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# The Effect of Company Characteristics and Gender Diversity on Disclosures Related to Sustainable Development Goals

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**Abstract:** A sustainability report is a means of conveying information related to the sustainable development goals that have been agreed by the nations of the world for the safety of humans and the environment. The existence of sustainability report is influenced by several factor such as profitability, leverage, firm size, industry type, and gender diversity. Therefore, this study is performed to examine empirically the effect of profitability, leverage, firm size, industry type, and gender diversity on sustainability reports. The population in this study comprises all manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2020. The sample was taken using the purposive sampling method, and 112 samples were obtained. The data analysis technique was multiple regression analysis performed using the SPSS. The result indicates that the variables of leverage, industry type, and gender diversity have a significant effect on sustainability reports, while profitability and firm size do not have a significant effect.

**Keywords:** sustainability development goals; sustainability report; profitability; leverage; firm size; industry type; gender diversity

Citation: Wahyuningrum, I.F.S.; Oktavilia, S.; Utami, S. The Effect of Company Characteristics and Gender Diversity on Disclosures Related to Sustainable Development Goals. *Sustainability* **2022**, *14*, 13301. https://doi.org/10.3390/su142013301

Received: 4 August 2022 Accepted: 6 October 2022 Published: 16 October 2022

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# 1. Introduction

The presence of pollution, global warming, climate change, and the scarcity of natural resources create environmental problems that trigger public awareness on environmental sustainability. This underlies the establishment of the concept of the Sustainable Development Goals (SDGs) [1]. According to research conducted by the United Nations, about 89% of CEOs have realized that their companies' commitment to the SDGs can have a positive impact on their industry. In addition, research conducted by PWC in 2017 demonstrated that 62% of the 470 companies have incorporated SDGs in their company or sustainability reports. However, only 37% prioritize the SDG targets as their company's targets. Meanwhile, the rest (63%) do not relate SDGs and company targets in their company or sustainability reports [2].

Sustainability reporting (SR) is a report that contains information on the company's performance on economic, environmental and social aspects including their sustainable practices and disclosing the sustainability information laid out in the Sustainable Development Goals (SDGs). SR has been a growing trend in the last two decades. Companies have shown increasing interest in communicating their Corporate Social Responsibility (CSR) information in annual reports—whether the reporting is stand-alone or integrated—and on their websites [3–5]. Making voluntary disclosures will allow a company to improve its relationship with other parties, including investors, banks, consumers and suppliers. In addition, through quality reporting, companies can understand, communicate and manage their contribution to the goals of the SDGs.

In Indonesia, the government has issued Presidential Decree No. 59/2017 pertaining to the Implementation of Sustainable Development Goal Achievement. However, this decree has not been effective, as is indicated by the SDSN (Sustainable Development

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Solution Network) report, according to which Indonesia's ranking has dropped from 98th, in 2016, to 100th, in 2017. Indonesia's position means it is lagging behind Malaysia, Thailand, Singapore, Vietnam, and the Philippines.

The increase in the number of SR disclosures has also led to an increase in the interest of researchers to investigate the determinants and motivations of companies in disclosing SR information (Ali et al., 2017) [6]. Previous studies on SR have stated that company characteristics such as firm size, type of industry, capital structure, profitability, media visibility, ownership structure and corporate governance mostly appear to be determinants in both developed and developing countries (Ali et al., 2017; Dienes et al., 2016) [6,7]. Several studies on SR focusing on developing countries have been conducted in Indonesia, Malaysia, and Bangladesh (Gunawan & Joseph, 2017; Islam et al., 2017) [8,9]. However, this research has been mostly conducted with a descriptive qualitative approach and was limited in terms of the number of observations. Therefore, it is necessary to conduct a study to increase the generalizability of the findings of previous studies using an alternative approach, namely a quantitative one.

Although previous studies have examined the factors that influence CSR disclosure, few of them have investigated the content and specific determinants of SR information such as gender equality. The involvement of women in social and economic activities has become quite an interesting topic in recent years. Women have equal opportunities to occupy all levels in the company: from the lowest level to the highest level. Currently, information on gender equality practices is one kind of sustainability information that has developed and become valuable for companies' key stakeholders. This is because the disclosure of gender equality indicates a company's commitment to the sustainable development process [10]. Previous research also suggests that there is a need for studies in certain SR fields to pay greater attention to the motivation of companies to disclose information on gender equality in their SR (Campbell, 2007) [11]. Research conducted by Bear et al., 2010 [12] finds that female directors are more sensitive regarding CSR activities than male directors; this is because women are more inclined to relate to social, educational and regulatory issues. Previous research has mostly linked the characteristics of companies and the presence of a female members on boards of directors to the disclosure of CSR and other voluntary disclosures. Furthermore, this study will examine the effect of company characteristics and gender diversity on SR disclosure using the disclosure items according to the 2016 GRI Standard which consists of 77 items. It is expected that using these 77 items in the 2016 GRI Standard will show the extent to which SR disclosures are made by companies in Indonesia and what factors affect the achievement of SDGs through SR disclosure.

Overall, the demand for corporate SR has become a driver of change and a fundamental criterion for realizing competitive and strategic advantages while achieving the SDGs. The study of SR in this research considers that the variables that are unique to each country are important. Since Indonesia has a large number of companies and industries that involve female workers, it is important to considerate gender in this study.

The structure of this article is to start with the background and objectives of the research in Section 1, followed by Section 2, which contains a summary of the relevant theory and hypothesis development. Then, Section 3 explains the data and research methodology, followed by a discussion of the study's results. Lastly, Section 6 presented the conclusions of the study.

# 2. Literature Review and Hypothesis Development

This study is conducted according to agency theory, legitimacy theory and stakeholder theory. Agency theory is used to explain the relationship that occurs between stakeholders (principals) and management (agents). The principal entrusts the agent to manage all company activities, which means that the agent will have more information than the principal and cause an information gap (agency gap). To minimize the agency gap, companies try to disclose more information—meaning both mandatory and

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voluntary information. Information related to sustainability reports is believed to reduce information asymmetry and the resulting agency costs.

Another theory that is being used in this study is legitimacy theory. Legitimacy theory states that companies are required to carry out their operational activities in accordance with the norms prevailing in society. Several factors are assumed to influence environmental disclosure including profitability, leverage, firm size, industry type, and gender diversity. Van Horne & Wachowicz [13] state that profitability is the ability of a company to generate profits within a certain period. More specifically, profitability is the income generated after deducting all costs incurred during a certain period that are related to assets, sales, and capital activities [14]. Profitability shows the availability of company funds; the higher the company's operational funds, the more flexible the company is in determining its activities. Profitability is also the amount of money a company can generate with whatever resources it has. Thus, it is considered to be one of the indicators of good company management [15]. Good company management tends to lead to better information disclosure that improve benefit for stakeholders.

Sustainability report (SR) disclosure is a form of responsibility to stakeholders. The existence of going-concern (sustainability) and accountability accounting principles can be realized; one of these is by disclosing information in sustainability reports to maintain the loyalty of stakeholders. Stakeholder theory states that a company is not an entity that only operates for its own interests but must provide benefits to its stakeholders, namely, shareholders, creditors, consumers, suppliers, government, society, analysts, and other parties [16]. Companies with a high level of profitability will come under pressure from the community who will assume that the company can carry out its social and environmental responsibilities better than companies that have a lower level of profitability. With great attention from the community, the company must have a strategy to build a good image by carrying out social responsibility and reporting more broadly in its sustainability report. In addition, companies with a high level of profitability tend to disclose more information [17]. This is because companies that have the ability to generate greater profits will usually also have more funds used for making disclosures—both voluntary and mandatory. In this study, profitability of company is measured by using return on assets (ROA). The results of research conducted by [18–21] show that ROA has a significant positive effect on the disclosure of SR. Hence, the following hypothesis is proposed.

**H1:** Companies with a high level of profitability will disclose more in their SR than companies with a lower level of profitability.

Leverage is a financial ratio used to measure a company's ability to meet its long-term obligations. This ratio indicates the extent to which the company finances its operations with funding from debt. There are several types of ratios used to calculate leverage, namely, Debt-to-Asset Ratio (DAR), Debt-to-Equity Ratio (DER), Debt-to-Capital Ratio, Debt-to-EBITDA Ratio, and Long-Term-Debt-to-Equity Ratio (LTDE). This study uses the DAR ratio to measure the company's leverage. DAR is calculated by comparing the total debt to the total assets owned by the company. This ratio shows the extent to which debt in the company's capital structure can be covered by assets. The smaller the DAR ratio, the better the company's financial health condition.

The level of the leverage ratio in a company is one of the factors that determine the direction of the company's policy to make social and environmental disclosures. When the leverage ratio is high, creditors play an important role as one of the stakeholders in the company. Roberts [22] states that when the company's leverage position is high, creditors have control over access to financial resources for the sustainability of the company's operations. This is in line with stakeholder theory, which states that companies with a high level of leverage will have greater responsibilities to stakeholders, which in this case are the creditors. The companies will come under pressure from creditors to pay what they are obliged to in accordance with the specified time limit; thus, the companies will

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prefer to allocate limited company resources to pay off all their obligations rather than making social and environmental disclosure reports. Alotaibi, Bhatia & Tuli, and Branco et al. [18,23,24] state that the level of leverage has a significant negative effect on the disclosure of SR.

**H2:** Companies with high leverage will disclose less in their SR than companies with low leverage levels.

Firm size is a measure the size (large or small) of a company. The determination of the size of a company can be seen from the total assets owned by the company. Asset value broadly represents the company's resources (such as financial capacity, capabilities, processes, and knowledge), and hence, these resources can be utilized by the company to engage in SR [25]. Large companies have a broad impact, high exposure, and they receive greater stakeholder monitoring/pressure [26]. This means that large companies are faced with various stakeholders who expect sustainability reporting to be carried out [27].

Companies that are classified as large will disclose more responsibility information regarding their activities in terms of the environment than small companies do. This indicates that the bigger the company, the greater the spotlight from the community, since the company's activities have a greater influence or impact on society. Thus, with a large amount of attention from the public on them, large companies must publish their environmental and social responsibility information as widely as possible in order to meet the expectations or demands of the community. Legitimacy theory explains the legitimacy of a business to carry out activities in the community that implies a social contract between the business entity and the community [3]. This theory suggests that the existence of public spotlight will require more publication of information of all company's activities and their responsibility to the surrounding environment. This requires large companies to consistently publish sustainability reports as a form of responsibility to all the parties. Therefore, the company's activities are always legitimate in the community. The results of research conducted by [18,24,25] state that the firm size variable has a positive effect on the SR disclosure.

**H3:** Large companies will reveal more in their SR than small companies.

The industry type is a company's characteristic or classification related to the business field, business risks, employees, and the company's environment. According to the proximity to the environment, industries can be divided into two types, namely, high-profile industry (environmentally sensitive) and low-profile industry (non-environmentally sensitive) [28,29]. High-profile companies face more intense monitoring, greater social visibility, and public pressure because their operations have the potential to have both direct and wide-ranging impacts on the environment [29].

The difference between the values within the company and the social values of the community is called the "legitimacy gap"; this difference can result in a loss of legitimacy. Company can lose support from the community as well, which can affect the company's ability to continue its business activities [16]. One of the strategies that companies can use to reduce the legitimacy gap is to release SR. SR can demonstrate how the company is responsible for the community and the environment, especially in the case of high-profile companies. The implementation of responsibility disclosure must also be incorporated with community's social values.

According to legitimacy theory, high-profile industries will publish more about their social responsibility activities in order to gain legitimacy in the community. This is because high-profile companies have greater incentives to maintain a good corporate image in front of the public. The disclosure of SR information is wider in high-profile companies than in low-profile companies [30]. Legitimacy theory reveals that industry type can

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influence the disclosure of SR [29]. Previous researchers [4,23,31,32] suggest that industry type has a significant positive effect on the disclosure of SR.

**H4:** Companies in sensitive industries will disclose more in their SR than companies in non-sensitive industries.

According to Law No. 40/2007 article 97, the definition of the board of directors is the party that has the authority and responsibility to manage the company for the benefit of the company. The board of directors is obliged to make a register of shareholders, a special register, to keep minutes of the general meeting of shareholders (GMS) and meetings of the board of directors, to prepare an annual report, and to examine all lists, minutes, and financial documents of the company.

Gender diversity is one of the aspects of board diversity. The values of male and female board members differ in terms of their social responsibilities. Ben-Amar et al. [33] found some theoretical support regarding gender diversity in a board of directors. Gender diversity can have an impact on the company's decisions to respond to stakeholder requests to improve SR and provide insight into or comparison of thoughts derived from the personal knowledge of members of the board of directors, from their experience in other organizations.

In recent years, gender diversity has increased throughout the businesses world in developing countries, especially in Asia [34]. According to Deloitte, 2019 [35], since 2016, the level of gender diversity in Asia is indicated to be women holding 9.3% of board of director seats and accounting for 4.2% of the chairperson roles, an increase of 1.5% and 1.6%, respectively. For example, in the Philippines, the number of companies without female directors dropped significantly from 26%, in 2019, to 14%, in 2020. This indicates that the percentage of women in director positions is starting to rise. On the other hand, in China, one of the developed countries, the average percentage of women holding positions at the director level is still in the range of 13.0%, in 2020, which is an increase of 1.6%, from 2019.

The existence of differences in gender diversity in developed and developing countries indicates that differences in institutional, political, social and cultural contexts will have an effect on corporate governance [34]. In addition, in developing countries, there is increasing pressure from stakeholders, foreign investors, and international media to improve the implementation of governance and to initiate sustainability policies and procedures that are consistent with those adopted in developed countries (Ali et al., 2017) [7].

Ben-Amar et al. [33] find that the disclosure of information about GHG emissions positively increases when there are at least three women on a board of directors. Alazzani et al. [36] find that there is a positive relationship between social performance and the proportion of female directors in Malaysian companies, as is the case with [37], who found that the size of the board of directors has a positive relationship with voluntary disclosure, but the composition of the board of directors does not have a significant relationship. Fernandez-feijoo et.al, Kassinis et al., Martínez-Ferrero & García-Sánchez [4,38,39] find a significant positive relationship between the proportion of females on the board of directors and CSR, but the significance depends on their social performance as well. Likewise, the authors of [40] find a significant positive relationship between femininity and the number of sustainability reports. This is unlike the study by [41], which revealed that the proportion of men and women on the board of directors is not significantly related to the quality of sustainability reports in the Asia Pacific region. Alazzani et al., Cicchiello et al., and Kassinis et al. [34,36,39] state that gender diversity has a significant positive effect on the disclosure of SR.

**H5:** *Gender diversity on the boards of directors affects the disclosure of SR.* 

#### 3. Data and Methods

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This study has used secondary data obtained from sustainable reporting published by a sample of the companies listed on the Indonesia Stock Exchange (IDX), from the year 2020. Sampling in this study uses a non-probability sampling technique and a non-probability sampling with purposive sampling technique. The selection criteria (Table 1) are as follows:

Table 1. Sample selection criteria.

No	Explanation	Total
1	Manufacturing companies listed on the Indonesia Stock Exchange in the period 2020	256
2	Companies that did not publish annual reports and sustainability reports	(85)
3	Companies that did not have complete data related to the research variables	(27)
4	Outlier	(32)
	Total sample	112

According to Table 1, a total of 32 companies are categorized as outliers after normality testing and needed to be eliminated. The total number of samples after outlier elimination is 112. The dependent variable in this study is the disclosure of sustainability reporting (SR). There are several methods that can be used to measure SR, namely, using content analysis and a disclosure index. This study uses a checklist of items (disclosure index) as the method to measure the disclosure of SR. The checklist was chosen since these standards are still relevant and valid to be used as a means of measuring SR in Indonesia. The standard used is the 2016 GRI Standard issued by an international independent organization that initiates SR, namely the Global Reporting Initiative (GRI).

The number of SR disclosure items in the 2016 GRI Standard is 77 items. In this case, the disclosure will be given a value of 1 point if the item is disclosed and a value of 0 if it is not disclosed [42]. For each sample, all disclosure scores will be added together so that a total environmental disclosure score is obtained for each sample. The average score of the overall SR disclosure based on the 2016 GRI Standard index is obtained from the total number of SR disclosure items, which is then divided by 77.

Descriptive statistical analysis is the technique used to describe the profile of individual research variables. Descriptive statistical analysis includes the mean, minimum, maximum, and standard deviation values of each variable. The effect of the independent variable on the dependent variable (SR) was tested by multiple regression analysis using SPSS 25 software. The multiple regression equation is explained as follows:

$$SR = \beta 0 + \beta 1ROAi + \beta 2DARi + \beta 3SIZEi + \beta 4TYPEi + \beta 5GENDi + ei$$

Here, profitability (ROA) is measured by dividing total profit by total assets; leverage (DAR) in this study is measured by dividing total debt by total assets; company size (SIZE) is measured using the natural logarithms of total assets; type of industry (TYPE) is measured by dividing the type of business run by the company based on a dummy variable with a score of 1 = if the company is included in the high-profile group, and 0 = low profile; gender (Gend) is measured by using the proportion of the male contribution compared to that of women by looking at how many female directors there are in total in the company.

#### 4. Results

This study uses descriptive statistics to examine the extent to which SR disclosures have been made by listed companies in Indonesia. In addition, multiple linear regression are conducted to examine the factors that influence the disclosure of SR. The result of the descriptive statistical analysis of the research variables are presented in Table 2.

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Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ROA	112	-0.5583	0.4468	0.047124	0.1090783
DAR	112	0.1331	1.9228	0.671913	0.2611095
SIZE	112	12.4699	15.1513	13.732283	0.7016484
GEND	112	0	6	1.50	1.565
SR	112	0.0130	0.4156	0.177876	0.0993788
Valid N (listwise)	112				

**Table 2.** The results of descriptive statistical analysis.

Table 2 shows the minimum and maximum values of each independent and dependent variable. From a total of 112 research samples (N), the company with a low level of profitability (ROA), namely, a value of –0.55, is PT. Bakrie & Brothers Tbk and the company with a high level of profitability, namely, a value of 0.45, is PT. Unilever Indonesia. The average value of 0.04 indicates that the average level of profitability of companies that publish sustainability reports is 4.7%. The standard deviation for the profitability variable is 0.109. The lowest leverage level of 0.13 was obtained by PT. Indocement Tunggal Prakarsa Tbk, while the highest leverage level of 1.92 was obtained by PT. Bakrie & Brothers Tbk.

As for the company size variable, the minimum value of 12.46 was obtained by PT. Total Bangun Persada Tbk and the company with the maximum value, namely, 15.15, was PT. Bank Rakyat Indonesia Tbk. High-profile companies dominate this study, featuring 57 of them, as opposed to the 55 low-profile companies. PT. Bank Cimb Niaga Tbk is one of the companies that has the highest number of female board of directors, namely, six, while PT. Astra International is one of the companies that does not have a female member on its board of directors.

The dependent variable in this study is the disclosure of SR with a minimum value of 0.01 and a maximum value of 0.41. The average value of companies that disclose SR is only 17.78%, which still indicates the low level of SR disclosure by Indonesian companies. Based on 77 total items of SR disclosure according to the GRI Standard, the most SR disclosures were made by PT. Jasa Marga Tbk with 32 items disclosed. On the other hand, the lowest level of SR disclosure was by PT. Bank OCBC NISP Tbk, which disclosed only 1 item out of the total 77 possible SR disclosures.

The classical assumption test is a statistical test based on the estimation of the dependent variable with the assumption that the Ordinary Least Square (OLS) is fulfilled. The normality test in this study used the Kolmogorov–Smirnov statistical test. Table 3 presents the results of the One Sample Kolmogorov–Smirnov Test with the basis of decision making being a level of significance that is greater than 0.05 or 5%. Based on the results of the Kolmogorov–Smirnov test from Table 3, a significance value of 0.200 (>0.05) was obtained, so the data are normally distributed.

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Table 3. One-sample l	Kolmogorov-	Smirnov to	est.
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		<b>Unstandardized Residual</b>
N		112
Normal Parameters a,b	Mean	0.0000000
Normal Parameters 4,0	Std. Deviation	0.09262029
	Absolute	0.055
Most Extreme Differences	Positive	0.055
	Negative	-0.052
Test Statistic		0.055
Asymp. Sig. (2-tailed)		0.200 c,d

<sup>&</sup>lt;sup>a</sup>—Test distribution is Normal; <sup>b</sup>—Calculated from data; <sup>c</sup>—Lilliefors Significance Correction; <sup>d</sup>—This is a lower bound of the true significance.

The multicollinearity test in this study involved detecting the tolerance value and the value of the variance inflation factor (VIF), on the basis of decision making on the tolerance value > 0.10 and the VIF value < 10. The sample in this study is free from multicollinearity symptoms since each variable has a VIF value < 10 and a tolerance > 0.10. The autocorrelation test in this study uses the run test. The basis for decision making on the run test autocorrelation test is if the run test value is greater than 0.05, then there is no autocorrelation symptom, but if the run test value is less than 0.05, it can be concluded that autocorrelation symptoms have occurred in the research model. The result of the run test shows that the significance value is 0.058 (>0.05), so the research data are free from autocorrelation symptoms.

The heteroscedasticity test in this study used the Glejser test with a significance level of 5% and used the residual abs. The resulting significance level is above 0.05 for each variable, so there are no heteroscedasticity symptoms. The multiple regression model in this study consists of the independent variables of profitability, leverage, firm size, industry type, and gender diversity, which are presented in Table 4.

Table 4. Hypothesis test result.

Coefficients a							
	Unstandardized		Standardized	t	Sig.	Collinearity	
Model	Coefficients		Coefficients			Statistics	
	В	Std. Error	Beta			Tolerance	VIF
(Constant)	-0.170	0.225		-0.756	0.451		
ROA	0.125	0.100	0.137	1.252	0.213	0.683	1.463
DAR	0.139	0.045	0.364	3.056	0.003	0.577	1.733
SIZE	0.018	0.016	0.125	1.125	0.263	0.668	1.498
1 TYPE	0.058	0.023	0.292	2.548	0.012	0.624	1.603
GEND	-0.015	0.006	-0.242	-2.498	0.014	0.874	1.144
$R^2 = 0.09$							
Sig at 0.05							
N = 112							

<sup>&</sup>lt;sup>a</sup>-Dependent Variable: SR.

#### 5. Discussion

## 5.1. The Effect of Profitability on the Disclosure of SR

The regression results in Table 4 show that the profitability variable (ROA) has a t count of 1.252 with a significance level of 0.213 (0.213 > 0.05). These results indicate that profitability has no effect on SR, and therefore, the first hypothesis (H1) is rejected. According to [24], a higher level of profitability will not expand the disclosure of SR since

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the company focuses on improving the earnings performance rather than disclosing enough information. The company considers that environmental disclosure will trigger public scrutiny and requests for information about the success of a company, and therefore, the company does not need to disclose environmental information. The stakeholders are more focused on information about the company's financial success.

Contrary to the legitimacy theory, which states that companies should not only focus on business interests—that is to say, generating profits—but also must pay attention to the interests of the community and the existing social contract. The high and low level of company profitability is not an indicator in terms of disclosing SR. Dissanayake et al. [25] revealed that profitability appears to be the reason for management to disclose information about the impact on the community and the environment by the company's business activities. Profitability is not important for entities in disclosing sustainability reports. Management assumes that when the company's financial condition is declining, the company needs to disclose the sustainability report as good news, whereas when the company is in a good financial condition, it is not necessary to disclose the SR. In their research, Orazalin et al. [43], add that companies that have higher profits and have large financial resources do not necessarily disclose good quality SR reports compared to companies that have low profitability. The result of this study is in line with previous research, namely [5,25,32,44], which state that profitability does not affect the extent of SR disclosure. These results are consistent with those of previous studies. This shows that whether companies have a high or low level of profitability, there is no guarantee that they will disclose SR, even though they are required to disclose SR as a form of responsibility to the community.

# 5.2. The Effect of Leverage on the Disclosure of SR

According to the result of hypothesis testing, leverage has a t count of 3.056 with a significance level of 0.003 (<0.05), and therefore, the second hypothesis (H2) is accepted. The higher the leverage in a company, the lower the level of SR disclosure will be. This is because the company will focus on economic activities and reduce voluntary reporting. The costs incurred in making social information available are also not small. This will have an impact on the company's income, which is decreasing. Therefore, the companies will tend to reduce or limit the social information they disclose.

Conversely, if the level of leverage is low, the company discloses more extensive SR information because the debt they have is not too large. A high leverage ratio will also have an impact on the disclosure and preparation of social information which will cost a lot of money, and consequently, it will have an impact in terms of a decline in company income. Decreased income will result in lower profits, and the company will reduce environmental and social-related activities because, in practice, these will incur high costs.

In accordance with stakeholder theory, the company must have good interactions with the stakeholders. Stakeholders, especially creditors, tend to trust companies that have less debt. Companies with low levels of debt will be able to gain trust in taking out loans. The result of this study is in line with previous research, namely [45], which states that the lower level of leverage will affect the extent of SR disclosure.

# 5.3. The Effect of Firm Size on SR Disclosure

The larger the size of the company, the wider the company's SR disclosure will be. According to the result of hypothesis testing, firm size has a t-count value of 1.125 with a significance level of 0.263 (>0.05), accordingly, the third hypothesis (H3) is rejected. Large companies have an urge to withhold information that contains relevant values to avoid the pressure of political costs in law and tax increases and pressure to carry out social responsibility. Therefore, management prefers to disclose information voluntarily and just as necessary. This indicates that companies with large assets do not automatically disclose more SR than companies with small assets. SR, which is still voluntary in Indonesia, is considered by companies to be something that does not need to be disclosed. The

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companies still consider that it is sufficient to carry out non-financial activities through corporate social responsibility (CSR) without the need for SR.

The result of the study contradicts the legitimacy theory, which states that large companies have a wider tendency to disclose SR [41]. This is because large companies receive higher pressure from stakeholders and tend to stay away from the public spotlight to avoid the pressure of political costs in law and tax increases. Large companies also reduce sharing information related to political contributions. The result of this study is in line with previous research [25,46], which states that firm size does not affect the extent of SR disclosure. This shows that large companies do not disclose more sustainability information (through SR) compared to smaller companies. This also confirms that the size of the company does not affect the company's ability to disclose SR as a form of social awareness.

# 5.4. The Effect of Industry Type on SR Disclosure

The industry type is classified based on the company's level of sensitivity to the environment. There are two categories of companies, namely, low profile (non-environmentally sensitive) and high profile (environmentally sensitive). High-profile companies disclose SR more transparently due to the impact of complex operational activities and greater stakeholder pressure. These complex companies have an indirect impact on the environment and surrounding communities that require SR disclosure. According to the result of hypothesis testing, industry type has a t-count value of 2.548 with a significance level of 0.012 (<0.05), and thus, the fourth hypothesis (H4) is accepted.

Companies that are included in the high-profile category are the energy, materials, industrial, and utility sectors. Meanwhile, low-profile companies are engaged in the consumer directory, consumer staples, healthcare, financials, information technology, consumer service, and real estate sectors. The type of industry in this study is dominated by high-profile companies (50.9%). High-profile companies disclose more SR as they are required to gain legitimacy from the community. By disclosing more information, the companies will gain public trust for long-term sustainability.

Legitimacy theory supports the result of this study which shows that companies, in their practices and activities, require stakeholder recognition and legitimacy [47]. A high-profile company needs more disclosure to make its stakeholders recognize its practices are in accordance with prevailing social values and norms. Practices that violate social values and norms will certainly be considered detrimental. Therefore, it has an impact in terms of the difficulty of gaining recognition and legitimacy in the eyes of stakeholders.

The result of this study is in line with previous research by [48] who suggest that industry type can affect the extent of SR disclosure. It has been demonstrated that the type of industry affects the company's responsibility in SR disclosures. This is because more than 50% of the companies in this study fall into the high-profile category, which really need the trust of the public and their stakeholders.

#### 5.5. The Effect of Gender Diversity on the Disclosure of SR

Table 4 presents the regression results that indicate that gender diversity has a value of -2.498 with a significance level of 0.014 (0.014 < 0.05). This finding indicates that gender diversity has a negative effect on SR, and therefore, the fifth hypothesis (H5) is accepted. The values of men and women differ in their social responsibilities. Gender diversity among the members of the board of directors in a company or organization will mean there are different insights and thoughts based on their personal knowledge.

Recently, female members of boards of directors in companies in Indonesia work alongside male directors. Machold et al. [49], suggest that women's perspectives lead to differences in communicating their opinions, which will affect the policies that are enacted. When there are female members on the board, it will indirectly increase the uniqueness and give rise to different opinions, perspectives, experiences, and work styles in comparison to male directors [19]. Female members on the board of directors play an

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important role in the development of corporate sustainability disclosure [50]. The presence of women encourages companies to provide disclosures in SR, since their level of concern is higher [51]. Women also have greater concern for individuals and the lives of others in making decisions.

This is in accordance with stakeholder theory, according to which all groups or individuals can influence the achievement of company goals. The male members of the board of directors do not necessarily become a measure for the extent of SR disclosure. The result of this study is in line with research conducted by [4,36], who said that gender diversity affects SR disclosure. Kassinis et al. [39] conducted similar research related to SR disclosure. The result shows that gender diversity affects the extent of SR disclosure.

#### 6. Conclusions

Sustainability reports are not yet mandatory in Indonesia, but the number of companies reporting on sustainability has been increasing. This study indicates that profitability and firm size do not affect the extent of SR disclosure. Meanwhile, the disclosure of SR by companies is influenced by a low level of leverage, their high-profile characteristics, and whether they have an increasing level of diversity in terms of female directors. Sometimes, decisions made by women tend to be more socially oriented and will contribute more to stakeholders and sustainable practices than the decisions of men. Therefore, it is expected that a greater percentage of women participating on the boards of directors will be able to provide support to the challenges faced by top management. The positive effect of gender diversity on SR disclosure shows that gender diversity is not only able to improve company performance, but it also has benefits for companies in relation to SDGs reporting. Therefore, it is supposed that the government can also reduce inequality in terms of the percentage of members of boards of directors who are women. This is because a greater presence of women on the boards of directors has been demonstrated to increase commitment to sustainability practices, especially in developing countries such as Indonesia.

In addition, due to the low understanding of the concept of the importance of sustainability in this regard, related to the disclosure of SR in supporting the SDGs in developing countries, it is expected that the government will be able to educate companies to instill a corporate culture based on values rooted sustainability practices. Ultimately, it could establish strict rules related to a company's obligation to disclose SR, which will support the achievement of SDGs.

It is expected that further research will use other additional factors aside from the financial side and company characteristics; these would be from the social and cultural context in supporting the achievement of SDGs. In addition, the research in this study could also be conducted in developed countries in order to examine whether there is a significant difference in the achievement of the SDGs through the disclosure of SR—both in terms of company characteristics and in terms of gender diversity—in developing and developed countries.

This study illustrates the following: (1) the level of SR disclosure by companies in Indonesia in 2020 is still very low; (2) company characteristics—in this case profitability and company size—have no effect on SR disclosure. Meanwhile, leverage, industry type and gender are significantly positively related to the achievement of the SDGs through the disclosure of SR by companies. This study also suggests that the government can place more emphasis on companies in Indonesia, especially companies listed on the IDX, to be more concerned about making disclosures from the economic side, especially financial disclosures, but also in terms of social and environmental aspects as stated in the SR. The significant influence of gender diversity on SR disclosure suggest that companies can provide more opportunities for women to be able to occupy positions on corporate boards of directors or other important positions, according to their abilities and competencies, so that gender equality can be fulfilled.

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**Author Contributions:** Conceptualization, I.F.S.W.; methodology, S.O. and I.F.S.W.; software, S.O.; validation, S.U.; formal analysis, S.O.; investigation, S.U.; resources, S.O.; data curation, S.O.; writing—original draft preparation, I.F.S.W.; writing—review and editing, S.U.; visualization, S.O.; supervision, I.F.S.W.; project administration, I.F.S.W.; funding acquisition, S.U. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by DIPA UNNES, grant number SP DIPA-023.17.2.677507/2021.

Conflicts of Interest: The authors declare no conflict of interest.

## References

- Badan Pusat Statistik. Statistik Lingkungan Hidup Indonesia; BPS Indonesia: Jakarta, Indonesia, 2018.
- 2. Ikatan Akuntan Indonesia. Peran Inklusif Akuntan Dalam Sdgs 2030; Maj. Akuntan Indonesia: Jakarta, Indonesia, 2018.
- 3. Faisal, F.; Tower, G.; Rusmin, R. Legitimising Corporate Sustainability Reporting Throughout the World. *Australas. Account. Bus. Financ. J.* **2012**, *6*, 19–34.
- 4. Martínez-Ferrero, J.; García-Sánchez, I.-M. The Level of Sustainability Assurance: The Effects of Brand Reputation and Industry Specialisation of Assurance Providers. J. Bus. Ethic- 2018, 150, 971–990. https://doi.org/10.1007/s10551-016-3159-x.
- 5. Karaman, A.S.; Kilic, M.; Uyar, A. Sustainability reporting in the aviation industry: Worldwide evidence. *Sustain. Accounting, Manag. Policy J.* **2018**, *9*, 362–391. https://doi.org/10.1108/SAMPJ-12-2017-0150.
- 6. Ali, W.; Frynas, G.J.; Mahmood, Z. Determinants of Corporate Social Responsibility (CSR) Disclosure in Developed and Developing Countries: A Literature Review". *Corp. Soc. Responsib. Environ. Manag.* **2017**, 24, 273–294.
- Dienes, D.; Sassen, R.; Fischer, J. What are the drivers of sustainability reporting? A systematic review. Sustain. Accounting, Manag. Policy J. 2016, 7, 154–189. https://doi.org/10.1108/SAMPJ-08-2014-0050.
- 8. Gunawan, J.; Joseph, C.; Crowther, D.; Seifi, S. The Institutionalization of Anti-Corruption Practices in Indonesian Companies. **2017**, *12*, 147–159. https://doi.org/10.1108/S2043-052320170000012012.
- 9. Islam, G.S.; Rahman, M.; Kazi, N. Waste glass powder as partial replacement of cement for sustainable concrete practice. *Int. J. Sustain. Built Environ.* **2017**, *6*, 37–44. https://doi.org/10.1016/j.ijsbe.2016.10.005.
- 10. *GRI 2016: 101*; Standar Pelaporan Keberlanjutan Landasan. Global Reporting Initiative: Amsterdam, The Netherlands, 2016; p. 30
- 11. Campbell, J.L. Why would corporations behave in socially responsible ways? an institutional theory of corporate social responsibility. *Acad. Manag. Rev.* **2007**, *32*, 946–967. https://doi.org/10.5465/AMR.2007.25275684.
- 12. Bear, S.; Rahman, N.; Post, C. The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation. *J. Bus. Ethic* **2010**, 97, 207–221. https://doi.org/10.1007/s10551-010-0505-2.
- 13. van Horne, J.C.; Wachowicz, J.M. Fundamentals of Financial Management, 13th ed.; Pearson: London, UK, 2009.
- 14. Alarussi, A.S.; Alhaderi, S.M. Factors affecting profitability in Malaysia. J. Econ. Stud. 2018, 45, 442–458.
- 15. Shaheen, S.; Malik, Q.A. The Impact of Capital Intensity, Size of Firm and Profitability on Debt Financing in Textile Industry of Pakistan. *Interdiscip. J. Contemp. Res. Bus.* **2012**, *3*, 1061–1066.
- 16. Ghozali, I.; Chariri, A. *Teori Akuntansi International Financial Reporting System (IFRS)*; Badan Penerbit Univesitas Diponegoro: Semarang, Indonesia, 2014.
- 17. Wahyuningrum, I.F.S.; Budihardjo, M.A.; Muhammad, F.I.; Djajadikerta, H.G.; Trireksani, T. Do Environmental and Financial Performances Affect Environmental Disclosures? Evidence from Listed Companies in Indonesia. *Entrep. Sustain. Issues* **2020**, *8*, 1047–1061.
- 18. Branco, M.C.; Delgado, C.; Gomes, S.F.; Eugénio, T.C.P. Factors influencing the assurance of sustainability reports in the context of the economic crisis in Portugal. *Manag. Audit. J.* **2014**, *29*, 237–252.
- 19. Giannarakis, G. Corporate governance and financial characteristic effects on the extent of corporate social responsibility disclosure. *Soc. Responsib. J.* **2014**, *10*, 569–590. https://doi.org/10.1108/SRJ-02-2013-0008.
- 20. Onoja, A.A.; Okoye, E.I.; Nwoye, U.J. Global Reporting Initiative and Sustainability Reporting Practices: A study of Nigeria and South Africa Oil and Gas Firms. *Res. J. Manag. Pract.* **2021**, 2782, 7674.
- 21. Orazalin, N.; Mahmood, M. Determinants of GRI-based sustainability reporting: Evidence from an emerging economy. *J. Account. Emerg. Econ.* **2020**, *10*, 140–164. https://doi.org/10.1108/JAEE-12-2018-0137.
- 22. Roberts, R.W. Determinants of corporate social responsibility disclosure: An application of stakeholder theory. *Account. Organ. Soc.* **1992**, *17*, 595–612. https://doi.org/10.1016/0361-3682(92)90015-K.
- 23. Alotaibi, M.M. Determinants of Sustainability Disclosure of Saudi Listed Companies. *J. Econ. Sustain. Dev.* **2020**, *11*, 83–97. https://doi.org/10.7176/jesd/11-2-09.
- 24. Bhatia, A.; Tuli, S. Corporate attributes affecting sustainability reporting: An Indian perspective. *Int. J. Law Manag.* **2017**, *59*, 322–340. https://doi.org/10.1108/IJLMA-11-2015-0057.
- 25. Dissanayake, D.; Tilt, C.; Qian, W. Factors influencing sustainability reporting by Sri Lankan companies. *Pac. Account. Rev.* **2019**, 31, 84–109. https://doi.org/10.1108/PAR-10-2017-0085.
- Gallo, P.J.; Christensen, L.J. Firm Size Matters: An Empirical Investigation of Organizational Size and Ownership on Sustainability-Related Behaviors. Bus. Soc. 2011, 50, 315–349.

Sustainability **2022**, 14, 13301

27. Jamali, D. The CSR of MNC Subsidiaries in Developing Countries: Global, Local, Substantive or Diluted? *J. Bus. Ethics* **2010**, *93*, 181–200.

- 28. Nuskiya, M.; Ekanayake, A.; Beddewela, E.; Gerged, A.M. Determinants of corporate environmental disclosures in Sri Lanka: The role of corporate governance. *J. Account. Emerg. Econ.* **2021**, *11*, 367–394.
- 29. Wang, J.; Song, L.; Yao, S. The Determinants Of Corporate Social Responsibility Disclosure: Evidence From China. *J. Appl. Bus. Res.* 2013, 29, 1833. https://doi.org/10.19030/jabr.v29i6.8220.
- 30. Chan, M.C.; Watson, J.; Woodliff, D. Corporate Governance Quality and CSR Disclosures. *J. Bus. Ethic-* **2014**, *125*, 59–73. https://doi.org/10.1007/s10551-013-1887-8.
- 31. Mutalib, H.A.; Jamil, C.Z.M.; Hussin, W.N.W. The Availability, Extent and Quality of Sustainability Reporting by Malaysian Listed Firms: Subsequent to Mandatory Disclosure. *Asian J. Financ. Account.* **2014**, *6*, 239–257.
- 32. D'Amico, E.; Coluccia, D.; Fontana, S.; Solimene, S. Factors Influencing Corporate Environmental Disclosure. *Bus. Strat. Environ.* **2014**, 25, 178–192. https://doi.org/10.1002/bse.1865.
- 33. Ben-Amar, W.; Chang, M.; McIlkenny, P. Board Gender Diversity and Corporate Response to Sustainability Initiatives: Evidence from the Carbon Disclosure Project. *J. Bus. Ethic-* **2017**, 142, 369–383.
- 34. Cicchiello, A.F.; Fellegara, A.M.; Kazemikhasragh, A.; Monferrà, S. Gender diversity on corporate boards: How Asian and African women contribute on sustainability reporting activity. *Gend. Manag. Int. J.* **2021**, *36*, 801–820. https://doi.org/10.1108/GM-05-2020-0147.
- 35. Delloite. Women in the Boardroom: A Global Perspective, 6th ed.; Delloite: London, UK, 2019
- 36. Alazzani, A.; Hassanein, A.; Aljanadi, Y. Impact of gender diversity on social and environmental performance: Evidence from Malaysia. *Corp. Governance: Int. J. Bus. Soc.* **2017**, *17*, 266–283. https://doi.org/10.1108/CG-12-2015-0161.
- Allegrini, M.; Greco, G. Corporate Boards, Audit Committees and Voluntary Disclosure: Evidence from Italian Listed Companies. J. Manag. Gov. 2013, 17, 187–216.
- 38. BFernandez-Feijoo, B.; Romero, S.; Ruiz, S. Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework. *J. Bus. Ethics* **2014**, *122*, 53–63. https://doi.org/10.1007/s10551-013-1748-5.
- 39. Kassinis, G.; Panayiotou, A.; Dimou, A.; Katsifaraki, G. Gender and Environmental Sustainability: A Longitudinal Analysis. *Corp. Soc. Responsib. Environ. Manag.* **2016**, 23, 399–412. https://doi.org/10.1002/csr.1386.
- 40. Gallen, M.L.; Peraita, C. The Relationship between Femininity and Sustainability Reporting. *Corp. Soc. Responsib. Environ. Manag.* **2017**, 24, 496–508.
- 41. Amran, A.; Zain, M.M.; Sulaiman, M.; Sarker, T.; Ooi, S.K. Empowering Society for Better Corporate Social Responsibility (CSR): The Case of Malaysia," *Kaji. Malays.* **2013**, *31*, 57.
- 42. Mahmood, M.; Orazalin, N. Green governance and sustainability reporting in Kazakhstan's oil, gas, and mining sector: Evidence from a former USSR emerging economy. *J. Clean. Prod.* **2017**, *164*, 389–397. https://doi.org/10.1016/j.jclepro.2017.06.203.
- 43. Orazalin, N.; Mahmood, M. Economic, environmental, and social performance indicators of sustainability reporting: Evidence from the Russian oil and gas industry. *Energy Policy* **2018**, *121*, 70–79. https://doi.org/10.1016/j.enpol.2018.06.015.
- 44. Isa, M.A. Sustainability Reporting Among Nigeria Food and Beverages Firms. Int. J. Agric. Econ. Dev. 2014, 2, 1.
- 45. Kumar, K.; Kumri, R.; Kumar, R. The state of corporate sustainability reporting in India: Evidence from environmentally sensitive industries. *Business and Society Review* **2020**, 126, 1-26.
- 46. Kuzey, C.; Uyar, A. Determinants of sustainability reporting and its impact on firm value: Evidence from the emerging market of Turkey. *J. Clean. Prod.* **2017**, *143*, 27–39. https://doi.org/10.1016/j.jclepro.2016.12.153.
- 47. Abu Bakar, A.B.S.; Ghazali, N.A.B.M.; Ahmad, M.B. Sustainability Reporting and Board Diversity in Malaysia. *Int. J. Acad. Res. Bus. Soc. Sci.* **2019**, *9*,1044–1067. https://doi.org/10.6007/IJARBSS/v9-i3/5663.
- 48. Aris, N.; Yusof, S.M.; Idris, N.I.; Zaidi, N.S.; Anuar, R. Analysis of Firms' Characteristics Affecting the Sustainability Reporting Disclosure in Malaysia. *Int. J. Acad. Res. Bus. Soc. Sci.* **2021**, *11*, 1–20. https://doi.org/10.6007/ijarbss/v11-i14/8325.
- 49. Machold, S.; Ahmed, P.K.; Farquhar, S. Corporate Governance and Ethics: A Feminist Perspective. *J. Bus. Ethic-* **2007**, *81*, 665–678. https://doi.org/10.1007/s10551-007-9539-5.
- 50. MZahid, M.; Rahman, H.U.; Ali, W.; Khan, M.; Alharthi, M.; Qureshi, M.I.; Jan, A. Boardroom gender diversity: Implications for corporate sustainability disclosures in Malaysia. *J. Clean. Prod.* **2020**, 244, 118683. https://doi.org/10.1016/j.jcle-pro.2019.118683.
- 51. Chebbi, K.; Aliedan, M.; Alsahlawi, A. Women on the Board and Environmental Sustainability Reporting: Evidence from France. *Creat. Innov. Manag.* **2020**, *14*, 231–258.