

Original Article

Green Accounting and Involvement of Underwriters in Sustainability Reports

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Abstract: *The goal of this study was to determine whether there was a significant correlation between the size of the audit committee, the frequency of meetings, the expertise of the committee, and the ability to carry out sustainability reporting assurance while being sensitive to industry needs for handling COVID-19. The research sample is a mining firm that uses moderating regression analysis for data analysis and is listed on the Indonesian stock exchange. According to the study's findings, the likelihood of carrying out sustainability reporting assurance depends significantly on the size, frequency of audit committee meetings, and industry sensitivity to the handling of COVID 19. Although the various results indicate that there is no meaningful correlation between the audit committee's expertise and the likelihood of carrying out assurance for sustainability reporting. The study's findings also show that the industry's sensitivity to COVID-19 handling enhances the link between the size of the audit committee and the feasibility of carrying out assurance for sustainability reporting.*

Keywords: *Sustainability Reporting Assurance, Green Accounting, Sustainability Reports.*

I. INTRODUCTION

By providing evidence that corporate reports adhere to predetermined standards, assurance services can assist businesses in lowering the legal risks connected to sustainability reporting. This would assist the business appease stakeholders and safeguard it against lawsuits or other legal problems arising from its reporting operations on sustainability and social responsibility. In addition, the use of Assurance services is not only useful for increasing stakeholder confidence but can also become a requirement for public prowess and portfolio for companies in certain circumstances, such as requirements required by government regulations or the Indonesian stock exchange.

In today's business environment, there has been an increasing demand for firm value from non-financial information because financial information alone is not sufficient to capture true firm value (Cohen & Simnett, 2015). This leads investors and stakeholders to continue to look beyond financial reports to inform their views and analysis on company performance (KPMG, 2017), such as social, environmental and human rights issues. In order for interested parties to understand the company's commitment to sustainability, these non-financial issues are described in a sustainability report (SR), which also contains economic, environmental, and social impacts brought on by the company's daily operating activities.

However, reports made by internal parties will be considered credible and trustworthy if an independent party guarantees them, such as in an external audit of financial reports (Cohen & Simnett, 2015). Adams & Evans (2014) contend that a guarantor who certifies that the information is accurate and reliable is required to increase the integrity and reliability of the information revealed in sustainability reporting.

Rossi, (2017) has previously conducted research on the necessity for an independent assurance agency to ensure the veracity and authenticity of sustainability report (SRA) information. Both Al-Shaer & Zaman (2018) and (Liao et al., 2018) carried out the identical action. By taking into account the characteristics of the size of the audit committee, the frequency of audit committee meetings, and the expertise that the audit committee possesses, the current research addresses the need for an independent guarantee institution that professionally guarantees that the data and information disclosed in sustainability reporting in Indonesia is reliable and accurate.

The development of the current sustainability report also shows that many mining companies operating in Indonesia are already concerned about the development and handling of the Covid 19 pandemic outbreak that has hit Indonesia. At the beginning of 2020 until now the Covid 19 pandemic is still a shared responsibility, including the company. Therefore, many mining companies that are reporting environmental responsibility or sustainability have reported that they have social and environmental responsibility to care for the handling of Covid-19. The cost and seriousness undertaken by the company to report the cost of handling Covid 19 as part of the industry's sensitivity to report it in the sustainability reporting assurance



report. Research conducted by Farida & Evi (2019) informs that the sensitivity of the company's industry affects sustainability reporting.

This study is crucial since industrial businesses listed on the Indonesian stock exchange still hardly ever employ assurance agencies for sustainability reporting in Indonesia. Even though Indonesia is a member country of the G20 which is a union or group of developed countries that have high economic growth rates. In addition, what is novel in this study is the existence of industry sensitivity variables in handling COVID-19. The goal of this study was to establish a significant correlation between audit committee size and sustainability reporting assurance by looking at the frequency of audit committee meetings, the expertise of the audit committee, and the feasibility of carrying out sustainability reporting assurance with industry sensitivity to Covid 19 handlers.

II. THEORETICAL FRAMEWORK

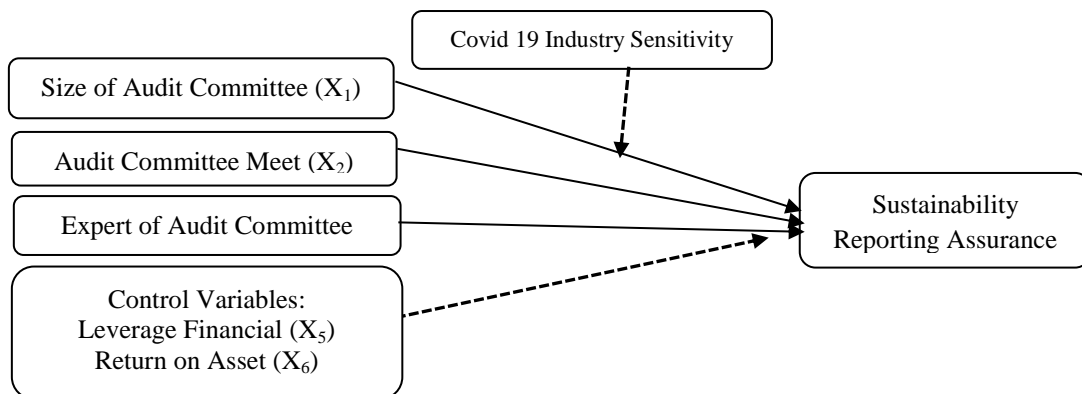
A) Sustainability Reports

An approach that prioritizes ongoing development in reducing an organization's negative overall societal effect while increasing its positive overall societal impact is more beneficial. Implementing a change in any organization can be difficult, but it can be more difficult for organizations that have usually primarily been financially focused to approach their operations from a triple bottom line perspective. When tackling sustainability, small, gradual improvements are frequently a better course of action than making drastic ones. In business, it is said that "you can only manage what you measure." Performance-based management is built around measurement. Regardless of the size of the company a little sole proprietorship or a huge global conglomerate—this assertion is accurate. Any organization must have clearly defined business metrics that can be gathered, analyzed, assessed, and acted upon in order to understand its current position and progress on its business activities. Currently, there are two basic objectives for sustainability reporting, both of which are voluntary: Documenting and evaluating an organization's environmental and social effect; and communicating an organization's sustainability efforts and advancement to stakeholders. The main focus of sustainability reporting is often on comparing performance from one year to the next and comparing it to predetermined goals and targets. A longer-term perspective and comparisons to other businesses in comparable fields and regions may also be included. Reporting on sustainability is also known as "triple bottom line" reporting since it considers a company's social and environmental "bottom lines" in addition to its financial bottom line. The three areas—also known as people, planet, and profit—are interrelated, and a company's development in each is reflected in its sustainability reporting. (Mirela-Cătălina, 2020)

B) Sustainability Reports Assurance

Reliance on independent assurance is one strategy to increase the reliability of sustainability data. Sustainability reports can be used by managers to help their businesses project a more sustainable image. Engaging in sustainability assurance is thought to lessen green washing since it boosts users' views of information trustworthiness and increases their confidence in sustainability reports. Studies reveal that assurance is necessary to guarantee a certain level of dependability, and stakeholders saw assured report as more dependable than non-assured once, even if assurance over sustainability report is still in its early stages and there are some issues raised regarding its reliability. Prior research discovered additional elements connected to the voluntary acceptance of assurance over sustainability reporting in addition to boosting reliability. According to Cohen & Simnett (2015), businesses who need to improve their reputation are more likely to have their sustainability reports assured. Additionally, look into how institutional elements at the national level affect the voluntary acceptance of assurance over sustainability reporting. The lack of a widely agreed standard to direct practitioners is the fundamental worry in the assurance process of sustainability reports. The common frameworks that assurance primarily employs. (Alshahali & Malaguweno, 2021)

Figure 1: Research Framework



C) Research Hypothesis

- H₁: There is a correlation between the size of the audit committee and the chance of implementing assurance for sustainability reporting.
- H₂: The frequency of audit committee meetings and the likelihood of implementing sustainability reporting assurance are correlated.
- H₃: The chance of implementing sustainability reporting assurance is correlated with the audit committee's experience.
- H₄: There is a connection between the industry's sensitivity to how Covid 19 is handled and the viability of implementing assurance for sustainability reporting.
- H₅: The association between audit committee size and the feasibility of carrying out assurance for sustainability reporting is strengthened by industry sensitivity to the management of COVID 19.

III. RESEARCH METHODS

This study is an empirical investigation using a small sample of mines that were listed on the Indonesia Stock Exchange during the years of 2020 and 2022. This research uses six variables consisting of four independent variables, namely: Audit Committee Size (X₁), Number of Audit Committees (X₂), Audit Committee Expertise (X₃) and industry sensitivity to the handling of covid 19 (X₄). One dependent variable is Sustainability Reporting Assurance and 2 control variables namely return on assets (X₅) and financial leverage (X₆). The operational definition and measurement of variables are as follows:

Table 1. Variable Measurement

Variable	Measurement
Sustainability Reporting Assurance (SRA)	There are three ways to achieve sustainability assurance. (1). Companies can publish their reports independently, using their own data and analysis. (2) Companies may use third party providers to help create or manage their reports for them. Guarantee = 1 if the firm adopts independent guarantees, 0 otherwise
Size of Audit Committee (X ₁)	totaling the number of audit members serving on the audit committee
Number of Audit Committee (X ₂)	number of audit committee meetings in a year
Expert of Audit Committee (X ₃)	divide the number of audit members who have financial or accounting expertise by the total number of members
Industry Sensitivity industry on handling COVID-19 (X ₄)	The company's sensitivity to the availability of funds and the company's concern for handling the Covid 19 outbreak
Leverage Financial (X ₅)	Total Debt : Total Asset
Return on Asset (X ₆)	Net Operating Income : Average of Total Asset

The criteria of a dummy dependent variable are used in the data analysis method known as logistic regression analysis to show the relationship between the independent factors and the dependent variable. This study's logistic regression equation is as follows:

$$Y = \ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1SAC + \beta_2ACM + \beta_3EAC + \beta_4SIC$$

$$p = \frac{\exp(\beta_0 + \beta_1SAC + \beta_2ACM + \beta_3EAC + \beta_4SIC)}{1 + \exp(\beta_0 + \beta_1SAC + \beta_2ACM + \beta_3EAC + \beta_4SIC)}$$

IV. RESULTS AND DISCUSSION

Table 2 on the research results informs that the number of assuror accountants is 31 (45.59%) while the assuror accountants are 37 (54.41%). This information indicates that the opportunities for accountants and non-accountants as guarantors of sustainability reporting have the same business opportunities.

Table 2: Type of Assuror

Assuror	Sum	Percentage
Accountant	31	45.59%
Non-Accountant	37	54.41%
Total	68	100.00%

Source: processed secondary data, 2023

The existence of a guarantee institution in the form of a consulting firm has now begun to develop and obtain potential clients to provide assurance services. Meanwhile, certification bodies that provide guarantee services also open up opportunities for companies to use the assurance services. The results of the research inform that the number of assurance services in the form of consulting institutions or firms is greater in number and clients.

Table 3. Sustainability Reporting Assurance service providers

	2020	2021	2022
Accountants			
Ernst & Young	1	1	1
KPMG	1	1	1
Moores Rowland	4	3	3
Total	6	5	5
Non-Accountants			
Consultant Specialists			
SR Asia	5	6	6
SGS Indonesia	1	1	1
Certification Bodies			
PT BSI Group Indonesia	-	1	1
CBC Global	1	2	2
TUV Rheinland	-	1	1
Lloyd's LRQA Indonesia	1	1	1
Total	8	12	12

Source: processed secondary data, 2023

Table 3 informs that there are more providers of sustainability reporting assurance services provided by non-accountants services compared to accountants. Specifically, it can be informed that specialist consultant services get more clients compared to guarantee agency services. These results prove that clients and companies that require sustainability reporting assurance services prefer and trust the services of specialist consultants, because this agency is able to provide strategic explanations and assistance for future strategic steps for companies to provide benefits to society, the earth and other stakeholders. Companies that use assurance services do not only want the results of an assessment of corporate sustainability reporting performance, but more than that, how consulting services are able to provide strategic solutions for sustainable benefits (O'Dwyer et al., 2017)

Table 4: Statistic Descriptive

	N	Min	Max	Mean	Std. Deviation
SAC	138	2	8	3,63	1,21
ACM	138	3	77	13,11	11,16
EAC	138	0,14	1	0,56	0,24
SIC	138	0	1	0,63	0,58
LEV	138	0,00	6,11	0,59	0,46
ROA	138	-0,03	0,52	0,07	0,15
SRA	138	0	1		0,29

Source: processed secondary data, 2023

The conclusions are supported by the descriptive statistical analysis shown in Table 4:

The audit committee size variable (SAC) has a mean value of 3.63, a minimum value of 2 that is held by each of the 11 sample companies, a maximum value of 8 that is held by PT Bukit Asam, and a range of values in between. These results indicate that the distribution of the data is quite low with a standard deviation value of 1.21. The variable number of audit committee member meetings (ACM) has a minimum value of 3 which is owned by the 35 companies in the sample, the maximum value is 77 which is owned by PT. Transcoal Pacific, with a mean value of 13.11. These results indicate that the data distribution is quite high with a standard deviation value of 11.16. The variable number of expert audit committees (EAC) has a minimum value of 0.14 which is owned by PT. Indo Straits Tbk, with a maximum value of 83 and a mean value of 0.56, is held by PT Medco Energi Internasional. These findings show that, with a standard deviation of 0.24, the data distribution is quite small.

The industry sensitivity variable for handling Covid 19 (SIC) has a mean value of 0.63 and a minimum value of 0 owned by PT Indika Energy Tbk, PT Sawit Sumbermas Sarana Tbk, and 26 other companies. Its maximum value is 1 owned by PT Energy Mega Persada, PT Medco Energi Internasional, and 36 other companies. These findings suggest that the data's distribution is relatively uniform, with a standard deviation of only 0.58. The variable of sustainability reporting assurance (SRA) has a minimum value of 0 which is owned by PT. Central Omega Resources, the maximum value of 1 is owned by 47 companies out of 62 companies, and the mean value is 0.18. These results indicate that the distribution of the data is quite low with a standard deviation value of 0.29. The leverage variable (LEV) has a minimum value of 0.00 which is owned by the 30 companies in the sample, a maximum value of 6.11 which is owned by Alumindo Light Metal Industry, and a mean value of 0.59. These results indicate that the distribution of the data is quite low with a standard deviation value of 0.46. The variable return on assets (ROA) has a minimum value of -0.03 which is owned by PT. Lionmesh Prima, the maximum value of 0.52 which is owned by PT. Aneka Tambang, and a mean value of 0.07. These results indicate that the distribution of the data is quite low with a standard deviation value of 0.15.

Table 5: Logistic Regression Test Results

	B	S.E.	Wald	df	Sig.
SAC	0.028	0.019	2.117	1	0.002
ACM	0.171	0.262	2.338	1	0.001
EAC	0.012	0.021	1.317	1	0.012
SIC	0.053	0.063	2.815	1	0.001
LEV	0.139	0.041	3.707	1	0.000
ROA	0.109	0.118	4.116	1	0.000
SIC*SA	0.031	0.011	3.219	1	0.000

Source: processed secondary data, 2023

A) Discussion

a. Relationship between Audit Committee Size and Likelihood of Carrying out Sustainability Reporting Assurance

In this study, the audit committee size is proxied by the number of members on the committee that are revealed in the annual report (Haji & Anifowose, 2016). The audit committee's size has a big impact on whether or not the company decides to carry out sustainability reporting assurance. In order to accept H1, which asserts that there is a connection between the audit committee's size and the feasibility of carrying out assurance for sustainability reporting. The significance value, which is less than α 5% of 0.002, demonstrates this. According to the objectives of the organisation, expanding the oversight of the assurance function for sustainability reporting will require the right number of audit committee members who do outstanding work. The size of the audit committee also reveals how serious the firm is about hiring people who can offer guidance and counsel so that it may concentrate on achieving the welfare of society, the environment, and the company. Tanyi & Smith, (2015) informed that size can have an impact on monitoring effectiveness, the more likely they are to carry out effective oversight of the information contained in the sustainability reporting assurance and ensure transparency through the presence of an external guarantor. The results of this study are in line with (Nasir & Utara, 2019) but not in line with the findings of Kend, (2015)

b. The relationship between the number of audit committee meetings and the likelihood of carrying out sustainability reporting assurance

The fluctuating frequency of audit committee meetings demonstrates a substantial impact on the company's choice to publish a separate sustainability report. The findings of the logistic regression test, which have a significance value of 0.001, or less than α 5%, show this. This outcome is consistent with H2, which states that there is a connection between the frequency of audit committee meetings and the likelihood of executing sustainability reporting assurance. The audit committee must actively participate in its responsibilities; as a result, their existence is not only an act of conformity with the law. The frequency of audit committee meetings serves as a measure of the committee's effectiveness in carrying out the

strategic design of directed policy directions and work programmes to make sure that sustainability reporting is beneficial to society, the environment, and the business. Ellwood and Garcia-Lacalle, (2016); Haji & Anifowose, (2016); Appuhami & Tashakor, (2017); and Al-Shaer & Zaman, (2018) findings indicating there is a favourable correlation between the frequency of audit committee meetings or meetings and the propensity to adopt a sustainability reporting assurance are confirmed by the findings of this study. This result is consistent with the findings of Adila & Syofyan (2018) research, not Suryono & Prastiwi (2020) findings.

c. Relationship between Audit Committee Expertise and Possibility of Performing Sustainability Reporting Assurance

Members of the audit committee acquire their knowledge through experience, non-formal education, such as training and certification, and formal education, namely having a background in accounting and finance. The study's findings show that H3, which asserts a connection between audit committee knowledge and the ability to carry out assurance for sustainability reporting, cannot be accepted. The results of the logistic regression test show that the significant value is more than α 5%, or 0.012, in this case. Members of the audit committee who are knowledgeable about this study have not been productive in offering guidance and considerations for company policies to always pay attention to employee welfare and effective corporate management for the environment, society, and the organisation. The findings of this study are also attributable to the fact that assurance of sustainability reporting is not immediately tied to financial data, but that the audit committee's abilities and knowledge can limit employees' bad or non-corporate-goal-aligning behaviour. The findings of this study disagree with those of Shaban et al. (2020), who contend that having members of the audit committee with knowledge of finance and accounting will make it easier to monitor and verify the information revealed in the company's sustainability reporting.

d. Relationship of Industry Sensitivity to Handling Covid 19 on the Possibility of Carrying Out Sustainability Reporting Assurance

The study's findings show that 0.001 is less than α 5% according to the logistic regression test's significant value. These findings demonstrate that H4: Industry Sensitivity to the Handling of COVID-19 enhances the association between the size of the audit committee and the ability to carry out assurance of sustainability reporting. Cho et al, (2014) defines an industry that is sensitive to handling Covid-19 as a type of industry whose activities place the industry in handling Covid-19 or socially will get more social and environmental risks so risk management is needed with assurance on sustainability reports to increase report users' trust in credibility. Such information (Cho et al., 2014). Industries that have concern for handling Covid 19 can increase the possibility of carrying out sustainability reporting assurance.

e. Industry sensitivity to the handling of covid 19 strengthens the relationship between audit committee size and the possibility of carrying out sustainability reporting assurance.

The study's findings show that a significant value with α 5% level of significance is 0.000, and the results of the Covid-19 industry sensitivity moderation test have strengthened the link between the size of the audit committee and the feasibility of carrying out assurance for sustainability reporting. Companies that have concern for handling the Covid 19 outbreak are a form of positive sensitivity to provide and increase public trust in corporate social and environmental responsibility. The pressure to increase awareness of the handling of Covid-19 arose because the optimal number of audit committee members in this study was able to provide direction and policies for company management so that sustainability reporting activities were right on target and in accordance with community needs. Therefore, assurance is needed for these activities. The study's findings also demonstrate that industry sensitivity in using COVID 19 is a pure moderating variable that strengthens the link between the size of the audit committee and the likelihood of putting sustainability reporting assurance into practice. Because the significant value of 0.000 is less significant than the significant value of 0.002 for the association between the size of the audit committee and the likelihood of implementing sustainability reporting assurance, the outcome can be understood.

V. CONCLUSION

The audit committee's size has a big impact on whether or not the company decides to carry out sustainability reporting assurance. According to the objectives of the organization, expanding the oversight of the assurance function for sustainability reporting will require the right number of audit committee members who do outstanding work. The size of the audit committee also reveals how serious the firm is about hiring people who can offer guidance and counsel so that it may concentrate on achieving the welfare of society, the environment, and the company. The company's choice to publish a separate sustainability report was strongly influenced by the audit committee meetings, according to research. The audit committee must actively participate in its responsibilities; as a result, their existence is not only an act of conformity with the law. In order to ensure that sustainability reporting may benefit society, the environment, and the business, the audit committee's performance in carrying out the strategic development of directed policy orientations and work programme is measured by the frequency of its meetings. The expertise of audit committee meetings can't significant influence on the company's decision to release a separate

sustainability report. Members of the audit committee who have expertise in this study have not shown productivity in providing considerations and direction for company policies to always pay attention to the welfare and good management of the company for the environment, society and the company.

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