




Impact of environment performance on firm value: Evidence from Indonesia

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ABSTRACT

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Environmental policy is a way to mitigate the effects of climate change. However, the impact of complying with these policies on companies is still a matter of debate. This study examined the effect of environmental performance on firm value mediated by financial performance. This quantitative research used the purposive sampling method to select the sample. The sample comprised 95 non-financial companies with an observation period from 2017 to 2021. The panel data was tested using path analysis in SEM-STATA. The results show that financial performance partially mediates the effect of environmental performance on firm value. Environmental performance can also have a direct impact on firm value. The result indicates that investors consider factors other than financial performance when making investment decisions. The results also show that environmental performance positively impacts financial performance. Furthermore, financial performance positively impacts firm value. Investors optimally use the non-financial information provided by the company. One type of non-financial information used is environmental performance. Investors are aware of the importance of the company's concern for the impact of its operations on the environment. Companies that display good environmental performance tend to have a higher level of sustainability, which is profitable for investors. However, implementing strict environmental policies carries the risk that companies will move to countries with looser environmental policies. Developing countries, in particular, still need to overcome many obstacles in the implementation of environmental policies.

Contribution/Originality: This study focuses on the effect of environmental performance on firm value mediated by financial performance and the impact of corporate compliance with mandatory environmental policies in developing countries. Most studies are still carried out in developed countries and fail to examine the implementation of environmental policies in developing countries.

1. INTRODUCTION

This study examines the indirect impact of environmental performance on firm value. Companies that actively carry out activities oriented toward the environment are expected to enjoy better company profitability (Palmer & Truong, 2017). This strategy can positively impact both the environment in the current context of climate change as well as the company's competitive advantage (Benkraiem, Shuwaikh, Lakhal, & Guizani, 2022). In the end, shareholders will judge the actions of managers and provide an impact assessment of the strategy because it relates to shareholder prosperity. Investors generally judge managers' pro-environmental approaches to be positive news (Yadav, Han, & Rho, 2016).

The implementation of environmental regulations is a way to mitigate the threat of climate change. The impact of climate change encourages policymakers to participate in the prevention process (D'Orazio & Thole, 2022). In this case, the government has an important role in designing these regulations (Svartzman, Bolton, Despres, Pereira Da Silva, & Samama, 2021). The threat of climate change can take the form of physical changes, for example, natural disasters and changes in people's perspective on the environment (Semieniuk, Campiglio, Mercure, Volz, & Edwards, 2021). Governments of developed countries have been active in implementing environmental regulations, especially in terms of green financial policy in the early 2000s.

In contrast, the earliest green finance policy in a developing country was not implemented until 2003 (D'Orazio & Thole, 2022). Developing countries are considered less active participants in low-carbon economic development (Fu, Chang, & Miao, 2022). They only use environmental regulations to prevent industry non-compliance, which is quite high because governments and environmental management institutions often fail to strictly enforce the rules (Anderson, Buntaine, Liu, & Zhang, 2019; Fu & Jian, 2021).

Blackman, Lahiri, Pizer, Rivera Planter, and Muñoz Piña (2010) mentioned that there is a positive relationship between fines and company participation in environment-oriented activities in developing countries, meaning that companies play an active role in environmental activities to avoid penalties. Zulu et al. (2022) stated that although the law on environmental protection in Zambia was sufficient, its implementation needed to be improved due to the lack of understanding of the benefits that could result from the regulation. The level of success and sustainability of a collaborative project is influenced by compliance with laws and regulations (Pauna, Lampela, Aaltonen, & Kujala, 2021). Project management must not only be quality and budget-oriented but also oriented towards future sustainability, including environmental issues (Silvius & Schipper, 2014). Wong, Wong, and Boon-itt (2018) mentioned that publicizing company managers' environment-oriented activities can improve their company's performance.

Companies' implementation of environmental policies can be measured in the form of environmental performance (Tjahyono, 2013). The level of pollution produced is one of these measurements. Studies have explored the impact of a company's pollution level on its level of productivity (Du, Hanley, & Zhang, 2016; Wei, Löschel, & Liu, 2013). Using two different rules, administrative-based environmental regulation (AER) and market-based environmental regulation (MER), environment-oriented activities have the effect of reducing CO₂ emissions and streamlining the work of power plants in China. Environmental performance can also be measured by the marginal abatement cost (MACo). It captures the cost of reducing pollutants, as an unwanted output of production processes (Fare & Grosskopf, 1993). MACo is considered one of the proper measures of environmental performance (Zhang, Huang, & Qi, 2022). Other measures of environmental performance include rankings such as the Green Rankings in the United States (Yadav et al., 2016) and the Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup (PROPER) or Corporate Performance Rating Assessment Program (CPRAP) in Indonesia (Abdullah, Musriani, Syariati, & Hanafie, 2020; Iriyadi & Antonio, 2021).

Managers' awareness of the need to carry out environment-oriented activity strategies can improve a company's financial performance (or firm performance). According to Wong et al. (2018) and De Lucia, Paziienza, and Bartlett (2020), one of the strategies is green innovation (Bauweraerts, Arzubaga, & Diaz-Moriana, 2022). Wang and Lin (2022) examined the impact of environmental policies on green productivity. The results showed that environment-oriented companies mainly carry out green productivity. An example of green productivity is innovation in processes or products (Hu, Wang, Huang, & Huang, 2017). This process or product innovation can mediate the relationship between environmental policy and company performance. Other studies have shown that process innovation in the form of Technological Green New Product Introductions can also positively impact profitability (Palmer & Truong, 2017). Companies that implement environmental policies tend to improve their financial performance and be more competitive (Dwi Wardani & Sa, 2020; López-Gamero, Molina-Azorín, & Claver-Cortés, 2010; Permana, 2018; Tjahyono, 2013; Zhao, Zhao, Zeng, & Zhang, 2015). Government-issued environmental policies are one of the

government's tools to attract investment (Xie, Li, Ye, & Jiang, 2021; Yu & Li, 2020). The market, represented by shareholders, greatly appreciates the environmental investments made by companies and the low pollution they produce (Clarkson, Li, & Richardson, 2004). On the other hand, several other studies have shown that environmental performance has a negative impact on financial performance (Garcia & Orsato, 2020; Giannopoulos, Fagernes, Elmarzouky, & Hossain, 2022). Benkraiem et al. (2022) showed that the relationship between environmental performance and firm value is moderated by gender diversity and the company's innovation capacity. In other studies, the level of carbon emissions is negatively related to firm value, moderated by the level of pollution in the industrial sector, the level of monitoring of environmental policy implementation, and the scale of a country (Choi & Luo, 2021; Radu & Maram, 2021; Zhao, Fan, Fang, & Hua, 2018). Corporate social responsibility (CSR) also mediates the relationship between environmental policy and company value (Pratiwi & Setyoningsih, 2017). One study that examined the direct relationship between environmental policy and firm value is that of Basse Mama and Mandaroux (2022). The results of this research showed a non-linear relationship between the two variables. Other studies have concluded that environmental policies are not related to firm value (Aydoğmuş, Gülay, & Ergun, 2022). The relationship between the two is arguably mediated by financial performance (Dwi Wardani & Sa, 2020; Permana, 2018; Ramadhana & Januarti, 2022). However, there is inconsistency in the research results on the relationship between environmental policy and company value mediated by financial performance.

The current study contributes in two ways. First, it aims to research the effect of environmental performance on firm value mediated by financial performance in developing countries. Various studies have been conducted to examine the impact of environmental policies on firm value (Basse Mama & Mandaroux, 2022; Benkraiem et al., 2022; Kabir, Rahman, Rahman, & Anwar, 2021; Radu & Maram, 2021). However, the majority of research has been carried out in developed countries or on an international scale. Studies in the context of developing countries only examine how environmental policies are implemented by companies in developing countries (Ali, 2020; Anderson et al., 2019; Fu & Jian, 2021). Indonesia is used as the object of this research because Indonesia was one of the earliest developing countries to adopt environmental policies and is considered the most committed to green accounting policies (D'Orazio & Thole, 2022).

Second, the study focuses on the impact of corporate compliance with mandatory environmental policies. Several researchers who have examined environmental policies have distinguished the nature of the environmental policies issued by regulators. There are two types of policies; namely, policies that are mandatory and those that are voluntary (López-Gamero et al., 2010; Zhao et al., 2015). Wang and Lin (2022) examined the effect of mandatory and voluntary environmental policies on company performance. The results of the study showed that mandatory environmental policies have a negative impact on a company's financial performance. In contrast, voluntary environmental policies positively affect a company's financial performance. In contrast, other studies have shown that mandatory environmental policies can increase productivity (Ren, Li, Yuan, Li, & Chen, 2018; L. Xie et al., 2021) and investment (Xie et al., 2021; Yu & Li, 2020), as well as negatively impact the corporate value of companies that contribute to high pollution (Guo, Kuai, & Liu, 2020).

The remainder of this paper is organized as follows. Section 2 reviews the literature and develops the hypotheses. Section 3 describes the sample, data, and research design. Section 4 details the data analysis, results, and discussion, and Section 5 concludes.

2. LITERATURE REVIEW AND HYPOTHESES

2.1. Environmental Policy and Environmental Performance

In response to climate change, regulators have formulated policies to prevent negative impacts (D'Orazio & Thole, 2022). The environmental policy implemented by the regulator is a challenging matter because it has an impact on both the environment and the country's economy (Hu et al., 2017). Companies that produce high pollution levels may decide to move abroad to avoid the policy (Rubashkina, Galeotti, & Verdolini, 2015). Some environmental policies

are mandatory, and some are voluntary (López-Gamero et al., 2010; Zhao et al., 2015). According to You, Zhang, and Yuan (2019) and Xie, Yuan, and Huang (2017), mandatory regulations can take the form of laws, norms, or standards limiting companies' pollution-producing activities. Meanwhile, according to Wang and Lin (2022), voluntary policies tend to be more flexible because regulators only convey the objectives of the environmental policies without providing standards for their implementation.

The government uses various sets of regulations related to the environment and, of course, imposes compliance costs on companies (Wang, Sun, & Guo, 2019). Companies must perform environmental performance management to comply with applicable regulations (Tjahyono, 2013). Environmental performance is a measure of the success or failure of a company in complying with applicable environmental policies. Companies' obligations regarding the Protection and Management of the Environment in Indonesia are regulated in Indonesia (2009). Companies' environmental performance is then measured in the form of the Corporate Performance Rating Program (CPRAP). The two categories used in this assessment are compliance criteria and beyond compliance criteria. Based on these criteria, the company will receive a CPRAP rating, starting from the best, Gold, to Green, Blue, Red, and Black. If the company is rated Black twice in a row, it can be sued and its operations terminated.

2.2. Hypothesis Development

In stakeholder theory, business is a relationship between groups that have an interest in business activities for which a group is responsible (Freeman, 1994). According to Barney (1991), resource-based theory states that there is a need for a corporate framework to determine the use of resources to achieve a competitive advantage. For example, environmental activities such as reducing carbon emissions can increase a company's competitive advantage (Benkraiem et al., 2022; Palmer & Truong, 2017). Based on these two theories, companies will conduct environmental activities to comply with environmental policies. The environmental activities include adopting green innovations that can reduce the risks and impacts of pollution (Aboelmaged & Hashem, 2019). Leal-Millán, Roldán, Leal-Rodríguez, and Ortega-Gutiérrez (2016) defined green innovation as a method companies use to add business value in the form of new processes, equipment, systems, practices, and products that reduce negative environmental impacts. Green innovation encourages companies to use resources and carry out production processes efficiently and produce environmentally friendly products so that they minimize the environmental costs incurred and comply with environmental regulations (Hu et al., 2017). Chen and Ma (2021) conveyed that green investment is important in improving financial performance.

Palmer and Truong (2017) examined the impact of environmentally friendly product innovation on company profitability. Their results showed that environmentally friendly product innovations increase company profits. This effect is moderated by the family company; the research conducted by Bauweraerts et al. (2022) showed that family companies tend to inhibit the adoption of green innovations, which has the effect of decreasing company performance. Hu et al. (2017) also examined the relationship between environmental policy and firm performance moderated by product innovation and process innovation. The results showed that product innovation has a stronger mediating effect than process innovation. Other researchers have also examined the impact of environmental policies issued by regulators on financial performance (López-Gamero et al., 2010; Wang & Lin, 2022; Zhao et al., 2015).

H1: Environmental performance has a positive impact on financial performance.

According to signal theory, managers tend to provide information to investors as a signal that the company has a competitive advantage over other companies (Dang, Vu, Ngo, & Hoang, 2019). This information is used as the basis for investor analysis and investment decisions (Dwi Wardani & Sa, 2020). Financial reporting is one of the tools managers use to provide signals to investors. Financial reporting shows the company's financial performance, which reflects its efficiency and effectiveness in utilizing its resources (Musa Abdel Latif Ibrahim Al, 2017). To maintain the consistency of their company values, managers must continuously monitor the company's financial performance to

give investors a positive assessment of their company. For investors, the better the company's financial performance, the better the company's value (Dwi Wardani & Sa, 2020).

Various studies have examined the effect of financial performance on firm value. Financial performance is generally measured using return on assets (ROA) and return on equity (ROE), while Tobin's Q measures company value (Dang et al., 2019; Dwi Wardani & Sa, 2020; Permana, 2018). Researchers also use indicators of the ratio of gross profit to total assets and the percentage of operating costs to total assets to measure financial performance. The results show that financial performance positively affects firm value (Musa Abdel Latif Ibrahim Al, 2017).

H2: Financial performance has a positive impact on firm value.

Managers increasingly present environmental, social, and governance (ESG) disclosures to maintain a sustainable competitive advantage (Olsen, Awuah-Offei, & Bumblauskas, 2021). Society responds positively to a company's good environmental and ethical performance (Benkraiem et al., 2022). Investors pay special attention to companies that contribute greatly to environmental pollution. Investors assess companies based on financial performance, but they also look at the environmental impact of the company's activities (Bimha & Nhamo, 2017). Benkraiem et al. (2022) noted the reasons environmental performance can affect the value of a company. First, companies with high pollution levels tend to incur high production process costs and have a high risk of being fined by regulators. Second, high pressure from stakeholders causes companies to incur high costs to measure, report, and monitor the level of pollution generated.

Basse Mama and Mandaroux (2022) examined the effect of the level of carbon emissions on firm value. The results of this research showed a non-linear relationship between the level of carbon emissions produced and the company's value. However, Aydoğmuş et al. (2022) found that the environmental score has no significant relationship with firm value. Other studies have found that the relationship between the two is mediated by financial performance (Dwi Wardani & Sa, 2020; Permana, 2018). In countries with stringent environmental policies, carbon emissions are negatively related to firm value (Choi & Luo, 2021), whereas, in countries that are not strict in enforcing environmental policies, investors are less likely to consider a company's pollution contribution when making investment decisions.

H3: Environmental performance has a positive impact on firm value.

H4: Environmental performance has a positive impact on firm value mediated by financial performance.

3. SAMPLE, VARIABLES, AND METHODOLOGY

3.1. Sample

The population used in this research was non-financial companies in Indonesia during 2017–2021. Using the specified criteria, 95 samples were obtained for the study. The requirements for the sample were that the company must be a CPRAP predicate decided by the Minister of Environment and Forestry and have a sustainability report. The data has various sources, including the Minister of Environment and Forestry decree, company annual reports, and the Indonesia Stock Exchange (IDX).

Path analysis was used to analyze the data using structural equation modeling (SEM) in STATA data analysis software. The researchers used the decree of the Minister of Environment and Forestry to obtain a list of companies that have earned rankings based on environmental performance assessments. Annual reports were used to obtain company financial performance data, while IDX information was used to obtain company valuation data by investors.

3.2. Definition of Variables

3.2.1. Dependent Variables

The dependent variable used in this study was firm value, which was measured using Tobin's Q in accordance with Chung and Pruitt (1994). This measurement assesses managers' ability to manage company resources and potential investment opportunities from the point of view of stock prices (Sudiyatno & Puspitasari, 2010). If the value

of Tobin's Q is below 1, then the company's stock value is undervalued. Conversely, if the value of Tobin's Q is above 1, then the company's stock value is overvalued.

$$\text{Tobin's } Q = (\text{MVE} + \text{PS} + \text{DEBT}) / \text{TA}$$

Where market value of equity (MVE) is the multiplication value of the stock price by the number of outstanding shares, and preferred stock (PS) is the liquidating value of the firm's outstanding preferred stock.

At the same time, long-term debt, which is written as DEBT, is the reduction of short-term liabilities by current assets and the addition of the book value of long-term debt. Total assets (TA) is the book value of the company's total assets.

3.2.2. Independent Variables

The independent variable used in this study was environmental performance, which was measured by the CPRAP index issued through a Decree of the Minister of Environment and Forestry. The predicate is given in 5 CPRAP ratings, ranging from Gold (high) to Green, Blue, Red, and Black (low). Companies that have received a gold title have carried out more environmental management than required, carried out 3R (reduce, reuse, recycle) efforts, implemented a sustainable environmental management system, and carried out activities that are useful for society in the long term.

3.2.3. Mediating Variables

The mediating variable in this study was financial performance as measured by return on assets (ROA). ROA is the ratio between net profit and total assets. Researchers use ROA to measure a company's financial performance because investors tend to use ROA to analyze a company's ability to use its resources for profit (Aydoğmuş et al., 2022). The higher the ROA value, the more efficiently the company manages its assets.

3.2.4. Control Variables

In this study, the characteristics of the firm and industry were used as control variables. One control variable was company size, measured as the natural logarithm of the company's number of employees (Bauweraerts et al., 2022). The researchers used company size as a control variable because, according to Hall and Weiss (1967), the economies of scale that are possible in large companies can improve financial performance. The second control variable used was the Covid-19 condition, using a dummy variable. Samples during the Covid-19 period were given the number one and 0 otherwise. This was used as a control variable because the Covid-19 pandemic caused a marked decline in the stock exchange (Folger-Laronde, Pashang, Feor, & ElAlfy, 2022).

3.3. Empirical Setting

The regression models employed were based on the equation of Baron and Kenny (1986). This study used path analysis to analyze the data using the conceptual model below:

$$ROA_{it} = \alpha_0 + \beta_1 \text{PROPER}_{it} + \beta_2 \text{Cont}_{it} + \varepsilon_{it} \quad (1)$$

$$\text{Tobin's } s_{it} = \alpha_0 + \beta_1 \text{KL}_{it} + \beta_2 \text{ROA}_{it} + \varepsilon_{it} \quad (2)$$

$$\text{Tobin's } s_{it} = \alpha_0 + \beta_1 \text{KL}_{it} + \varepsilon_{it} \quad (3)$$

Equation 1 presents the multiple regression model used to test the direct effect of environmental performance (CPRAP; written as PROPER in the equation) on financial performance (ROA) and to test our first hypothesis. Equation 2 presents the indirect effect of environmental performance (CPRAP) on firm value (Tobin's) via financial performance (ROA) to test our fourth hypothesis.

Equation 3 presents the direct effect of environmental performance (CPRAP) on firm value (Tobin's) before mediation by financial performance (ROA) to answer our third hypothesis.

4. EMPIRICAL RESULTS

4.1. Descriptive Statistics

The results in Table 1 show that the companies sampled in this study received a predicate with an average value of 3.231579 for their CPRAP or PROPER rating, corresponding to a blue rating, meaning that the sample companies carried out the required environmental management under the applicable rules and regulations. The average Tobin's Q was 1.807021, meaning that the average company that formed the sample in this study was considered overvalued by investors compared to the book value of its shares. Investors highly valued companies that had received a high rating from the government through the CPRAP Index.

Table 1. Descriptive statistics of variables.

Variables	Mean	Standard deviation	Min.	Max.
Tobin's	1.807	2.182	0.257	12.263
MTV	4.818	13.186	0.000	82.444
PROPER	3.232	0.535	3	5
ROA	0.085	0.119	-0.118	0.542
Size	10528.31	11628.99	161	40183
Variables	No of the sample with category 1 = COVID-19 period			% of total
COVID period	38 samples		40%	

Table 1 also shows that the average ROA value was 0.085128. The sample companies obtained a rate of return on the investment made. However, there was also a value of -0.117666 for one sample company's ROA, which means that there were still companies that had not obtained a rate of return on the investment made. The size variable shows that the average number of employees in the sampled companies was more than 10,000. Such companies can implement economies of scale, which can impact their financial performance.

4.2. Path Analysis

The findings in Table 2 show that companies' decision to implement environmental policies that the government has set can improve their financial performance ($\beta = 8.110088$, $p = 0.0001$). Even though environmental activities are carried out by companies as a form of policy compliance, the decision to do so can also improve their financial performance. Good awareness of managers concerning carrying out business operations with an environmental orientation can improve companies' financial performance (Wong et al., 2018). Green investment is an important factor in a company's efforts to improve its financial performance (Chen & Ma, 2021). A fairly severe penalty is given to companies that are rated Black twice, encouraging companies to implement the environmental policies required by the government. Companies with high emissions are potentially subject to additional taxes, fines, or severe government sanctions (Fu et al., 2022). Another benefit obtained by companies with good environmental performance is gaining access to capital to increase their financial performance. However, the COVID-19 pandemic reduced the impact of a company's environmental performance on its financial performance ($\beta = -1.458476$, $p = 0.009$). The pandemic caused a market decline, meaning that companies did not get an optimal rate of return on their investments.

Table 2 shows a significant influence of financial performance on firm value ($\beta = 0.705343$, $p = 0.0001$). The higher the profit earned by the company, the higher the value of the company. Investors interpret the financial performance information presented by companies as a positive signal. Good financial performance can give the company a positive reputation in the eyes of investors (Dang et al., 2019). For this reason, managers must continue to evaluate their financial performance to realize the company's vision and mission and be able to measure the company value from an investor's point of view to increase investor wealth (Musa Abdel Latif Ibrahim Al, 2017).

Concerning hypotheses 3 and 4, Table 2 shows a significant correlation between the Proper variable and the ROA variable ($\beta = 0.705343$, $p = 0.0001$) and a significant correlation between ROA and Tobin's Q ($\beta = 8.110088$, $p = 0.0000$). There is also a significant effect of Proper on Tobin's Q ($\beta = 2.02606$, $p = 0.0000$). Based on these results,

H3 is accepted, while H4 is accepted with ROA as a partially mediating variable. There is a direct relationship between environmental performance and company value that is not mediated by financial performance. This means that company value is currently not only measured by financial performance; investors also consider the impact of the company's operations on the environment (Bimha & Nhamo, 2017). There are several reasons why a company's environmental performance may affect its value (Radu & Maram, 2021). First, companies with high levels of pollution will incur production costs for changing to more environmentally friendly methods. Second, companies with high pollution levels also face a higher risk of fines, higher taxes, and the threat of government sanctions. Third, companies incur additional costs due to pressure from stakeholders such as the government, consumers, environmental activists, and others. Investors react positively to companies that care more about the environment, which has a positive effect on stock prices.

Table 2. Path results of empirical analysis.

Variable	ROA		Tobin's	
	Coefficient	Prob	Coefficient	Prob
PROPER	0.070	0.000***	2.026	0.000***
ROA	-	-	8.110	0.000***
Size	-0.015	0.072*	-	-
PROPER Covid	-1.458	0.009**	-	-

Note: *** p < 0.01, ** p < 0.05, * p < 0.10. For variable definitions, see Section 3.

4.3. Robustness Checks

To validate the results of the hypothesis testing, the researchers tested the effect of the PROPER variable on firm value mediated by financial performance by using the market-to-book (MTB) ratio to measure firm value. The results in Table 3 are consistent with the results of the hypothesis testing. For H1, a value was obtained ($\beta = 0.0705343$, $p = 0.001$) consistent with accepting H1. For H2, a value was obtained ($\beta = 78.31151$, $p = 0.000$) that was consistent with accepting H2. For hypotheses 3 and 4, the value of the PROPER variable's effect on MTB was ($\beta = -6.16441$, $p = 0.0530$). This indicated a significant relationship between PROPER and MTB, so hypothesis 3 was accepted, while hypothesis 4 was accepted with financial performance as a partial mediating variable. Based on Table 3, it can also be seen that the Covid-19 condition weakened the relationship between PROPER and ROA, which is consistent with previous tests using Tobin's Q as a measure of firm value.

Table 3. Path results of empirical analysis.

Variable	ROA		MTB	
	Coefficient	Prob	Coefficient	Prob
PROPER	0.070	0.001**	-6.164	0.053*
ROA	-	-	78.311	0.000***
Size	-0.015	0.072*	-	-
PROPER Covid	-0.106	0.017**	-	-

Note: *** p < 0.01, ** p < 0.05, * p < 0.10. For variable definitions, see Section 3.

5. CONCLUSION

In principle, environmental performance by companies is the company's compliance with the environmental policies set by the government. This environmental performance can positively impact the environment and meet the standards set out in the regulations. The benefits obtained by companies with good environmental performance include reduced costs arising from non-compliance, such as fines, additional taxes, or other sanctions. Another potential benefit is easy access to capital to support the achievement of good financial performance.

Investors use analytical bases aside from the information presented in financial reporting for their decision-making, one of which is environmental performance. Investors are aware of the importance of concern for the impact of company operations on the environment, which is, of course, associated with the company's sustainability.

Companies with good environmental performance tend to have a higher level of sustainability, which is profitable for investors. Compliance with the government's environmental policies prevents risks that would impact investors.

The government plays an important role in efforts to implement environmental policy. Such policies are challenging as they must balance climate change mitigation efforts with their impact on economic development. Strict policy implementation can increase the risk that companies will move to countries with looser environmental policies. Developing countries, in particular, still face many obstacles in the implementation of environmental policy.

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