ENVIRONMENTAL TRANSPARENCY AND CORPORATE SUSTAINABILITY PERFORMANCE : PRELIMINARY FINDING IN INDONESIAN INDUSTRY DURING COVID-19

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ABSTRACT

Environmental transparency play a considerable part in the firm's sustainability and important for decision strategy during abnormal economy. Board have main role getting effectively direction of environmental-friendly investment ie corporate social responsibility in achieving sustainability goal Environment, Social, and Governance scores provide transparency of information that is useful to both investors and managers of fims. As the growing industrial world grew, it had an increasing impact as well. Thus, people's hopes for responsibility and firm concern for the environment emerged.

This research uses purposive sampling approach and the sample included infrastructure, health, basic material, nom-primer, and insutrial sector of firm listed IDX during 2019-2020. We use board size and corporate social responsibility (CSR) disclosure as proxy of environmental transparency, therefore the measurement of corporate sustainability performance (CSP) using three indicators of it are economic, social, and environmental. The study results shows that environmental transparency of Indonesian industry increased during covid-19 but tend to less their participation in corporate social responsibility. The higest value of environment transparency in automotive industry and then farmacy industry have highest value of CSP. There is significant effect of environmental transparency to CSP for both board size and CSR. During abnormal economy, a firm should still keeping it transparency of governance and continue the CSR program specially for social and environment aspect.

1. Introduction

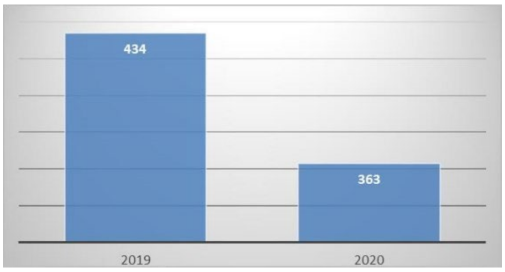
The development of the business world and industry is increasing, the environmental impacts caused by its operational activities are also growing and tend to be challenging to control. It raises the demands and expectations of the community regarding the company's role, responsibility, and concern for the community and the surrounding environment. Thus, in recent years, there has been a change in views on the business environment. Firms have begun to compete in transparency, namely by disclosing information that can support decision-making activities.

Indeed, the role of the environment has a substantial contribution to the firm. Where all firms activities will always involve and utilize natural resources. The use of natural resources that are not goodwill causes damage to the environment and can interfere with the community's welfare. It triggers people's concerns about their survival that the community asks the company to provide information related to its activities. By providing this information, the public can review how the firm cares about the environment and society. On the other hand, providing the information can also give recognition from the public to the existence of the firm.

Law Number 40 of 2007 concerning Limited Liability Companies, Article 74 paragraph (1) states that companies carrying out their business activities in fields related to natural resources are obliged to carry out social and environmental responsibilities. It is a legal basis that regulates detailed and more specific reports that can be used as a record of assessing the company's commitment to the government regarding sustainable development programs (sustainability report).

Elkingkon (1997) argues that to achieve extraordinary performance, companies must be responsible for the positive and negative impacts caused by social, economic, and environmental aspects. These three aspects are better known as the triple bottom line. Corporate sustainability have compliance pressure from both internal and external stakeholders and Bansal (2005) state that sustainability concept based on balancing the principles of integrity (environment), equity (society), and prosperity (economy). For this reason, companies should be able to issue sustainability reports whose contents are related to financial statements and non-financial information such as social, economic, and environmental performance activities. This annual report hopes that the company will grow and develop sustainability (sustainable performance).

Based on data for the 2019-2020 periods, many firms are listed on the Indonesia Stock Exchange in the non-financial sector that does not issue sustainability reports. There is only 434 companies reported sustainability reports for 2019 and 363 companies in 2020. Meanwhile, 99% of companies did not issue sustainability reports in a row during 2019-2020.



Graph 1. Firm’s Sustainability Reporting in 2019-2020
Source: Data Processing Results, 2021

Firms that do not report their sustainability report are unlikely to achieve maximum performance. Because, as said before, the firm must have a piece of information from three aspects; social, economic, and environmental to achieve outstanding performance, recognition from the public, and increasing the image of the company in the eyes of investors.

Environmental risks become very important to be reported. Firms that protect the environment will indirectly extend the service life of it. The sustainable ecological conditions can support the success and sustainability of economic and social development. It links to the chance of firm’s sustainability performance. Sustainability performance can be used by management to show responsibility for resource allocation so as to assess overall company performance (Rosini and Rahman, 2020). In this context, an assessment of the company’s performance can be used by management to make decisions (Staniskis and Arbaciauskas, 2009). Sustainability performance arises from world concerns over the impact of environmental damage ie environmental risk.

Environmental risks will increase the company's overall risk, and in the end, these risks will affect investors' decisions (Eriandani et al., 2019). Environmental risks caused by industrial operations can occur in all configurations, such as the contamination of drinking water sources, the release of toxic gases, and the erosion of soil quality in the world. Firms that are not sustainable in terms of environmental factors have problems that are high in risk. Public awareness of the importance of environmental risks optimizes the firm's actions in its social responsibility. There are environmental impacts that arise as a result of running a company. The higher the operational level of the company, the more problems faced must be controlled. The investors seeking transparency look for some indicator of corporate responsibility from third party agencies that is a combination of past performance and evaluation of action that can influence future performance. A firm should concern to its environmental transparency because corporate governance a core aspect of a business, that describes the effectivity improvement of firm’s sustainability (Jha and Rangarjan, 2020)

Previous research conducted by Arieftiara and Venusita (2017) shows that the company's environmental performance affects firm value. The research Mc. Guire et al. (1988), Brower (2010), Yu and Zhao (2012), Wiedmann and Lenzens (2006), Massound et al. (2011), Earnhart and Lizal (2010), and Iqbal et al. (2013) proves that consumers prefer environmentally friendly products. Moreover, companies have an excellent environmental performance focus on the production process and are serious about producing ecologically friendly products. While the research of Eriandani et al. (2019) shows that the environmental risk information is responded to positively by investors, it is not used to determine the rate of return or from the company's side. It is not able to reduce the cost of capital.

This research focus on environmental transparency as part of industry risk that determine sustainability performance. Investors are interested in the additional information included in annual reports, information on environmental, social and political responsibilities and ensuring firm’s commitment to building a sustainable economy and improving the quality life through the environmental governance disclosure (Meiwanto et al., 2018). According Rosini and Rahman (2020), it is also importance focus of corporate attention for formulating the dimensions of sustainability performance namely economic, social, environmental, and communication performance. The disclosure of firm’s environment describes an countinuing of social, economy, and environmental responsibility and will due to sustainability performance caused supporting of stakeholder.

Many companies of Indonesia industry still do not report their sustainability reports during covid 19, then we examine the environmental tranparency on corporate sustainability performance which using environmental transparency as proxy of industrial risk that measured by board size and firm’s participation of CSR program. According Meiwanto et al (2018), the firm’s relationship in meeting stakeholder’s interests characterises stakeholder theory. But as for the explanation of norms in its operational environment, the application of legitimacy theory results in better tendencies. The better tendency is generally that high profitability can become public information communicating the advantages of one company in comparison to other companies. We follow the research of Meiwanto et al (2018) that using non-financial industry as observation unit, but we focus developing new measurement of environmental transparency namely Environmental Transparency Average (ETA) that calculated the score of boardsize and CSR and also measure corporate sustainability performance by average of economic, social, and environment performance namely Corporate Sustainability Performance Average (CSPA). We argue governance process can not separate between input and outcome, then boardszie as decision making will connected to their decision ie CSR program and totally corporate performance. This study implicates the empirical finding of corporate sustainability performance determinant specially in Indonesia’s non financial industry.

2. Literature Review

Firm’s Environment Risk and Transparency

Risk management is learning about a firm applying rules in dealing with various problems by placing a regular and comprehensive management approach. One of them is the disclosure of corporate risk, which is a way to increase the firm's confidence in helping investors understand its strategy. Investors know the opportunities and threats that the company will face and how the firm's ability to handle these opportunities. Furthermore, threats can be interpreted as firm risk being a condition where one day there may be a decline in company performance inversely proportional to the company's expectations due to certain conditions in the future.

Green (2015) defines environment risk as to the probability value of an undesirable event and its consequences from spontaneous natural origin or human actions (physical or administrative) transmitted through the environment. The environment risk arises because of the relationship between the company, the environment, and the materials that manage the environment. Environmental hazards can come from greenhouse gas emissions, the use of hazardous substances, and things that can pollute and/or pollute biodiversity.

The firm's environment risk are divided into two. First, the threat comes from the firm's internal environment, such as employee performance and production and non-production activities. Second is the risk that comes from outside the firm's background, namely its relationship with nature and its impacts which also need to be controlled by the company. Natural disasters, weather conditions, and changes are forms of unpredictable environment risks. The ecological dangers caused by the firm's activities are predictable, such as using dioxins in their production. Regardless of the various risks that may occur, firm can only control the way they respond to external threats, not manage their risks (Eriandani et al., 2019).

Analyzing various firm’s environment risk that may occur is the first step to achieving a sustainable environment. Although the disclosure requires additional costs, these costs can be invested in preventing and controlling environmental pollution. In addition to supporting in the background, companies must also reduce the pollution that occurs. By doing these two things, the company can improve the function of natural resources, which can directly increase the company's productivity and extend the firm's life.

The firm's disclosure of environmental information is a form of ecological transparency that can affect the company's ability to realize good governance. By implementing transparency, companies participate and facilitate the government's performance in sustainable activities Tahir (2014) states that fairness can be grown with transparency in every policy and decision within the organization and government.

We use ecological transparency that measured by board size, and CSR disclosure. This based on the argument that environmental transparency issued by the firm is one way for providing information needed by the firm's stakeholders. The firm's relationship with the social environment requires corporate social responsibility, so sound business governance (good corporate governance) is required. In carrying out transparency and environmental accountability, board members, both the board of directors and the commissioners, are needed to assist managers in making environmental decisions. According to Dey (1994 in Kusumawati et al (2005) suggest that good corporate governance in the long term can improve firm performance and benefit shareholders. Beiner et al. (2003) state that board size of directors is a crucial governance mechanism because they can ensure that managers follow board interests. We also use CSR disclosure as proxied of environmental tranparency according the findings from previous studies also suggest that the increase in CSR disclosures is associated with government ownership and the introduction of corporate governance standards. Therefore, environmental and social activities as frindly investment practise relevant to financial stability of business reflecting the expectations of shareholders (Chepeliuk and Harkusha, 2020)

Corporate Sustainability Performance

Company performance describes a company's ability to achieve its goals through the effective and efficient use of its resources and the extent to which its success in generating profits. According to Indrawan (2011), company performance is a measurable result and describes the empirical conditions of a company of various agreed sizes. The performance finds out that has been achieved, and a performance assessment is carried out. The company's performance appraisal can be reviewed based on the financial statements and changes in stock prices. Therefore, the value of the company will be reflected based on the share price.

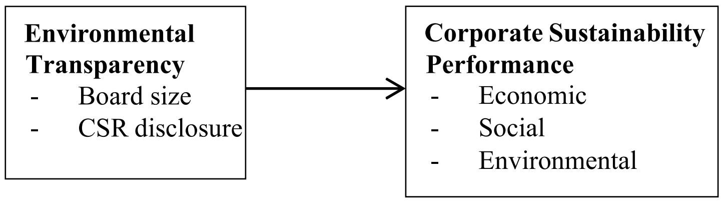
Corporate sustainability performance (CSP) describes the company's impact on society, including customers, employees, suppliers, local communities, and the natural environment (Hilman and Kim 2001; Mateen and Bulan, 2008). So that CSP is described as a broad interpretation of the social or human and environmental dimensions (Perrini et al., 2011). In CSP, the environmental aspects that are more concerned are the problems of resource conservation, energy consumption, waste minimization, and emission or pollution reduction (Krause et al., 2009; Wagner, 2010). CSP has a comprehensive scope in social aspects in overcoming poverty, employee health and safety, protection of human rights, and participation in various social initiatives (Krause et al., 2009; Perrini et al., 2011).

The company's sustainability performance shows how well its priorities are in addressing social issues such as reducing poverty, freedom of human rights, improving living standards, and addressing environmental problems such as waste management, pollution reduction, and resource conservation.

In this study, corporate sustainability performance (CSP) follow Hourneaux et al (2018) that includes three indicators, namely economic, social, and environmental, revealed in the firm's sustainability report and GRI-G4 in Indonesia. Reporting Framework is intended to perform as an accepted framework for reporting on an organisation's economic, environmental and social performance (GRI, 2008). The GRI is a network with experts and representatives from various sectors of society present in over 40 countries around the world, and it has been determining the guidelines to sustainability reporting with the participation of several important stakeholders**.**

Environmental Transparency and Corporate Sustainability Performance

Oswald (2010) reveals that environmental transparency is valuable information about how the company works and encourages community involvement and company disclosure. Environmental transparency creates an advantage for the community to get better access to environmental policies, environmental status, and components that companies use in their operations. Environmental transparency can also be interpreted as disclosure of information in decision making or disclosing material and relevant information, such as the effect of fluctuations in the company's stock price.



Souce : developed from Hong et al (2021), Koloreva et al (2020), and Hourneux et al (2018)

Soekarno (2008) suggests that companies will get the desired results and fulfill their social responsibilities towards ecological risks by considering environmental risks. The openness of environmental and social activities will increase the trust and reputation of the company for stakeholder. It will then affect the entire performance of the company, including the company's sustainability performance. Based on new measurement of environmental transparency and corporate sustainability performance, we develop the hyphotesis in this study :

H1 : The environmental transparency (ETA) affect corporate sustainability performance (CSPA)

3. Data and Methodology

This paper explores data from annual report and sustainability report of non-financial industry firms listed on the Indonesia Stock Exchange in 2019-2020 such data of boardz size, and CSR disclosure . The sample selected by specific criteria consisted of new IDX-IC industry are non-primer sector, healthy sector, basic material sector, and infrastructure sector. As for delisting, relisting, moving other areas, mergers or acquisitions and no sustainability reporting excluded from the sample.

The dependent variable corporate sustainability performance (CSP) is measured by calculated the dimensions of economic, social and environmental according to the TBL approach. We develop the measurement of CSP from Hourneaux et al. (2018) named Corporate Sustainability Performance Average (CSPA). We count economic indicators (ROE), social and environmental indicator according Global Reporting Initiative (GRI), provide a specific scale and averaged so that it reflects the firm's CSP in a year. Independent variable is environmental tranparency proxied by board size and CSR disclosure of social and environment score. We also develop the measurement of environmental tranparency from Hong et al (2021) named ETA (Environmental Transparency Average) which calculate the average of board size and CSR score.We propose the hypothesis that environmental tranparency have positive impact on sustainability performance and test it with simple regression. The model expressed as follows:

$$CSPA_{i,t} = \beta_0 + \beta_1 ETA_{i,t} + \varepsilon_{i,t}$$

CSPA is the corporate sustainability performance average measured by the average of three indicator are finance, social, environment and ETA is the environmental transparency average proxied by average of board size and CSR.

4. Results and Discussion

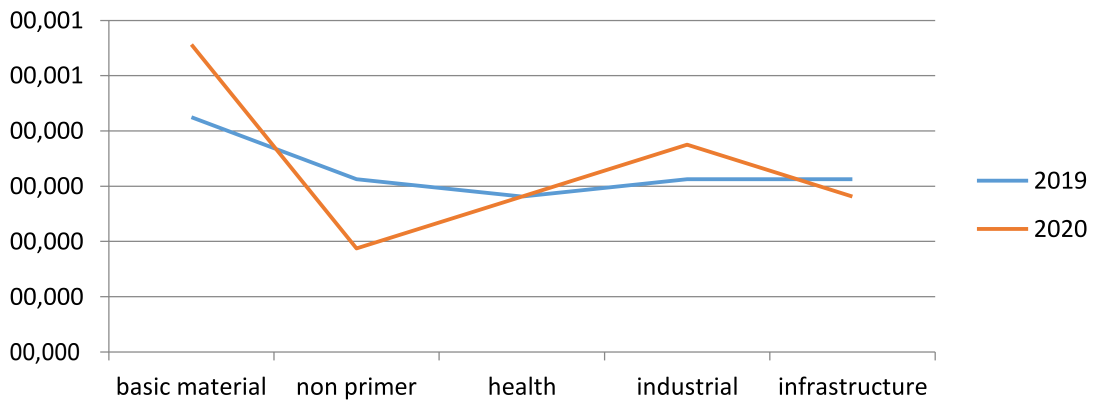
Table 1. present the detail reviews of the cross-industry distribution of the environmental transparency. We observe data of governance and sustainability report ie CSR disclosure during 2019-2020 from basic material, infrastructure, health, industrial, and non-primer industry. Detailed board size descriptive data in those industry shows a minimum number of board members is six and a maximum of 15. The average firm have value of number of social participation in CSR disclosure between 6-7 item such training and education, comunity awarness, and safe healthy aspect. Furthermore, the Indonesian industry seem get more attention of social aspect in CSR disclosure better than environmental.

Table 1. Industry Distribution of Environmental Tranparency

Industry	Average Board Size	Social participation of CSR disclosure	Environment participation of CSR disclosure	Score CSR
Basic Material	10.8	6.3	7.35	0.4906
Non Primer	15	7	3.5	0.2500
Health	12	6.5	5.5	0.2813
Industrial	12	7	5.5	0.3438
Infrastructure	10	7	5	0.2969
Mean		6.8	5.37	0.3325
Modus	12	7	5.5	-

Board Size is the number of board members in the firm, CSR disclosure based on GRI.G40

During covid-19 in 2020, environmentally-friendly investment in Indonesia firms tend to decreasing the participation, except basic material and industrial sector. This may caused firms facing a distressed financial linked to global impact of covid-19. Our data shows that the average CSR is 5.8333 which economic dimension is -39.5233, average environment dimension is 0.6049, and the social dimension is 0.3030. Below the data of CSR in non financial sector of Indonesian industry.



Graph 1. Average CSR Per Sector
Source: Data Processing Results, 2021

For corporate sustainability performance, our data shows that health sector has the highest average CSP score and increase it value during covid-2020, while other industries had decreased CSP score and infrastructure industry has the lowest average score (minus). The concept in corporate sustainability performance (CSP) is a system consisting of three elements, namely social, environmental, and economic, to achieve the goal of perfection, namely sustainability (Montiel, 2008).

Table 2. Industry Distribution of Corporate Sustainability Performance

Industry	Economic Indicator	Social Indicator	Environmental indicator
Basic Material	0.694	0.700	0.364
Non Primer	3.55	0.444	1.331
Health	27.7	0.444	4.626
Industrial	14.45	0.556	3.456
Infrastructure	-404.73	0.5	-65.89
Mean	-71.67	0.529	-11.22

CSP indicator folowed Hourneaux et al. (2018) included finance/economic, social, and environment indicator

The value of CSP describes the effectiveness, efficiency, and stability of the company. The tabel 2 shows that a company with a negative CSP value means that company is unstable.

Furthermore, the data of average environmental transparency linked to average CSP describes that the higest environmental transparency in non-primer sector and the lowest is infrastructure sector (minus). It contras with the value of sustainability performance which health sector has the highest value. We argument the abnormal economy such covid-19 lead the firms have unpredictable risk linked to their market. Our data confirm that non financial sector of Indonesian industry tend decreased sustainability performance during covid-19 in 2020.

Table 3. Results of regression and robust test analysis

Variable	Dependent variable: Corporate Sustainabil Performance Average (CSPA)	
	Research model	Robust model
Environmental Transparency Average (ETA)	-0,929* (0,622)	
Board Size		-0,912* (0,440)
CSR		-0,894* (0,353)
Economic		-0.1409* (0,0439)
Social		0,0249* (0,0061)
Environmental		0,4376* (0,0758)
R-squared	0,863	0,8216

* significant 1%, exposed values are standard errors.

Hypothesis testing shows developed measurement of environmental transparency proxy namely Environmental Transparency (ETA), has negative effect on corporate sustainability performance (CSPA). The finding of this study is same with Hong et al (2021) that board size impacts CSP which desicion of members inside the board can have an impact on the environmental performance. Furthermore, the tabel 3 of results of robust tests by replacing environmental tranparency measurements following Hourneaux et al. (2018) which separates the three dimensions of CSR, also show that the environmental transparency will decrease the firm's sustainability performance

As previously stated above, the disclosure of environmental risks will require additional costs. Meanwhile, ecological risk disclosure is also a voluntary disclosure. However, firm aware of and protecting the environment will continue to provide transparent information to stakeholders. Also, companies that consider risk will get the results they want and fulfill their responsibilities to the surrounding environment (Soekarno, 2008).

5. Conclusion

Based on the results and discussion of the research that has been done, it can be concluded that the environmental transparency in this study more fluctuates in abnormal economy such covid-19. The participation and responsibilities that the firm has carried out towards the surrounding environment have increased and decreased.

Corporate sustainability performance in this study each company has different values, the assessment is seen from the economic, environmental, and social elements. The high CSP value indicate that the firm's efficiency, effectiveness, and stability are stable. Vice versa, firm with low or even negative CSP values indicate that the firm's condition is less stable.

The new measurement of ETA and CSPA have consistency results with robustness check finding that the firm's environmental transparency affects corporate sustainability performance (CSP). It may indicates the disclosure of environmental risks in Indonesian industry still require high additional costs or there is inefficiency in firm's operational process that should explored more by next study. However, with environmental hazards, the firm will complete the annual report and the firm's sustainability report. A complete and transparent firm report will make it easier for stakeholders to make an assessment.

There are very few companies that issue annual reports and Sustainability Performance consecutively from 2019-2020, so this study has limited the observation unit in short period with simple model. Furthermore, in analyzing the data, we find several firm have incomplete data then must calculate it manually. It is recommended to develop this research further to know the extent of the influence of corporate environmental risks on corporate sustainability performance. Next research could add some control variables such firm characteristic, market risk, operational efficiency and other variabel into CSP model for better analysis about determinant of CSP.

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