

Accounting Analysis Journal

https://journal.unnes.ac.id/sju/index.php/aaj



# Voluntary Assurance of Sustainability Reports: Evidence from Indonesia

# Inten Meutia<sup>127</sup>, Shelly F Kartasari<sup>2</sup>, and Rochmawati Daud<sup>3</sup>

1.2.3 Faculty of Economics, University Sriwijaya, Indonesia

ARTICLE INFO	ABSTRACT			
<i>Article History:</i> Submitted July 26 <sup>th</sup> , 2022 Revised August 20 <sup>th</sup> , 2022 Accepted September 23 <sup>rd</sup> , 2022 Published September 29 <sup>th</sup> , 2022 <i>Keywords:</i> <i>Assurance Statement; Corporate</i> <i>Governance; Sustainability</i> <i>Report</i>	<b>Purpose :</b> -This study aims to prove the determinants of the adoption of assurance statements in companies in Indonesia. Several companies in Indonesia have included assurance reports in their sustainability reports as a voluntary disclosure. This phenomenon motivates this study, considering that sustainability report assurance is gaining interest among companies, but there is still very little literature discussing this issue, specifically in Indonesia. This research will fill the research gap on sustainability report assurance. <b>Method :</b> Using data from companies participating in ASRRAT (Asian Sustainability			
	<ul> <li>Report Rating) for five years (2017 – 2021), this study assesses the influence of governance, profitability, and company age on the company's decision to adopt assurance on sustainability reports. Total unit analysis are 140 sustainability reports from 28 companies.</li> <li>Findings : The results show that governance, profitability, and the company age significantly influence the adoption of assurance on sustainability reports. This study provides preliminary evidence of the willingness of companies to adopt assurance of sustainability reports in Indonesia by identifying characteristics that distinguish Indonesia from other countries concerning the choice to implement an assurance for sustainability reports.</li> <li>Novelty : This research uses governance measures based on the GRI standard of gov-</li> </ul>			
	ernance disclosure standards, consisting of 29 disclosure indicators. Previous studies linking governance with sustainability reports only tested specific governance mecha- nisms, such as the audit committee, board of directors, or diversity. © 2022 The Authors. Published by UNNES. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/)			

# INTRODUCTION

Sustainability reporting is a concept that has developed over the last two decades. This concept became known starting with the Bruntland Report in 1987. Sustainability issues are significant for society and the environment (Burritt & Schaltegger, 2010). For companies, sustainability issues link environmental and social management with competitive business strategies (Schaltegger & Wagner, 2011). Second, integrating ecological and social information with financial and non-financial information (Schaltegger & Wagner, 2017). Thus, sustainability activities use a strategic approach from the inside-out for management performance measurement and outside-in strategy to adapt and align company activities with stakeholders with gaining community legitimacy (Elena Windolph et al., 2014).

In recent decades, the increase in information on sustainability performance reports is a result of the increasing number of corporate sustainability activities around the world (Safari & Areeb, 2020; Journeault et al., 2020). KPMG (2020), in his latest research reports, that 80 percent of N100 companies world-wide have made a sustainability report. Meanwhile, since 2011, more than 90 percent of the G 250 have made sustainability reports, an increase in almost all countries globally (KPMG, 2020). This increase occurred in both for-profit companies (Searcy & Buslovich, 2014; Peters & Romi, 2015; Jamil et al., 2021) and non-profit entities (Lourenço et al., 2014; Sassen & Azizi, 2018).

Companies that publish sustainability reports transparently and provide accurate and reliable information to their users will increase trust and confidence and gain legitimacy from their stakeholders (Al-Shaer & Zaman, 2019; Mashayekhi, 2019; Geerts et al., 2021; Soh, 2014; Manetti & Toccafondi, 2012). However, reporting on sustainability information cannot be separated from various criticisms: it is considered opportunistic, greenwashing, lacks

sense, only lip service lacks stakeholder inclusiveness, and has not met the expectations of report users (Burritt & Schaltegger, 2010; Mahoney et al., 2013). Some authors criticize the reliability of corporate sustainability information because sustainability reports do not represent actual practice; this reporting is considered only symbolic (Schaltegger & Burritt, 2006; Chelli et al., 2019; Cho et al., 2015).

As a result, there are demands from stakeholders for companies to assure that the economic, social and environmental information presented in the sustainability report is information that has high credibility. For this reason, for sustainability reporting to be relevant, reliable, and credible, it is necessary to have independent guarantees from external assurance providers (Kaya, 2017; Paolo Perego & Kolk, 2012; Al-Shaer & Zaman, 2019).

Adams and Evans (2004a), stated that having a statement of assurance on a sustainability report can help increase the information's credibility. Martínez-Ferrero et al., (2018) confirmed a positive relationship between assurance and reporting quality. Following (Gürtürk & Hahn, 2016), through external assurance covering the sustainability report's content and structure, the sustainability report's reliability, comparability, and credibility will increase globally. KPMG research (2020) shows an increase in N100 companies adopting assurance from independent third-party on their sustainability reports by more than 50 percent since 1993. These findings show that sustainability report assurance has become a widely adopted practise by companies globally.

Scholars and practitioners have highlighted the benefits of assurance on sustainability reports (Mnif Sellami et al., 2019; Achmad et al., 2017). According to (Rossi & Tarquinio, 2017b; Cheng et al., 2015; Brown & Kohlbeck, 2017; KPMG, 2020), the main benefits of assurance on sustainability reports include increased quality and reliability of sustainability reports, company value; encouraged management and stakeholder engagement. Farooq and de Villiers (2018) identify the benefits of assurance to develop trust and confidence in governance, management, and stakeholder engagement. The assurance of sustainability reports can increase companies' and users' confidence in the data quality for decision-making (Maroun, 2019; Seguí-Mas et al., 2018).

KPMG (2020) highlights that assurance gives stakeholders greater confidence that statements and claims are made accurately and transparently. Adopting independent assurance also signifies a company's more significant commitment to Environment Social Governance (ESG) issues. In addition, it also delivers a mechanism to encourage system improvements to the company's ESG performance (O'Dwyer et al., 2011b; Velte, 2021).

There has also been an increase in companies compiling sustainability reports in Indonesia recently. The number of sustainability reports in Indonesia can be seen in the number of companies participating in the Asia Sustainability Report Rating (ASR Rating) award for sustainability reports conducted annually by the NCSR since 2005. Although the awareness of companies to publish sustainability reports in Indonesia has increased, regulations governing assurance of sustainability reports are not yet available.

The need for assurance on sustainability reports has only been implicitly stated in POJK number 51 of 2017. This POJK regulates the obligation to publish sustainability reports, effective starting in 2019 in stages. Several companies in Indonesia have included assurance reports in their sustainability reports as a voluntary disclosure. This phenomenon motivates this study, considering that sustainability report assurance is gaining interest among companies, but there is still very little literature discussing this issue, specifically in Indonesia. This research will fill the research gap on sustainability report assurance.

This research contributes to developing sustainability report practices in Indonesia by identifying the criteria for companies that adopt assurance on sustainability reports. Research on sustainability reports assurance is mainly carried out in developed countries (Al-Shaer & Zaman, 2019; Channuntapipat et al., 2019; Larrinaga et al., 2018; Maroun, 2020; Maroun, 2019; Simoni et al., 2020). Based on the review, there is still little research on sustainability reports assurance carried out in developing countries. This study will provide additional evidence on sustainability report assurance in developing countries.

Another contribution of this research is using governance measures based on the GRI standard of governance disclosure standards, consisting of 29 disclosure indicators. Previous studies linking governance with sustainability reports only tested specific governance mechanisms, such as the audit committee, board of directors, or diversity (Bae et al., 2018; Michelon & Parbonetti, 2012; Naciti, 2019; Önder & Baimurzin, 2020; Wahyudi, 2021).

There has been an increase in requests for assurance on the sustainability report to increase the sustainability report's credibility (Hummel et al., 2019; Rossi & Tarquinio, 2017a). Assurance of sustainability reports can encourage increased user trust and perceptions about the credibility of information (Michelon et al., 2019). Therefore, adopting sustainability reduces negative perceptions about the company (Quick & Inwinkl, 2020).

Considering that the development of sustainability reports assurance is still in its early stages, the reliability of this assurance is still in doubt (Farooq & de Villiers, 2018). Research shows that assurance is crucial to certifying sustainability reports' reliability, and stakeholders perceive assurance of sustainability reports to be more reliable than not (Hassan et al., 2020; Maroun, 2020).

According to neo-institutional theory, analyzing sustainability assurance means understanding the practice as a response in isomorphic behaviour to the emergence of institutional obstacles to gain legitimacy (Herold, 2018; Geerts et al., 2021). Companies are actively building their corporate image; sustainability assurance is part of the strategy to build legitimacy (Junior et al., 2014; Gillet, 2012), responding to normative, mimetic, and coercive pressures.

In understanding the factors that drive companies to adopt sustainability report assurance, it is essential to

pay attention to the trends of companies in attracting customers and investors. Signal theory assumes that companies publish sustainability reports voluntarily to demonstrate how the company's values, goals, and strategies can solve various social, environmental, and ethical problems (Bae et al., 2018). Based on this assumption, companies with sound financial, social and environmental performance will become enthusiasts to disclose their performance to reduce legitimacy problems (Bae et al., 2018).

Based on Signal theory, companies with well sustainability performance seek to communicate their results and impact – and are more concerned with seeking third-party assurance than lower-performing companies. There is a tendency for companies with lower performance to partially disclose or misrepresent their results (Simoni et al., 2020). Sustainability performance is positively related to an organization's propensity to disclose social and environmental impacts and adopt assurance. Thus, sustainability performance should be positively associated with an organization's propensity to assure their sustainability report (Braam & Peeters, 2018).

The Signal theory also supports the assumption that firms with better corporate social performance will voluntarily adopt assurance to signal their sustainability performance (Braam & Peeters, 2018). In short, companies with better social or environmental performance will be more interested in adopting sustainability report assurance. According to (Kılıç & Kuzey, 2019), this practice is related to management practices and corporate governance mechanisms. Companies with good corporate governance mechanisms have incentives to deliver their superior to consumers and other stakeholders (Naseem et al., 2017; Maroun, 2019). Many kinds of literature prove a positive relationship between management practices, mechanisms of corporate governance, and the quality of non-financial disclosures (Odoemelam & Okafor, 2018).

In this perspective, assurance is a mechanism that can minimize agency problems and increase management accountability to shareholders and other stakeholders. Several previous studies examining the relationship between governance and voluntary disclosure separated each element of governance as a separate mechanism and found inconsistent results, such as audit committees (Altawalbeh, 2020; Al Ma'ani & Alawad, 2019; Albawwat, 2022; Zaman et al., 2021) board directors (Bueno et al., 2018; Sarhan & Ntim, 2019; Tingbani et al., 2020) or ownership structure (Alqatameen et al., 2020; Khlif et al., 2017; Juhmani, 2013; Masum et al., 2020; Mnif Sellami et al., 2019). Based on the definition presented by (the Cadbury Report, 1992) that governance is a system that functions to direct and control the organization, as well as the concept of governance (OECD) that Corporate governance is a set of relationships between the company's management (board of directors), the board of commissioners, shareholders, and other stakeholders. This study understands governance as a unit that should not be measured separately to see its contribution to supporting company performance, including adopting sustainability reports assurance. So the first hypothesis in this study is:

#### H<sub>i</sub>: Companies with good corporate governance are more likely to adopt assurance on sustainability reports.

Profitable companies generally want to recognize more excellent company value. To achieve this, the issue of sustainability becomes relevant because sustainability issues can affect the company's value (Loh et al., 2017; Geiszler et al., 2018). Therefore, financial reporting is insufficient in communicating the company's value; this makes sustainability reports important (Hassan et al., 2020). For superior financial performance to be translated as superior corporate value, sustainability performance must also be communicated. However, the value of a sustainability report depends on the perceived credibility of the information disclosed (Odoemelam & Okafor, 2018). Therefore, companies with high profitability need to increase the credibility of sustainability reports by adopting assurance on sustainability reports. According to (Mnif Sellami et al., 2019), companies that may adopt assurance on sustainability reports are those that have enough profit, considering the cost of assurance is not tiny. Several studies on the relationship between assurance on sustainability reports and profitability show mixed results. Research by (Maroun & Prinsloo, 2020; Wong et al., 2016) cannot prove the existence of a relationship between profitability and assurance. Meanwhile, research (Castelo Branco et al., 2014; Maroun & Prinsloo, 2020) shows the opposite result. Therefore, this study formulates the second hypothesis as follows:

### H<sub>2</sub>: Profitable companies are more likely to adopt assurance on sustainability reports

The company's age is often assumed to indicate the company's ability to survive in the business environment. Age is also a measure of a company's capacity to maintain its reputation. Some authors argue that corporate

Criteria	Data
Companies participating in ASRRAT in the period 2017 -2020	120
Less:	
Inconsistent company	90
Companies that do not have complete data	2
Sample company	28
Five years observation	140

Table 1. Sample Criteria

CODE	Variables	Variable operational definition	Measurement
AS	Adopt Assurance SR	The company has a assurance report	Dummy 1. Adoption 0. Non-Adoption
GOV	Corporate Governance Score	Governance Index based on GRI standard 102 (29 items)	Disclosed items divided by item that should be disclosed
ROA	Profitability	A measure of an organization's prof- it relative to its expenses	Return on Assets Ratio = Net profit / Total asset
AGE	Corporate age	The number of years since the date of foundation of the company	The year the company is observed minus the year the company was founded
IND	Types of Industry	Category type of company industry based on carbon emissions.	1. High * 2. Medium** 3. Low***
SIZE	Company Size	Total Assets of the company	Ln Total Asset company

 Table 2
 Research Variables

\* High (high carbon industries: construction and materials, electricity, gas, water and utilities, industrial transportation, mining, travel, and recreation); \*\* medium (medium industries include aerospace and defence, chemicals, electronics, and electrical equipment, food manufacturers, general industry, and support

services):

\*\*\* Low (low carbon industries: banks, fixed-line telecommunications, food retailers, medical equipment, life insurance, media, mobile telecommunications, real estate, and software)

maturity may impact the quantity and type of social responsibility undertaken (Cahyani & Suryaningsih, 2016; D'Amato & Falivena, 2020). However, Nguyen et al., (2021) research does not prove that the company's age affects the disclosure of social responsibility. According to Rettab et al., (2009), the more mature the company, its reputation increases, and its social responsibility activities become integrated with its activities. Likewise, the relationship between the company and stakeholders is becoming closer.

Consequently, the company will maintain this relationship by meeting stakeholder expectations by adopting assurance on sustainability reports. Research by Wulandari and Suganda (2021) also proves that the company's age is one factor determining the company's increase in its credibility. Therefore, this study hypothesizes that more mature companies are more likely to adopt assurance on sustainability reports.

## H<sub>3</sub>: Older companies are more likely to adopt assurance on sustainability reports.

## **RESEARCH METHODS**

Panel regression analysis is a tool used in this study to test the hypothesis. The logit model is used since the dependent variable is a dummy variable. This study uses data from companies participating in the ASR Rating (Asia Sustainability Reporting Rating) issued by the NCSR (National Center for Sustainability Reporting). NCSR is the Institution that initiates sustainability reporting in Indonesia and ASIA. ASR Rating, previously known as the Sustainability Reporting Awards (SRA). This Institution has awarded companies with the best sustainability reports since 2005 based on GRI standards.

The initial sample of this study came from participating companies as participants' ASR Rating from 2013 - to 2020. One hundred twenty-one companies participated in the ASR Rating in 2013 - 2020. Companies with experience in the ASR Rating have taken the initiative to make a sustainability report, although it is still voluntary. So it is hoped that this company has also attempted to adopt assurance from a third party to guarantee sustainability reports to increase stakeholder trust. Simnett et al. (2009) stated that companies consistently publishing sustainability reports are most likely to adopt assurance.

However, not many companies follow the ASR Rating consistently from year to year. Based on the data ob-

Tahun	Adopting Assurance	Non-adopting assurance	Percentage
2017	9	21	30%
2018	12	18	40%
2019	12	18	40%
2020	15	15	50%
2021	15	15	50%
Increase percentage	66,7%		

Table 3. Sample Companies Adopting Assurance

Source: The Processed Data (2022)

indie in Descriptive ou				
Variable	Observ	Mean	Min	Max
AS	140		0	1
IND	140		1	3
Ln Total Aset	140	31,625	29,375	34,952
ROA	140	0,025	-0,672	0,263
AGE	140	45,14	8	74
GCG	140	0,394	0,043	0,957

Table 4. 1	Descriptive	Statistic
------------	-------------	-----------

Source: The Processed Data (2022)

tained, there are only 30 companies that have consistently followed the ASR Rating for the last five years (2017 to 2020). Of the thirty companies, two companies do not have complete data. So the unit of analysis of this research is 140 companies. Table 1 shows the research sample criteria.

The analysis was carried out using content analysis. Content analysis is a research technique for making replicable and valid conclusions from a text (or other meaningful material) to the context in which it is used (Krippendorff, 2013). In accounting, content analysis is a widely used analytical technique, primarily when the research seeks to identify the content of the annual or other reports.

The dependent variable of this study is binary; the value is equal to 1 if the company adopts an assurance statement and 0 if it does not. Therefore, the analysis of this study would be more suitable to use a logistic regression model. Normal distribution or homoscedasticity is not a prerequisite in logistic analysis. It does not require linearity between the dependent and independent variables. The relationship between company characteristics and the quality of the assurance report will be analyzed using equation 1. Furthermore, the operational definition and measurement of each research variable can be seen in table 2.

# $ASit = \beta 0 + \beta 1 GOVAit + \beta 1 ROAit + \beta 3 AGEit + \beta 4 INDit + \beta 5 SIZEit + \pounds it \qquad (1)$

This study uses different measurements from previous studies to gauge the quality of corporate governance. This study uses a disclosure index based on the GRI 102 standard in the governance disclosure section, consisting of 29 disclosure indicators. In previous studies, corporate governance was divided into specific mechanisms such as the board of directors, audit committees, etc.

This model includes control variables to consider other factors influencing the decision to adopt assurance. Pressures related to sustainability will affect companies operating in environmentally sensitive industries more than companies in sectors with little environmental impact (Jaaffar et al., 2018). Previous research has proven a higher level of transparency in the sustainability reports of environmentally sensitive companies (Miralles-Quirós et al., 2018; Nilipour et al., 2020). Therefore it will be more likely to adopt assurances on sustainability reports. Previous studies have proven that the industry influences the company's decision to compile a sustainability report (Sukitsch et al., 2015; Myšková & Hájek, 2018; Nurim & Asmara, 2019). This study also includes firm size, measured as the natural log of total assets to control firm size. The literature finds that firm size affects the likelihood of sustainability reporting (Michelon et al., 2019; Braam & Peeters, 2018; Peters & Romi, 2015).

### **RESULTS AND DISCUSSIONS**

The descriptive statistics in table 3 show the sample companies have sustainability reports assurance in the period 2017 – 2021. Table 3 shows an increase in companies adopting assurance on sustainability reports since 2017, although this increase is not too significant. In 2017 only 30 percent of companies adopted assurance, but in 2020 and 2021, it has become 50 percent. There was an increase in companies adopting sustainability assurance by 66.7 percent compared to 2017. This shows that assurance on sustainability reports has become a matter of interest for companies. The increasing number of companies adopting this assurance, as described by (Larrinaga et al., 2018),

i doite of i all whoe e	onclutions						
Variables	AS	Ln TA	ROA	AGE	IND	GCG	VIF
AS	1,000						1,21
Ln TA	0,486***	1,000					1,19
ROA	-0,1218***	0,0017***	1,000				1,22
AGE	0,0706***	0,1355***	0,1228***	1,000			1,10
IND	0,1138***	0,0598***	0,2432***	0,1154***	1,000		1,13
GCG	0,372***	0,206**	0,146	0,259***	0,103	1,000	1,38

# Table 5. Pairwise correlations

Note: Significant Level : \*10%, \*\* 5% \*\*\*1%

Source: The Processed Data (2022)

0	5		
Variables	Signs Predicted	<b>Regression Coefficient</b>	Z-Value (p-Value)
Constant		12,083	692 (0,000)
Ln TA	+	5,703**	2,26 (0,018)
ROA	+	1,214**	0,6 (0,024)
AGE	+	0,029***	6,87 (0,000)
IND	+	1.057**	1,90 (0,047)
GCG	+	2.374**	2,81 (0,015)

Table 6. Regression Analysis

Notes: Wald chi-square 58.82, (p-value) (0.000), number of observations 140

Significant Level: \*10%, \*\* 5% \*\*\*1%

Source: The Processed Data (2022)

is an attempt to improve the quality of sustainability reports.

Table 3 shows the descriptive statistics of the research variables: each research variable's average, minimum and maximum values. The sample company has an average Ln value of 31,625 total assets. Concerning profitability, the average ROA value is 0.025. Generally, the ROA value that is considered reasonable is above 0.5 (Tangngisalu, 2022). The average age of the sample companies is 45.14. This figure indicates that the sample companies are pretty mature in business. Finally, the average GCG score of the sample companies is 0.394. This figure is still far below the excellent value.

Multicollinearity problems between independent variables should not arise in logistic regression analysis. This study identifies the possibility of multicollinearity problems among the five explanatory variables by making a correlation matrix. Table 5 shows that all correlation coefficients are below 0.8. According to (Lewis-Beck & Lewis-Beck, 2016; Gujarati, 2004), the limit at which the severe problem of multicollinearity begins is 0.8. The highest VIF number (1.38) implies that the multicollinearity problem does not exist. According to (Matloff, 2017), the limit where the issue of multicollinearity arises is 10.

As can be seen from table 6, corporate governance is positively and significantly associated with assurance adoption; thus, the first hypothesis is supported. Companies with good governance will pay more attention to the issue of sustainability reports, so they will adopt sustainability reports assurance to improve the sustainability report's quality. In addition, this finding also proves that companies with good governance tend to be more transparent by trying to assure sustainability reports. This finding is consistent with previous research, which found a positive relationship between good governance and the decision to adopt an assurance statement (Peters & Romi, 2015). The assurance statement's adoption is the governance mechanism's impact on reducing agency problems and increasing management accountability to shareholders and other stakeholders.

Table 6 also shows a positive and significant relationship concerning the company's age at the 5% level. The refore, the second hypothesis is supported. This finding is in line with (Dutta, 2019) and (Alotaibi, 2020), which prove that firm age is positively related to voluntary reporting practices. Older companies are usually more established and tend to be more transparent in their inclusion in sustainability reports. Older companies will improve their sustainability report's credibility by adopting an assurance statement.

Finally, the third hypothesis is supported by evidence that profitability and sustainability reports' assurance has a positive and significant relationship. This finding implies that companies with better profits have the resources to adopt assurance statements because the adoption of assurance statements involves high costs. This finding is consistent with the results (Farooq et al., 2021; Tarquinio & Rossi, 2017; Branco et al., 2014).

Regarding the control variables, both company size and industry type have a positive and significant relationship with the sustainability report's assurance. This relationship implies that larger companies facing more significant pressure and dealing with wider stakeholders tend to have sustainability reports assurance. This finding aligns with previous sustainability report assurance studies (Braam & Peeters, 2018; Branco et al., 2014), which found that firm size is a factor that determines the desire to adopt assurance. Research by (H. Cho et al., 2014; Nilipour et al., 2020) proves that environmentally sensitive companies adopt an assurance statement.

#### CONCLUSIONS

The increasing number of companies issuing sustainability reports has been accompanied by increasing demand for the credibility of these reports (KPMG, 2020). As a result, companies use assurance statements to improve the sustainability report's credibility. As Hummel et al. (2019) highlighted, research on sustainability assurance is still in its early stages and requires more evidence. The findings of this study corroborate previous findings regarding the factors that determine the adoption of sustainability report assurance. In addition, it also strengthens previous relationships by using different measures, specifically for corporate governance.

This study indicates that corporate governance influences the company's desire to adopt assurance on sustainability reports. Companies with good governance tend to adopt assurance to increase the sustainability reports' credibility. Firm age and profitability also significantly influence the adoption of assurance. The longer the company operates, the possibility of the company adopting assurance on SR also increases. This finding indicates that the company feels the need to maintain its credibility. Because assurance usually involves high costs, the tendency to adopt assurance is more likely to occur in financially strong companies. This study also proves that industry type and the company's size influence companies to adopt sustainability reports assurance.

This research significantly contributes to the development of sustainability accounting in developing countries and the sustainability accounting literature generally. In addition, this study identifies characteristics that distinguish Indonesia from other countries concerning the desire to adopt assurance on sustainability reports. This finding also provides evidence to understand the dynamics and adoption of sustainability assurance under developed countries' different economic and environmental characteristics. Finally, these findings contribute to Signal theory by providing empirical evidence on corporate governance and corporate aspects and explaining how these two relate to companies' willingness to adopt assurances on sustainability reports.

However, this study has some limitations. First, the number of samples is limited; the following research can expand by covering all listed companies in Indonesia, and a more extended period would be interesting. Second, the binary variable (no/yes) is a measure that has been widely used in assurance statement research (Harymawan et al., 2020; Mnif Sellami et al., 2019; Martínez-Ferrero et al., 2017). This measurement can be considered another limitation of this work. Further research can be developed by measuring the assurance statement quality.

#### REFERENCES

- Achmad, T., Faisal, F., & Ulum, M. B. (2017). Nature of Information Provided and Quality of Sustainability Reports Assurance Statements Of Fortune Global 500 Companies. Journal of Applied Business Research (JABR), 33(5), 1023–1034. https://doi.org/10.19030/jabr.v33i5.10024
- Adams, C. A., & Evans, R. (2004). Accountability, Completeness, Credibility and the Audit Expectations Gap. Journal of Corporate Citizenship, 2004(14), 97–115. https://doi.org/10.9774/GLEAF.4700.2004.su.00010
- Al-Shaer, H., & Zaman, M. (2019). CEO Compensation and Sustainability Reporting Assurance: Evidence from the UK. Journal of Business Ethics, 158(1), 233–252. https://doi.org/10.1007/s10551-017-3735-8
- Al Ma'ani, A. M., & Alawad, A. (2019). Impact of the Audit Committee's Characteristics on Voluntary Disclosure: The Case of the Banks Operating in Jordan. International Journal of Accounting and Financial Reporting, 9(4), 414. https://doi. org/10.5296/ijafr.v9i4.16143
- Albawwat, A. H. (2022). The Influence of Audit Committee Characteristics on Voluntary Disclosure of Annual Financial Reports in Jordan. Universal Journal of Accounting and Finance, 10(1), 161–170. https://doi.org/10.13189/ujaf.2022.100117
- Alotaibi, M. M. (2020). Determinants of Sustainability Disclosure of Saudi Listed Companies. Journal of Economics and Sustainable Development, 11(2), 83–97. https://doi.org/10.7176/JESD/11-2-09
- Alqatameen, D. A., Alhaleem Alkhalaileh, M. A., & Dabaghia, M. N. (2020). Ownership Structure, Board Composition and Voluntary Disclosure by Non-financial Firms Listed in )ASE). International Business Research, 13(7), 93. https://doi. org/10.5539/ibr.v13n7p93
- Altawalbeh, M. A. F. (2020). Audit Committee Attributes, Corporate Governance and Voluntary Disclosure: Evidence from Jordan. International Journal of Academic Research in Accounting, Finance and Management Sciences. https://doi. org/10.6007/ijarafms/v10-i2/7440
- Bae, S., Masud, M., & Kim, J. (2018). A Cross-Country Investigation of Corporate Governance and Corporate Sustainability Disclosure: A Signaling Theory Perspective. Sustainability, 10(8), 2611. https://doi.org/10.3390/su10082611
- Braam, G., & Peeters, R. (2018a). Corporate Sustainability Performance and Assurance on Sustainability Reports: Diffusion of Accounting Practices in the Realm of Sustainable Development. Corporate Social Responsibility and Environmental Management. https://doi.org/10.1002/csr.1447
- Braam, G., & Peeters, R. (2018b). Corporate Sustainability Performance and Assurance on Sustainability Reports: Diffusion of Accounting Practices in the Realm of Sustainable Development. Corporate Social Responsibility and Environmental Management, 25(2), 164–181. https://doi.org/10.1002/csr.1447
- Bueno, G., Marcon, R., Pruner-da-Silva, A. L., & Ribeirete, F. (2018). The role of the board in voluntary disclosure. Corporate Governance (Bingley). https://doi.org/10.1108/CG-09-2017-0205
- Burritt, R. L., & Schaltegger, S. (2010). Sustainability accounting and reporting: Fad or trend? Accounting, Auditing & Accountability Journal. https://doi.org/10.1108/09513571011080144
- Cahyani, C., & Suryaningsih, R. (2016). The Effect of Leverage, Board of Commissioner, Foreign Ownership, Company Age, and Company Size Towards the Disclosure of Corporate Social Responsibility (CSR) Implementation. GATR Accounting and Finance Review, 1(1), 27–33. https://doi.org/10.35609/afr.2016.1.1(4)
- Castelo Branco, M., Delgado, C., Ferreira Gomes, S., & Cristina Pereira Eugénio, T. (2014). Factors influencing the assurance of sustainability reports in the context of the economic crisis in Portugal. Managerial Auditing Journal, 29(3), 237–252. https://doi.org/10.1108/MAJ-07-2013-0905
- Channuntapipat, C., Samsonova-Taddei, A., & Turley, S. (2019). Exploring diversity in sustainability assurance practice: Evidence from assurance providers in the UK. Accounting, Auditing and Accountability Journal. https://doi.org/10.1108/ AAAJ-05-2017-2940
- Chelli, M., Durocher, S., & Fortin, A. (2019). Substantive and symbolic strategies sustaining the environmentally friendly ideology. Accounting, Auditing & Accountability Journal, 32(4), 1013–1042. https://doi.org/10.1108/AAAJ-02-2018-3343
- Cho, C. H., Laine, M., Roberts, R. W., & Rodrigue, M. (2015). Organized hypocrisy, organizational façades, and sustainability reporting. Accounting, Organizations and Society, 40, 78–94. https://doi.org/10.1016/j.aos.2014.12.003

### 51 Inten Meutia, Shelly F Kartasari, & Rochmawati Daud, Voluntary Assurance of Sustainability Reports: Evidence from Indonesia

- D'Amato, A., & Falivena, C. (2020). Corporate social responsibility and firm value: Do firm size and age matter? Empirical evidence from European listed companies. Corporate Social Responsibility and Environmental Management, 27(2), 909–924. https://doi.org/10.1002/csr.1855
- Dutta, P. (2019). Determinants of voluntary sustainability assurance: the importance of corporate environmental performance. Social Responsibility Journal, 16(8), 1403–1414. https://doi.org/10.1108/SRJ-06-2019-0213
- Elena Windolph, S., Schaltegger, S., & Herzig, C. (2014). Implementing corporate sustainability. Sustainability Accounting, Management and Policy Journal. https://doi.org/10.1108/sampj-01-2014-0002
- Farooq, M. B., & de Villiers, C. (2018). The shaping of sustainability assurance through the competition between accounting and non-accounting providers. Accounting, Auditing & Accountability Journal, 32(1), 307–336. https://doi.org/10.1108/ AAAJ-10-2016-2756
- Farooq, M. B., Zaman, R., Sarraj, D., & Khalid, F. (2021). Examining the extent of and drivers for materiality assessment disclosures in sustainability reports. Sustainability Accounting, Management and Policy Journal, 12(5), 965–1002. https:// doi.org/10.1108/SAMPJ-04-2020-0113
- Geerts, M., Dooms, M., & Stas, L. (2021). Determinants of Sustainability Reporting in the Present Institutional Context: The Case of Port Managing Bodies. Sustainability, 13(6), 3148. https://doi.org/10.3390/su13063148
- Geiszler, M., Muenzen, J., & Lippitt, J. (2018). The Effect of Environmental Sustainability Initiatives on Firm Value. The International Journal of Sustainability in Economic, Social, and Cultural Context, 14(3), 21–31. https://doi.org/10.18848/2325-1115/CGP/v14i03/21-31
- Gillet, C. (2012). A study of sustainability verification practices: the French case. Journal of Accounting & Organizational Change, 8(1), 62–84. https://doi.org/10.1108/18325911211205748
- Gujarati, D. (2004). Basic Econometrics (Ekonometrika Dasar). Penerbit Erlangga.
- Gürtürk, A., & Hahn, R. (2016). An empirical assessment of assurance statements in sustainability reports: smoke screens or enlightening information? Journal of Cleaner Production, 136, 30–41. https://doi.org/10.1016/j.jclepro.2015.09.089
- H. Cho, C., Michelon, G., M. Patten, D., & W. Roberts, R. (2014). CSR report assurance in the USA: an empirical investigation of determinants and effects. Sustainability Accounting, Management and Policy Journal, 5(2), 130–148. https://doi. org/10.1108/SAMPJ-01-2014-0003
- Harymawan, I., Nasih, M., Salsabilla, A., & Putra, F. K. G. (2020). External assurance on sustainability report disclosure and firm value: evidence from Indonesia and Malaysia. Entrepreneurship and Sustainability Issues, 7(3), 1500–1512. https://doi.org/10.9770/jesi.2020.7.3(5)
- Hassan, A., Elamer, A. A., Fletcher, M., & Sobhan, N. (2020). Voluntary assurance of sustainability reporting: evidence from an emerging economy. Accounting Research Journal, 33(2), 391–410. https://doi.org/10.1108/ARJ-10-2018-0169
- Herold, D. (2018). Demystifying the link between institutional theory and stakeholder theory in sustainability reporting. Economics, Management and Sustainability, 3(2), 6–19. https://doi.org/10.14254/jems.2018.3-2.1
- Hummel, K., Schlick, C., & Fifka, M. (2019). The Role of Sustainability Performance and Accounting Assurors in Sustainability Assurance Engagements. Journal of Business Ethics, 154(3), 733–757. https://doi.org/10.1007/s10551-016-3410-5
- Jaaffar, A. H., Amran, A., & Rajadurai, J. (2018). The Impact of Institutional Pressures of Climate Change Concerns on Corporate Environmental Reporting Practices: A Descriptive Study of Malaysia's Environmentally Sensitive Public Listed Companies. SAGE Open, 8(2), 215824401877483. https://doi.org/10.1177/2158244018774839
- Jamil, A., Mohd Ghazali, N. A., & Puat Nelson, S. (2021). The influence of corporate governance structure on sustainability reporting in Malaysia. Social Responsibility Journal, 17(8), 1251–1278. https://doi.org/10.1108/SRJ-08-2020-0310
- Journeault, M., Levant, Y., & Picard, C.-F. (2021). Sustainability performance reporting: A technocratic shadowing and silencing. Critical Perspectives on Accounting, 74(xxxx), 102145. https://doi.org/10.1016/j.cpa.2019.102145
- Juhmani, O. I. (2013). Ownership Structure and Corporate Voluntary Disclosure: Evidence from Bahrain. International Journal of Accounting and Financial Reporting, 3(2), 133. https://doi.org/10.5296/ijafr.v3i2.4088
- Junior, R. M., Best, P. J., & Cotter, J. (2014). Sustainability Reporting and Assurance: A Historical Analysis on a World-Wide Phenomenon. Journal of Business Ethics, 120(1), 1–11. https://doi.org/10.1007/s10551-013-1637-y
- Kaya, I. (2017). Sustainability Reporting Assurance: A Literature Survey. In Eurasian Studies in Business and Economics (Vol. 7, pp. 33–50). https://doi.org/10.1007/978-3-319-54112-9\_3
- Khlif, H., Ahmed, K., & Souissi, M. (2017). Ownership structure and voluntary disclosure: A synthesis of empirical studies. Australian Journal of Management, 42(3), 376–403. https://doi.org/10.1177/0312896216641475
- Kılıç, M., & Kuzey, C. (2019). The effect of corporate governance on carbon emission disclosures. International Journal of Climate Change Strategies and Management, 11(1), 35–53. https://doi.org/10.1108/IJCCSM-07-2017-0144
- KPMG. (2020). The Time Has Come! The KPMG Survey of Sustainability Reporting 2020. https://doi.org/10.6004/ jnccn.2019.0020
- Krippendorff, K. (2013). Content Analysis: An Introduction to Its Methodology. Content Analysis: An Introduction to Its Methodology. Thousand Oaks, CA: Sage Publications. Retrieved from http://www.uk.sagepub.com/textbooks/Book234903
- Larrinaga, C., Rossi, A., Luque-Vilchez, M., & Núñez-Nickel, M. (2018). Institutionalization of the Contents of Sustainability Assurance Services: A Comparison Between Italy and United States. Journal of Business Ethics, 163(1), 67–83. https:// doi.org/10.1007/s10551-018-4014-z
- Lewis-Beck, C., & Lewis-Beck, M. (2016). Applied Regression: An Introduction. Applied Regression: An Introduction. 2455 Teller Road, Thousand Oaks California 91320: SAGE Publications, Inc. https://doi.org/10.4135/9781483396774
- Loh, L., Thomas, T., & Wang, Y. (2017). Sustainability Reporting and Firm Value: Evidence from Singapore-Listed Companies. Sustainability, 9(11), 2112. https://doi.org/10.3390/su9112112
- Lourenço, I. C., Callen, J. L., Branco, M. C., & Curto, J. D. (2014). The Value Relevance of Reputation for Sustainability Leadership. Journal of Business Ethics, 119(1), 17–28. https://doi.org/10.1007/s10551-012-1617-7
- Mahoney, L. S., Thorne, L., Cecil, L., & LaGore, W. (2013). A research note on standalone corporate social responsibility reports: Signaling or greenwashing? Critical Perspectives on Accounting, 24(4–5), 350–359. https://doi.org/10.1016/j.

cpa.2012.09.008

- Manetti, G., & Toccafondi, S. (2012). The Role of Stakeholders in Sustainability Reporting Assurance. Journal of Business Ethics, 107(3), 363–377. https://doi.org/10.1007/s10551-011-1044-1
- Maroun, W. (2019). Does external assurance contribute to higher quality integrated reports? Journal of Accounting and Public Policy, 38(4), 106670. https://doi.org/10.1016/j.jaccpubpol.2019.06.002
- Maroun, W. (2020). A Conceptual Model for Understanding Corporate Social Responsibility Assurance Practice. Journal of Business Ethics, 161(1), 187–209. https://doi.org/10.1007/s10551-018-3909-z
- Maroun, W., & Prinsloo, A. (2020). Drivers of combined assurance in a sustainable development context: Evidence from integrated reports. Business Strategy and the Environment, 29(8), 3702–3719. https://doi.org/10.1002/bse.2606
- Martínez-Ferrero, J., García-Sánchez, I.-M., & Ruiz-Barbadillo, E. (2018). The quality of sustainability assurance reports: The expertise and experience of assurance providers as determinants. Business Strategy and the Environment, 27(8), 1181– 1196. https://doi.org/10.1002/bse.2061
- Martínez-Ferrero, J., & García-Sánchez, I. M. (2017). Coercive, normative and mimetic isomorphism as determinants of the voluntary assurance of sustainability reports. International Business Review, 26(1), 102–118. https://doi.org/10.1016/j. ibusrev.2016.05.009
- Mashayekhi, B. (2019). A Survey on Corporate Sustainability Reporting: The Case of Iran. Journal of Finance and Accounting, 7(3), 76. https://doi.org/10.11648/j.jfa.20190703.12
- MASUM, M. H., LATIFF, A. R. A., & OSMAN, M. N. H. (2020). Ownership Structure and Corporate Voluntary Disclosures in Transition Economy. The Journal of Asian Finance, Economics and Business, 7(10), 601–611. https://doi. org/10.13106/jafeb.2020.vol7.no10.601
- Matloff, N. (2017). Statistical Regression and Classification. Statistical Regression and Classification: From Linear Models to Machine Learning. Chapman and Hall/CRC. https://doi.org/10.1201/9781315119588
- Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. Journal of Management & Governance, 16(3), 477–509. https://doi.org/10.1007/s10997-010-9160-3
- Michelon, G., Patten, D. M., & Romi, A. M. (2019). Creating Legitimacy for Sustainability Assurance Practices: Evidence from Sustainability Restatements. European Accounting Review, 28(2), 395–422. https://doi.org/10.1080/09638180.2018.1 469424
- Miralles-Quirós, M. M., Miralles-Quirós, J. L., & Gonçalves, L. M. V. (2018). The value relevance of environmental, social, and governance performance: The Brazilian case. Sustainability (Switzerland). https://doi.org/10.3390/su10030574
- Mnif Sellami, Y., Dammak Ben Hlima, N., & Jarboui, A. (2019). An empirical investigation of determinants of sustainability report assurance in France. Journal of Financial Reporting and Accounting, 17(2), 320–342. https://doi.org/10.1108/ JFRA-02-2018-0019
- Moroney, R., Windsor, C., & Aw, Y. T. (2012). Evidence of assurance enhancing the quality of voluntary environmental disclosures: An empirical analysis. Accounting and Finance, 52(3), 903–939. https://doi.org/10.1111/j.1467-629X.2011.00413.x
- Myšková, R., & Hájek, P. (2018). Sustainability and Corporate Social Responsibility in the Text of Annual Reports—The Case of the IT Services Industry. Sustainability, 10(11), 4119. https://doi.org/10.3390/su10114119
- Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. Journal of Cleaner Production, 237, 117727. https://doi.org/10.1016/j.jclepro.2019.117727
- Naseem, M. A., Riaz, S., Rehman, R. U., Ikram, A., & Malik, F. (2017). Impact of board characteristics on corporate social responsibility disclosure. Journal of Applied Business Research. https://doi.org/10.19030/jabr.v33i4.10001
- Nilipour, A., de Silva, T.-A., & Li, X. (2020). The Readability of Sustainability Reporting in New Zealand over time. Australasian Accounting, Business and Finance Journal, 14(3), 86–107. https://doi.org/10.14453/aabfj.v14i3.7
- Nurim, Y., & Asmara, E. N. (2019). Industry Characteristics and Patterns of Sustainability Reports. Indonesian Journal of Sustainability Accounting and Management, 3(2), 174. https://doi.org/10.28992/ijsam.v3i2.87
- O'Dwyer, B., Owen, D., & Unerman, J. (2011). Seeking legitimacy for new assurance forms: The case of assurance on sustainability reporting. Accounting, Organizations and Society, 36(1), 31–52. https://doi.org/10.1016/j.aos.2011.01.002
- Odoemelam, N., & Okafor, R. (2018). The Influence of Corporate Governance on Environmental Disclosure of Listed Non-Financial Firms in Nigeria. Indonesian Journal of Sustainability Accounting and Management, 2(1), 25. https://doi. org/10.28992/ijsam.v2i1.47
- Önder, □., & Baimurzin, R. (2020). Effect of Corporate Governance on Sustainability Disclosures: Evidence from Turkey. Indonesian Journal of Sustainability Accounting and Management, 4(1), 93. https://doi.org/10.28992/ijsam.v4i1.207
- Perego, P., & Kolk, A. (2012). Multinationals' Accountability on Sustainability: The Evolution of Third-party Assurance of Sustainability Reports. Journal of Business Ethics, 110(2), 173–190. https://doi.org/10.1007/s10551-012-1420-5
- Peters, G. F., & Romi, A. M. (2015). The Association between Sustainability Governance Characteristics and the Assurance of Corporate Sustainability Reports. AUDITING: A Journal of Practice & Theory, 34(1), 163–198. https://doi. org/10.2308/ajpt-50849
- Quick, R., & Inwinkl, P. (2020). Assurance on CSR reports: impact on the credibility perceptions of non-financial information by bank directors. Meditari Accountancy Research, 28(5), 833–862. https://doi.org/10.1108/MEDAR-10-2019-0597
- Rettab, B., Brik, A. Ben, & Mellahi, K. (2009). A Study of Management Perceptions of the Impact of Corporate Social Responsibility on Organisational Performance in Emerging Economies: The Case of Dubai. Journal of Business Ethics, 89(3), 371–390. https://doi.org/10.1007/s10551-008-0005-9
- Rossi, A., & Tarquinio, L. (2017). An analysis of sustainability report assurance statements: Evidence from Italian listed companies. Managerial Auditing Journal, 32(6), 578–602. https://doi.org/10.1108/MAJ-07-2016-1408
- Safari, M., & Areeb, A. (2020). A qualitative analysis of GRI principles for defining sustainability report quality: an Australian case from the preparers' perspective. Accounting Forum, 44(4), 344–375. https://doi.org/10.1080/01559982.2020.173 6759

#### 53 Inten Meutia, Shelly F Kartasari, & Rochmawati Daud, Voluntary Assurance of Sustainability Reports: Evidence from Indonesia

- Sarhan, A. A., & Ntim, C. G. (2019). Corporate boards, shareholding structures and voluntary disclosure in emerging MENA economies. Journal of Accounting in Emerging Economies, 9(1), 2–27. https://doi.org/10.1108/JAEE-03-2017-0033
- Sassen, R., & Azizi, L. (2018). Assessing sustainability reports of US universities. International Journal of Sustainability in Higher Education, 19(7), 1158–1184. https://doi.org/10.1108/IJSHE-06-2016-0114
- Schaltegger, S., & Burritt, R. (2006). Corporate Sustainability Accounting. A Catchphrase for Compliant Corporations or a Business Decision Support for Sustainability Leaders? In Sustainability Accounting and Reporting (pp. 37–59). Springer Netherlands. https://doi.org/10.1007/978-1-4020-4974-3\_2
- Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: Categories and interactions. Business Strategy and the Environment. https://doi.org/10.1002/bse.682
- Schaltegger, S., & Wagner, M. (2017). Managing the Business Case for Sustainability. (S. Schaltegger & M. Wagner, Eds.). London: Routledge. https://doi.org/10.4324/9781351280525
- Searcy, C., & Buslovich, R. (2014). Corporate Perspectives on the Development and Use of Sustainability Reports. Journal of Business Ethics. https://doi.org/10.1007/s10551-013-1701-7
- Seguí-Mas, E., Polo-Garrido, F., & Bollas-Araya, H. (2018). Sustainability Assurance in Socially-Sensitive Sectors: A Worldwide Analysis of the Financial Services Industry. Sustainability, 10(8), 2777. https://doi.org/10.3390/su10082777
- Simnett, R., Vanstraelen, A., & Chua, W. F. (2009). Assurance on Sustainability Reports: An International Comparison. The Accounting Review, 84(3), 937–967. https://doi.org/10.2308/accr.2009.84.3.937
- Simoni, L., Bini, L., & Bellucci, M. (2020). Effects of social, environmental, and institutional factors on sustainability report assurance: evidence from European countries. Meditari Accountancy Research, 28(6), 1059–1087. https://doi. org/10.1108/MEDAR-03-2019-0462
- Soh, D. S. B. (2014). Sustainability Reporting and Assurance: A Historical Analysis on a World-Wide Phenomenon. Social and Environmental Accountability Journal, 34(2), 125–125. https://doi.org/10.1080/0969160x.2014.938484
- Sukitsch, M., Engert, S., & Baumgartner, R. (2015). The Implementation of Corporate Sustainability in the European Automotive Industry: An Analysis of Sustainability Reports. Sustainability, 7(9), 11504–11531. https://doi.org/10.3390/ su70911504
- Tangngisalu J. (2022). Current Ratio, Return on Asset, and Debt-to-Equity-Ratio on Stock-Price of Sector Property and Real Estate. Golden Ratio Financ Manag. 2(1):1-14.
- Tarquinio, L., & Rossi, A. (2017). Determinants of corporate social responsibility reporting and external assurance: evidence from Italian-listed companies. International Journal of Accounting, Auditing and Performance Evaluation, 13(4), 398. https://doi.org/10.1504/IJAAPE.2017.087249
- Tingbani, I., Chithambo, L., Tauringana, V., & Papanikolaou, N. (2020). Board gender diversity, environmental committee and greenhouse gas voluntary disclosures. Business Strategy and the Environment, 29(6), 2194–2210. https://doi. org/10.1002/bse.2495
- Velte, P. (2021). Determinants and consequences of corporate social responsibility assurance: a systematic review of archival research. Society and Business Review, 16(1), 1–25. https://doi.org/10.1108/SBR-05-2020-0077
- Wahyudi, S. M. (2021). The Effect of Corporate Governance and Company Characteristics on Disclosure of Sustainability Report Companies. European Journal of Business and Management Research. https://doi.org/10.24018/ejbmr.2021.6.4.929
- Wong, J., Wong, N., Li, W. Y., & Chen, L. (2016). Sustainability assurance: an emerging market for the accounting profession. Pacific Accounting Review, 28(3), 238–259. https://doi.org/10.1108/PAR-11-2014-0038
- Wulandari, S., & Suganda, A. D. (2021). Determining factors of earnings management based on accrual model. Jurnal Akuntansi & Auditing Indonesia, 25(1), 45–53. https://doi.org/10.20885/jaai.vol25.iss1.art5
- Zaman, R., Farooq, M. B., Khalid, F., & Mahmood, Z. (2021). Examining the extent of and determinants for sustainability assurance quality: The role of audit committees. Business Strategy and the Environment, 30(7), 2887–2906. https://doi. org/10.1002/bse.2777