure accurate and valid results. CEO narcissism must be controlled because narcissistic CEOs tend to influence corporate policy and may manipulate information disclosure to enhance their self-image (Kalbuana et al., 2023; Kind et al., 2023). CEO characteristics, such as educational background or experience, should also be controlled because these factors can influence strategic decisions, including the disclosure of sustainability reports (Zhang et al., 2023). The audit committee is another important variable, as the existence and quality of the audit committee can improve the accuracy and transparency of financial and sustainability reports (Al-Shaer & Zaman, 2018; Buallay & Al-Ajmi, 2019). The company's size needs to be controlled because large companies tend to have more resources for more comprehensive disclosure (Al-Qudah & Houcine, 2024; Kumar et al., 2023). Controlling these variables can provide a clearer and more accurate picture of the influence of gender diversity and social connections on the disclosure of sustainability reports. It ensures that the results obtained are not biased by the control variables, making them more valid and increasing the generalizability of the research findings.

RESEARCH HYPOTHESIS DEVELOPMENT

Sustainability Reporting

According to the Global Reporting Initiative (GRI, 2021), a sustainability report is a process by which companies communicate their economic, environmental, and social impacts to various stakeholders. In Indonesia, sustainability reports are regulated by the Financial

Services Authority (OJK) Regulation No. 51/POJK.03/2017 concerning Implementing Sustainable Finance Principles for Financial Services Institutions. This regulation requires companies listed on the capital market to conduct sustainability reporting as part of risk management and social responsibility practices.

Sustainability reporting aims to provide a transparent and accurate picture of how an organization manages its economic, social, and environmental impacts. One of the most commonly used frameworks for preparing sustainability reports is the Global Reporting Initiative (GRI) standard. Based on GRI 2021, at least 74 items are included in the sustainability report's points. GRI 2021 presents a comprehensive set of sustainability reporting standards designed to increase companies' transparency and accountability worldwide. By using the GRI framework, companies can increase transparency to stakeholders, strengthen their reputation, and support global sustainable development goals. Based on a PWC report, in 2022, 80% of the companies studied in Indonesia used the GRI Standards for sustainability reports (PWC, 2023).

Gender Diversity

Gender diversity refers to the proportion of men and women in the workplace, which can influence how people communicate and work with each other in the workplace and influence the organisation's performance (Girón et al., 2021). Women bring unique characteristics to the board, such as experience, skills, perspectives, and networks, that may improve the internal decision-making process and the company's ability to meet the needs of various stakeholders (Manita et al., 2018). Compared to men, women are more stakeholder-oriented and have a more democratic and participatory leadership style (Zahid et al., 2020). The presence of women on the board has been widely interpreted as a signal of good governance and a driver of better transparency and accountability on non-financial issues (Wasiuzzaman & Wan Mohammad, 2020).

Political Connections

The variable of political connections referred to in this study is the special relationship that a company's board of directors has with the government or political parties. The presence of political connections on the board increases the percentage of influence on board decisions (Y. Wang et al., 2023). Political connections can create value for politically dependent firms through a systematic value exchange between firms and politicians (Joni et al., 2020).

Business-political relations also need to be considered in any regulatory efforts to develop corporate accountability in the context of corporate social responsibility (Muttakin et al., 2018) so that politically connected companies are more likely to disclose their social responsibility activities in a high-quality manner than companies without such connections. Politically connected companies are more likely to achieve greater effectiveness from their social responsibility engagement

because they can better identify salient social issues and understand political expectations, both of which help enhance sociopolitical legitimacy, than companies without such connections (Du et al., 2019).

Gender Diversity & Sustainability Reporting

Stakeholder theory argues that companies have a responsibility to meet the needs and interests of various stakeholder groups, including employees, customers, communities, and the environment (Freeman, 2010). Companies with gender diversity on the board tend to be more sensitive to different perspectives and stakeholder interests. This diversity can improve the quality of disclosures in sustainability reports, as a gender-diverse board may be more concerned and responsive to social and environmental issues that are important to its stakeholders (Manita et al., 2018).

The demand for gender equality has led many companies to give equal opportunities to all individuals to occupy various important positions, such as directorships. Modern women are very aware of the importance of education so they can occupy important positions in various companies and work professionally (Hadya & Susanto, 2018). The presence of female directors can influence a company's sustainability reporting activities due to their heightened sensitivity to economic and social issues and their increased awareness of environmental risks. In addition, greater female board participation is associated with significantly higher sustainability investment values and greater reporting efficiency (Cicchello et al., 2021).

The empirical study by Girón et al. (2021) found that companies with more women on their boards tend to provide more comprehensive and transparent sustainability disclosures. Nicolò et al. (2022) found similar results: board gender diversity is associated with increased number and quality of sustainability reports. Research by Suwasono and Anggraini (2021) found that companies in Indonesia with more gender-diverse boards tend to provide more comprehensive sustainability reporting disclosures. Based on this description, the following hypothesis can be drawn:

H1: Gender diversity has a positive impact on sustainability reporting.

Political Connections & Sustainability Reporting

Stakeholder theory states that companies must consider the interests of all parties involved in or affected by their business activities, including government, society and the environment (Freeman, 2010). In this context, a company's political connections may influence how it manages stakeholder relationships and discloses sustainability-related information. Qian and Chen (2021) found that companies with political connections are more likely to disclose sustainability information extensively to maintain good relations with the government. Similar results were found by Du et al. (2019), showing that political connections can help firms access the resources and support needed to implement better sustainability practices. However, not all research supports this relationship. A study by Xiao and Shen (2022) shows that

political connections do not significantly impact the disclosure of sustainability reports, because political connections hinder the company's environmental performance and create negative externalities on the environment. In Indonesia, research by Nugrahanti (2021) found that companies with political connections are likelier to disclose sustainability information to maintain good relations with the government and meet social expectations. Based on the results of previous research, the following hypothesis can be drawn:

H2: Political connections have a positive impact on sustainability reporting.

RESEARCH METHODOLOGY

Research Sample

This study aims to determine the impact of gender diversity and political affiliations on sustainability disclosure by mining companies in Indonesia. This research is quantitative, where the interpretation of the causal relationship under study is based on quantitative and objective measurements. The population of this study is all mining companies listed on the Indonesia Stock Exchange (IDX) during the period 2019-2023. The researchers conducted a purposive sampling of mining companies using the criteria presented in Table 1.

Table 1. Sample Criteria and Observation Data

Criterion/Indicator	Number of Samples				
	2019	2020	2021	2022	2023
Mining companies listed on the IDX (as of July 6, 2024)	45	45	45	45	45
Companies that did not publish financial statements for 2019-2023	-1	-1	-1	-1	-1
Companies that do not publish a sustainability report for 2019-2023	-27	-24	-6	-2	0
Total Sample	17	20	38	42	44
Final Research Sample	161				

Based on the sample selection conducted on mining sector companies in Indonesia that have met the research criteria, a data sample of 161 samples was obtained, which will be used for data analysis processing.

Measurement of Variables

Sustainability reporting disclosure is measured using the GRI Standards guidelines. Researchers will analyze the GRI matrix reported by the company against the GRI standards using dummy variables. When GRI standard indicators are implemented, a value of 1 will be given, and when the opposite occurs, a value of 0 will be given. Then, after all the matrices have been analyzed, the researcher will calculate the index value using Formula 1.

$$SRDi = \frac{\sum Xi}{Ni} \quad (1)$$

Where:

SRDi – Sustainability report disclosure index;
 $\sum Xi$ – Total number of items disclosed by the company;
 Ni – Total number of disclosure items in the GRI Standards guidelines.

Gender diversity is calculated as the percentage of women in management positions, and the company's total workforce (Girón et al., 2021), and it can be measured using Formula 2.

$$\text{Gender Diversity} = \frac{\text{Total Number of Members of the Board of Directors}}{\text{Total Number of Women on the Board of Directors}} \times 100\% \quad (2)$$

The *political connections* measurement uses the number of boards, both the Board of Commissioners (DK) and the Board of Directors (DD), with political connections. It is measured by a dummy number, where it is given a number 1 if it has a political connection and a number 0 if it does not (Faccio, 2006).

In addition, this study uses control variables such as CEO narcissism, audit committee, firm size, and board of directors' characteristics to ensure accurate and reliable results.

CEO narcissism refers to a narcissistic trait exhibited by the highest-ranking leader of an organization, assessed through unobtrusive indicators as outlined by Chatterjee and Hambrick (2007), and adapted to the context of data available in Indonesia. This study employs two indicators: (1) the evaluation of the CEO's photo size in the annual report on a scale of 1–5, where 1 indicates the

absence of the CEO's photo and 5 indicates the CEO's photo occupying an entire page; and (2) the frequency of the CEO's name in the company's press releases, calculated as the number of times the CEO's name appears divided by the total number of press releases issued by the company (Saputra & Primasari, 2024).

The audit committee is a corporate entity tasked with supervising the quality of information transparency, which encompasses ongoing reporting. The annual count of audit committee meetings quantifies this variable. According to POJK No. 55/POJK.04/2015, the minimum meeting reference is established four times annually (Peraturan Otoritas Jasa Keuangan, 2015).

The firm size indicates its magnitude, as evidenced by total assets, sales, and market value of shares. This study measures company size by utilizing the natural logarithm of total assets (Orazalin & Mahmood, 2020).

The board of directors' characteristics pertain to the skills, educational background, and experience of its members in finance or accounting. The variable is quantified by the ratio of board members possessing expertise in accounting or finance relative to the total board composition (Githaiga & Kosgei, 2023).

Data Analysis Method

The data analysis in this study is quantitative. The panel data regression analysis is carried out with the help of the Eviews-13 application because it processes panel data more efficiently than other data processing applications, especially because it has a testing function for selecting an automatic regression estimation model,

thus facilitating the panel data processing process. This study's stages of analysis testing research are descriptive statistical analysis, classical assumption tests, panel data regression analysis, and hypothesis testing.

One must first choose the most appropriate model or approach to properly interpret the analysis results. That is, by determining the estimation model to be used in the research. The best model to apply to this research is the Random Effect Model (REM) approach. The econometric approach model used to test the effect of gender diversity and political connections on the disclosure of sustainability reporting in mining companies in Indonesia is as follows:

Model 1

$$SR = \alpha + \beta_1GD_{it} + \beta_2PC_{it} + E_{it} \quad (3)$$

Model 2

$$SR = \alpha + \beta_1GD_{it} + \beta_2PC_{it} + \beta_3NC_{it} + \beta_4FZ_{it} + \beta_5CA_{it} + \beta_6CC_{it} + E_{it} \quad (4)$$

Where:

SR = Sustainability Reporting Disclosure

GD = Gender Diversity

PC = Political Connections

NC = CEO Narcissism

FZ= Firm Size

CA = Audit Committee

CC = CEO Characteristics

α = Constant

β = Regression Coefficient

E = Error Rate

RESULTS AND DISCUSSION

Descriptive Statistics

Table 2. Descriptive Statistics

	Min	Max	Mean	Std. Deviation
SR	0.1190	1.0000	0.5422	0.1890
DIVGEN	0.0000	2.6667	0.3015	0.4357
POLICON	0.0000	1.0000	0.7018	0.4589
CARCEO	0.0000	1.0000	0.3641	0.2350
NARCEO	1.0000	6.5000	4.6273	1.2999
AUCOM	0.0000	60.0000	9.8261	10.3444
FIRMSIZE	6.0000	28.8970	19.5823	3.4049

Note: SR = sustainability reporting disclosure, DIVGEN = gender diversity, POLICON = political connections, CARCEO = CEO characteristics, NARCEO = CEO narcissism, AUCOM = audit committee, FIRMSIZE = company size.

Source: Data processed by authors (2025).

The results of the descriptive statistical test (Table 2) show that the variable of sustainability reporting disclosure of mining companies in Indonesia in 2019-2023 has an average value of 54.22%. This value means that the overall disclosure of mining companies in Indonesia is very low. This study found that there is more qualitative or narrative disclosure than quantitative disclosure. This rather low quality can be attributed to the fact that some companies still do not produce a sustainability report every year. Then, based on the items disclosed, companies tend to convey information only in words, paying less attention to things like charts, graphs, tables and pictures. In fact, many companies choose to present the same report every year, with no variation in

the content or elements included. Companies seem to be providing more information, but the information is irrelevant. This shows that reporting practices may not offer high-quality, sustainable information or be symbolic or formal to gain image and public trust (Cormier & Magnan, 2015).

Furthermore, the gender diversity variable shows an average value of 30.15%. This figure shows that only a few women hold positions on the Board of Commissioners or Board of Directors. Meanwhile, based on the results of a statistical test of 70.18%, the political connections variable shows that most mining companies in Indonesia have significant relationships with political actors and government officials. This also indicates that

political connections are still a dominant factor in the operations of mining companies in Indonesia. The CEO characteristics variable has an average value of 36.41%, which shows that the CEO's ability to plan a sustainability reporting strategy still needs improvement.

The CEO narcissism variable has a mean of 4.6 and a standard deviation 1.3. This is a significant difference, indicating that the distribution of CEO narcissism data is in good condition. Meanwhile, the maximum value of 6.5 for CEO narcissism is found in PT Energi Mega Persada Tbk. Thus, there are many CEOs with high levels of narcissism in Indonesia. The high level of CEO narcissism is caused by a number of conditions, such as a competitive corporate culture, the tide of globalization or

a history of success, which can boost confidence and encourage CEOs to behave narcissistically. Next, based on the average score, the audit committee holds at least 10 annual meetings. This exceeds the minimum requirement of meeting at least once every three months or four times a year. Company size, measured by the logarithm of total assets, has an average score of 19.58, indicating that the company size, measured by total assets, increases on average by 19.58 annually. The standard deviation of the company size is 3.405, which indicates that the distribution of the data does not vary as the standard deviation value is lower than the mean value.

Classical Assumption Test

Table 3. Results of the multicollinearity test

Correlation Coefficient	DIVGEN	POLICON	CARCEO	NARCEO	AUCOM	FIRMSIZE
DIVGEN	1.0000	0.1034	-0.0092	0.0545	0.1401	0.0298
POLICON	0.1034	1.0000	-0.1723	0.1435	0.1523	0.1263
CARCEO	-0.0092	-0.1723	1.0000	-0.2628	-0.1447	-0.1156
NARCEO	0.0545	0.1435	-0.2628	1.0000	0.0402	-0.1299
AUCOM	0.1401	0.1523	-0.1447	0.0402	1.0000	-0.0105
FIRMSIZE	0.0298	0.1263	-0.1156	-0.1299	-0.0105	1.0000

Source: Data processed by authors (2025).

The independent variable's correlation coefficient is less than 0.08 (Table 3), meaning that this research is free from multicollinearity.

Panel Data Regression Test

Table 4. Panel data regression test results with control variables

Variable	Random Effect Model		
	Coefficient	t-statistic	Prob.
(constant)	0.1641	1.2389	0.2173
DIVGEN	0.0129	2.5906	0.0105
POLICON	-0.0102	-0.2760	0.7829
CARCEO	-0.0175	-0.2665	0.7902
NARCEO	0.0299	2.3958	0.0178
AUCOM	0.0060	3.6038	0.0004
FIRMSIZE	0.0084	1.4419	0.1514
Prob. F-statistic		0.0001	
Adj R ²		0.1324	
Obs		161	

Source: Data processed by authors (2025).

Based on the REM model analysis results, the F-statistics probability value is 0.0001. This result indicates that all independent variables in this study contribute simultaneously to the dependent variable. Furthermore, the partial test results presented in Table 4 show that for the DIVGEN variable, the probability value is 0.0105, which means that the gender diversity variable has an effect on the dependent variable. Then, for the variable POLICON, the probability value obtained is

0.7829, which means there is no evidence that political connections affect the dependent variable. The following variable, CARCEO, obtained a probability value of 0.7902; in this case, the variable of board characteristics did not contribute to the dependent variable.

Based on the results of the study, the variable NARCEO obtained a probability value of 0.0178, which means that CEO narcissism has a positive effect on the dependent variable. Then, for the AUCOM variable, a

probability value of 0.0004 was obtained, which means that the audit committee has a significant positive impact on the dependent variable. Meanwhile, the FIRMSIZE variable obtained a probability value of 0.1514, which means that company size does not contribute to the dependent variable.

The coefficient of determination (R^2) quantifies the proportion of variance in the dependent variable that can be explained by the independent variables in a regression model. R^2 values range from 0 to 1, with higher values indicating a better model fit. In this study, an R^2 value of 0.1324 suggests that the independent variables explain

13.24% of the variance in the dependent variable, while the remaining 86.76% is attributed to factors outside the model. This indicates that the model's explanatory power is relatively low.

This study adds control variables that include CEO characteristics, CEO narcissism, audit committee, and company size. In this regard, it is important to examine whether the use of control variables refines the causal relationship between variables to obtain a more comprehensive empirical model or shows the opposite. Table 5 presents the results of panel data regression analysis without the use of control variables.

Table 5. Panel data regression test results without control variables

Variable	Random Effect Model		
	Coefficient	t-statistic	Prob.
(constant)	0.4819	12.7708	0.0000
DIVGEN	0.0147	2.2884	0.0050
POLICON	0.0016	0.0413	0.9671
Prob. F-statistic		0.0184	
Adj R^2		0.0373	
Obs		161	

Source: Data processed by authors (2025).

The study shows that using control variables in the panel data regression analysis does not lead to significantly different results compared to using no control variables. In this research, the gender diversity variable positively affects the disclosure of sustainability reports. In contrast, political connections do not affect the disclosure of sustainability reports with or without control variables. Nevertheless, the resulting adjusted R-squared (R^2) value is 0.0373. In this case, approximately 3.37% of the variability in the dependent variable can be explained by the independent variables included in the model without control variables.

After partial testing, it can be seen that the gender diversity variable makes a positive contribution to the disclosure of sustainability reporting. This finding implies that gender diversity is one of the determinants of sustainability disclosure. This positive relationship is likely to occur because companies led by female directors are more committed to sustainability reporting disclosure. This is consistent with the findings of Buniamin et al. (2020) that the presence of women in strategic positions can increase the company's concern for environmental and social issues, promoting transparency in sustainability reporting disclosure. The findings of Alta'any et al. (2024) show that the disclosure of sustainability reports tends to increase as the percentage of female directors on the board increases. The presence of female directors on the board makes companies more aware of their activities, and more focused on sustainability and proper reporting. A study by Wahid (2019) also supports this view, finding that companies with a higher proportion of women on the board tend to disclose environmental

information in more detail, do not commit financial reporting errors, and reduce the level of fraud.

Female directors are generally considered to be more risk-averse and stakeholder-focused. This is supported by research showing that female directors improve board effectiveness and environmental and social performance and that gender diversity contributes to better board oversight of companies' sustainability practices (Wang et al., 2021). Furthermore, based on certain characteristics of women, such as communal qualities, compassion, kindness, ethical orientation, etc., it is often believed that their presence on the board will increase the level of sustainable activities through greater concern for society and the environment (Jain & Zaman, 2020).

The results of this study confirm research that women on boards make a significant contribution to the disclosure of non-financial information, including sustainability reporting (Arayssi et al., 2020; Issa et al., 2022; Nicolò et al., 2022; Wasiuzzaman & Wan Mohammad, 2020; Zahid et al., 2020). Furthermore, Rao and Tilt (2016) state in their research that women tend to be more concerned about sustainability practices, thus promoting transparency in the disclosure of sustainability reports. Thus, the disclosure of corporate sustainability reports reflects the level of gender diversity, especially the proportion of women on the board, which plays an important role in increasing environmental and social transparency and accountability.

Meanwhile, the political connection variable is not a determinant of disclosure in sustainability reporting. This condition shows that the presence or absence of a political connection is not always a benchmark for better sustainability reporting disclosure. One possibility is that politically connected firms do not feel the need to

increase the transparency of sustainability reporting because they rely more on political connections to gain benefits such as access to government projects or regulatory incentives. In addition, regulations in Indonesia, which are still weak in enforcing sustainability reporting obligations, mean that politically connected firms do not face significant pressure to increase disclosure. A study by Hung et al. (2018) found that politically connected companies in some developing countries tend to focus more on economic benefits than sustainability disclosures.

Furthermore, although the data shows that most mining companies in Indonesia have political connections, this does not necessarily affect sustainability reporting disclosure. The political connections that mining companies have may not catalyze increasing sustainability transparency because these companies tend to take advantage of political connections to obtain protection from regulations or other benefits without feeling the need to be more open about their environmental and social impacts. In addition, companies with political connections will reduce CSR disclosure because obtaining litigation protection is easier (Saraswati et al., 2020).

The results of this study contradict the stakeholder theory, which states that companies should disclose sustainability reporting as a form of accountability to stakeholders, including the government. In this theory, politically connected firms are expected to be more encouraged to disclose sustainability reporting to maintain good relations with regulators and the public. However, the results of this study show that political connections do not affect the disclosure of sustainability reports, which also contradicts several previous studies (Du et al., 2019; Z. Wang et al., 2018). Thus, the results

of this study provide a new perspective that political connections may not be the main factor in determining the level of disclosure of sustainability reports in Indonesia.

CONCLUSION

Based on the research findings, it can be concluded that gender diversity on the board of directors has a positive and significant effect on sustainability reporting disclosure in Indonesian companies during the 2019–2023 period, where the presence of women on the board enhances the quality and transparency of sustainability reporting. Conversely, political connections do not have a significant effect on sustainability reporting disclosure. Additionally, control variables such as CEO narcissism and the presence of an audit committee have a positive and significant effect on sustainability reporting disclosure. In contrast, CEO characteristics and company size do not show significant influence.

These findings highlight the importance of gender diversity and internal corporate governance in promoting transparency and accountability in sustainability reporting.

There are several limitations in this study; the research model explains only 13.24%, which means that the variables in this study have not been able to explain the disclosure of sustainability reporting, and there are still many other variables outside this study that affect the disclosure of sustainability reporting. Further research is expected to add more variables other than gender diversity and political connections, expand the scope of research to the non-financial corporate sector, and extend the research period to obtain more accurate and generalizable results.

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