How Does Environmental Disclosure and Environmental Certification Affect Indonesia State-Owned Company Performance?

A K Widiatami[1*], P Suranti[2], L Latifah[3], I N Aeni[4], A Nurkhin[5]

[1] Economic Education Department, Universitas Negeri Semarang, Semarang, Indonesia

*E-mail: kania@mail.unnes.ac.id

Abstract. Companies today are not only focused on increasing profits but also must pay attention to environmental aspects when carrying out their activities, especially for state-owned companies in Indonesia that represent government-owned businesses. The purpose of this study is to analyze the effect of environmental disclosure and environmental certification on financial performance. The population in this study were state-owned companies listed on the IDX in 2018-2022. The sample selection technique uses purposive sampling and obtains 93 observation samples through unbalanced pooled data. This study has done a robustness check through different financial performance indicators with ROA and ROE. The result shows robust results that environmental certification negatively affects both ROA and ROE, while environmental disclosure does not affect ROA and ROE. It shows that companies with environmental certification have decreased their net profit performance from managing assets and capital from investors. The result has implications for state-owned companies in Indonesia, which should be more concerned about ecological effects and risks due to their business activities. State-owned companies are expected to be pioneer in making companies more aware of environmental trends because most of their capital is from the government.

Keywords: Environmental disclosure, Environmental certification, Financial performance, State-owned companies, ROA (Return on Assets)

1 Introduction

The increasingly rapid business world development makes business competition even more vital. Every company must be able to adapt to changes that occur to maintain its business in the long term, one of which is by obtaining maximum profits. Earning high profits will indicate that the company has good financial performance. Financial performance can be interpreted as a company's efforts which aim to measure the level of company health based on the profits it obtains [1]. Good financial performance in a company will make it easier to attract the interest of stakeholders to collaborate or invest their funds in the company.

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During Covid-19, many companies experienced a decline in profits, including State-Owned Enterprises (BUMN). However, state-owned companies experienced a decline in profits from before COVID-19 until COVID-19 occurred from 2019 to 2020. The profits of state-owned companies in 2019 decreased from 203 trillion to 165 trillion. Then, in 2020, state-owned companies' profits decreased again, reaching only 13 trillion. It shows that if we look at the profits in 2019-2020, the financial performance of state-owned companies could be better.

The company's economic and environmental aspects can show its financial performance. Companies are required to be able to protect and preserve the environment in carrying out their activities so that they can also have a positive impact on the company's financial performance. However, the fact is that not all companies pay attention to the environment when carrying out their activities. [2] states that PT Timah Tbk was sued by the Bangka Belitung government in 2021 because its activities caused damage to the aquatic ecosystem. PT Timah Tbk's activities are considered to cause water pollution, so fishermen's fish catches and income decrease. Reports from [3] also stated that in 2022, PT Antam experienced problems related to the environment where PT Antam was suspected of carrying out illegal mining and forest encroachment in Southeast Sulawesi's limited production forest area. PT Antam's activities are harmful to the surrounding environment through water pollution, so people have difficulty getting clean water.

According to POJK No.51/POJK.03/2017 article 10, financial services institutions, issuers, and public companies must disclose sustainability reports and report them to the Financial Services Authority (OJK). This sustainability report contains information regarding environmental, social, and governance disclosures. Companies must disclose sustainability reports transparently to encourage good financial performance. One factor that can influence financial performance is environmental disclosure contained in the company's sustainability report [4]. Environmental disclosure is a company's responsibility towards the environment that can attract stakeholders to invest so that the company makes a profit [1]. Environmental disclosure by companies is a form of company concern for the surrounding environment because company activities will always coexist with the environment and society.

Several previous studies have examined environmental disclosure on financial performance, such as research by [5] which states that environmental disclosure positively affects financial performance. The more information the company discloses, the better the response from stakeholders will be, thereby improving financial performance. However, according to [1], environmental disclosure does not affect financial performance even though the company has carried out environmental disclosure well. Environmental disclosure can only improve the company's image towards stakeholders if they focus more on making company profits.

Apart from environmental disclosure, environmental factors that can improve financial performance are environmental certification in the form of ISO 14001 [6]. Environmental certification can provide benefits, such as improving the company's overall environmental performance and increasing the trust of stakeholders in supporting the company's activities [7]. Environmental certification can also improve a company's image because it pays attention to the environment when carrying out its activities.

However, research by [4] revealed that ISO 14001 certification had no impact on financial performance. ISO 14001 certification requires enormous costs and long-term benefits to achieve its impact on financial performance.

The existence of inconsistencies in previous research encourages researchers to research the influence of environmental disclosure and environmental certification on the financial performance of state-owned companies. The novelty of this research lies in the research model with the dependent variable in the form of financial performance, which is measured using the ratio of Return on Assets (ROA) and Return on Equity (ROE), independent variables in the form of environmental disclosure and environmental certification, and adding a control variable in the form of Covid 19. This research could provide information and knowledge regarding environmental disclosure and certification in influencing the performance of state-owned companies. In addition, this research can be used to evaluate state-owned companies in managing environmental aspects and increasing company awareness of environmental trends. Companies that have managed the ecological impacts and risks resulting from their activities well are expected to reduce environmental damage and increase stakeholder trust.

The existence of inconsistencies in previous research encourages companies to be responsible for providing information to stakeholders, such as about the environment. According to the Stakeholder Theory, stakeholders have the right to obtain all information regarding the company's operational activities that can influence its decisions [8]. One of the pieces of information is regarding environmental disclosure and environmental certification related to this research. The level of disclosure of environmental information by the company will influence stakeholders' views of the company [1]. Apart from that, environmental certification in the form of ISO 14001 can also provide high trust to stakeholders to improve the company's financial performance [7].

Environmental disclosure is part of a company's responsibility to disclose environmental information related to its activities to the public and stakeholders [9]. Environmental disclosure can improve the company's image and reputation, adding value for stakeholders in assessing the company. Environmental disclosure can also increase the trust of stakeholders because the company has a deep concern for the environment so that it can improve its financial performance [4]. Therefore, the hypothesis in this research is as follows:

H1: Environmental disclosure can improve financial performance

Apart from environmental disclosure, environmental certification is also a factor that influences financial performance. Environmental certification in the form of ISO 14001 can support better company activities by reducing operational costs and increasing income in the long term. Cost reduction occurs due to energy efficiency, resource efficiency, and better waste management. Environmental certification also provides an excellent response to stakeholders to increase their investment, which can influence the company's profit or income, an indicator of financial performance [6]. Therefore, the hypothesis in this research is as follows:

H2: environmental certification can improve financial performance

2 Method

This research uses secondary data from financial, annual, and sustainability reports of state-owned companies listed on the IDX for 2018-2020. The sampling technique used was purposive sampling with the criteria of state-owned companies that were listed on the IDX in 2018-2022, had yet to experience delisting, and had published financial reports, annual reports, and sustainability reports for 2018-2022. From these criteria, a sample of 93 analysis data was obtained. The data used in this research is unbalanced panel data, which uses data with different observations for each company unit to be studied. This research uses panel data regression analysis to test hypotheses and perform robustness tests to test the robustness of the research model. The panel data regression model in this research can be formulated as follows:

$$ROAit = \alpha + \beta_1 EDit + \beta_2 ECit + \beta_3 COVIDit + e\text{it} \quad (1)$$

$$ROEit = \alpha + \beta_4 ECit + \beta_5 ECit + \beta_6 COVIDit + e\text{it}. \quad (2)$$

Where :
ROA = Return on Asset
ROE = Return on Equity
ED = Environmental Disclosure
EC = Environmental Certification
COVID = Covid 19
α = Constant
β = Regression Coefficient
e = Error term

This research uses dependent variables in financial performance (ROA and ROE), independent variables in the form of environmental disclosure and certification, and control variables in Covid 19. This study uses control variables to prevent bias in research results due to the influence of other variables not used. The definitions and measurements used for each variable in this study are presented in the following table.

Table 1. Variables definition and measurement.

Variable	Definition	Measurement
Dependent Variable		
Financial Performance (ROA and ROE)	A description of the company's financial condition is used as a measure to see the level of success of the company in earning profits from asset and equity usage.	ROA = Net Profit After Tax / Total Asset ROE = Net Profit After Tax / Total Equity
Independent Variable		
Environmental Disclosure (ED)	A disclose of company's responsibility to the community for the impact that the company's activities will	Number of items disclosed / Total environmental disclosure Items

	have on the surrounding environment.	
Environmental Certification (EC)	Companies that have met environmental standards will receive an ISO 14001 certificate.	Dummy variable, score 1 for companies that implement ISO 14001 and score 0 for companies that do not implement ISO 14001.
Control Variable		
Covid 19 (COVID)	Research year impacted by covid 19 (2020 and 2021).	Dummy variable, score 1 for research years 2020 and 2021, score 0 for research years 2018, 2019, and 2022.

3 Result and Analysis

Before testing the hypothesis, a research model was determined for this research. Model testing in this research uses the Hausman test to test the most appropriate model between fixed effects and random effects. The appropriate model is fixed effect if the probability value is <0.05. Conversely, if the probability value is > 0.05, the appropriate model is a random effect. The model test results in this research can be presented in the following table

Table 2. Model suitability test results

Dependent Variable	**Hausman Test**	
	Prob	**Result**
ROA	0.0298	Fixed Effect
ROE	0.0532	Random Effect

Based on Table 2, the most appropriate model in this research is the ROA equation in the form of a fixed effect model and the ROE equation in the form of a random effect model. Next, classical assumption tests were carried out in multicollinearity and heteroscedasticity. The classical assumption test has been carried out on this research model, and it has been proven that there are no multicollinearity and heteroscedasticity problems.

Table 3. Hypothesis testing result

	ROA		**ROE**	
	Coeff.	Prob.	Coeff	Prob.
ED	-0.4688	0.6067	0.0914	0.901
EC	-1.5350	0.0468*	-0.6868	0.0858**
COVID	-0.5905	0.0156*	-0.6541	0.0042*

Adj. R^2	56.46%	7.79%

*, ** p-value significant at the level 5% and 10%

The next step is to test the hypothesis that has been formulated. Table 3 shows the results of the hypothesis testing of the effect of environmental disclosure (ED) and environmental certification (EC) on financial performance using ROA and ROE measurements. These results found that the coefficient of the ED variable on ROA was -0.4688 with a probability value of 0.6067. Meanwhile, the coefficient of the ED variable on ROE is -0.0914, with a probability value of 0.901. This value can be interpreted as meaning that the ED variable does not affect financial performance, whether using ROA or ROE.

It has been proven that environmental disclosures made by companies cannot influence the ups and downs of financial performance. The results of this research are in line with research by [1], [10], and [11], who stated that environmental disclosure does not affect financial performance. Environmental disclosure is less of a concern for companies when carrying out their activities. It happens because the company's primary goal is to achieve maximum profits with the costs it incurs [11]. Apart from that, stakeholders also pay less attention to environmental disclosures when making decisions about the company. They focus more on the company's profit or loss. The results of this study are not in line with previous research, which found that environmental disclosure had a positive effect on financial performance [4,8].

Meanwhile, Table 3 shows that the coefficient of the EC variable on ROA is -0.15350 with a probability value of 0.0468. In addition, the coefficient of the EC variable on ROE is -0.6868, with a probability value of 0.0042. This value can mean that the EC variable negatively affects financial performance, whether using ROA or ROE.

The company's environmental certification in ISO 14001 proved to reduce financial performance. This research results align with previous research stating that environmental certification has a negative effect on financial performance [12]. Implementing environmental certification requires enormous costs, such as administrative and environmental management costs, by standards [13]. These significant costs can reduce the company's profits. Apart from that, this can also reduce investors' interest in investing their shares in the company.

4 Conclusion

This research aims to analyze the influence of environmental disclosure and certification on the financial performance of state-owned companies listed on the IDX in 2018-2022. The sample for this research was 24 companies with 93 total observations using unbalanced pooled data. This research has tested robustness through financial performance using two indicators from ROA and ROE. The results of this study state that environmental disclosure does not affect the ups and downs of financial performance. Environmental disclosure is of little concern to companies and stakeholders. Environmental disclosure does not add value to stakeholders and is only used as additional information. Stakeholders prioritize profit generation when assessing companies rather than information about the environment.

The research results also show robust results that environmental certification negatively affects financial performance. Environmental certification will incur considerable costs for environmental management by applicable standards. The enormous costs incurred can reduce company profits and the profits received by investors. A decrease in company profits will decrease investors' interest in investing their capital in the company. Investors will be more interested in companies with high profits than companies that have implemented environmental certification.

This research is expected to provide knowledge to practitioners regarding environmental disclosure and environmental certification in influencing the performance of state-owned companies. A company's environmental certification can reduce the performance of net profits by managing assets and capital from investors. The results of this research have implications for state-owned companies, which are expected to pay more attention to the ecological impacts and risks resulting from their activities, which can reduce environmental damage and increase stakeholder trust.

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