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THE IMPLICATIONS OF SUSTAINABILITY & CLIMATE-RELATED REPORTING, ESG RISK, AND GREEN ACCOUNTING IN ACHIEVING SUSTAINABLE GROWTH

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ABSTRAK

Meningkatnya perubahan iklim ekstrem saat ini berdampak pada akuntabilitas perusahaan yang dianggap berkontribusi terhadap peningkatan perubahan iklim tersebut. Penelitian ini bertujuan mengkaji pelaporan dan pengelolaan isu-isu lingkungan, sosial, dan tata kelola ditinjau dari Sustainability Report (SR), Climate Related Reporting (CR), risiko ESG yang tidak dikelola (ESG Risk Rating), green accounting (GA) terhadap Sustainable Growth (SG) pada perusahaan yang terdaftar di Bursa Efek Indonesia pada tahun 2022. Penelitian ini menggunakan data sekunder yang diperoleh dari laporan keberlanjutan dan laporan keuangan masing-masing perusahaan. Sampel sebanyak 79 perusahaan dianalisis menggunakan regresi linier berganda. Hasil penelitian menunjukkan bahwa SR dan CR tidak berpengaruh signifikan terhadap SG, sedangkan ESG risk rating berpengaruh positif signifikan terhadap SG dan GA berpengaruh negatif signifikan terhadap SG. Hasil penelitian ini memiliki implikasi praktis dan kebijakan yang didiskusikan lebih lanjut.

Kata Kunci: Standard GRI, TCFD, ESG risk rating, environmental cost, sustainable growth

ABSTRACT

The current increase in extreme climate change impacts the accountability of companies that contribute to the increase in climate change. This study aims to examine the reporting and management of environmental, social, and governance issues as seen from the Sustainability Report (SR), Climate-Related Reporting (CR), unmanaged ESG risk (ESG risk rating), green accounting (GA) towards Sustainable Growth (SG) in companies listed on the Indonesia Stock Exchange in 2022. This study uses secondary data from each company's sustainability reports and financial statements. A sample of 79 companies was analyzed using multiple linear regression. The study results show that SR and CC have no significant effect on SG, ESG risk rating has a significant positive effect on SG, and GA has a significant negative effect on SG. The results of this study have practical and policy implications that are discussed further.

Keywords: GRI Standard, TCFD, ESG risk rating, environmental cost, sustainable growth

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1. Introduction

The phenomenon of climate change represents a significant global concern, characterized by an increase in the world's average temperature and the frequency of natural disasters. As reported by the United Nations Climate Change (2022) and the World Meteorological Organization, global temperatures increased by 1.17°C in 2018-2022, representing an acceleration in the rate of warming from an average temperature increase of 0.18°C per decade since 1981 (NOAA National Centers for Environmental Information, 2023). The data provided by the Indonesian Meteorological, Climatological, and Geophysical Agency (BMKG) indicates that the annual temperature has increased since 2018 and 2020, making these two years the second warmest on record. The National Aeronautics and Space Administration (NASA) (2023) has reported that the current climate change is reaching levels that have not been seen for the last 10,000 years. Consequently, there has been a notable shift in weather patterns and an increase in the frequency of climate-related natural disasters, as evidenced by data from the World Bank (2023) which shows a rise in the occurrence of natural disasters since 2019.

The impact of climate change affects business development. The concept of sustainable growth in a company was first introduced by Higgins in 1977 (Oprean-Stan et al., 2020). From this concept, sustainable growth can be interpreted as the extent to which a company can grow and still experience profits in the future by utilizing its current resources. However, as time progresses, the ongoing utilization of resources is contingent upon the prevailing circumstances of global change. According to Terent'ev (2021), climate change is becoming a risk factor for the long-term market and financial stability of companies, with the phenomenon already occurring in the industrial sector (Republika Online, 2023); energy sector (CNBC Indonesia, 2023); coastal and marine sector, agricultural sector, and mining sector (Kompas, 2023) in Indonesia. A survey conducted by PwC (2021) revealed that 30% of CEOs perceive climate change to be a significant threat. Nevertheless, data from the Carbon Disclosure Project (2022) indicates that over 30% (23) of companies in Indonesia are aware of and acknowledge the climate-related risks that impact them. These risks pertain to the sustainability of the company, which is defined as follows: an increase in operational and indirect expenses is to be expected, including those related to extreme weather, changes in customer behavior, and the cost of replacing equipment with more environmentally friendly alternatives. Additionally, there is a potential for decreased revenue due to reduced consumer demand. Carbon Disclosure Project (2019) indicates that significant companies globally and in Indonesia acknowledge the climate risks to their business operations and sustainability. Consequently, climate change represents a crucial element in the company's sustainable growth.

In the online media BBC News Indonesia (2023), the UN Secretary-General, Antonio Guterres, advocated for the implementation of a "polluter pays" policy to address the financial implications of climate change. Research (Callahan & Mankin, 2022) indicates that the five countries with the highest emissions levels (the United States, China, Russia, Brazil, and India) have incurred economic losses amounting to US$4.1 trillion, representing 11% of the global annual gross domestic product (GDP).

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The Carbon Disclosure Project (CDP) report (2017) shows that the 100 largest fossil fuel companies are responsible for 71% of climate damage from 1988. This damage includes pollution, public health decline, and carbon emissions, which cause huge economic losses. It was also reported by World Air Quality (IQAir) (Greenpeace Indonesia, 2023) that Indonesia was declared the highest polluting country in Southeast Asia in the year 2022. As such, companies in Indonesia that generate emissions play a pivotal role in climate change and should be held liable for the associated losses.

Climate change puts pressure on companies to maintain their sustainability (Deloitte, 2019). The concept of sustainability implies a sense of purpose, manifested in the company's decision to minimize the detrimental impact of environmental damage. This is achieved by striking a balance between the sustainable growth of the company and the minimization of environmental harm. According to stakeholder theory, companies should consider stakeholders in achieving their goals and operating sustainably (Hörisch et al., 2020). The ability of companies to operate as going concerns is contingent upon the attainment of sustainable growth and the careful consideration of stakeholders. Customers are more likely attracted by companies that incorporate climate change into their strategic planning (Aldossary et al., 2024) Similarly, suppliers are more likely to choose customer companies that can sustain their sustainable growth over time and also focus on the environmental impact (Ingenbleek & Krampe, 2023). This approach can also mitigate the potential impact of climate change on sustainability issues, addressing both government and public concerns (Ye & Dela, 2023). Overall, this interconnection between companies and stakeholders presents a mutually beneficial solution. Therefore, sustainable growth can be defined as growth that can be achieved and sustained by the company's management capabilities without creating other problems (e.g. environmental damage) that are supported by stronger relationships with the stakeholders (Inc, 2023).

This study adopts variables from the research of Oprean-Stan et al. (2020), namely Sustainability Reporting and Unmanaged ESG Risk, and adds the variables Climate Change Reporting and Green Accounting. These variables can be named the companies' reporting, cost allocation, and risk mitigation of climate change-related corporate responsibilities to the stakeholders group. In accordance with subsequent responsibilities, individuals and groups of stakeholders are obliged to ensure the maintenance and supervision of their surrounding environment, as this has an impact on their general quality of life in the long term. This is in line with the principles of stakeholder theory. The study aims to see how climate change and accounting in the environmental sphere affect stakeholders' perspectives on the company's sustainable growth.

There are three novelties offered in this study. First, in terms of elements, this study has a focus on environmental impact management, which tends to be climate-related. As this study also examines the effect of climate-related reporting and green accounting on the sustainable growth of the company, the focus of the research elements is more specialized than the reference of Oprean-Stan et al. (2020). Second, in terms of time, the year 2022 set as the research time is the year in which Indonesia is reported as the most polluted country in Southeast Asia (Greenpeace Indonesia, 2023) Third, in terms of

measurement, this study also uses the 2021 GRI standard for sustainability reporting variable which is effectively used for 2022 reporting in testing the effectiveness of disclosure with this standard on the company's sustainable growth. From these novelties, this research is concluded from gap research from previous research (Oprean-Stan et al., 2020; Hardiningsih et al., 2020; Tsagas & Villiers, 2020; Weda & Sudana, 2021; Teng et al., 2021), Saini et al., 2022; Bataeva et al., 2022; Sanoran, 2023; Dura & Suharsono, 2022; Beekue & Lenuyiabari, 2022; Maji & Kalita, 2022; Li et al., 2023; Zhou et al., 2023; Indriastuti & Mutamimah, 2023; Damayanti & Yanti, 2023) for each of the variables' impact on sustainable growth, especially companies in Indonesia.

This study aims to examine the climate change elements in the company and the application of non-financial reporting standards from the perspective of sustainability, climate change, and environment-based accounting, as well as how companies manage ESG aspects that affect their sustainable growth. This research contributes by giving reasonable assurance of the implications on companies' sustainable growth in decision-making related to the changing of climate impact to support the worsening circumstances from climate change and the operational going concern. This study aims to examine the climate change elements in the company and the application of non-financial reporting standards from the perspective of sustainability, climate change, and environment-based accounting, as well as how companies manage ESG aspects that affect their sustainable growth.

2. Literature Review and Hypothesis Development

The stakeholder theory postulates that organizations are beholden not only to their management, but also to other stakeholders, including employees, customers, suppliers, investors, and society at large (Freudenreich et al., 2020; World Economic Forum, 2022). This theory creates a framework for understanding how corporate sustainability practices create value for various stakeholders (Freudenreich et al., 2020). The World Economic Forum (2022) asserts that companies that prioritize sustainability can generate financial returns as well as environmental and social benefits (World Economic Forum, 2022; Harrison & Wicks, 2013).

The stakeholder theory also demonstrates how the firms consider the interests of the stakeholders, which impacts the business objectives. The authors Bridoux & Stoelhorst (2022) discuss the emergence of the behavioral stakeholder theory, emphasizing the value creation through cooperation. The authors Kivits & Sawang (2021) underscore the importance of stakeholder engagement across the sectors, showing its positive impact on performance. This shift towards the stakeholder-centric approach enhances business outcomes and promotes sustainable, ethical practices. However, studies on corporate sustainability reports in Indonesia show that although companies recognize the importance of stakeholder theory, there is still room to improve its application, especially in terms of transparency and accountability (Meutia et al., 2022). Therefore, while stakeholder theory presents a robust model for understanding sustainable growth, its application in a concrete context shows some contradictions with the theory.

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Several studies have demonstrated the implications of sustainable growth. The research conducted by Oprean-Stan et al. (2020) demonstrates the correlation between sustainability reporting, inadequate ESG management, and company performance concerning sustainable growth. In a study conducted by Hardiningsih et al. (2020), the impact of sustainability information disclosure on the financial and market performance of mining companies in Indonesia and Malaysia was investigated. The findings revealed a statistically significant positive correlation between these variables. Conversely, Tsagas & Villiers (2020) concluded, following a review of the literature, that the disclosure of non-financial information does not necessarily have a significant effect on corporate sustainability, depending on the applicable application standards. These findings align with the conclusions of Weda & Sudana (2021), who demonstrated that the level of disclosure in sustainability reporting has no impact on stock returns. Teng et al. (2021) discovered that ESG risk has a considerable negative impact on a company's sustainable growth, with the effect being asymmetrical and influenced by the distribution of sustainable growth rate measurements. Meanwhile, Saini et al. (2022) found that ESG disclosures and supply chain practices have a significant positive effect on corporate financial performance, but climate change-related disclosures have a significant negative correlation with corporate financial performance.

Bataeva et al. (2022) discovered that ESG reporting exerts a considerable positive influence on the financial performance of Russian companies. Sanoran (2023) discovered that corporate sustainability resulted in favorable growth for companies in the Industrial Property & Construction sectors, but not for other sectors. Dura & Suharsono (2022) found that green accounting is detrimental to sustainable development and has no impact on financial performance. However, green accounting impacts sustainable development through financial performance.

The study by Beekue & Lenuyiabari (2022) revealed that the implementation of green cost accounting has a positive yet insignificant impact on the return on assets and profit after tax of upstream companies in Nigeria. Maji & Kalita (2022) discovered a positive correlation between the disclosure of climate change-related information and the performance of firms in the Indian energy sector. Li et al. (2023) found that ESG ratings have a negative impact on stock returns of Chinese listed companies, with a greater effect on non-manufacturing companies, public companies, and companies not located in provincial urban areas. Zhou et al. (2023) discovered that ESG performance enhances the innovation and sustainability performance of the manufacturing industry in Bangladesh. Damayanti & Yanti (2023) established that green accounting has no considerable impact on sustainable growth; however, material flow cost accounting exerts a favorable influence. Indriastuti & Mutamimah (2023) demonstrated that the sustainable performance of MSMEs in Central Java can be enhanced through green accounting and financial performance.

In comparison to the preceding study, this research presents a distinctive focus and set of characteristics. This study differs from those of Oprean-Stan et al. (2020), Teng et al. (2021), Saini et al. (2022), Bataeva et al. (2022), Sanoran (2023), Beekue & Lenuyiabari (2022), Li et al. (2023), and Zhou et al. (2023) in that it provides implications within the Indonesian context. This study differs from those of

Hardiningsih et al. (2020), Weda & Sudana (2021), Dura & Suharsono (2022), Maji & Kalita (2022), and Indriastuti & Mutamimah (2023) in that it adopts a more comprehensive approach by examining the issue from a sectoral perspective. While this study employs an identical methodology with that of the studies by Oprean-Stan et al. (2020), Hardiningsih et al. (2020), Weda & Sudana (2021), Bataeva et al. (2022), Sanoran (2023), Beekue & Lenuyiabari (2022), Maji & Kalita (2022), Damayanti & Yanti (2023); the study by Tsagas & Villiers (2020), which adopts a qualitative approach utilizing a method of comparative analysis and the studies by Teng et al. (2021), Saini et al. (2022), Dura & Suharsono (2022), Beekue & Lenuyiabari (2022), Li et al. (2023), Zhou et al. (2023), and Indriastuti & Mutamimah (2023), which employ a quantitative approach utilizing a method of different analysis, provide an additional perspective which contributes to this study. This research builds upon previous studies to present a nuanced perspective that extends their findings by grouping the affecting variables—namely, sustainability and climate-related reporting, ESG risk, and green accounting—into one research study conducted over a different specified period, 2022.

The hypotheses based on stakeholder theory posit that the company will be influenced to manage the environmental damages resulting from climate change by considering the interests of all stakeholders, thereby elevating the engagement between them. The initiation of sustainability reporting, which encompasses environmental, social, and corporate governance impacts, has the potential to affect stakeholder perceptions of the company's sustainable growth, with some studies identifying a positive correlation (Oprean-Stan et al., 2020; Saini et al., 2022; Bataeva et al., 2022) and others not finding a significant relationship (Hardiningsih et al., 2020; Weda & Sudana, 2021). As a company is more transparent and obligated with its sustainability management sustainability reporting has a positive significant influence on a company's sustainable growth as the stakeholders' interest meets with the company's objective.

H_1: Sustainability reporting has a positive and significant influence on sustainable growth.

Climate change reporting, as a form of non-financial reporting, also shows mixed results regarding its impact on sustainable growth. Some studies have found no significant link between the two (Hardiningsih et al., 2020; Tsagas & Villiers, 2020), while others have reported a positive relationship (Saini et al., 2022; Bataeva et al., 2022). As same as the sustainability reporting concept based on stakeholder theory the more a company is transparent and obligated with its climate-related impact, and influence on a company's sustainable growth.

H_2: Climate change reporting has a positive and significant impact on sustainable growth.

The stakeholder theory posits that a company bears responsibility and considers stakeholders' engagement with those about environmental, social, and governance (ESG) aspects. The better the company manages its ESG risk, the more it raises society's interest in reaching long-term development goals, contributes to the government, and increases the customers' demand and growth of the company. Therefore, ESG risk has a negative impact on sustainable growth, as shown in previous

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studies (Oprean-Stan et al., 2020; Teng et al., 2021) and a positive impact (Zhou et al., 2023; Sanoran, 2023).

H_3: ESG risks have a negative and significant impact on sustainable growth

Lastly, according to stakeholder theory, companies must consider the interests and needs of their stakeholders. Therefore, green accounting, which includes information on how a company allocates and addresses the environmental impacts of its operations, can influence how stakeholders perceive the company's sustainable growth. Several studies show that green accounting has a positive impact on sustainable growth as stated in previous studies (Dura & Suharsono, 2022; Indriastuti & Mutamimah, 2023), although several other studies did not find a significant impact (Beekue & Lenuyiabari, 2022; Damayanti & Yanti, 2023).

H_4: Green accounting has a positive significant influence on sustainable growth.

3. Research Method

This research employs a quantitative methodology to substantiate the hypothesis derived from the sampled data. Furthermore, this quantitative approach is designed to examine issues about numerical representations through the utilization of statistical techniques (Sugiyono, 2021). The data employed in this study is derived from secondary sources, namely the Indonesia Stock Exchange's online media and corporate entities. The data collection methodology entails a comprehensive examination of financial statements, annual reports, and sustainability reports, including those aligned with the Task Force on Climate-related Financial Disclosures (TCFD) standards. The sample was selected based on certain criteria, including:

Table 1. Research Sampling

No	Sampling Criteria	Total
1.	Companies listed on the IDX in the year 2022	824
2.	Companies that do not provide sustainability reports and audited financial statements for the period 2022 when this research was conducted	(36)
3.	Companies that are unlisted on Sustainalytics and have unissued an unmanaged ESG risk score (ESG risk rating) for 2022	(654)
4.	Companies that do not have green accounting measurements in their period expense recognition during 2022	(55)
	Total of Observation	79

Source: Secondary Data (Processed)

The measurement of variables in this study is explained as follows. The company's sustainable growth as the dependent variable is measured using the PRAT model (Profit margin, Retention rate, Assets Turnover, Financial Leverage) which follows the Higgins (1977) model and is used by the research of Oprean-Stan et al. (2020) and Altahtamouni et al. (2022). Sustainability reporting is measured using a disclosure index named GRI Standard that refers to the research of Khatri & Kjærland (2023) and Ottenstein et al. (2022). Climate change reporting is measured by a recommended disclosure index from

the Taskforce on Climate-related Financial Disclosure (TCFD) that was made by the Financial Stability Board as per G20 request, which the index is also called TCFD recommendations which is also used in the research of Bingler et al. (2022) and Moreno & Caminero (2022). ESG risk is taken from the score issued by Sustainalytics based on the research of Oprean-Stan et al. (2020). Lastly, Green accounting is measured by the proportion of environmental costs to net income, which is inferred from Rounaghi (2019) and Beekue & Lenuyiabari (2022).

The data analysis in this study was conducted using descriptive statistics, classical assumption tests (such as normality, multicollinearity, and heteroscedasticity tests), and regression analysis. The model is determined based on the type of data employed in the study, namely cross-sectional data, whereby variables are collected at a single point in time. The multiple linear regression model used in this study is:

$$SG = \alpha + \beta_1 SR_i + \beta_2 CR_i + \beta_3 ER_i + \beta_4 GA_i + e_i \quad (1)$$

Where:

α = Constant
β = Regression coefficient
SG = Sustainable Growth
SR = Sustainability Reporting
CR = Climate Change Reporting
ER = Unmanaged ESG Risk (ESG Risk Rating)
GA = Green Accounting
e = error term
i = the company under observation.

4. Result and Discussion

The following are descriptive statistics of each data used in this study, consisting of Corporate Sustainable Growth as the dependent variable and four independent variables, namely Sustainability Reporting, Climate Change Reporting, Unmanaged ESG Risk, and Green Accounting. The statistical description test is presented in Table 1 below:

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
SG	79	.0405701	.0364173	-.0059882	.2031049
SR	79	.7419058	.1199854	.4615385	.9848485
CR	79	.5486191	.2645364	.0909091	1
ER	79	30.32633	10.15062	12.67	54.6
GA	79	.0221994	.0402184	.000009	.194505

SG= Sustainable Growth, SR= Sustainability Reporting, CR = Climate Change Reporting, ER= Unmanaged ESG Risk (ESG Risk Rating), GA= Green Accounting

From the descriptive statistics table above, the average SG value of 0.0405701 indicates that the observed companies experienced sustainable growth of 4.057%. There is a variation of 0.0364173 in this growth rate across companies. The minimum and

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maximum values indicate a range in this growth, experiencing a decrease in growth (-0.0059882) while reaching growth of up to 20.31049. The mean SR value of 0.7419058 indicates that the observed companies have a sustainability reporting index of 74.19058%. There is a variation of 0.1199854 in this index across companies. The minimum and maximum values indicate a range in this index, with some companies having an index as high as 98.48485% while reporting an index as low as 46.15385%.

The average CR value of 0.5486191 indicates that, in general, companies have a climate change reporting level of 54.86191%. There is a variation of 0.2645364 in this level of reporting across companies. The minimum and maximum values indicate the range in this level of reporting, with 4 companies having the lowest level of reporting at 9.09091%, while 12 companies reach 100% reaching the highest index. The average ER value of 30.23633 indicates that the observed companies have an unmanaged level of ESG risk of 30.23633. There is a variation of 10.5062 in this level of risk across companies. The minimum and maximum values indicate the range in this level of risk, with the lowest level of risk being 12.67, while the highest risk was 54.6. The average GA value of 0.0221994 indicates that the observed companies have an environmental cost to net income level of 2.21994%. The value of 0.0402184 indicates the variation in this level across companies. The minimum and maximum values show the range of these levels, with levels as low as 0.000009%, while reaching as high as 19.4505%.

This research data was subjected to classical assumption tests, including tests of normality, multicollinearity, and heteroscedasticity. The normality test, conducted using the skewness and kurtosis technique, indicates that all variables are normally distributed following data transformation through the application of an absolute square root transformation on the SG variable and a logarithm transformation on the GA variable. The multicollinearity test on data that has been considered normally distributed indicates that there is no significant correlation between the independent variables, thereby demonstrating the absence of multicollinearity. A heteroscedasticity test on normal data distribution indicates that the data is homogeneous, indicating the absence of inequality of variance of residuals between observations. Therefore, the data has satisfied the prerequisites for hypothesis testing and is now suitable for further analysis.

After the data meets the classical assumptions and the appropriate regression model has been determined, this study proceeds to the hypothesis testing and results analysis stages. The test tools used include the Coefficient of Determination Test (R^2), Partial Test (t), and multiple linear regression analysis. The Coefficient of Determination (R^2) is a statistical test that is used to evaluate the extent to which independent variables can account for the variability of a dependent variable. The R^2 test results indicate an R-squared value of 0.1351. This indicates that the independent variables in the model are capable of explaining approximately 13.51% of the variation in the dependent variable. In contrast, the remaining 86.49% of the variation in the dependent variable is not explained by the independent variables in the model.

The objective of the t-test is to ascertain whether the influence exerted by each independent variable on the dependent variable is statistically significant. The t-table value is determined based on the significance value α and the degree of freedom (df), which in this study is 1.666.

Table 3. Summary of Regression Analysis

Variables	Predicted Sign.	Coefficient.	t	P > |t|
(constant)		.0011698	0.02	0.988
SR	+	.0275805	0.32	0.753
CR	+	.0666265	1.68	0.098
ER	-	.0021055	2.04	0.045*
Log (GA)	+	-.0103156	-2.10	0.039*

From the table above, it is concluded that the results of proving the hypothesis are as follows. The sustainability reporting variable (SR) does not have a significant influence on the sustainable growth variable (SG), with a probability t-value of 0.753 and a t-count value of 0.32. The climate change reporting variable (CR) may not have a significant influence on the sustainable growth variable (SG), with a probability t value of 0.098 and a count value of 1.68. The variable unmanaged ESG risk (ER) has a positive significant effect on the variable sustainable growth (SG), with a t-probability value of 0.045 and a t-count value of 2.04. The green accounting (GA) variable has a negative significant effect on the sustainable growth (SG) variable, with a t-probability value of 0.039 and a t-count value of -2.10.

This study assesses the impact of sustainability reporting on a company's capacity for sustainable growth. Based on the tenets of stakeholder theory, it is anticipated that a positive correlation will be observed between the two variables, given that sustainability reports serve as a conduit for communication between companies and their stakeholders. However, the results show that there is no significant relationship between sustainability reporting and sustainable growth. This may be due to the implementation of the new GRI standard, GRI Standard 2021, which is still in the early stages of understanding and implementation. Although there is no significant relationship overall, the research shows that for every 1% increase in the quality of reports that follow the GRI Standard 2021, companies will experience an increase in sustainable growth of 0.0275805. This suggests that improving the quality of reports can have a positive impact on sustainable growth. The results of this study are in line with Tsagas & Villiers's (2020) research which also found that the implications of sustainability reporting on sustainable growth are not significant. However, these results contradict other studies such as Oprean-Stan et al. (2020), Hardiningsih et al. (2020), Saini et al. (2022), and Bataeva et al. (2022) who found positive significant implications between the two variables. This study's result is justified by the period used than the prior studies. The contradicting results of those studies are from consecutive periods of more than 5 years. Thus, this study can't depict the hypothesis based on stakeholder theory because of the limited period used for determining the sustainability reporting quality. This suggests that more research is needed to understand the relationship between sustainability reporting and sustainable growth, especially in the context of implementing the new GRI standards.

This study evaluates the effect of climate change reporting on companies' sustainable growth. Based on stakeholder theory, it is expected that there is a positive relationship between the two because climate change reporting serves as a

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communication tool between companies and stakeholders regarding the impact of company operations on climate change. However, the results show that there is no significant relationship between climate change reporting and sustainable growth. This may be because the sample companies have not fully implemented the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) with an average disclosure level of 54.86% or 0.5486191. Although there is no significant relationship overall, the study shows that for every 1% increase in report quality that follows the TCFD recommendations, companies will experience an increase in sustainable growth of 0.0666265. This suggests that improving report quality can have a positive impact on sustainable growth.

The results of this study contradict the results of Maji & Kalita (2022) who found a positive significant implication between climate change reporting and sustainable growth, and the research of Saini et al. (2022) who found a negative significant implication between the two variables. Other than the limited period used in this study that can't show the significant influence on sustainable growth, the study of Maji & Kalita (2022) was done with the sample in the energy sector which shows a positive significant influence. This can be suggested for further research to also examine the influence of every sector. It could lead to other specified findings that would be value-added for specified sectors in Indonesia. The result is also contradicted by the research of Saini et al. (2022) which has probable factors from the different analyzing tools used in the study and the geographical distinction as a sample. Differing from linear regression analysis, Saini et al. (2022) used robustness analysis which could make a justificating conclusion when even the tests are not strictly fulfilled. Its research also used companies as a sample within India for 9 consecutive years period of time. This suggests that more research is needed to understand the relationship between climate change reporting and sustainable growth.

This study evaluates the effect of unmanaged ESG risk on a firm's sustainable growth. The results show that contrary to the initial hypothesis, unmanaged ESG risk has a positive significant effect on sustainable growth. That is, companies with higher ESG risk scores tend to have better sustainable growth. This result supports previous research by Li et al. (2023) but contradicts the study by Sanoran (2023). Despite some discrepancies with other studies, my findings make an important contribution to our understanding of the relationship between ESG risk and sustainable growth. From a stakeholder perspective, an increase in ESG risk score can be interpreted as greater engagement in ESG practices, which may attract investors concerned about sustainability and ethics. Therefore, companies with high ESG risk scores can attract more investment, which in turn can support the company's sustainable growth.

The present study posits that green accounting has a significant positive effect on the company's sustainable growth. However, the t-test results show that green accounting significantly negatively affects sustainable growth. It can be interpreted that the proportion of environmental costs from the company's net profit as a measure of green accounting variables has a significantly negative effect on the company's sustainable growth level. The results of this study contradict previous studies, such as Dura & Suharsono (2022) and Indriastuti & Mutamimah (2023), which show significant

positive implications for green accounting and sustainable growth. In addition, this study is also not in line with the research of Beekue & Lenuyiabari (2022) and Damayanti & Yanti (2023), which state that the implication between the two variables is not significant. From the results of this study, green accounting has a significant adverse effect on the company's sustainable growth. Although stakeholder theory explains that applying green accounting can support the company's sustainable growth, this study shows different results. This condition is likely due to the non-uniformity of reference for determining environmental costs for each company.

This research is expected to provide theoretical implications for future researchers as a reference in the study of Sustainable Growth in Indonesia. From a practical aspect, this research is expected to strengthen the company's confidence in presenting non-financial disclosure and increase the chances of achieving Sustainable Growth. For investors, this research can be a consideration when investing. At the same time, for regulators, it is anticipated that the findings of this study will help in efforts to achieve the Sustainability Development Goals (SDGs).

5. Conclusion, Implications, and Limitations

This study assesses the impact of four independent variables on the sustainable growth of companies listed on the Indonesia Stock Exchange during the 2022 financial year. The study's results, based on a sample of 79 companies, indicate that two of the four independent variables, namely unmanaged ESG risk and green accounting, significantly influence sustainable growth. By identifying the variables that influence a company’s sustainable growth, companies can prioritize ESG risk and green accounting areas in their strategic planning for the company’s growth. This results in more effective management of environmental, social, and governance (ESG) risks and resources and cost savings. Although sustainability reporting and climate change reporting have been disclosed according to GRI standards and The Task Force on Climate Related Financial Disclosures (TCFD) recommendations, neither has significantly affected the company's sustainable growth. Therefore, the company can consider enhancing sustainability and climate-related reporting quality. This policy helps make informed decisions that align with long-term sustainability goals and mitigate risks associated with climate change and global sustainability contribution.

This study has several limitations. First, despite efforts to select a representative sample, it is still possible that the sample does not accurately represent the population as a whole because only about +/- 10% of the company population meets the sample criteria, such as companies that do not publish audited financial statements, do not have an ESG Risk Rating score from Sustainalytics, or do not recognize or measure environmental costs. Secondly, limitations in the scientific literature discussing the relationship between variables may affect the interpretation and explanation of the research results. Third, the latest standard indices used as measurement tools on sustainability reporting variables have room for non-uniformity between companies, which may affect the study results. Considering the findings of this study, several suggestions can be applied to further research. For future researchers, it is recommended to expand the research period to increase the relevance of the relationship

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between variables and choose other variable proxies that can provide uniform values between companies. Thus, further research can provide deeper insights and contribute more to research in sustainable growth.

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