

Sustainability Reporting: Quality and Value RelevanceNurzi Sebrina^{1*}, Suhairi², Suhanda³¹*Universitas Negeri Padang, Padang ^{2,3}Universitas Andalas, Padang*Corresponding author: nurzisebrina@gmail.comDOI: <https://10.24036/wra.v10i1.117304>

Diterima : 25 Mei 2022
 Direvisi : 10 Juni 2022
 Disetujui : 14 Juni 2022
 Tersedia daring : 02 Juli 2022

Abstract

This study examines the quality of sustainability reporting of companies listed on the Indonesia Stock Exchange (IDX) and analyses the incremental value of sustainable reporting information (non-financial) on the value relevance of financial information. The research was conducted on the sustainability reporting of companies listed on the Indonesia Stock Exchange and from 713 listed companies, and by purposive sampling, a sample of 80 companies was obtained. Research on the quality of sustainability reports is carried out on reports published from 2016 to 2019. As for value relevance, it is carried out on sustainability reports published from 2016 to 2018. The significance of the value of information is investigated using the multiple regression method, modified Ohlson's (1995) model, while the quality of sustainability reporting is investigated using content analysis. The study shows that the quality of sustainability reporting is still low, determined by the disclosure index and the level of reliability. The quality of sustainability reporting and information on economic, environmental, social topics (except governance) is relevant for stakeholders. Thus, the research results related to the overall quality of sustainability reporting and the topics of sustainable performance are consistent with the value-enhancing theory in the context of the shared value concept. However, the sustainability report does not have a positive incremental value to the value relevance of financial information on companies listed on the Indonesia Stock Exchange.

Keywords: Sustainability reporting, the value relevance of sustainability reporting

Abstraksi

Penelitian ini bertujuan untuk memperoleh bukti empiris kualitas pelaporan keberlanjutan perusahaan publik yang terdaftar di Bursa Efek Indonesia, dan menganalisis nilai inkremental informasi pelaporan berkelanjutan (non-keuangan) terhadap relevansi nilai informasi keuangan. Dari 713 emiten bursa, sebanyak 80 perusahaan terpilih sebagai sampel berdasarkan metode purposive sampling. Penelitian kualitas laporan keberlanjutan dilakukan pada laporan yang diterbitkan pada tahun 2016 hingga 2019. Sedangkan untuk relevansi nilai dilakukan pada laporan keberlanjutan yang diterbitkan pada tahun 2016 hingga 2018. Relevansi nilai informasi diuji dengan menggunakan metode regresi berganda, model Ohlson modifikasi (1995), sedangkan kualitas pelaporan keberlanjutan diselidiki menggunakan analisis isi. Hasil penelitian menunjukkan bahwa kualitas *sustainability reporting* masih rendah, Kualitas laporan berkelanjutan dan kualitas dimensi ekonomi, lingkungan, sosial (kecuali tatakelola) mempunyai relevansi nilai bagi investor sebagai *stakeholder*. Hasil penelitian konsisten dengan teori peningkatan nilai (*the value-enhancing theory*) dalam konteks konsep nilai bersama (*shared value concept*). Namun, *sustainability report* tidak memiliki nilai inkremental positif terhadap relevansi nilai informasi keuangan pada perusahaan yang terdaftar di Bursa Efek Indonesia.

Kata-kata kunci: Pelaporan berkelanjutan, Relevansi nilai pelaporan berkelanjutan

Cara Membuat Kutipan (APA 6th style):

Sebrina, Nurzi; Suhairi; Suhanda. (2022). *Sustainability Reporting: Quality and Value Relevance*. *Wahana Riset Akuntansi*. 10(1), 69-83.



INTRODUCTION

Sustainable development promotes economic and social growth while minimizing environmental damage and maximizing natural resources. Corporations play an essential role in achieving sustainable development goals by adopting policies and business practices that maximize shareholder wealth, the economic and social welfare of their employees, and society in general without harming the environment (Mensah, 2019). Company activities that contribute to development are balancing economic, ecological, and social issues (do Prado et al., 2020). Business sustainability is a process that enables organizations to design and implement strategies that contribute to sustainable performance in all areas, namely EGSEE (economic, governance, social, ethical, and environmental) (Brockett, A., & Rezaee, 2012). These non-financial GSEE sustainability activities and performance can increase its long-term value by fulfilling its social responsibilities environmental obligations, creating an ethical workplace, and enhancing its reputation (Rezaee, Tsui, Cheng, & Zhou, 2019). Corporate social responsibility (CSR) reporting is a communication tool companies use to convey a transparent image. It is also a tool available to managers to assess continuous improvement in non-financial areas (Fernandez-Feijoo, Romero, & Ruiz, 2014).

Sustainability performance reporting is also a big concern for public companies in Indonesia. Ernst & Young (EY) Indonesia's 2015 Global Investor Survey emphasized the country's business sustainability reports' excellence. Based on the survey, investors claimed to have received minimal information about non-financial information from companies. That's what causes investors and regulators to encourage transparency in corporate sustainability reports because this is one of the crucial aspects that affect the company's development. Investors will undoubtedly welcome this big step in the effort to make sustainability disclosure transparent. According to research conducted by EY Indonesia (2015), investors have begun to pay more attention to the non-financial aspects of companies in the last two years. Even developments regarding the non-financial elements are also often used as a basis for decision-making. The prospect of loans will be wide open for companies that transparently present their sustainability reports. That's what makes companies more forthcoming in providing information about non-financial aspects. Transparency of sustainability reports does not only meet the regulations in force in Indonesia. Moreover, the sustainability report will also motivate the company's internal systems to pursue the best business strategy. So that companies that have the best track records have a chance to win the market competition.

Sustainability reporting is an essential component for communicating the company's commitment and performance on sustainability issues. However, this report's trustworthiness and reliability have been widely criticized in the literature. For this reason, assurance of sustainability reporting can be carried out to ensure the quality and reliability of the information disclosed (Dando & Swift, 2003) (Rasche & Esser, 2006). One of the fundamental objectives of sustainability reporting (GRI, 2009) and quality of sustainability reporting is to provide investors with relevant and reliable information to estimate firm value for equity investment decisions (Boiral, Heras-Saizarbitoria, & Brotherton, 2019) (Moroney, Windsor, & Aw, 2012). This phenomenon is investigated empirically by examining the quality of sustainability information/reports and assessing the economic consequences of sustainability information/reports by looking at the relevance of the value of sustainability information in investor decision-making. These investors want to estimate the value of the company. However, the critical question is, regardless of the relevance of this reliable sustainability information for decision making, how is this information perceived by investors, negatively or positively? Researchers study the business case of a company's corporate sustainability performance by examining its value relevance and investigating its relationship to the company's financial performance (Rivera, Muñoz, & Moneva, 2017); (Buhovac, Ermenc, & Klemenc, 2017)

There are two contradictory hypotheses: the social impact and the trade-off hypotheses. The social impact hypotheses show that serving stakeholders' interests in a broad group will improve the company's financial performance, increasing shareholder wealth. The trade-off hypothesis states that the company's sustainability activities incur unimportant costs and reduce the company's profitability. Sustainability activities harm shareholder wealth (Marom, 2006); (Preston & O'Bannon, 1997). Given these two contradictory hypotheses and inconclusive empirical evidence, the value relevance of corporate sustainability performance (CSP) must be explored in depth to reconcile these opposing views, which leads us to a unified theory.

In this context, this study explores the incremental value relevance of sustainability reporting while considering the quality. The study is an essential factor for stock market participants. Jadoon et al. (Jadoon, Ali, Ayub, Tahir, & Mumtaz, 2021) were conducted a study on 247 companies from 2012-2016 for the 30 best green capital markets ranked by the Global Green Economy Index. The study shows that investors value the company's sustainability performance (achieved only through social, economic, and corporate governance topics) and the quality of sustainability reporting. However, the environmental issues of the CSP are less financially material to investors.

Most studies also suggest that sustainability performance enhances corporate value or value relevance (Bachoo, Tan, & Wilson, 2013) (Halimah, Irsyanti, & Aini, 2020) (Sutopo, Kot, Adiati, & Ardila, 2018) (Jadoon, Ali, Ayub, Tahir, & Mumtaz, 2021) (Cooray, Senaratne, Gunarathne, Herath, & Samudrage, 2020) (Farhana & Adelina, 2019) (Aureli, Gigli, Medei, & Supino, 2020). Each researcher uses a different analytical technique, starting with the study of events (Aureli et al., 2020), as well as using the Ohlson model, 1995 (Ohlson, 1995) (OHLSON, 1995) (Farhana & Adelina, 2019) (Bachoo et al., 2013) (Sutopo et al., 2018) (Jadoon et al., 2021) (Halimah et al., 2020).

This research was conducted by exploring the quality of sustainable reporting on companies listed on the Indonesia Stock Exchange from 2016 to 2019. In exploring the quality of the report, presenting more in-depth information, related to mapping the quality of the sustainability reporting according to the triple bottom line, based on the industry in Indonesia during the year of observation. Furthermore, they tested the value relevance of sustainability information and the incremental impact of sustainable (non-financial) reports on the value relevance of financial information. An exploratory study on the quality of sustainability reporting for public companies in Indonesia is guided by the GRI (Global Reporting Initiative). Exploration of the quality of sustainable reporting information is assessed using a triple-bottom-line (economic, environmental, and social) topic disclosure index using GRI G4 and GRI Standards, followed by an 0-4 scale indicating the availability of external assurances (Al-Shaer & Zaman, 2016). A modified model of Ohlson, 1995 (Ohlson, 1995) (Jadoon et al., 2021) (Amir & Lev, 1996) (Sutopo et al., 2018) is used in research on the value relevance of corporate sustainability information (Halimah et al., 2020). In contrast to previous studies in the Indonesian context (Sutopo et al., 2018) (Halimah et al., 2020), this study analyses the quality of sustainable reporting disclosures, which previous studies did not explore in more depth.

This research is expected to provide empirical evidence of the company's commitment to support sustainable development through Sustainability Reporting and examine the sustainability report's economic consequences (value relevance). In addition, it is expected to provide advice on government policies to support sustainable development through corporate contributions. The study shows that the quality of sustainability reporting is still low, determined by the disclosure index and the level of reliability. The quality of sustainability reporting and information on economic, environmental, social topics (except governance) is relevant for stakeholders. Thus, the research results related to the overall quality of sustainability reporting and the topics of sustainable performance are consistent with the value-enhancing theory in the context of the shared value concept. However, the sustainability report does not have a positive incremental value to the value relevance of financial information on companies listed on the Indonesia Stock Exchange. Investors should consider long-term sustainability rather than short-term financial performance. The findings can also be useful for policymakers when issuing rules for sustainable reporting because the results show that transparency is a relevant value.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Stakeholder theory states that companies must fulfil stakeholders' interests and focus on the main stakeholders, namely employees, customers, stockholders, and secondary stakeholder groups, such as environmental and community groups (Jadoon et al., 2021). The literature on the value relevance of corporate sustainability performance shows conflicting views on corporate social and environmental activities. Stakeholder theory contributes to understanding the influence of stakeholders on organizational actions and how organizations respond to these influences. Stakeholders often influence the organization's philosophy and practice of sustainability reporting. Stakeholder/stakeholder involvement can be defined as "trust-based collaboration between individuals and social institutions with different goals that can only be achieved collaboratively." Organizations are moving towards stakeholder engagement primarily to increase trust, transparency, and accountability and provide more effective communication on sustainability reporting (Wang, 2017).

The social impact hypothesis states that social activities involving environmental activities positively affect the company's financial performance. This view is consistent with stakeholder theory, where consideration of sustainability activities is essential for shareholders and provides value relevance (Alshehhi, Nobanee, & Khare, 2018) (Jadoon et al., 2021). On the other hand, the trade-off hypothesis states that companies that engage in social and environmental activities will sacrifice their valuable financial resources. This sacrifice is against the interests of shareholders (Chen & Lee, 2017). Furthermore, shareholders view the activity negatively, which ultimately negatively impacts the company's market value. Therefore, the company's sustainable activities have no value relevance. (Porter, M. E., & Kramer, 2006) stated that companies must focus on social and environmental problems because companies cannot solve social and environmental issues. Therefore, these activities mutually benefit the community and the company, enabling reconciliation between the two opposing hypotheses. (Porter & Kramer, 2011) introduced the concept of shared value. Share values are "operating policies and practices that enhance a company's competitiveness while advancing the economic and social conditions of the communities in which they operate." Therefore, it is crucial to conduct empirical research on the value relevance of its sustainable reporting using the share value perspective.

Sustainability Reporting

The World Business Council for Sustainable Development defines corporate social responsibility as a commitment to sustainable compliance with ethics, contributing to economic development, and improving employees' quality of life and their families and local communities. Companies must engage in socially ethical behaviour and act responsibly towards stakeholders. GRI formulated a globally recognized reporting framework, which provides sustainability reporting as essential and valuable as financial reporting (Wang, 2017).

Sustainability reports include quantitative and qualitative information on financial/economic, social/ethical, and environmental performance and seek to reflect the company's economic, social and ecological behaviour (GRI, 2013). The existence of a sustainability report does not mean an increase in the quality of the information reported (Junior, R M., Best, P. J., 2014). (Simnett, Vanstraelen, & Chua, 2009) found that assurance of sustainability reports increases the credibility and reliability of statements and helps build a company's reputation. Concerns about the integrity of the information disclosed in the reports led to more transparent reports. The company responded to this demand by providing external independent assurance on the sustainability report. Previous studies suggest that assurance of sustainability reports improves their quality and that the quality of these reports will be better when assurance is provided by the auditing profession (GRI, 2013;). (Junior, R M., Best, P. J., 2014) provides a historical analysis of sustainability reporting and sustainability reporting assurance. They argue that sustainability reports help improve stakeholders' dialogue and decision-making processes (Al-Shaer & Zaman, 2016). Increasing disclosure transparency (sustainability reporting) positively affects the company in the capital market. According to Beaver (1998), information asymmetry implies that company management has more personal information than existing shareholders or potential investors. Complete and adequate information helps reduce the adverse selection of bad-risk investments and the associated moral hazard (Wang, 2017). Regarding the integrity of the information disclosed in the report, there is a demand for a more transparent report. The company responded to this demand by providing external independent assurance on the sustainability report (Al-Shaer & Zaman, 2016).

Value Relevance

Value relevance is the ability of a performance measure to explain variations in market value. Value relevance relates to making investment decisions using performance measures (Barton, Hansen, & Pownall, 2010). Traditionally, the focus on value relevance has been limited to financial information, such as sales, earnings, the book value of equity, comprehensive income, and operating cash flows (Amir, Harris, & Venuti, 1993).

Another stream of value relevance has developed, which considers non-accounting variables as essential factors in determining stock prices (Amir & Lev, 1996); (Aureli et al., 2020); (Cardamone, Carnevale, & Giunta, 2012). It is emphasized that accounting information is not the only factor that explains variations in the market value of firms. The non-accounting component is an equally

important factor influencing market value and variations (Aureli et al., 2020) (Villiers, Venter, & Hsiao, 2017) (Aureli et al. 2020; Villiers, Hsiao, and Maroun 2017; (La Torre, Sabelfeld, Blomkvist, Tarquinio, & Dumay, 2018). As a result, the value relevance of non-financial research mainly revolves around CSP and its topics (Aureli et al., 2020).

Value Relevance of Economic, Social, Environmental and Corporate Governance Topics

Two alternative theories can explain the impact of SR activities on the company's market value, namely the value-enhancing theory and the shareholder expense theory. The value-enhancing theory assumes that integrating social responsibility activities into corporate strategy and practices results in a competitive advantage that supports long-term corporate value creation. These advantages include increasing brand reputation, employee productivity, operating efficiency, improving relations with government, communities, and other interested parties, access to investment projects, and more significant financial resources (Miralles-Quirós, Miralles-Quirós, & Gonçalves, 2018). Based on this theory, it is hoped that later SR measures will have a positive and significant value by the stock market.

On the other hand, there is a conflicting theory, namely the shareholder expense theory, which states that investing in CSR practices increases costs and places the company at an economic loss due to lower market value. This theory then shows that sustainability commitments can encourage over-investment and other activities that are not in the best interests of stakeholders. Thus the implementation of sustainable initiatives is not profitable and will further destroy the value of the company (Miralles-Quirós et al., 2018).

Value Relevance of Sustainability Reporting

In this study, value relevance focuses on analyzing the value relevance of its sustainability through its disclosure. Theoretically, this literature stream states that reducing information asymmetry among stakeholders will increase the firm's market value. The sustainability report is a significant step in reducing information asymmetry (Schadewitz & Niskala, 2010). However, it fails to recognize that information asymmetry affects investors' investment-related decisions. Still, the actual content of the reports and the reliability of the information also has a significant impact on the firm's market value (Kaspereit & Lopatta, 2016). Therefore, a comprehensive approach should be used to understand the value relevance of corporate sustainability.

Empirically, studies such as (Schadewitz & Niskala, 2010); (Klerk, Villiers, & Staden, 2015), (Bernardi & Stark, 2018) determine the value-enhancing impact of corporate sustainability disclosures. (Schadewitz & Niskala, 2010) identify a relationship between reporting responsibility and firm value for the 2002-2005 Finnish stock market. (Klerk et al., 2015) examined the relationship between stock prices and the level of corporate social responsibility (CSR) disclosure of large British companies using a modified Ohlson (1995) model. They used three different proxies for CSR to examine the strength of the results. Finally, (Bernardi & Stark, 2018) investigated the cross-country value relevance of disclosing information on environmental and social activities and performance in Europe.

However, (Cardamone et al., 2012) expressed conflicting results focusing on the value relevance of social reports on 178 listed Italian companies. They report a negative relationship between market value and social reporting. This point of view was recently supported by (Aureli et al., 2020). Their study focuses on the value relevance of environmental, social, and governance disclosures by taking a sample of companies listed on the Dow Jones Sustainability World Index.

To investigate whether investors value corporate sustainability activities and the quality of corporate sustainability reporting, the researcher uses the market value model developed by Ohlson (1995). This model postulates that the market value is only a function of book value and accounting profit. The researcher modified Ohlson's (1995) model by including two additional non-financial variables: the quality of sustainability reporting and its components. The company's sustainable performance presented in the company's sustainable reporting reduces economic uncertainty and risk for investors while increasing the predictability of earnings (Lourenço, Branco, Curto, & Eugénio, 2012). These benefits are achieved by improving relationships and reducing the costs of conflicts with stakeholders (Roberts, 1992), creating a reputation for sustainability as a competitive advantage (Gallego-Álvarez, Prado-Lorenzo, Rodríguez-Domínguez, & García-Sánchez, 2010) and increasing

employee productivity (Vitaliano, 2010). Quality sustainability reporting increases the credibility and reliability of corporate sustainability performance increases stakeholder confidence in the information provided (Choi & Wong, 2007). Investors can accurately measure the company's market valuation and reduce information asymmetry (Schadewitz & Niskala, 2010).

Hypothesis: *the higher the quality of the company's sustainability reporting, the higher the incremental value of the company's sustainability (non-financial) information on the value relevance of financial information*

RESEARCH METHOD

The research was conducted using content analysis and causal association. The population is all companies listed on the Indonesia Stock Exchange from 2016-2019, namely 713 companies as of October 2020. Sampling in this study was carried out by purposive sampling. Sustainability reports are obtained from the company's website, the Indonesia Stock Exchange (www.IDX.co.id), and the National Center of Sustainability Reporting (www.ncsr-id.org). The share price was obtained from www.finance.yahoo.com. The sample criteria are as follows (1) companies listed on the Indonesia Stock Exchange in 2016-2019, (2) companies that present complete sustainability reports from 2016-2019, (3) companies that present financial statements using the rupiah currency.

Table 1 Sampling Criteria

Description	Quantity
Companies listed on the Indonesia Stock Exchange as of October 2020	713
Companies that do not present complete sustainability reports from 2016-to 2020	(633)
Total sample	80
Sample observation period 4 years (4 × 80)	320

(Source: www.IDX.co.id, data processed)

Variables

Quality of Sustainability Report

The quality of sustainability reporting is how complete the company presents sustainability information (triple bottom line and corporate governance) and external guarantees in the sustainability report. The quality of sustainable reporting from the completeness of disclosure, by looking at the disclosure of the Economic, Social, and Environmental topics following the Global Reporting Initiative (GRI) 4 for 2016 data and GRI Standard for 2017-2019 data. A dichotomous approach carried out quality analysis by calculating the Sustainability Reporting Disclosure Index (SRDI). Each SRD item in the research instrument was given a value of 1 if disclosed and 0 if not disclosed. Next, the scores of each item are summed to obtain an overall score for each company. The formula for calculating the SRDI is as follows:

$$SRDI_j = \frac{\sum X_{it}}{174}$$

Notes:

SRDI_j = SR Disclosure Index of company j,

X_{it} = dummy variable: 1 = if item i is disclosed; 0 = if item i is not disclosed. nj = number of items for company j.

The quality of the next SR is based on external guarantees.

Value Relevance of Accounting Information

We examine the incremental value of sustainability reporting (non-financial) information on the value relevance of financial information. Analysis of the incremental value of sustainability reports on the value relevance of accounting information was carried out using modified Ohlson Model (1995), the market value model.

- a. Examining the value relevance of financial information, modified Ohlson's model, 1995

$$MV_{it} = \alpha_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \varepsilon_{it} \text{ (Eq.1)}$$

(MV is the market value per share as of April 1 in year t+1, BVPS is book value per share in year t, and EPS is earnings per share in year t)

- b. We examine the incremental value of sustainability reporting (non-financial) information on the value relevance of financial information.

$$MV_{it} = \alpha_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \beta_3 SUS_{it} + \varepsilon_{it} \text{ (Eq. 2)}$$

$$MV_{it} = \alpha_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \beta_3 SUS_{it} + \beta_4 QSUS_{it} + \varepsilon_{it} \text{ (Eq.3)}$$

where i represents the company, t is the year, MV is the market value per share, BVPS is book value per share, and EPS is earnings per share. SUS is a company's sustainability performance measured by a four-topical equivalent score (i.e., economic, social, environmental, and corporate governance). In the subsequent analysis, the performance scores of each topic are measured alternately to capture the individual effects of each topic. QSUS (Al-Shaer & Zaman, 2016) is the quality of sustainability reporting on a scale of 0-4 [0 = no sustainability report; 1 = there is a sustainability report; 2 = there is a sustainability report and the company has a sustainability committee affiliated with the board of directors; 3 = there is a sustainability report and assurance provided by the non-audit company; 4 = there is a sustainability report and is externally guaranteed by one of the Big 4 or another audit firm].

The hypothesis is accepted if adjusted R2 in models 2 and 3 is higher than model 1 (the value relevance model of financial information) and the coefficients 3, 4, and 5 are significant and positive.

RESULT AND DISCUSSION

Quality of Sustainability Report

Sustainability is a balance between the Triple Bottom Line (TBL) concept, namely profit-people-planet, where the company must be responsible for the positive or negative impacts caused by the company's activities, including economic, social, and environmental aspects (Elkington, 1997). The company's focus is not only to pursue profit (profit) but also to focus more on and contribute to the welfare of its stakeholders (people) and contribute to preserving the surrounding environment (planet). These three concepts (TBL) are a unity that cannot be separated and influence each other.

The quality of the sustainability report follows the research conducted by Loh, Thomas, and Wang (Loh, Thomas, & Wang, 2017) with a disclosure index that the GRI guides. The GRI-G4 guidelines are used for the 2016 reporting year with a total indicator of 149 items consisting of 58 general standard disclosure items and 91 specific standard disclosure items. The GRI standards guidelines are used for the 2017-2019 reporting year, with 141 items consisting of 56 general standard disclosure items and 85 specific standard disclosure items.

The quality of the sustainability report can be seen in Table 2 below. The sustainability reports observed were 42 reports in 2016; for 2017, there were 55 reports; in 2018, there were 59 reports, and in 2019 there were 79 reports. Table 2 shows the quality of the report based on the disclosure index following GRI G4 (the year 2016) and GRI Standard (the Year 2017-2018), namely SR_total, and the quality of the report is based on the level of reliability following the presence or absence of assurance by a competent external party (external assurance), namely SR-Reliability.

Insert table 2 here

Until 2019, only 11.1% sustainability reports were found from 713 companies listed on the Indonesia Stock Exchange as of October 2020, which increased from before but not significantly. Finance companies have the most sustainability reports; as of 2019, 18 companies or 22,8%, followed by companies in the Energy sector, 14 companies (17.7%), and the least in the Transportation and Logistics sector, namely one company.

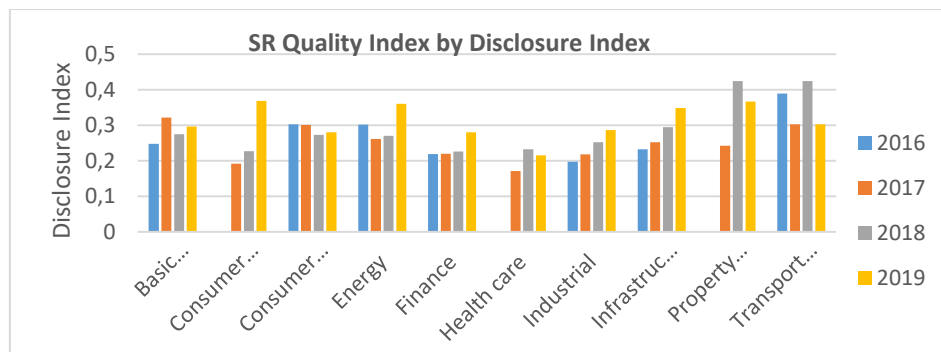


Figure 1. SR Quality Index based on Disclosure Index

The disclosure index has increased from 2016 to 2019, from an average index of 0.189 to an average of 0.311 in 2019. Although it has grown, this index is still below 40% of the items that must be disclosed or still relatively low. In 2019, the highest disclosure index was in the consumer cyclical sector, with an index of 0.369, and the lowest index was in the Health care sector with an index of 0.215 (Table 2). There are three areas where the quality of sustainable disclosure has consistently improved over the past four years: Consumer Cyclical, Energy, Finance, Industrial, and Infrastructure. This increase shows the company's commitment to meeting stakeholder interests to be consistent in sustainable development, taking the balance of economic, environmental, and social.

This study provides empirical evidence that Indonesia's sustainability reports are still low with an index based on the GRI. The Economic topic shows the highest index, followed by the disclosure index of the Environmental and Social topics. The most widely disclosed aspect of the economic issue is the direct economic value generated and distributed. The direct economic value generated and distributed is the aspect that is easiest for the company to disclose because it is easy to trace data to audited financial statements. In contrast, the lowest aspect is revealed by The Proportion of senior management hired from the local community. This proportion of senior management from local communities shows that the company has not realized a positive market presence. Involving local community members in the management team can improve human resources. The company has not been able to increase the economic benefits for local communities and increase the organization's ability to understand local needs.

Energy consumption within the organization and the Reduction of energy consumption are the environmental topics that companies are most exposed. This information is important enough for investors to show how companies use energy more efficiently. Choosing renewable energy sources is critical to fighting climate change and lowering the organization's overall environmental footprint. The disclosures in this Standard can provide information about an organization's impact on energy and how the organization manages it. On the other hand, there are several items, which are presented with a minimum standard, which is only 7% of the total observed sustainability reports, including reclaimed products and their packaging materials, other indirect (scope 3) GHG emissions, and negative environmental impacts in the supply chain and actions are taken. These aspects are generally related to suppliers' material aspects, emission aspects, and environmental assessment aspects. This low disclosure relates to the company's not yet being fully committed to protecting the environment due to the negative consequences of the company's operational activities.

The topic of Supplier Social Assessment, in particular, Negative social impacts in the supply chain and actions are taken, including the aspects that are least disclosed in the observed sustainability reports. However, the disclosures supplied do not correctly describe the negative social repercussions in the supply chain and the steps taken by the organization. It could be that the company has not yet discovered the negative social impact of the supply chain or its actions or that the company does not yet have the motive to disclose this, so the reason this could happen requires further research.

The quality of the sustainability report is seen from the reliability of the information based on external assurance. According to the GRI Standards, one of the principles of sustainable report quality is reliability. Reliability indicates that the organization must collect, record, compile, analyze, and disclose information and the processes used to prepare reports to be tested, determining the quality and

materiality of the data. One of the tests that can be done is to identify the existence of external assurance.

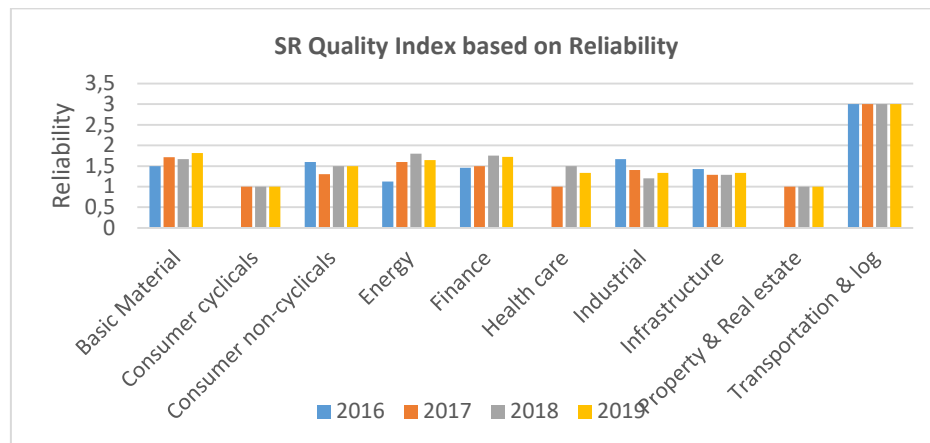


Figure 2. SR Quality Index based on reliability

Reliability was classified on five scales (Al-Shaer & Zaman, 2016). The study results can be seen in Table 2, which shows the average score of 1,177 in 2016, and until 2019, it increased slightly to 1,568 (this average is calculated from the average of each industry group). The sustainability report is still at the level, has compiled a sustainability report, meaning that the company has not formed a sustainability committee and has not assembled a report that has been identified as guaranteed by external parties. But, on average there are 19% of companies have stated the existence of external party guarantees on sustainable reporting (Table 3). On average, 64.8% of companies have prepared a report from comprehensive research. However, it is only a statement that the report has been prepared following GRI but not external assurance.

Insert Table 3 here

Table 4 shows how disclosure quality is evaluated based on the area of disclosure according to the triple bottom line topics. The economic topic has the highest average index of the other two sizes, with a 2019 average of 0.371, followed by the environmental topic with an index of 0.364 and the social topic with an index of 0.363.

Insert Table 4 here

The economic topic, the infrastructure industry, and the property and real estate sector have the highest disclosure indexes, namely 0.547 and 0.538. The primary consumer goods, property, and real estate sectors have the most heightened environmental topic disclosures, namely 0.583 and 0.456. For the social topic, transportation and logistics, and property and real estate, the most increased social topics revealed 0.529 and 0.431. The high disclosure of economic, environmental, and social topics in the real estate, transportation, and logistics sectors shows a commitment to maintaining a triple-bottom-line balance. Still, the number of companies in these fields is relatively minimal, namely one company in the transportation sector and three companies in property and real estate.

Value Relevance of Sustainability Reporting Information

The relevance of the value of SR information was investigated with the modified Ohlson's model (1995) (Halimah et al., 2020) (Cardamone et al., 2012) (Jadoon et al., 2021). The tests carried out on samples from 2016 to 2018 (2019 data) cannot be continued because an unfixed model was found after processing the data. Regarding the 2019 statistics, the company's market worth was calculated from the start of the Covid 19 epidemic in April 2020. Because the company's actual market value decreased at the beginning of 2020, the 2019 data was not included in the SR information value relevance test).

Table 5. Descriptive Statistics

	MV	BVS	EPS	SRQ_CG	SRQ_ECO	SRQ_ENV	SRQ_SOC	SRQ_1	SRQ_2	LEV
Mean	4170.03	2146.42	292.15	0.093	0.320	0.218	0.278	0.224	1.300	2.290
Median	1732.50	1228.48	115.68	0.045	0.307	0.200	0.267	0.216	1.000	1.410
Maximum	32150.00	15294.53	3371.28	1.000	0.923	0.617	0.833	0.646	3.000	11.910
Minimum	50.00	-1021.55	-308.470	0.000	0.000	0.000	0.000	0.000	0.000	-2.110
Std. Dev.	6283.64	2705.96	524.023	0.145	0.228	0.161	0.185	0.135	0.926	2.505
Observations	180	180	180	180	180	180	180	180	180	180

From Table 5, it can be seen that the quality of the Sustainability Report is assessed from several aspects, namely 1) the extent of the disclosure of sustainable reporting as measured by the disclosure index, based on the GRI Standard (SRQ_1). Economic aspects (SRQ_ECO), environmental aspects (SRQ_ENV), and social aspects (SRQ_SOC). In addition to the triple bottom line, the quality of corporate governance disclosure (SRQ-CG) is also observed, which is one of the items that companies must disclose in building and supporting sustainable development. 2) sustainability reporting quality as seen from the report's Reliability (SRQ_2).

Sustainability reporting quality (SRQ 1) indicates the highest disclosure with a score of 0.646, and the lowest is 0.000. At the same time, the mean has a score of 0.224 and a standard deviation of 0.135. The highest score is on the disclosure of the economic aspect (SRQ ECO), which is 0.923, followed by the disclosure of the social part (SRQ SOC), which is 0.833, and the maximum disclosure on the environmental aspect (SRQ ENV), which is the lowest of the previous two elements, which is 0.617.

Meanwhile, the highest mean value of disclosure is also in the economic aspect, namely 0.320, and the lowest in the environmental part, with a mean value of 0.218. The mean score shows that the quality of sustainability reporting disclosure is still low, which is below 50% of the disclosure items regulated by the GRI Standard. Sustainability reporting quality (SRQ 2) indicates the highest quality with a score of 3.000, and the lowest is 0.000. At the same time, the mean has a score of 1.300 and a standard deviation of 0.926.

Based on the results of the regression on the Chow Test and Hausman, the model used is a fixed effect model approach to estimate value relevance using the Ohlson (1995) model to see the effect of financial information, namely book value and earnings on the company's market value (Model 1) and the impact of non-financial information, namely the quality of the sustainability report on the relevance of firm value (Model 2 to Model 7). The results of panel regression 1 to 7 can be seen in table 5.

Insert Table 5 here

This study uses the value relevance model proposed by Ohlson (1995) in Model 1, which is followed by the next modified model that adds SR quality through 2 proxies, namely: 1) total SR disclosure index and 2) SR report reliability (models 6 and 7). Further addition, by adding each SR topic to Ohlson's (1995) baseline model, in Models 2 through 5.

Testing model 1 shows that accounting information has value relevance for investors as seen from the two significant variables at 1%, and the adjusted R2 value is 0.993. The coefficients of book value per share (BVS) and Earnings per share (EPS) are -0.423 and 1.614, respectively, and are significant at 1%. The incremental impact of sustainability reporting (SR) quality is done by adding a sustainability reporting (SR) quality variable to the value relevance model of accounting information (Model 1). Two main proxies, namely measure the quality of sustainability reporting (SR); 1) total SR disclosure, calculated by an index based on GRI standard (SRQ_1 in Model 6) and 2) SR reliability, which is scored based on the report using external assurance or not (SRQ_2 in model 7).

The study of the effect of SRQ_1 on investor reactions with the company's market value proxy shows the variable coefficient SRQ_1 with a value of 237.051 and significant at 1%. Model 6 shows that SRQ_1 has a positive effect on the company's market value. The higher the SR disclosure quality index, the higher the company's market value. A study of the quality of SR Reliability (SRQ_2) shows

that the coefficient was 131.732 and significant at 5%, which mean that The higher the level of reliability of the SR report, the higher the company's market value. These two models show that the quality of SR information is relevant in making investors' investment decisions. The incremental effect of SR quality information on the value relevance of accounting information shows a decrease in the value of adjusted R² from model 1 (without SR information) of 99.3%. The contribution of BVS and EPS information and the control variable LEV to the company's market value is 99.3%; the rest is contributed by other information. In model 6 and model 7, the adjusted R² is 0.986 and 0.969, lower than model 1, 0.993; this shows that the contribution of non-financial information (SR) does not have a positive incremental impact.

The next stage is to examine the effect of SR items, namely the economic, environmental, social topics, and add to corporate governance on the company's market value to see the value relevance of each SR topic information. In the test results from Model 3 to Model 5, it shows the SRQ_ECO coefficient of 5,123 (value < 0.1), the environmental topic SRQ_ENV 118,200 (< 0.05), the social topic SRQ_SOC 350.916 (< 0.01), and lastly added in addition to the triple bottom line which is also part of SR, namely corporate governance SRQ_CG -223,876 (value < 0.01). The results show that the higher the quality of the economic, environmental, and social topics will result in a higher market value of the company, but for the governance topic, the higher the quality of disclosure of governance, the lower the market value. Based on the economic, environmental, and social topics, the social topic has the highest impact on the company's market value, and the economic topic has the lowest impact on the company's market value.

To see the incremental impact of the SR topic on the value relevance of accounting information, it shows that there is a decrease in the value of adjusted R² from the basic model (Model 1), namely from 99.3% to 98.5% (SRQ_CG), 99.0% (SRQ_ECO), 99.2% (SRQ_ENV) and 99.0% (SRQ_SOC). Thus, each topic of SR does not have a positive incremental impact on the value relevance of accounting information.

DISCUSSION

The sustainability report is an essential component for communicating the company's commitment and performance in sustainability issues. However, the trustworthiness and reliability of this report have been widely criticized in the literature. One of the fundamental objectives of sustainability reporting (GRI, 2009) and the quality of sustainability reporting is to provide investors with relevant and reliable information to estimate firm value for equity investment decisions (Boiral et al., 2019) (Moroney et al., 2012).

The results of research on sustainability reports in Indonesia with observations from 2016 to 2019 show that until 2019 only 11.22% of companies have published sustainability reports. The average disclosure index of those who present sustainability reports is low, namely 0.311 for the economic, environmental, and social topics. The economic topic is relatively higher than the other topics, followed by the environmental and social topics. The primary consumer goods, energy, property, and real estate sectors are among the sectors that show a higher average index in 2019. Meanwhile, the sectors whose disclosure quality has consistently increased from year to year are the industrial and infrastructure sectors. The reliability also indicates the low quality of the sustainability report. Which, on average, does not have a sustainability committee in the company. The report does not show any external assurance. From the research, 19% of reports already have external assurance.

The results (models 6 and 7) show that SRQ_1 and SRQ_2 have a significant positive effect on the company's market value, with coefficients of 237.051 and 131.732, respectively, with < 1% and 5%. The study shows that the higher the quality of the disclosure index and the reliability of the sustainability report, the higher the company's market value (Al-Shaer & Zaman, 2016). Likewise, with the sustainability report topic, the higher the economic, environmental, and social quality (except the governance topic), the higher the company's market value. Research results related to the overall quality of SR and the topics of sustainable performance are consistent with the value-enhancing theory in the shared value concept. The study indicates that if the company chooses to carry out social activities, which are mutually beneficial activities between the company and the community, it will increase its value. Generally, the closer a social issue is to a corporation's core business, the greater the chance to utilize its resources and benefit society. A value proposition is at the heart of every strategy: a set of demands that a firm can satisfy for its clients that others cannot. Most corporate social

responsibility strategies occur when a company adds a social topic to its value proposition, making social impact an integral part of the overall strategy (Porter, M. E., & Kramer, 2006). Social enterprises that create shared value can develop much faster than pure social programs, which often experience an inability to grow and become self-reliant (Porter & Kramer, 2011).

Sustainability reporting influences the value of companies in Indonesia; this study is in line with the results of research (Farhana & Adelina, 2019) (Halimah et al., 2020). The information on the contribution of sustainable development to the company has value for investors and stakeholders in making investment decisions by stakeholder theory. Stakeholder theory contributes to understanding the influence of stakeholders on organizational actions and how organizations respond to these influences. Stakeholders often influence the organization's philosophy and practice of sustainability reporting. Stakeholder involvement can be defined as "trust-based collaboration between individuals and social institutions with different goals that can only be achieved collaboratively". In addition, the social impact hypothesis shows that serving the interests of stakeholders in a broad group will improve the company's financial performance, which in turn increases shareholder wealth (Preston & O'Bannon, 1997) (Marom, 2006).

Investors value economic, environmental, and social information, but it is not in line with research (Jadoon et al., 2021). Research (Jadoon et al., 2021) shows that the economic, social, and governance topics provide value for investors, except for information on the environmental topic. However, there is no positive incremental impact of SR information on accounting information from all topics and scales of measuring the quality of sustainable reports. This study shows that information on the company's commitment to realizing the triple bottom line (profit-planet-people) is relevant in stakeholder decision-making. Concerning sustainable reporting, which is still voluntary in Indonesia, the number of companies that publish reports is still limited. This research needs to be continued to find strategic policies that must be made to improve the compliance of related companies.

CONCLUSION

This research was conducted to examine the phenomenon of sustainable reporting in Indonesia by examining the quality with an explorative method (content analysis) analyzed with a quantitative approach. Furthermore, to find out the relevance of the value of the sustainable report information for investor decision-making as a stakeholder. In terms of report reliability, it also shows that a sustainability report is prepared. However, many companies do not have a sustainability committee, and there are still many reports that do not include external assurance in the report. So that stakeholders will have doubts about the truth of the report's contents.

The results show that the level of sustainability reporting presentation in Indonesia is still low, namely 11.1% of all public companies per the year 2019. From a more in-depth analysis of the level of disclosure of each topic according to the GRI, the index is also still low, namely 0.311 on average in the same year. The quality of sustainability reporting and its topics provide investors with value in their decision-making. Thus, investors are also concerned with the company's sustainability performance in forming value other than accounting information. However, the quality of sustainable reporting information (non-accounting information) has not positively impacted the value relevance of accounting information.

This study contributes and has implications for researchers, investors and policymakers. First, this study expand the value relevance analysis to consider several specific topics. Second, this article suggests that investors should consider long-term sustainability rather than short-term financial performance; thus, sceptical investors need to incorporate information on economic, environmental and social topics into their resource allocation decisions. Third, the findings can also be helpful for policymakers when issuing rules for sustainable reporting because the results show that transparency is a relevant value. The limitation of this study is related to the small number of samples due to the low level of presentation of sustainable reports in Indonesia. Future research could shed light on the determinants that could explain Indonesia's low level of sustainability reporting, identifying whether they are related to pressure from different stakeholders, corporate governance, stock market, or industry. In addition, it encourages researchers to thoroughly analyze the document's contents to understand whether external pressures on sustainable disclosure result in improved report quality. Determinant research that explains the quality of sustainable reports can later be used to consistently

determine strategies for developing sustainable reports in the future because, so far in Indonesia, it is still voluntary.

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