

Environmental Performance: In Efforts to Improve Financial Performance and Firm Value

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Abstract. This study examines the effect of environmental Performance on firm value through the company's financial Performance. The sample in this study is companies that follow Proper from the Ministry of Environment and Forestry of the Republic of Indonesia and have been listed on the Indonesia Stock Exchange. The analytical method used in this research is path analysis. The study's results found that environmental Performance significantly influences financial Performance and firm value. Financial Performance can mediate the effect of environmental Performance on firm value.

Keywords: Environmental Performance, Financial Performance, Firm Value

1. Introduction

The company's value does not increase if the level of company performance, especially the company's financial performance, does not increase. Financial Performance in a company can be assessed by how optimally the company generates profit or profit from all operating activities. If a company can obtain or achieve optimal company profits, it will directly impact the level of business continuity. Today, many companies only focus on achieving optimal performance levels but do not pay attention to the environmental impact of their activities or operating processes, whereas in some reports, it is found that many companies ignore environmental impacts. [1].

Excessive use of chemicals in the operations and production activities of the company also contributes to the negative impact on the environment and tends to damage the environment. In addition, the company's lack of awareness to manage waste correctly and adequately will further aggravate environmental conditions. Based on data from the Ministry of Environment of the Republic of Indonesia data obtained that from 2,593 companies from 299 types of industrial businesses, there are still 645 companies that are still in the red category, where these results mean the company is only able to achieve the requirements set to control environmental impacts. Based on these results, the environmental condition must be a severe concern for companies, communities, and governments. In the last two decades, many researchers have researched the impact of company operations on the environment, often referred to as Corporate Environmental Responsibility (CER) [2].

The impact of pollution of the company's activities on the environment is divided into air, soil, and water pollution. Based on a report from the Ministry of Environment (KLHK) in 2020, it was found that there are still 59% of rivers in Indonesia are in the heavily polluted category, 26.6% are in the moderately polluted category, and 8.9% are in the lightly polluted category, where industrial activities cause the majority. The waste from the company causes the biota in the river to be unable to live due to a lack of oxygen. Based on these data, it can be concluded that most rivers or water areas in Indonesia have been polluted by industrial waste, which impacts the lower quality of clean water in Indonesia [3].

Pollution of watersheds (DAS) is very common in Indonesia, where in 2020 there are two companies in the Citarum watershed, namely PT Kamarga Kunia Textile Induri (KKTII) and PT How Are You Indonesia (HAYI) found guilty because they have been proven guilty. Polluting the environment of the Citarum watershed, the Citarum watershed was polluted by 721,945.66 hectares, and for this impact, they were punished with material compensation of IDR 16.263 billion. [4]. In addition to water pollution, there are several cases of air pollution, such as air pollution by PT Acid Industry and PT Mahkota Indonesia. The investigation results from the Ministry of Environment and Forestry and the Provincial Government of DKI Jakarta found that the two companies polluted the air around the factory [5].

Based on various findings of violations and cases that occurred in Indonesia, the Government of Indonesia decided on the provisions contained in the decision of the Chairman of BAPEPAM-LK Regulation Number X.K.6 regarding the requirements for presenting reports of Indonesian public companies in the annual report. The regulation stipulates the obligation of public companies to give social responsibility reports, one of which is related to the company's responsibility to the environment. Furthermore, the 2014 Ministry of Environment and Forestry regulation Number 3 formulates a company's performance assessment in environmental management or Proper, where based on this proper assessment, the company's environmental Performance can be classified (Gold, Green, Blue, Red, and Black). So this regulation can prevent companies from committing violations that have an impact on environmental pollution.

A company's high or low environmental performance assessment can directly impact the level of company value, where the better the company's environmental Performance, the company's value will also increase. The factors that can cause this to happen are the view of the company's ability to realize the social contract and legitimacy so that the company gets a positive response from the market. Investors are more interested in investing in companies with an excellent corporate image because, in general, companies with a good corporate image have loyal customers and have an impact on the stability of the level of financial performance obtained by the company [6]. However, in research from Chang [7], different results were found that environmental performance variables negatively influence firm value. Furthermore, in the study by Chang [8], it was found that the environmental performance of companies in China from 2008-2012 significantly influenced the company's financial performance, which was proxied to Return on Assets. However, there are different research results found by Munjal & Malarvizhi [9], where it was found that in banking companies in India, the environmental performance achieved by the company did not significantly affect the company's financial Performance.

1.1 Stakeholder Theory

Stakeholders are a group of people or parties who are interested in the conditions of a company or organization; these people or parties usually contribute to the company or organization and feel the impact of a decision chosen by the company or organization [10]. Meanwhile, according to Azheri [11], the stakeholder approach is the relationship between a company and an organization with parties inside or outside the company or organization. So based on this explanation, it can be concluded that stakeholders are parties who have an attachment to a company or organization and feel the impact of every decision taken by the company or organization.

In its development, stakeholder theory is considered a theory that describes the relationship between the company and parties who have an interest in the company, where in the decision-making process, these parties have a vital and dynamic role. So based on this, it can be concluded that the company or organization is not an entity that can operate independently and put aside the interests of the parties related to it, wherein the relationship between the company and the interested parties is the principles of accountability and responsibility will be created [12]. The tagline of the stakeholder theory is that the better the relationship between the company and its interested parties, the better the business activities of a company; where in creating this relationship, there must be a sense of trust, respect, and collaboration between the two [10]. Stakeholder theory is part of strategic management, which contains the main goal which is to help the company to create good relations with interested parties, especially external parties, which in turn can create a competitive advantage for the company [13].

1.2 Environmental Performance on Financial Performance

Singh et al. [14] revealed that when a company incurs costs related to environmental aspects, it will automatically build a good image for stakeholders and potential investors. From this, there will be a positive response from the market because it has carried out its obligations and responsibilities for environmental care. The government created proper to encourage companies to take better care of the environment. So companies that follow Proper will undoubtedly get positive scores from stakeholders even though they only get a rating of 3 or 4, already showing their concern for the environment. Previous studies that discussed EP's effect on FP found a positive influence [15,16]. Meanwhile, different studies have found that EP does not affect FP due to companies that are too focused on increasing profit orientation without paying attention to EP, which might be able to increase profits or improve the company's FP [9]. Based on the explanation above, EP and FP, the alternative hypotheses in this study are:

H1: EP Affects FP

1.3 Environmental Performance on Firm Value

Many environmental issues at home and abroad will cause the community to demand that all companies pay attention to the social and environmental impacts arising from the company's operating activities and take responsibility for overcoming them. The community wants the company to be able to control the impact caused by its business activities. The company can do this situation with efforts to manage and preserve the environment [2]. The explanation above follows the theory of legitimacy as a form of company recognition from the community. From this recognition, the company certainly has a good image for the community. Investors will be more interested in companies with a good image or image in the community, because it

impacts high consumer loyalty to the company's products. In a study conducted by Khanifah et al. [17] found that EP has a negative effect on FV. However, a study conducted by Fadrul et al. [21] shows that EP positively affects FV.

H4: EP Affects FV

1.4 Environmental Performance on Firm Value Towards Financial Performance

Various environmental problems in Indonesia can give rise to community claims because the company's production activities interfere with and even harm the environment and society [18]. This phenomenon supports the theory of legitimacy, a form of recognition of the company's existence from the community. Companies must be able to align economic goals with environmental and social goals. That way, the public's view of the company will be good [7].

If the company already has a door in the people's hearts, the community will likely accept the products produced by the company [19]. Furthermore, automatic FP has a direct effect on the value of the company [20]. When the company's EP is good, it will increase FP, which indirectly also increases the value of the company. Investors will prefer company shares by looking at the market economy and emerging news. At the same time, EP assessed by Proper is a company's long-term strategy to maintain the company's sustainability (going concern) which cannot be felt in the short term. In this case, it is also supported by signal theory, in Rinsman & Prasetyo's research [15] which provides an understanding of the importance of information about the company needed by shareholders or external parties owned by the company. Chang's research [8] found that companies with good environmental and social Performance will respond positively to investors by increasing stock prices, which will increase FP and company value. Furthermore, in Fauziyyah's research, [20] it was found that EP indirectly affects FV through FP.

H8: EP Affects FV through FP

2. Research Method

This study uses the associative method with a quantitative data approach, aiming to examine the independent variable's effect on the dependent variable through the mediating variable [21]. In this study, two tests will be carried out: testing the direct and indirect effects. In this study, the research population is all companies that followed Proper from 2010-2020 and are listed on the Indonesia Stock Exchange (IDX) from 2010-2020. Furthermore, to determine the number of samples in this study, the researcher used a sampling method with purposive sampling. In this study, path analysis was used to determine the causal relationship and to explain the direct and indirect effects of a set of variables as causal variables.

3. Results

3.1 Normality Test

Based on the results of normality testing with Kolmogorov Smirnov, the Asymp. value was found. Sig (2-tailed) is 0.100, where the value is greater than 0.05, so it can be concluded that the data in this study meet the assumption of normality in the sub-structure 1 test.

Furthermore, the normality test results for sub-structure 2 of the Asymp. value were also found. Sig (2-tailed) is 0.200, where the value is greater than 0.05, so it can be concluded that the data in this study meet the assumption of normality in sub-structure two tests.

3.2 Autocorrelation Test

Based on the results of the autocorrelation test in sub-structure 1, it was found that the DW value was 2.007, where the value was in the criteria $du (1.71) > dw (2.007) > 4 - du (4 - 1.71)$. So it can be concluded that there is no autocorrelation in the sub-structure equation 1. Furthermore, the results of the autocorrelation test in sub-structure 2 found that the DW value is 1.819, where the value is in the criteria $du (1.71) > dw (1.819) > 4 - du (4 - 1.71)$. So it can be concluded that there is no autocorrelation in sub-structure equation 2.

3.3 Hypotheses Test

Table 3. Multiple Linear Regression Test Results and Partial Significance of Substructure 1

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	9.080	4.147		2.190	.032
EP	2.360	.050	.208	2.053	.044

a. Dependent Variable: FP

The effect of EP on FP variables is 0.208. Furthermore, based on the results of the partial significance test, it was found that $(2.053) > (1.99)$ and $(0.044) < 0.05$ so that it can be concluded that EP has a positive and significant effect on FP.

Table 4. Multiple Linear Regression Test Results and Partial Significance of Substructure 2

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	.823	.414		1.990	.050
EP	.539	.114	.357	4.710	.000
FP	.084	.011	.633	7.585	.000

a. Dependent Variable: FV

The effect of EP on the FV variable is 0.357. Furthermore, based on the results of the partial significance test, it was found that $(4.710) > (1.99)$ and $(0.000) < 0.05$, so it can be concluded that EP has a positive and significant effect on FV. The effect of FP on the FV variable is 0.633. Furthermore, based on the results of the partial significance test, it was found that the t-count value $(7.585) > t$ -table (1.99) and the sig value $(0.000) < 0.05$, so it can be concluded that FP has a positive and significant effect on FV. Based on the results of the mediation test, it is

known that the Sobel Test Statistic (4.14) > 1.975 and the Two-Tailed Probability (0.00) < 0.05. so it can be concluded that FP can significantly mediate the effect of EP on FV.

4. Conclusion

The partial significance test results indicate that EP has a positive and significant effect on FP. These findings are consistent with previous research that found a positive and significant impact of EP on FP. Furthermore, the partial significance test results revealed that EP has a positive and significant effect on FV. These results align with Fadrul et al. [22], who found that EP positively affected FV. Research by Harahap et al. [23] also found that EP can affect FV. The results of the mediation test found that FP could significantly mediate the effect of EP. The results align with Chang [8], who found that firms could use EP as a competitive advantage. Investors will respond positively to companies with good environmental and social Performance by increasing stock prices and the company's value.

References

- [1] Lingga, Suaryana. Pengaruh Langsung dan Tidak Langsung Kinerja Lingkungan pada Nilai Perusahaan. *E-Jurnal Akunt.* 2017;20(2):1419–45.
- [2] Benlemlih M, Cai L. Corporate environmental performance and financing decisions. *Bus Ethics.* 2020;29(2):248–65.
- [3] Antara. KLHK Ungkap Penyebab 59 Persen Sungai di Indonesia Tercemar Berat [Internet]. *Bisnis.Tempo.co.* 2021.
- [4] Arumingtyas L. Dua Perusahaan Cemari DAS Citarum Kena Hukum Rp16,26 Miliar [Internet]. 2021.
- [5] Amrullah A. Dua Pabrik Penyebab Pencemaran Udara Diberi Sanksi [Internet]. 2020.
- [6] Widya Y. Pengaruh Tata Kelola Perusahaan Dan Kinerja Lingkungan Terhadap Nilai Perusahaan. *J Akunt dan Keuang Drh.* 2016;11(2):52–9.
- [7] Gu Y, Zhou G, Wu Y, Xu M, Chang T, Gong Y, et al. Environmental performance analysis on resource multiple-life-cycle recycling system: Evidence from waste pet bottles in China. *Resour Conserv Recycl* [Internet]. 2020;158(March):104821.
- [8] Chang K. The impacts of environmental performance and propensity disclosure on financial performance: Empirical evidence from unbalanced panel data of heavy-pollution industries in China. *J Ind Eng Manag.* 2015;8(1):21–36.
- [9] Munjal P, Malarvizhi P. Impact of Environmental Performance on Financial Performance: Empirical Evidence from Indian Banking Sector. *J Technol Manag Grow Econ.* 2021;12(1):13–24.
- [10] Bonnafous-Boucher M, Rendtorff JD. Stakeholder Theory: A model for strategic management. *SpringerBriefs in Ethics.* 2016. 1–83 p.
- [11] Azheri B. Corporate Social Responsibility; Dari Voluntary Menjadi Mandatory. Jakarta: Rajawali Pers; 2012. 350 p.
- [12] Harrison JS, Barney JB, Freeman RE, Phillips RA. The cambridge handbook of stakeholder theory. *The Cambridge Handbook of Stakeholder Theory.* 2019. 1–280 p.
- [13] Mardikanto T. CSR (Corporate Social Responsibility). Bandung: Alfabeta; 2014.
- [14] Singh SK, Giudice M Del, Chierici R, Graziano D. Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technol Forecast Soc Change* [Internet]. 2020;150(May 2019):119762.
- [15] Rinsman TCS, Prasetyo AB. The Effects of Financial and Environmental Performances on Firm Value with Environmental Disclosure as an Intervening Variable. *J Din Akunt.* 2020;12(2):90–9.
- [16] Xie Y, Fang Y, Zhang D. How Environmental Performance Affects Financial Performance in the Food Industry: A Global Outlook. *Sustain.* 2022;14(4):1–18.

- [17] Khanifah K, Udin U, Hadi N, Alfiana F. Environmental performance and firm value: Testing the role of firm reputation in emerging countries. *Int J Energy Econ Policy*. 2020;10(1):96–103.
- [18] van de Burgwal D, Vieira RJO. Environmental disclosure determinants in Dutch listed companies. *Rev Contab Finanças - USP*. 2014;25(64):60–78.
- [19] Longoni A, Cagliano R. Inclusive environmental disclosure practices and firm performance: The role of green supply chain management. *Int J Oper Prod Manag*. 2018;38(9):1815–35.
- [20] Fauziyyah N. The Influence Of Environmental Performance And Ownership Structure On The Firm's Value With The Financial Performance As Intervening Variable (Empirical Study on company listed in Indonesia Stock Exchange Period 2013-2017). *Bus Process Manag J*. 2019;2(1):23–33.
- [21] Malhotra NK, Hall P. Student Resource Manual with Technology Manual Essentials of Marketing Research: A Hands-On Orientation Preface. 2015;
- [22] Fadrul, Budiyanto, Asyik NF. The Effect of Ownership Structure and Corporate Social Responsibility on Financial Performance and Firm Value in Mining Sector Companies in Indonesian. *Int J Econ Dev Res*. 2021;2(2):394–411.
- [23] Harahap CD, Juliana I, Lindayani FF. The Impact of Environmental Performance and Profitability on Firm Value. *Indones Manag Account Res*. 2019;17(1):53.