INFLUENCE OF PROFITABILITY, LEVERAGE, AND ENVIRONMENTAL COSTS ON ENVIRONMENTAL PERFORMANCE

Imanuel Wihandoko[1*], Adam Zakaria[2], I Gusti Ketut Agung Ulupui[3]
[123]Jakarta State University
Corresponding Author (Imanuelwihandoko@gmail.com)

Abstract

This study intends to determine the impact of profitability, leverage, and environmental costs on environmental performance. Profitability is proxied by the ratio of net income to total assets, leverage is proxied by the ratio of debt to equity. The population of this research is non-financial companies listed on the Indonesia Stock Exchange (IDX) and PROPER with a period of 2017-2020. The method of determining the sample used the principle of purposive sampling and obtained a sample of thirteen companies so that the total observations were fifty-two. Eviews 8 software is used in the study of the evidence for presumption testing by utilizing the panel regression analysis. The research results show that profitability, leverage, and environmental costs have a negative and insignificant effect on environmental performance.

Keywords: Profitability, Leverage, Environmental Costs, Environmental Performance.

Abstrak

Penelitian ini bermaksud untuk menentukan dampak profitabilitas, leverage, dan biaya lingkungan terhadap kinerja lingkungan. Profitabilitas diproksikan dengan perbandingan laba bersih terhadap total aset*, leverage* diproksikan dengan rasio utang terhadap ekuitas. Populasi riset ini adalah perseroan non-keuangan yang tercatat di Bursa Efek Indonesia (BEI) dan PROPER dengan rentang waktu 2017-2020. Metode penentuan sampel menggunakan prinsip *purposive sampling* dan didapat sampel sebanyak tiga belas perseroan hingga total observasi menjadi lima puluh dua. *Software Eviews 8* dipergunakan dalam penelaahan evidensi untuk pengujian presumsi dengan memanfaatkan analisis regresi panel yang digunakan. Berlandaskan hasil riset dipahami jika profitabilitas, *leverage,* dan biaya lingkungan memiliki pengaruh negatif dan tidak signifikan terhadap kinerja lingkungan.

Kata Kunci: Profitabilitas, *Leverage*, Biaya Lingkungan, Kinerja Lingkungan

INTRODUCTION

The existence of an entity amid the environment and society has a wide effect. The perceived effects can be in the form of positive effects and negative effects. The positive effects include providing consumer goods/services, creating job opportunities, and increasing individual, regional, and state income. One of the countries with the largest economies in the world is China, this achievement is mostly obtained through the manufacturing sector and the production of goods/services (McGuinness et al., 2017). However, the rapid economic growth achieved by China has caused damage to environmental and public health because 60% of the total global coal consumption in China, which makes China the largest contributor to carbon emissions in the world (Elmagrhi et al., 2019). When compared to other countries, Indonesia as an example is also the largest producer and consumer of coal, so it affects the environment and society (Hartl et al., 2021).

The government has responded to this with many positive initiatives including introducing various laws, regulations, and guidelines aimed at promoting the implementation of good environmental practices. Increasingly aware of every party with an interest in a sustainable environment so that the company is also urged to continue to participate in green practice by incorporating environmental practices into the strategic planning process to prevent environmental damage that may be caused by operational activities (Francoeur et al., 2021). The company must also consider environmental issues as a strategic issue with a focus on the relationship between the company and the environment (Ezzi & Jarboui, 2016).

The importance of good environmental management is an important step for the company to have competitive advantages such as increasing reputation, increasing productivity, reducing financing, and strengthening relationships between stakeholders, on the other hand, if the company's environmental management is bad it can cause additional costs, which can lead to a decrease in market value and doubts about legitimacy. company (Zou et al., 2015). Reliable environmental performance parameters are needed to provide information in decision-making while ensuring environmental goals (Henri & Journeault, 2008). The environmental performance parameter is a calculation method using numbers that provide facts about environmental issues (Henri & Journeault, 2008). The Government of Indonesia through the Ministry of Environment created environmental parameters through PROPER PROKASIH in 1995 which later became PROPER in 2002 for measuring environmental compliance performance ratings based on the rules regarding environmental management as outlined in Law No. 23 of 1997 concerning Environmental Management Article 5, regarding social and environmental responsibility, the company must carry out operational activities associated with natural resources.

Profitability can be interpreted as the company's capability to earn profits (Widarsono & Hadiyanti, 2015). Companies whose financial reports have high profits will be faced with high expectations and social constraints from the community compared to companies that have small profits. Consequently, the company must explain to the public that its activities do not violate societal norms and the law (Hasyir, 2015).

Egbunike and Okoro (2018) clarified that environmental costs must be properly defined and monitored while taking into account the company's capacity to generate profits. The company is constantly issuing environmental costs as a form of effort to deal with natural damage to develop public trust and influence the company's legitimacy as well as a manifestation of the company's interests in developing managed fields so that they will continue to provide benefits in the coming period (Adyaksana and Pronosokodewo, 2020). Reporting on environmental costs if a company is to improve environmental performance (Setiawan et al., 2018). Companies with high environmental costs will report their companies to the PROPER Ministry of Environment & Forests because the PROPER rating is the company's credibility in the environmental field. Although a company with high environmental

costs does not necessarily get a gold rating in PROPER and it also does not necessarily mean that the company complies with existing regulations.

Each company has a capital structure that will be used to obtain profits, loans from other parties, using its own capital, and investor capital. Assuming that the current form of capital composition is dominated by loans from other parties or loans to finance the company's operations, the company's liability ratio will increase so that profits from the company's operational activities will be distributed to reduce the company's financial risk. When the company's profit cannot be increased because it depends on obligations from outside parties which results in the company having to pay interest expenses, the management will reduce activities related to environmental management, prevention, and improvement caused by the company's operational activities.

Based on the literature above, this study has an object to find the effect of profitability, leverage, and environmental costs on environmental performance.

LITERATURE STUDY AND HYPOTHESES DEVELOPMENT

Legitimacy Theory

Legitimacy theory centers around the collaboration that occurs between a company and its surroundings (Deegan, 2002). Legitimacy can also be interpreted as the most common way to equalize suspicions and responses that the activities carried out by the company are following the standards and values held by the community (Pakpahan and Rajagukguk, 2018). A company or organization can also be more *legitimate* if every activity carried out focuses on accepted practices because this is important for the community (ANN Sari and Triyono, 2019).

Legitimacy theory has been used in accounting research to update the hypothesis of social and environmental responsibility, as used in research by (Hasyir, 2015; Rivandi, 2021; Zou et al., 2015). This research is based on the theory of legitimacy because the researcher sees that environmental performance has a relationship with public recognition of the company.

Stakeholder Theory

Stakeholder theory is a theory that reveals that every impact caused in its functional implementation, the company must be responsible for this to any party, while according to Suharyani et al (2019) the organization is clearly not an authoritative body that works only for itself, but to overcome stakeholder issues. It is important that organizations not only attach importance to the interests of executives and investors but also different partners (Suharyani et al., 2019).theory *stakeholder* has a relationship between environmental performance and *stakeholder*.

Environmental Performance

The expected measurable results from the management of a company regarding environmental aspects are the understanding of environmental performance according to Bergmann (2016) so that it can be concluded that environmental performance is the company's efforts to manage, prevent, and improve the environment in order to create a good environment. Because a well-managed environment is an indication of abiding environmental performance (Suratno et al., 2004) One

of the benchmarks for measuring a company's competitive advantage is assessed through environmental performance parameters. These parameters have many types and studies on environmental performance have been studied using different parameters. Al-Tuwaijri et al (2004) and Clarkson et al (2011) used the Toxis Delivery Invetory (TRI) benchmark issued by the US Ecological Security Organization (EPA).

Meanwhile in Indonesia, the Ministry of Environment and Forestry (KLHK) makes parameters to see how far the company follows the regulations and guidelines that have been set in 2002 as used by (Parlupi, 2017; Soseno et al., 2020).

Profitability

Entities with *profit oriented* will depend on their profitability. Profitability as the ability to generate profits using sales level assets (CW Sari et al., 2013). If an entity earns a profit that has been estimated and even exceeds the estimate, the company's financial performance can be said to be successful, otherwise if the profit earned is not in accordance with the existing estimates, then the company's financial performance can be said to be unsuccessful. If the profitability ratio obtained is in accordance with existing estimates, the existing profit should be used to improve environmental performance as an investment for the entity so that the environment around the company will return to being healthy and not polluted, as explained in the legitimacy theory that the entity carries out each of its operational activities. must follow and obey the values and norms recognized in the community, especially regarding the issue of environmental management. When the company has gained good legitimacy from the community so that it can become a competitive advantage for the company. So that it becomes a good image and becomes a factor in increasing the company's profit

Leverage

The company's capital funding has a debt structure from other parties, and debt loans from other parties use their capital. The company's capital originating from creditors is debt. The use of debt by the company is usually used to finance its operations. If the company uses debt effectively and efficiently, the company's financial performance can improve so that it affects the company's environmental performance. But if it's the other way around, the company's leverage ratio will be affected.

If the company's leverage ratio/level is high, the financial risk will also be high. As one of the activity costs, the costs incurred in environmental performance must be reduced so that financial risks can be reduced (Darlis et al., 2009). Leverage is a ratio used to see the company's ability to pay obligations financed by creditors to the company's capital (Harahap, 2011).

Environmental Costs

In each of the company's operational activities, the output issued by the company is not only in the form of products to be sold but also in the form of waste, this can cause environmental damage if the management of waste is bad. Environmental costs include the costs of treating waste or repairing the damaged environment.

Mowen (2007) revealed that any costs that arise as a result of poor-quality environmental conditions are referred to as environmental costs. Thus, environmental costs are related to the establishment, detection, and updating of environmental issues.

HYPOTHESIS DEVELOPMENT

The Effect of Profitability on Environmental Performance

When the company earns profit from its operational activities, the company can allocate more resources for investment in the environment so as to improve environmental performance. Investments in the environment can be in the form of improvements to the products, processes, systems and facilities used by the company. If the company can improve environmental performance, the company will also get a good image so that it gains legitimacy from existing stakeholders. So that public acceptance of each product/service offered is better and increases the company's profitability. Because consumers who care about the environment will choose companies with competitive advantages in the form of high

environmental performance so that company profits increase. This research is supported by Hasyir (2015) and Widarsono & Hadiyanti (2015) who state that there is an influence between profitability on environmental performance. Based on the above study, the hypothesis proposed in this study is as follows

H₁: profitability has a positive effect on environmental performance

Effect of *Leverage* on environmental performance

The company's debt is a source of finance obtained from external parties of the company. The company's financial risk will increase if the company's leverage ratio is high (RA Sari, 2012). When financial risk is high, management will reduce costs to reduce the level of risk. Because investment in the environment is a high-risk investment project. This statement is supported by Yesika & Chariri (2013) which states that leverage has a negative effect on environmental performance. Based on the above study, the hypothesis proposed in this study is as follows.

H₂: *leverage* has a negative effect on environmental performance

Effect of Environmental Costs on Environmental Performance

Expenditures used by a company in connection with efforts to prevent, detect & repair a damaged environment, which are caused by the company's operations in creating profitability are referred to as environmental costs. If it already has high profitability, the company should start investing. Investments that need to be made to maintain resources and competitive advantage are environmental investments, even though these investments are *high-risk projects*. If management has invested in the environment, then the costs incurred in the form of environmental costs should be used effectively, so that the expected investment will be received by the company. This statement is supported by Soseno et al., (2020) who state that environmental costs have a positive effect on environmental performance. Based on the above study, the hypothesis proposed in this study is as follows.

H₃: Environmental costs have a positive effect on environmental performance.

Based on the above framework, the following theoretical framework can be formed:
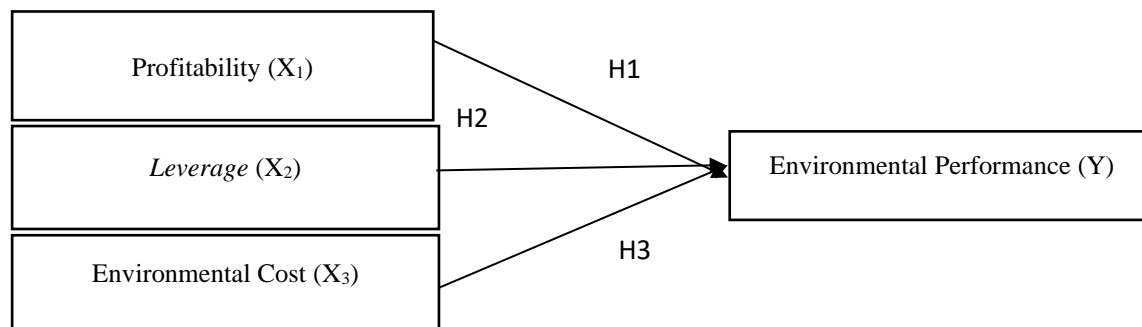
Figure 1. Conceptual Framework
Source: Data processed by the author, 2022

RESEARCH METHODS

The object of this research is a non-financial company listed on the Indonesia Stock Exchange (IDX) and PROPER 2017 timeframe -2020. While this research is limited to the dependent variable, namely profitability, *leverage*, and environmental costs on environmental performance. The research method uses panel data regression analysis processed through *Eviews 8 software*. The principle used for the sample in this research is *purposive sampling*.are the prerequisites for deciding the sample used in this research:

1. The company is listed on the Indonesia Stock Exchange and has participated in PROPER for the 2017-2020 period.

2. Company publishes *annual reports* successively during the 2017-2020 period.

3. Data related to research variables are presented in full in the *annual report* published during the 2017-2020 period.

Table 1. Sample Selection

Description	Number of
Companies listed on the IDX and participating in PROPER in 2017-2020	**77**
Companies listed on the IDX and have followed PROPER successively in 2017-2020	**(26)**
Data related to research variables are incomplete in *annual report* 2017-2020	**(21)**
Number of samples	**30**
Number of samples during the observation period (2017-2020)	**120**
Outlier Data	**(68)**
Number of samples used in the study	**52**

Source: Data processed by the author, 2022

Variables in this research use operationalization as follows:

Environmental performance as the dependent variable in this research. Environmental performance is proxied by rating environmental performance parameters using PROPER, the authors get from data published by PROPER, and the rating table for environmental performance variables using PROPER, namely:

Table 2. Rating of Environmental Performance Variables with PROPER

Color	Standard Assessment	Value
Gold	Consistently shows ecological advantages in production procedures or services to the community	5.
Green	Through the 4Rs (Reduce, Reuse, Recycling, Recovery), the company has managed beyond the prerequisites, and has been involved in social responsibility.	4.
Blue	Has taken the necessary actions to protect the environment and follow & comply with existing regulations and guidelines.	3.
Red	Company activities do not follow and obey the existing rules and guidelines.	2.
Black	Awarded to a person who is responsible for the act and/or activity that intentionally commits an act or omission that results in pollution and/or destruction of the environment as well as a violation of laws and regulations or is subject to administrative sanctions.	1.

Profitability is the ratio of entities to profit in a special period with assets or *entities* owned. The proxy used by the author is *Return on Assets*. The method to calculate *return on assets* used by Mustika et al (2015), CW Sari et al (2013), Vinayagamoorthi et al (2015) is as follows:

$$Return\ on\ Assets = \frac{Net\ Profit}{Total\ Assets}$$

Leverage. is the risk ratio between the capital obtained through creditors & the capital that the entity uses its capital to finance the entity's activities. The way to measure solvency *(leverage)* that will be used by the author is the *Debt on Equity Ratio.* The method to calculate the *Debt on Equity Ratio* used by Mustika et al (2015), CW Sari et al (2013) is as follows

$$Debt\ on\ Equity\ Ratio\ = \frac{Total\ Liability}{Total\ Equity}$$

Environmental costs are costs incurred to maintain environmental sustainability in the form of preventing damage environment due to the company's activities as well as to restore the natural environment if it has been further polluted by the company. The measurement of environmental costs *(environmental cost)* that will be used by the author is a comparison between environmental costs and net profit after tax. The formula for calculating environmental costs used by Dewata et al (2018), Siregar et al (2019) is as follows:

$$Environmental\ Cost = \frac{Environmental\ development\ program}{Net\ Profit}$$

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Table 3. Descriptive Statistical Analysis

	Environmental Performance	Profitability	*Leverage*	Environmental Costs
Mean	3.230769	0.075327	0.729753	0.015664
Median	3.000000	0.071000	0.726229	0.011341
Maximum	4.000000	0.148000	1.549194	-0.0929000
Minimum	3.000753	-0.029000	3.000753	0.07000
0.090192Dev.	0.425436	0.042608	0.358925	0.022010

Source: *Eviews* 8, data processed by the author, 2022

Environmental performance is measured using a PROPER rating proxy which is distinguished by color ratings. Gold, value = 5. Green, value = 4. Blue, value = 3. Red, value = 2. Black, value = 1. Table 3 shows that the minimum value for environmental performance is 3,000, the maximum value is 4,000, with *a mean* 3,230 and *std dev* 0.425 which means low data variation

Profitability is measured using *return on assets (ROA)* which shows a minimum value of -0.029, a maximum value of 0.148, with *a mean* 0.075 and *std dev of 0.042* which means low data variation.

Leverage is measured using *debt on equity ratio (DER)* which shows a minimum value of 0.175, a maximum value of 1.549, with *a mean* 0.729 and *std dev* 0.358 which means low data variation

Environmental costs are measured using a comparison of community development programs compared to *net profit* which shows a minimum value of -0.069, a maximum value of 0.090, with *a mean* 0.015 and *std dev* of 0.022 which means low data variation.

Best Model Selection

Test Chow

Test Chow test is used to determine between the common effect model and the fixed effect model. The Chow test has a test prerequisite if (p-value > 0.05) so that the common effect model is filtered, but if (p-value < 0.05) the selected is a *fixed-effect model*. Based on the calculation results, it can be seen that if *the p-value* is 0.0022, then the fixed effect model is selected to be used and then continued with

Hausman test.

Table 4. Test Results Chow

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistics	df	Prob.
Cross-section F	2.412530	(12.36)	0.0206
Cross-section Chi-square	30.685429	12	0.0022

Source: *Eviews* 8, data processed by the author, 2022

Hausman Test

The Hausman test is used to determine between the fixed effect model and the random effect model. In carrying out the Hausman test, there is a prerequisite if the chi-square or p-value 0.05 so that the random effect model is selected, but if the chi-square or p-value <0.05, the selected is a fixed-effect model. Based on the test results, it can be seen that *the random cross-section* is 0.0072 greater than 0.05, so the *chi-square* is significantly greater than 0.05. Following the prerequisites that have been described. So Ho is accepted so that the *fixed effect model is used.*

Table 5. *Hausman*

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

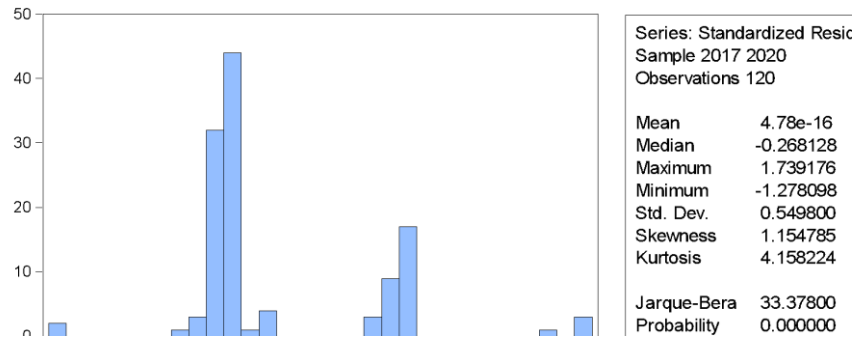| Test Summary	Chi-Sq.statistics	Chi-Sqdf	Prob.
Cross-section random	12.054947	3	0.0072

Source: *Eviews* 8, data processed by the author, 2022

Classical Assumption Test

Normality Test

The benefits of the normality test is to ensure that the independent/independent and dependent/dependent variables in this research have a regression model with normal or abnormal distribution. In this research, the normality test will use the jarque-fall test. The jarque fallow test has a probability calculated value, if the probability calculation result is greater than a significant value of 0.05 then the data is distributed normally. If the result of the jarque fallow test is less than the significant probability value of 0.05, then the data is not normally distributed. The normality test results obtained do not meet the prerequisites, namely the *probability* above 0.05. For this reason, an outlier test was carried out by looking at the *studentized residual* using Microsoft Excel. Outlier data can be determined if the data value is greater than 2.5 or greater than 3 / (-3) (Ghozali, 2013).
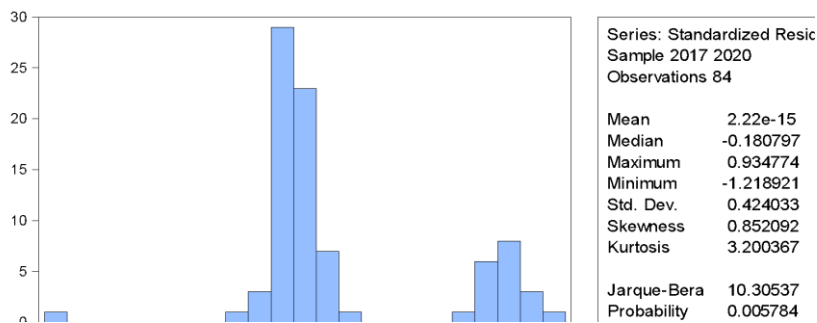
| Series: Standardized Resid |
| Sample 2017 2020 |
| Observations 120 |

Mean	4.78e-16
Median	-0.268128
Maximum	1.739176
Minimum	-1.278098
Std. Dev.	0.549800
Skewness	1.154785
Kurtosis	4.158224
Jarque-Bera	33.37800
Probability	0.000000

Figure 2. Normality Test Results
(Before *Outlier*)
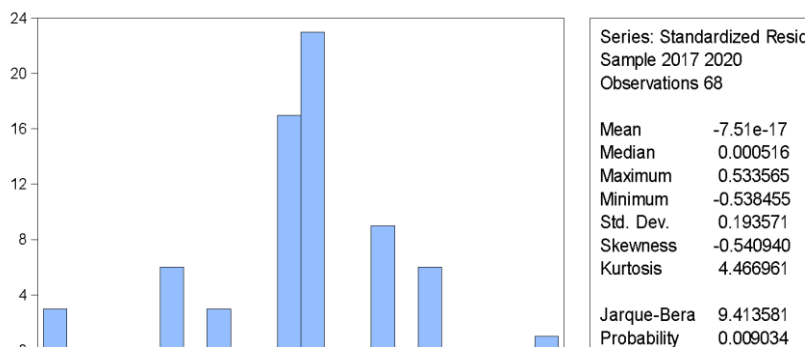Source: *Eviews* 8, data processed by the author, 2022

There were nine sample companies that were included in the *outlier*, namely PT Adaro Energy Tbk (2019,2020), PT Bukit Asam Tbk (2017), PT Aneka Tambang Tbk (2017,2019), PT Timah Tbk (2019), PT Argo Pantes Tbk (2017,2018,2019,2020), PT Lippo Cikarang Tbk (2020), PT Sat Nusa Persada (2018), PT Siantar Top Tbk (2017), PT Semen Baturaja Tbk (2019,2020). The results of the first outlier normality test show that if the data still does not meet the classical assumptions, then the second outlier test is carried out.

| Series: Standardized Resid |
| Sample 2017 2020 |
| Observations 84 |

Mean	2.22e-15
Median	-0.180797
Maximum	0.934774
Minimum	-1.218921
Std. Dev.	0.424033
Skewness	0.852092
Kurtosis	3.200367
Jarque-Bera	10.30537
Probability	0.005784

Figure 3. Normality Test Results
(After Elimination *Outlier*)
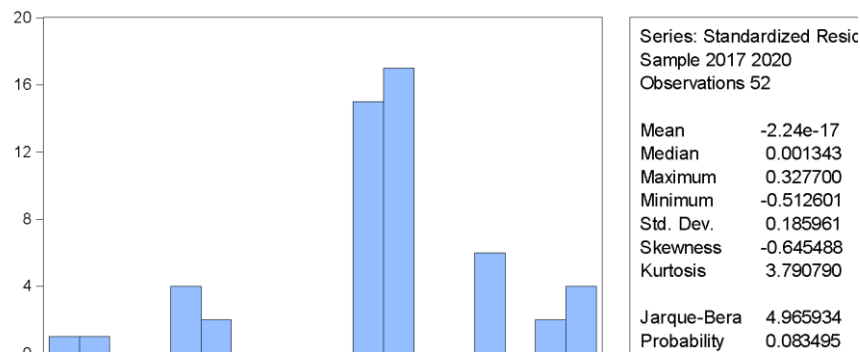Source: *Eviews* 8, data processed by the author, 2022

There are four samples that fall into the *outlier*, namely PT Phapros Tbk (2020), PT Tifico (2020), and PT Citra Turbindo Tbk (2017), PT Indo Acidtama Tbk (2017,2020). The results of the second outlier test show that the data still does not meet the classical assumptions, so a third outlier test is carried out.

| Series: Standardized Resid |
| Sample 2017 2020 |
| Observations 68 |

Mean	-7.51e-17
Median	0.000516
Maximum	0.533565
Minimum	-0.538455
Std. Dev.	0.193571
Skewness	-0.540940
Kurtosis	4.466961
Jarque-Bera	9.413581
Probability	0.009034

Figure 4. Normality Test Results
(After Elimination *Outlier* of the Second
Source: *Eviews* 8, data processed by the author, 2022

There are two samples included *outlier*, namely PT Vale Indonesia Tbk (2017), PT Semen Indonesia Tbk (2017), PT Asahimas Flat Glass (2018,2020), PT Indo Rama Synthetics (2017). The results of the third outlier test show that if the data still does not meet the prerequisites for the classical assumptions, a third outlier test is carried out. The results of the third outlier test, show that the data meets one of the classic assumption tests, namely the normality test with a *probability of* 0.083495 > 0.05

Figure 5. Normality Test Results
(After Elimination *Outlier* Third
Source: *Eviews* 8, data processed by the author, 2022

Multicollinearity Test

The benefit of the multicollinearity test is to understand that in the regression model there is a relationship between the independent variables. Observing the calculated value of R2 can detect the level of correlation between the independent variables. If the calculated value of R2 is high, there are several (especially none) significant independent/independent variables. If the value of R2 is high above 0.80, then the F test in most cases will reject the hypothesis that makes the statement that the partial slope coefficient is simultaneously equal to zero, but the individual t-test describes the partial slope coefficient which is stagnantly different from zero. The relationship between two independent/independent variables that have an arithmetic value of more than 0.80 can be used as a feature that multicollinearity is a serious issue (Ghozali, 2013). The results of the multicollinearity test have no correlation coefficient values between variables that exceed 0.80. So it can be concluded that the data does not have a multicollinearity problem.

Table 6. Multicollinearity Test Results

	Profitability	*Leverage*	Environmental Cost
Profitability	1.0000000	-0.462746	0.366509
Leverage	-0.462746	1.000000	-0.222734
Environmental Cost	0.366509	-0.222734	1.000000

Source: *Eviews* 8, data processed by the author, 2022

Heteroscedasticity Test

Benefits of heteroscedasticity test to ensure that there is inequality in the regression model variance from the residual of one observation to another observation. Whether or not heteroscedasticity is found can be understood through the calculated value of the probability of Obs*R-square which is compared with the level of significance. So if the significance probability value is above 0.05, it can be interpreted that there is no heteroscedasticity in this research. So it can be concluded that the data does not have a heteroscedasticity problem.

Table 7. Heteroscedasticity Test

Variable	Prob
C	0.6742
Profitability	0.9345
Leverage	0.1023
Environmental Costs	0.8530

Source: *Eviews* 8, data processed by the author, 2022

Panel Data Regression Analysis

After testing the best model, the fixed-effect model is selected as the model to be used and also the best model and has been validated that the regression model developed to test that the hypothesis does not contain the issue of classical assumptions. Then performed a regression analysis of all regression models. Regression analysis in this research is used to understand the relationship between the dependent/dependent variables and the independent/independent variables in the regression model. This research has a dependent variable, namely environmental performance, and also has independent variables formed from profitability, leverage, and environmental costs.

Table 8. Random Effect Regression *Model*

Variable	Coefficient
C	3.232983
Profitability	-0.005018
Leverage	-0.000406
Environmental costs	-0.098292

Source: Eviews 8, data processed by the author, 2021

Based on the test results shown in table 8, the multiple linear regression equation used in the study is as follows:

Environmental performance = 3.232983 - 0.005018 (Profitability) – 0.000406 (*Leverage*) – 0.098292 (Environmental costs) + e

Hypothesis

Testing Statistical Test t

The benefits of the t-test are useful to understand partially or individually independent variables have a significant influence on variables dependent. To know whether the independent variable has a significant effect on the dependent variable, test criteria are used if (tcount > ttable) or (p-value < 0.05) then the independent variable affects the dependent variable. The results of the t-test test are shown in table 4.9 as follows:

Table 9. T-Test Results

Variable	t-Statistic	Prob.
C	92.12058	0.0000
Profitability	-0.024651	0.9805
Leverage	-0.015112	0.9880
Environmental costs	-0.164453	0.8703

Source: Eviews 8, data processed by the author, 2021

1. Based on the t-test shown in table 4.10, profitability has a probability level of 0.9805 and t count - 0.024651. This shows that the probability value is greater than the significance value, which is 0.9805 > 0.05 and the smaller t count is 0.024651 < 1.6772 (with a negative direction). Thus, the profitability variable has a negative and insignificant impact on environmental performance. This shows that the first hypothesis is rejected.

2. Based on the t-test shown in table 4.10, leverage has a calculated probability level of 0.9880 and a calculated t-count - 0.015112. This shows that the probability value is greater than the significance value, which is 0.9880 > 0.05 and the smaller t count is 0.015112 < 1.6772 (with a negative direction). Thus, the leverage variable has a negative and insignificant impact on environmental performance. This shows that the second hypothesis is accepted

3. Based on the t-test shown in table 4.10, environmental costs have a probability level of 0.8703 and t-count - 0.164453. This shows that the probability value is greater than the significance value 0.8703 > 0.05 and the smaller t count is 0.164453 < 1.6772 (with a negative direction). Thus, the environmental cost variable has a negative and insignificant impact on environmental performance. This shows that the third hypothesis is rejected.

Simultaneous Significance Test (Test F)

The benefit of the simultaneous significance test (Test F) is useful for understanding all independent variables simultaneously or simultaneously having an influence on the dependent variable in the existing regression model. Simultaneous significance testing (F test) was carried out using the comparison criteria of F-statistics (Fcount) with Ftable and also based on probability (ρ). With a df value of 48 and a significance of 0.05, the F table value is 2.80. To understand whether the independent variables have a joint or simultaneous influence on the dependent variable in the regression model, by using the test prerequisites if (Fcount > Ftable) or (p-value < 0.05) then the independent variables have a joint influence or simultaneously on the dependent variable. Based on the results of the F test presented in table 4.11 above, the calculated F is 4.137780 with a significance level of 0.000238. This shows that the calculated F is greater than the F table (4.137780 > 2.80) with a significance value (0.000238 < 0.05). It can be concluded that the independent variables together or simultaneously can affect the dependent variable

Coefficient of Determination

The coefficient of determination (R2) aims to determine how far the ability of the independent variables in explaining the dependent variable. The coefficient of determination (R2) test was carried out using the Adjusted R-Squared on the adjusted R2 regression equation from the independent variables in this study was 0.479946 or 47.99%. This means that 47.99% of the stock's systematic risk is influenced and can be explained by the three independent variables in this study, namely profitability, leverage, and environmental costs. While the other 52.1% is explained by other variables outside the regression model.

Effect of Profitability on Environmental Performance

Based on the results of the calculation of the hypothesis test that has been carried out, it shows that the regression coefficient has a significance value greater than 0.05 and is negative. These results illustrate that profitability has a negative and insignificant effect on the

Company's environmental performance with a high level of assets will have more influence on the community (CW Sari et al 2013). This makes companies with high assets tend to focus on profitability only so that the environment is not one of the company's priorities. This can happen because the public's

perception of the company is good so the company is considered to be less likely to damage the environment. Another factor that might influence it is that reporting on environmental performance is a voluntary activity and not mandatory, so reporting in the environmental field is only so that the company's image looks good.

However, this is not in line with research conducted by Widarsono & Hadiyanti (2015) which states that profitability has an effect positive on environmental performance. This result also contradicts the research of Hasyir (2015) Mustika et al (2015) CW Sari et al (2013) Yesika & Chariri (2013) which state that profitability does not affect environmental performance.

Effect *Leverage* on Environmental Performance

Based on the calculation results of the hypothesis test that has been carried out, it shows that the regression coefficient has a significance value greater than 0.05 and is negative. These results show that leverage has a negative and insignificant effect on the

Company's environmental performance which depends on debt, the leverage ratio will be higher, so the risk that must be borne by the company will be even greater. This affects the lower the company's efforts related to the environment (CW Sari et al., 2013). This is also an indication that the company pays more attention to financial performance compared to environmental performance.

.This study is consistent with the results of previous research, namely (Widarsono & Hadiyanti, 2015) which showed that there was a negative effect of leverage on environmental performance, because the higher the level of leverage, the company will try to suppress leverage. costs include costs regarding the company's social and environmental activities.

However, the results of this study are not in line with research conducted by Mustika et al (2015) which states that leverage has a positive effect on environmental performance.

Effect of Environmental Costs on Environmental Performance

Based on the calculation results of the hypothesis test that has been carried out, it shows that the regression coefficient has a significance value greater than 0.05 and is negative. These results give the result that environmental costs have a negative and insignificant effect on environmental performance.

Environmental costs are categorized as additional expenses by the company and the company also often ignores environmental costs so that they cannot be known in the financial statements. The company will usually not display environmental costs in its financial statements because the company seeks to hide activities that are detrimental to the environment. It can also be an indication that environmental costs are high but environmental performance will be declining.

However, the results of this study are not in line with research conducted by Soseno et al (2020) which states that environmental costs have a positive effect on environmental performance.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Based on the results of the calculation of the hypothesis test and referring to the purpose of this research, the conclusions that can be drawn are as follows:

1. Profitability has a negative and insignificant effect on environmental performance

2. *Leverage* has a negative and insignificant effect on environmental performance.

3. Environmental costs have a negative effect and are not significant on environmental performance.

Limitations

This research has limitations which can be summarized as follows:

1. The selection and use of samples in this research are limited to companies listed on the Indonesia Stock Exchange (IDX) in the non-financial sector because the phenomena that occur are factually limited to companies non-financial. As a result, the mapping is carried out only on non-financial companies and not on all companies in Indonesia.

2. Based on the results of the calculation of the coefficient of determination, it appears that the *Adjusted R-Square* 0.479946, thus proving that the independent variable is influenced and can be explained by the dependent variable. Other variables not examined in this research explained 52.01% of other influences.

Suggestions

Based on the limitations of the research that has been done so that researchers can submit several recommendations to complete future research, namely, as follows:

1. The selection of samples and populations in future research is expected not only to companies in the non-financial sector or using companies that have different characteristics. .

2. Use of other variables such as ISO 14001, *growth,* liquidity, company size, the proportion of independent commissioners, size of the board of commissioners, type of industry, etc. in future research

3. Adding an observation period so that research results have a high level of consistency

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