



Do Environmental Performance and Disclosure Contribute to the Economic Performance? The Moderating Role of Corporate Action

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Abstract

Objective – The purpose of this study is to examine the effect of environmental performance and environmental disclosure on economic performance of the Indonesian listed manufacturing companies by using corporate action as a moderating variable.

Design/methodology – This study used secondary data obtained from the official website of the Indonesia Stock Exchange and the Ministry of Environment and Forestry, Indonesia. The sample consisted of manufacturing companies that are listed and follow the Company Performance Rating Assessment Program (*Program Penilaian Peringkat Kinerja Perusahaan*/PROPER) issued by the Ministry of Environment and Forestry for the period of 2011-2016. The study employed a purposive sampling approach, which includes 22 companies with 132 observations. The multiple linear regression method was used for data analysis.

Results – The results indicated that environmental performance has a significant positive effect while environmental disclosure has a significant negative effect on economic performance. The testing of corporate action as a moderating variable demonstrated that it could not strengthen the effect of environmental performance on economic performance. However, it could enhance the effect of environmental disclosure on economic performance.

Keywords: Economic Performance, Environmental Performance, Environmental Disclosure, Corporate Action

1. Introduction

To date, the environment has become one of the public focuses, both nationally and internationally. Apart from providing positive benefits to the economy, companies are required to have more roles in improving the social conditions in the community, as well as the surrounding environment. Many companies have been criticized for creating social problems that are troubling the community such as pollution, resource depletion, waste, floods, and many more. One of the reasons for this issue is the top management does not commit to fulfilling their social responsibility regarding environmental sustainability (Kurniawan & Breliastiti, 2017). The Ministry of Environment and Forestry's data (2018) indicated the reasons for the manufacturing companies' incompliance are dominated by (1) 34% of water pollution aspect, followed by (2) 30% of waste management aspect, (3) 18% of air pollution control aspect, and (4) 64% of the infrastructure and service sector aspect. Furthermore, based on the findings from the Ministry of Environment and Forestry, manufacturing companies are still low in fulfilling their obligations to protect and manage the environment properly.

The company's performance in fulfilling its environmental-social responsibility is known as environmental performance. In Indonesia, it is determined from the company's performance in the Company Performance Rating Assessment Program (*Program Penilaian Peringkat Kinerja Perusahaan*/PROPER) issued by the Ministry of Environment and Forestry. This program aims to encourage corporate governance in environmental management through information instruments. The company integrates environmental issues, which are formulated in the company's strategy model, the reporting,

and the disclosure. In general, companies have aspirations for continuous development without damaging the environment. Thus, it may have a positive impact on the company's sustainability and improve its economic performance. Environmental disclosure is a means to evaluate the environmental performance in which the number of disclosures of the company's responsibility activities is the key to assess its economic performance. While, the annual return indicates the relative economic performance of a company within a similar industry. Economic performance assessment is focused on determining the value of a company's performance based on stock prices. This is conducted to assess a company's ability through corporate return on investment (Al-Tuwaijri, Christensen, & Hughes, 2004; San, Soh, Teh, & Ng, 2015).

The stock price is the price formed at the stock exchange. Companies with excellent environmental performance and reputation may affect stock prices. This becomes an aspect of the investor's fundamental analysis, which assumes that every investor is a rational being. Therefore, the fundamental analysis assesses the relationship between stock prices and the company's condition. Investors have interests in economic incentives both in the long-term as dividends and in the short-term as abnormal returns. This may affect the company's value, as demonstrated through an increase in stock prices in the capital market (Murwaningsari, 2012). A study by Al-Tuwaijri et al., (2004) found a positive relationship between environmental performance and economic performance, i.e. the innovative solutions to reduce inefficiencies associated with environmental pollution are good marketing both for the environmental aspect and industrial competitiveness, simultaneously.

San et al., (2015) discovered that environmental disclosure has a significant positive effect on financial performance as measured by ROA and ROE. On the other hand, organizational size has no significant effect on financial performance. Furthermore, San et al., (2015) argued that the Malaysian manufacturing companies consider that information on environmental issues is critical to be published in annual reports. In addition to having a positive impact on the company's growth, the companies consider that the information can protect the environment. Garzella & Rafaele (2013) discovered that there are significant differences between the manufacturing, financial, and other industries in terms of environmental issues integration, which is formulated in the corporate strategy model, the reporting, and the disclosure.

Indonesia's Government Regulation No. 57/2016 regarding The Protection and Management of Peat Ecosystems with the criteria and scope of control improved in 2017 as well as its PROPER performance evaluation system that includes company ratings are one of the uniqueness of this study compared to previous research. In addition, the integration of environmental issues within the corporate strategy model is a novelty. This study also adds corporate action as a moderating variable manifested in the company's real actions of dividend-paying as returns given to shareholders. Utomo (2018) state that corporate action is a step or action taken by a company that has a direct impact on share ownership of shareholders (investors), and Riyanto (2020) The implementation of a corporate action normally has an impact on shareholders and others who have a substantial stake in the success of the corporation. In the best scenarios associated with this action, all parties involved benefit from the implementation of the action. Thus, it may increase the effect of environmental performance and environmental disclosure on the company's economic performance. This research is expected to make a major contribution to companies, regulators as policymakers, and other stakeholders to increase awareness on environmental issues and stakeholder's requests for environmental disclosure. Currently, reports on environmental responsibility are significant considerations in developing strategies, sustainability, and competitiveness (Suki, 2013). Focusing on the growing company environment may lead to excellent business performance. In addition, by having the incurred costs of environmental management, it is expected that companies may obtain incentives and reduce corporate taxes.

Thus, this study aims to provide empirical evidence whether 1) environmental performance affects economic performance, 2) environmental disclosure affects economic performance, 3) corporate action as a moderating variable strengthens the effect of environmental performance on economic performance, and, 4) corporate action as a moderating variable strengthens the effect of environmental disclosure on economic performance, at manufacturing companies that follow the PROPER program. The remaining of this paper is structured as follow. The next section reviews the literature followed by a description of research method. The results and discussion will be presented in the section afterwards. Finally the last section concludes this study.

2. Literature Review

The Stakeholder Theory

Stakeholder theory is a theory that describes which parties, both groups and individuals, who can influence or be influenced by the achievement of organizational and company goals are accountable to any party (E. R. Freeman & Mcvea, 2001). The main similarity between the two concepts is that both stakeholder theory and CSR stress the importance of incorporating societal interests into business operations, businesses are embedded in society always. They are never as separate as the defenders of neoclassical theory try and pretend. At the same time, the two concepts differ in that stakeholder theory posits the key responsibilities of the business overall, i.e. corporate responsibilities, where responsibility to the society (which is often represented by the communities where business operates) is a very important but only one part among other corporate responsibilities. CSR prioritizes one aspect of business – its orientation toward the society at large, i.e. its social orientation – over the other business responsibilities. Stakeholder theory posits that the essence of business primarily lies in building relationships and creating value for all its stakeholders. Though the composition of stakeholders may differ depending on company's industry and business model, the main stakeholders typically include employees, customers, communities, suppliers, and owners or investors (Freeman & Dmytriiev, 2017). A company must maintain relationships with its stakeholders by accommodating their desires and needs, especially to stakeholders who have a significant role regarding the availability of resources used for company operations, such as labor, markets for company products, and others (Ghozali & Chariri, 2007). The emergence of the stakeholder theory as a dominant paradigm further strengthens the concept that companies are responsible to shareholders as well as to stakeholders (Maulida & Adam, 2012). The stakeholder theory states that environmental disclosures are generated due to stakeholder demands. Managers provide environmental information that they believe is demanded by the stakeholders. If the company's long-term sustainability and success depend on the resources provided by external stakeholders and the company needs the support of all stakeholders (Laan, Joyce, Adhikari, & Tondkar, 2005), the stakeholder's demands will be handled by management through disclosure of environmental strategies and implementation of related activities. Environmental improvement programs can bring benefits and advance the company's business reputation.

The Legitimacy Theory

The legitimacy theory is often used as the basis for implementing Organizational Social Responsibility (CSR). Legitimacy theory posits that organisations continually seek to ensure that they operate within the bounds and norms of their respective societies. In adopting a legitimacy theory perspective, a company would voluntarily report on activities if management perceived that those activities were expected by the communities in which it operates (Cormier & Gordon, 2001; Deegan, 2002; Craig Deegan, Rankin, & Voght, 2000). While there is no generally accepted theory for explaining CSR disclosure practices, recent research in the CSR literature has primarily relied on legitimacy theory (Deegan, 2002). Indeed, "it is probable that legitimacy theory is the most

widely used theory to explain environmental and social disclosures” (Campbell, Reece, & Mitchell, 2003). Furthermore, Tilling (2004) expressed that the legitimacy theory offers a powerful mechanism to understand the company’s social and environmental disclosures. Barkemeyer (2007) explained that there are two things related to the organizational legitimacy theory in the context of corporate social responsibility in developing countries. Firstly, the capability to place profit-maximizing motives makes a clearer picture of a company’s motivation in increasing its social responsibility. Secondly, organizational legitimacy can include cultural factors that may shape different institutional pressures in different contexts. The legitimacy theory believed that in achieving legitimacy goals, the company must operate within the rules or norms and focus on the local community’s expectations (Cong & Freedman, 2011; de Villiers & van Staden, 2006; C Deegan, 2002; O’Donovan, 2002).

Economic Performance

Economic performance is a company’s performance that relatively changes annually within a similar industry (companies that are engaged in the same business). It is characterized by the company’s annual return (L Spica \ Almilial & Wijayanto, 2007). Economic performance is the relative performance of companies in an industry which is the same as the annual profit of the industry concerned (Luciana Spica Almilial & Brilliantien, 2007). Suratno (2006) economic performance is the macroeconomic performance of a group of companies in an industry. So thus economic performance is the performance of the company in the economic field and is the same industry. Nakumura (2015) suggests that the significant resources required for such investments outweigh whatever positive impact such investments have on firms’ economic performance. Firms’ high economic performance leads to fewer environmental investments and more social investments. Environmental and labor-related investments may not be effective for improving economic performance. Singh, Nitish, Ma, & Yang (2016). The findings show that environmental expenditure has a negative impact on economic performance through pollution prevention capability. In contrast, environmental expenditure has a positive impact on economic performance through product stewardship capability. Both effects are significantly strengthened when the firm is located in an environmentally munificent country. Nadae, Carvalho, & Vieira (2019) argue that several economic performance indicators of both groups were statistically analyzed and compared. This study shows that the industry sector influences this relation, particularly in the energy, chemical and petrochemicals, services and transportation sectors.

Economic performance is disclosed in the company’s annual financial statement. In the era of market economy accompanied by the realization of Good Economic Performance, it is not only demanded to create an efficient economic performance that brings tremendous profits for companies economically but also needs to be accompanied by ethical behavior that is realized through corporate social responsibility.

Environmental Performance

According to stakeholder theory, various actors in society exert pressure on firms to engage in environmental activities (Albino, Balice, & Dangelico, 2009). For example, governments strictly request firms to conform to environmental laws and regulations; communities expect firms to protect the environment and engage in citizenship behavior; customers demand more environmentally friendly products. As pressure from stakeholders’ increases, business managers have to integrate environmental issue into their business strategy to meet stakeholders’ expectation (Tumpa, Ali, Rahman, & Paul, 2019). The influence of environmental commitment on firm performance is an important issue that need to be clarified (Hirunyawipada & Xiong, 2018). Stakeholders nowadays are increasingly demanding more environmentally conscious business practices from business organisations (Global Reporting Initiative, 2018). Companies now

view environmental and social impact in their investment decisions as a significant priority at par with economic performance goals (Burchman, 2018). By disclosing their Environmental Performance Indicators (EPI), firms make a choice of whether to provide their stakeholders with complete information about their environmental performance or to manage the impressions of these stakeholders by selectively reporting indicators that help to portray their environmental activities in a positive light. Whether these voluntary disclosures are informative or opportunistic is still unknown because there is little research about the determinants of EPI disclosures or the association between the information disclosed and firms' actual performances (Tadros, Magnan, & Boulianne, 2020).

The assessment of environmental performance is an important aspect of the environmental management system. This is the outcome of the environmental management system that is given to companies in real terms. In addition, environmental performance is a measurable result of an environmental management system related to the control of environmental aspects. The assessment of environmental performance is based on the policy of the Ministry of Environment and Forestry, i.e. by examining the company's compliance level in conducting various activities related to environmental management that have not yet become regulatory requirements (beyond compliance). PROPER is the Ministry's flagship program that oversees companies through public disclosure mechanisms. It provides incentives and/or disincentives to the responsible person of business entities and/or activities following the Regulation of the Minister of Environment and Forestry No. 5/2011. The PROPER award aims to encourage companies to comply with environmental regulations and achieve environmental excellence through the integration of the principles of sustainable development in the production process and services, the application of an environmental management system, 3R, energy efficiency, resource conservation, as well as ethical and responsible business conduct through the public development program.

Environmental Disclosure

In general, disclosure is divided into two types, i.e. voluntary disclosure and mandatory disclosure. Voluntary disclosure discloses information regarding various company activities/conditions voluntarily. In reality, voluntary disclosure does not happen because companies tend to deliberately save information that can reduce cash flow. This is considered to cause company loss. Therefore, company managers only reveal good information (good news) that may benefit the company. Ghazali & Chariri (2007) argued that companies might disclose all information that is required for the capital market to function. Proponents of this opinion stated that if a piece of information is undisclosed, it happens because the information is irrelevant to investors or the information is already available elsewhere. Reports related to non-financial information such as CSR are mandatory and regulated through Article 66, Paragraph 2 of Law No. 40/2007 regarding Limited Companies.

Aragon-Correa, Marcus, & Hurtado-Torres (2016) in his research compare environmental disclosures made by the top 100 international firms using their disclosure scores and environmental performance provided by Bloomberg database to those made by a sample of firms from their corresponding industries. They find that international firms disclose more information while demonstrating a poorer level of performance. They conclude that these firms find a pollution haven by operating internationally and hope that by disclosing information about their performance that they legitimize their operations. On the contrary, Hassan & Romilly (2018) also examine the association between Bloomberg disclosure scores and the amount of GHG emissions released by firms. They find a positive association between disclosure and performance for the sample of firms operating in developed countries and a negative association for firms operating in developing countries. Qian & Schaltegger (2017) find that increased carbon disclosures are associated with a reduction in carbon emissions. Contrary to the common view of environmental disclosures as legitimization tools, Qian & Schaltegger (2017)

conclude that these disclosures could also derive real organizational change and provide benefits to shareholders through reduced emissions which results in potential savings.

Corporate Action

A corporate action is a company's action or policy in distributing investment returns known as dividends. A dividend is a form of profit distribution per share for each investor. The ability to pay dividends to investors can be described as Dividend per Share (DPS). The information on DPS is required to determine the profit of each share received by the shareholders. The rising DPS may attract investors to buy the company's shares. Richardson & Welker (2001) discovered a significant positive relationship between social disclosure and the capital cost in which more companies benefit due to social disclosure. Assuming an inverse relationship between capital cost and stock prices, as suggested by the dividend discount model, Richardson & Welker (2001) also pointed out that increased social disclosure is related to stock prices. Sutami (2011) suggests non-financial related environmental performance factors such as financial performance, stock prices, and capital costs. The success of the leadership as a company manager can be seen from the financial performance or economic performance shown by the number of sales, labor, assets owned and ratio analysis, which is presented in the financial statements. There are three main points about the relationship between corporate social responsibility and economic performance.

Hypotheses Development

Companies with high levels of environmental performance have better long-term value compared to companies with low levels of environmental performance, Sarumpaet (2005). The effect of environmental cost disclosure will be accepted as good news by investors. Information on company activities or performance is essential for stakeholders, especially investors, because such disclosures are required to assess whether the company has carried out its activities appropriately, i.e. not only making profits but also fulfilling its responsibilities to stakeholders. Al-Tuwaijri et al., (2004) expressed that there is a positive relationship between environmental performance and economic performance. Similarly, Suratno (2006) also discovered a positive and significant relationship between environmental performance and economic performance. Based on the above explanation, there is a relationship between environmental performance and economic performance, which can trigger an investor's positive response to increase the company's stock price. Brammer, Brooks, & Pavelin (2006) show that corporate social performance expressed as the activities related to the natural environment, community and the employment issues positively influences financial performance. Singh et al., (2016) in optimizing environmental expenditures for maximizing economic performance, this finding further confirms our hypothesis that environmental munificence would strength then both the positive indirect effect of environmental expenditure on economic performance through product stewardship capability and the negative indirect effect of environmental expenditure on economic performance through pollution prevention capability.

H1: Environmental performance positively affects economic performance.

The purpose of environmental accounting disclosure is related to environmental conservation activities by companies and other organizations that include the interests of public organizations and local public companies. The disclosure is essential for stakeholders to understand, evaluate, and analyze so that it can provide support for their business. Ghazali & Chariri (2007) argued that the company would disclose all information that is required for the capital market to function. Thus, it is believed to trigger the investor's positive response, which may increase the company's stock price. Previ-

ous studies proved that environmental disclosure has a positive relationship with environmental performance and economic performance (Al-Tuwaijri et al., 2004; Lu & Taylor, 2018; San et al., 2015; Suratno, 2006).

H2: Environmental disclosure positively affects economic performance

Investors react more quickly if companies carry out concrete actions instead of only providing publications on the company's performance, such as the environmental performance disclosure, funding structure, the total accumulated income, and environmental disclosure. One of the factors that can encourage investors to increase share prices is the presence of corporate action, which in this study is the dividend per share, i.e. the amount of profit obtained by investors from the profits generated by the company (Sharif, Purohit, & Pillai, 2015). General, investors prefer the dividend per share compared to earnings per share. Companies can use the distribution of dividends per share to attract investors. Investors become interested in gaining profits from the dividend distribution. As a result, investors will be interested in buying the company's shares and ultimately will increase the company's share prices. The company's actions in dividend distribution may strengthen the effect of environmental performance on economic performance.

Nadae et al. (2019) results findings suggest the positive influence of IMS with social and environmental sustainability standards vs negative effects on economic performance, in addition, Tadros et al., (2020) the results show that firms' disclosures are not associated with the level of environmental performance and that firms continue to provide EPI information even if they witness a decline in their environmental performance. The evidence suggests that firms' environmental disclosures are reliable and indicative of their environmental performance.

H3: Corporate action strengthens the effect of environmental performance on economic performance.

Economic costs and benefits underlie the rationale of disclosing environmental information to satisfy the information needs of shareholders. However, non-financial stakeholders – including regulators, environmentalists and members of the society – have interests in firms' environmental performances and can influence firms' disclosure decision. Nadae et al., (2019) study a firm's decision to select performance indicators that better represent its environmental strategy and help the firm to reformulate this strategy. The study finds that stakeholders – including customers, creditors, employees, government organizations, and community members – actively engage with the firm in that process and influence the selection of these indicators.

The company's action in distributing dividends is a significant signal for investing. According to the signaling theory, companies can use the dividends per share to demonstrate their policy regarding the profit distribution. The company's plans influence the decision to share the company's profit. If the company plans to carry out a project that may generate more profit in the future, the company's decision to not share its profit will not make investors react and will not change the share price. Thus, the company's actions in dividend distribution policies can strengthen the effect of environmental performance on economic performance.

H4: Corporate action strengthens the effect of environmental disclosure on economic performance.

3. Research Method

Population and Sample

This study used secondary data obtained from the Indonesia Stock Exchange official website (www.idx.co.id) and company websites. The population consisted of manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2011 to 2016, i.e. 22 companies with 132 years of observation. The selection of the research period

Timeliness
Disclosure,
Board Features,
Proportionate
Audit
Committee Size

from 2011 to 2016 is based on several considerations: (i) environmental performance is of particular concern in the government's efforts to apply the principles of good corporate governance (ii) the increasing number of companies participating in the PROPER award (iii) recent years, the environmental issue has become one of the topics discussed due to the fact that many manufacturing companies are adapting to report their environmental performance. Manufacturing companies are chosen as objects of research because manufacturing companies have a big role in environment and most of them to participating in the PROPER award. This study employed a purposive sampling method accompanied by established criteria, i.e. (1) the company is a manufacturing company listed on the IDX, (2) the company follows the PROPER program that is reviewed by the Ministry of Environment and Forestry, (3) the company publishes annual financial reports and/or sustainability reports, and (4) the company provides comprehensive data to support this study.

Research Model

This study employed a multiple regression analysis method. This analysis is used to test the effect of the independent variable on the dependent variable. The multiple regression equation model used in this study is as follows.

$$\text{EcoPerform} = \alpha + \beta_1 \text{EnvPerform} + \beta_2 \text{EnvDisC} + \beta_3 \text{CorAct} + \beta_4 \text{EnvPerform} * \text{CorAct} + \beta_5 \text{EnvDisc} * \text{CorAct} + \beta_6 \text{Size} + \beta_7 \text{Growth} + \beta_8 \text{CapStruct} + \beta_9 \text{Profit} + \varepsilon_{it}$$

EcoPerform: environmental performance; EnvDisC: environmental disclosure; CorAct: corporate action; Size: company size; Growth: company growth; CapStruct: company's capital structure; Profit: company's profitability; and ε_{it} : error.

Variables and Measurements

The dependent variable in this study is the economic performance, which is the relative company's performance in a similar industry marked by the annual return of the intended industry (Suratno, 2006). In this study, the economic performance was determined using the stock price (Al-Tuwaijri et al., 2004). The intended stock price is the closing price of December 31st obtained from the Indonesia Stock Exchange (IDX) report. The stock price is a reflection or an overview of the company's prospects as a financial and non-financial measure.

Environmental performance is the company's performance in creating a good environment (Suratno, 2006). It is determined based on the company's performance ratings in the PROPER program. There are five ratings, i.e. gold, green, blue, red, and black (Solovida & Latan, 2017). Gold is the highest rating followed sequentially with other colors with black as the lowest rank. In this study, calculations were made by giving value following the company's color ratings. Environmental disclosure can be obtained through CSR disclosures in annual reports or sustainability reports, which are usually separate documents. The assessment used the GRI Index (environmental), which has been used by approximately 1500 companies in 60 countries. In 2002, GRI was adopted by the UN and the UN Global Compact, as mentioned in the EU document within the European CSR Framework. This index has the most comprehensive report format and content. Based on the environmental field, the GRI Index was obtained from 2017 (www.globalreporting.org). The environmental field consists of 1 dimension and nine aspects. The categorization of environmental performance disclosure per the GRI guidelines is available in the Appendix. The determination of environmental disclosure items is conducted by calculating the number of disclosed items divided by the number of environmental GRI disclosure items.

The moderating variable is the corporate action, i.e. dividend per share (DPS). It is a ratio that shows the amount of cash dividend received by investors from each share they own. DPS is explained as all distributed cash dividends compared to the number

of listed shares (Dewi, Adiputra, & Yuniarta, 2015). In this study, the calculation used for the DPS ratio is the total distributed cash dividends divided by the number of listed shares. This calculation is similar to the approach that has been used in the studies by (Dewi et al., 2015; Jambowo, 2014; Sharif et al., 2015).

The control variable in this study is size, i.e. the company size based on its total assets (Murwaningsari & Sistya, 2017). In this study, size is calculated using the natural logarithm of the company's total assets. Organizational growth is the company's ability to increase its size. The more the company grows, the more likely it generates profit. The company growth can be determined by the sales growth, i.e. sales of the year (t) reduced by sales of the previous year ($t-1$). The data was obtained from the company's financial statements. Capital structure was calculated using the debt to equity ratio (DER), i.e. the ratio used as a benchmark in comparing the corporate debt and capital. This ratio can describe the company's capital structure. The formula for the DER ratio is total debt divided by total equity. Profitability was calculated using the return on assets (ROA), i.e. the ratio that shows the amount of profit generated by the company from its assets (Al-Tuwaijri et al., 2004; Clarkson, Li, Richardson, & Vasvari, 2011; Lu & Taylor, 2018).

4. Result and Discussion

Descriptive Statistics

Based on the descriptive statistics in Table 1, the economic performance variable has a mean value of 7,867.21. This means that the average stock price of manufacturing companies listed on the IDX and following the PROPER program has a minimum value of 50 (PT. Indo Acidatama Tbk) and a maximum value of 63.90 (PT. Gudang Garam Tbk) with a standard deviation of 13,645.51. From the statistical results it was found that the average value is smaller than the standard deviation value so that the data deviation that occurs is high, the distribution of the value of the stock price is not evenly distributed. Stock prices can change at any time according to supply and demand, apart from being influenced by fundamental and technical factors. The environmental performance shows a mean value of 5.13. This means that the average rating of companies participating in the PROPER program in a blue category has a minimum annual value of 3 (PT. Fajar Surya Wisesa Tbk, PT. Gudang Garam Tbk, and PT. Tifico Fiber Indonesia Tbk) and a maximum annual value of 6.89 (PT. Indofood CBP Sukses Makmur Tbk) with a standard deviation of 0.63. mean while, the environmental disclosure variable shows a mean value of 0.86. This means that the average items disclosed within the GRI disclosure items have a minimum value of 0.53 (PT. Toba Pulp Lestari Tbk) and a maximum value of 1 (PT. Timah (Persero) Tbk, PT. Unilever Indonesia Tbk, PT. Gudang Garam Tbk, and PT. Indofood CBP Sukses Makmur Tbk) with a standard deviation of 0.09. The mean value is greater than the standard deviation value so that the data deviation that occurs is low, the value is evenly distributed.

The smallest company size is 16.54; growth is 0.00 while profitability is -12.00 with an average value of corporate action of 170.67. This means the company pays that amount of dividends for each of the company's shares. This shows the dividend payments as a corporate control to drive the company's economic performance.

Hypotheses Testing Results

Table 4 shows the results of the hypotheses testing, which is conducted using partial regression. Before the hypotheses testing, a classical assumption testing is carried out to ensure that the regression model has met the classical assumption test in analyzing the data. The classical assumption testing includes normality testing, multicollinearity, heteroscedasticity, and autocorrelation tests. The test results are presented in Table 1 below:

Table 1. Normality Test Results

Information	Significance Traffic	Asymp. Sig. (2-tailed)	Decision
Multiple Regression Equation	0.05	0.546	Normally Distributed Data

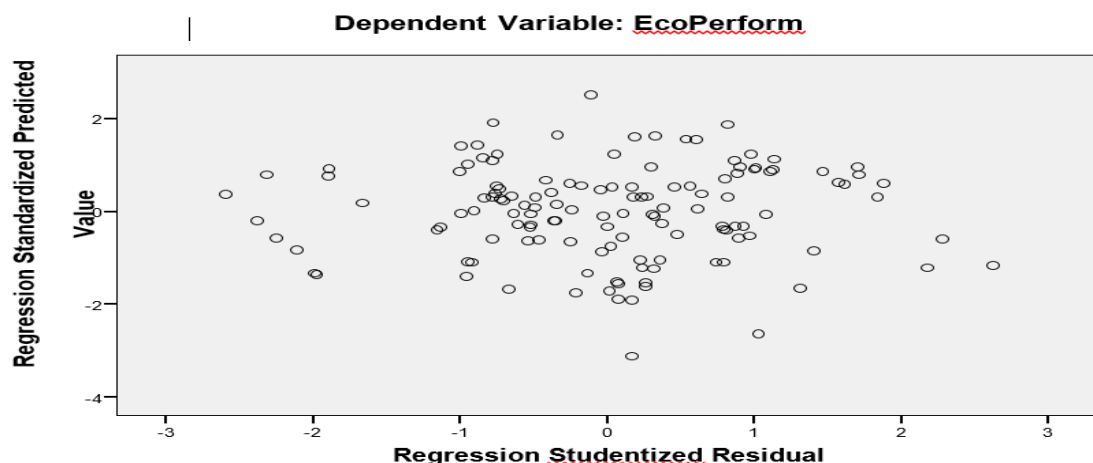
Based on the One-Sample Kolmogorov-Smirnov Test it can be seen that the Asymp. Sig = 0.000 > 0.05 means that the data is normally distributed. Based on the results of the multicollinearity test, the following can be shown:

Table 2. Multicollinearity Test Results

Model	Collinearity Statistics		Conclusion
	Tolerance	VIF	
Environmental Performance	.903	1.107	No Multicollinearity
Organizational Reputation	.864	1.158	No Multicollinearity
Environmental Disclosure	.904	1.106	No Multicollinearity
Environmental Strategy	.961	1.040	No Multicollinearity

From the table above it is known that each variable has a value Variance Inflation Factor (VIF) is less than 10, it shows that there is no multicollinearity (there is no strong relationship between the independent variables). This shows that there is no multicollinearity which means that there is no strong relationship between the independent variables.

Heteroscedasticity testing used scatterplot graphs to examine the occurrence of heteroscedasticity. This is carried out by observing the data distribution in the graph, and it is concluded that there is no heteroscedasticity in the regression model. Based on the scatterplot graph, to analyze heteroscedasticity, there is no heteroscedasticity by examining the point distribution shown in the figure below. From these figure, it can be seen that the scatter points are random and scattered both above and below the number 0 on the Y axis, so it can be concluded that there is no heteroscedasticity in the regression model.

Scatterplot

The autocorrelation is calculated from the Durbin Watson value, which is obtained from the autocorrelation test. The result is equal to 1956, with the DW value between du and $4-du$. Thus, it is concluded that there is no autocorrelation in the regression model of this study.

The determination coefficient is indicated by the value of Adj R² of 0.497 or 49.7%. This means that both the independent and control variables can predict and influence

economic performance, while 50.3% is influenced by other variables that are not included in this research model. The F-test result with a p-value of 0.000 is significant at the level of 1%. Thus, it is concluded that the independent variables significantly influence the dependent variable.

The partial test results in table 4 shows that the environmental performance variable affects economic performance with a coefficient of 1.891 and a significant value of 0.061 at the level of 10%. Thus, it is concluded that H1 is accepted, i.e. environmental performance has a positive effect on economic performance. As for the environmental disclosure variable, it has a significant positive effect on the economic performance with a significant value of 0,000 at the level of 1% and a coefficient value of -3,743. Thus, H2 is accepted with a negative predictive ability. This means that the company discloses environmental information following the specified standards so it does not provide an added good news value for investors, which may cause an increase in the share price.

Variable	N	Minimum	Maximum	Mean	Std. Deviation
EcoPerform	132	50.00	63900.00	7867.21	13645.51
EnvPerform	132	3.00	6.89	5.13	0.63
EnvDisc	132	0.53	1.00	0.86	0.09
CorAct	132	0.00	2600.00	170.67	347.73
Size	132	16.54	35.16	28.16	3.30
Capital Structure	132	0.02	1.45	0.28	0.27
Growth	132	0.00	2.94	0.25	0.39
Profitability	132	-12.00	0.42	0.001	1.09
Valid N (listwise)	132				

Note: EcoPerform: environmental performance; EnvDisC: environmental disclosure; CorAct: corporate action; Size: company size; Growth: company growth; CapStruct: capital structure; Profit: company profitability.

$$\text{EcoPerform} = \alpha + \beta_1 \text{EnvPerform} + \beta_2 \text{EnvDisC} + \beta_3 \text{CorAct} + \beta_4 \text{EnvPerform} * \text{CorAct} + \beta_5 \text{EnvDisc} * \text{CorAct} + \beta_6 \text{Size} + \beta_7 \text{Growth} + \beta_8 \text{CapStruct} + \beta_9 \text{Profit} + \text{eit.}$$

Variable	Prediction	Coefficients	p-value	Collinearity	
				Tolerance	VIF
C			0.001		
EnvPerform	+	1.891	0.061	*	0.309
EnvDisC	+/-	-3.743	0.000	***	0.595
Size	+	0.161	0.033	**	0.689
Growth	+	0.223	0.002	***	0.807
CapStruct	+	-0.063	0.359		0.824
Profit	+	0.039	0.564		0.828
CorAct	-	0.304	0.001	***	0.516
EnvPerform*CorAct	+/-	-0.666	0.170		
EnvDisc*CorAct	+	0.989	0.036	**	
R ²		0.531			
Adj R ²		0.497			
F-Statistics		15.376			
Prob (F-Statistics)			0.000	***	
Kolmogorov Smirnov		0.799			
Asymp. Sig. (2-tailed)		0.546			
Durbin Watson		1.956			
Observation		132			

Dependent variable: Economic Performance

***Significant at 1%; **Significant at 5%; and * Significant at 10%

Note: EcoPerform: environmental performance; EnvDisC: environmental disclosure; CorAct: corporate action; Size: company size; Growth: company growth; CapStruct: capital structure; Profit: company profitability.

Timeliness
Disclosure,
Board Features,
Proportionate
Audit
Committee Size

Table 3. Descriptive Statistics

Table 4. The Effect of Environmental Performance and Environmental Disclosure on Economic Performance using Corporate Action as a Moderating Variable

Based on table 4, the result of the moderating test, i.e. corporate action variables with environmental performance, shows a change of the coefficient value from 1.891 to -0.666 with a p-value of 0.170. This is above the significant value of 0.05, which means that corporate action was unable to moderate or strengthen the effect of environmental performance on the economic performance as well as the corporate action with the environmental disclosure. Thus, it is concluded that H3 is rejected. Based on the test results shown in Table 2, the coefficient value changed from -3.743 to 0.989 with a p-value of 0.036, which is below the significant value of 0.05. It means that corporate action can moderate or strengthen the effect of environmental performance on economic performance. Thus, it is concluded that H4 is accepted.

Discussion

Environmental performance influences business performance at the level of 10%. The corporate behavior that is included in the PROPER program and rated by the Ministry of Environment and Forestry may influence investment decisions from external parties. Thus, it may improve economic performance, which is characterized by increased investment returns and stock prices. Currently, national and global investors consider that environmental performance is one of the obligations that must be met. It is proven that these companies are aware of environmental issues and considers these issues in investing, especially in the Indonesian capital market. These results support the findings of previous (Al-Tuwaijri et al., 2004; Lu & Taylor, 2018; Suratno, 2006).

Environmental disclosure has a significant negative effect on business performance with a significance value of 0.000 at the level of 1%. Support for the studies by (Al-Tuwaijri et al., 2004; Lu & Taylor, 2018; Rakhiemah & Agustia, 2007).

Based on the analysis of environmental disclosures, companies that are considered to have high environmental risks are companies that directly use natural resources in their production process. Companies with high environmental disclosure in their financial statements will be more trustworthy. Reliable financial statements may have a positive effect on economic performance because investors will respond positively to fluctuations in share prices that tend to increase. Conversely, if the company's environmental disclosure is low, investors may respond negatively to fluctuations in share prices, which decline annually. This is consistent with the signaling theory.

A corporate action is unable to strengthen the effect of environmental performance on economic performance. This happens because environmental performance is reported based on the existing obligations by following GRI standards so that companies tend to provide dividends to companies that show good performance. The legitimacy theory implies that in order to survive, corporations must be responsible for people, the planet, and profits. This is referred to as triple bottom line reporting or CSR reporting. The accountability environment includes increasing public scrutiny of the company's environmental performance and its disclosure. Companies with good environmental performance are not necessarily those with high economic performance. Conversely, corporate action is able to strengthen the effect of environmental disclosure on economic performance. This indicates that companies with high environmental disclosure and good dividend distribution may improve its economic performance. Therefore investors will react swiftly and make good news that the company has carried out its operations with full responsibility to the surrounding environment.

The company size as control variable has a significant level of 0.03. The bigger the size of the company, the higher the possibility of compliance and disclosure of its environmental activities. The company growth of 0.002 indicates that the more a company grows, the better its economic performance. This is marked by the company's returns and its stock price (Al-Tuwaijri et al., 2004; Lu & Taylor, 2018; San et al., 2015). Company growth may provide investment opportunities and require managers to manage the company effectively and efficiently (Murwaningsari & Sistya, 2017). On the other

hand, the company's capital structure and profitability do not significantly affect economic performance. The firm decision to select performance indicators that better represent its environmental strategy and help the firm to reformulate this strategy. For managers, environmental and labor-related investments are not effective for improving economic performance. However, eradicating them completely might harm corporate reputation. In contrast, social investments have now become important. For policymakers, different approaches may be adopted to encourage firms to increase CSR investments (Nakumura, 2015).

5. Conclusions

Based on data analysis and discussion, it is concluded that environmental performance has a significant effect on economic performance. Companies that have a PROPER rating can influence the decision to investment. Environmental disclosure has a significant negative effect on economic performance. The result of this study is inconsistent with a previous study, which indicated that there is a positive effect of environmental disclosure on economic performance. In addition, it is demonstrated that the corporate action is unable to strengthen the effect of environmental performance on economic performance. However, it can strengthen the effect of environmental disclosure on economic performance.

This study used a content analysis approach to analyze the information in annual reports and corporate social responsibility reports. This approach has a limitation because it is prone to the researcher's subjectivity. Some companies that are part of the research object did not publish social responsibility reports separately on their website. Therefore, the researcher collected information from parts of the company's annual report as the basis for assessing the GRI standard index. The standard index in the GRI assessment was carried out manually, so it is possible to have errors in the disclosure assessment. In addition, this study has a relatively small sample size of only 22 companies. For companies that potentially produce hazardous and poisonous waste, especially public companies in Indonesia, this study implies that if they wish to increase their environmental disclosure in their annual report, they must increase their environmental performance beforehand. For accounting and environmental regulators, relevant reporting standards must be established due to the increasing public demands for transparency in all areas. Environmental disclosure in the company's annual report is important information that must be considered as an investment decision. Future studies should further assess the environmental strategy and company reputation, which are considered capable of bringing an impact on the company's economic performance. This is conducted by incorporating elements of environmental management accountancy (EMA) adopted by the company in implementing company operations.

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Appendix: Environmental Disclosure Items According to GRI

No	Aspect	Indicator (Item)
1	Material	Material being used based on weight or volume Percentage of material being used that are recycled input material Energy consumption in the organization Energy consumption outside the organization
2	Energy	Energy intensity Reduction of energy consumption Reduction of energy requirements for products and services Total water withdrawal by source
3	Water	Water sources significantly affected by water withdrawal Percentage and total volume of water that is recycled and reused

**Timeliness
Disclosure,
Board Features,
Proportionate
Audit
Committee Size**

4	Biodiversity	Operational locations that are owned, leased, managed within, or adjacent to protected areas and areas of high biodiversity value outside the protected areas A description of the significant impacts of activities, products, and services on the biodiversity in protected areas and areas of high biodiversity value outside the protected areas Protected or restored habitats The total number of species in the IUCN Red List and species in the national protected species list having habitats in areas that are affected by operational, based on the risk level of extinction
5	Emission	Direct greenhouse gas emission Indirect greenhouse gas emission Other indirect greenhouse gas emission Intensity of greenhouse gas emission Reduction of greenhouse gas emission Emission of ozone-depleting substances NOX, SOX, and other significant emissions Total waste water by quality and purpose Total waste weight by type and method of disposal Amount and total volume of significant spill
6	Effluent and Waste	Waste weights that are considered hazardous according to the provisions of the Basel Convention Appendix I, II, III, and VIII, which are transported, imported, exported, or treated, and the percentage of waste transported for international shipping Identity, size, protected status, and biodiversity value of water bodies and related habitats that are significantly affected by the organization's disposals and runoff water
7	Products and Services	The level of impact mitigation on the environmental impact of products and services Percentage of sold products and its reclaimed packaging, according to the category
8	Compliance	The monetary value of significant fines and the total amount of non-monetary sanctions for non-compliance of the environmental law and regulations
9	Transportation	Significant environmental impacts from product shipping, materials for organizational operational, and labor transport
10	Others	Total expenditure and investment for environmental protection by type
11	Environmental-Related Supplier Assessment	Percentage of new supplier screenings using environmental criteria Significant actual and potential negative environmental impacts in the supply chain and the actions taken
12	Environmental-Related Complaint Mechanism	Number of complaints on environmental impacts that are submitted, handled, and resolved through official complaint mechanisms

Source: accessed via www.globalreporting.org GRI (2017).