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Improving Firm Value Through Environmental Performance and Reporting: It's Effective?

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Abstract

This study aims to determine the effect of corporate environmental responsibility on firm value with ICSR as a moderating variable. This type of research is quantitative research using Moderate Regression Analysis (MRA) as data analysis and using secondary data in the form of panel data. The samples used were 19 companies using the purposive sampling method and processed using the Eviews10 application tool. The results showed that partially the environmental accounting reporting and environmental cost variables had no effect on firm value, while environmental performance had a positive and significant effect on firm value. Then ICSR is able to moderate the effect of environmental costs on firm value, but is unable to moderate environmental accounting reporting and environmental accounting reporting and environmental costs on firm value.

Keyword: environmental accounting reporting; environmental costs; environmental performance; ICSR.

A. Introduction

One of the objectives of company management performance is to achieve profit (profit) from operational activities. This is done by the company to maximize the value of the company. The price that the owner of capital is ready to pay when the company is sold is called the company value. The rise and fall of the company's value can be seen from the stock price. The greater the company's ability to generate net profit after tax, the share price will also increase so that it can motivate investors to increase investment in companies that have high corporate value (Edi, 2019).

This is what makes companies in this industrial revolution era increasingly competitive to improve the economy. However, pollution and environmental damage arising from industrial processes is a serious problem (Adyaksana, 2019). Indonesia as an industrialized country has experienced a lot of environmental damage. In the records of the Indonesian Ministry of Environment and Forestry (KLHK) in 2019 the compliance of the manufacturing sector in environmental management was still low at 29.15.



Continuous environmental damage causes disasters such as landslides, floods, forest fires to occur in several regions in Indonesia. The practice of destroying the environment that ignores the environment is the fact that those who control millions of hectares of land are proven to be the cause of the disaster. Company activities are the biggest contributor to environmental damage. Therefore, it is necessary to have a company policy that is environmentally and socially responsible. An analysis by the Indonesian Forum for the Environment (Walhi) found that environmental damage in Indonesia was caused by several factors, namely companies, government, communities and government companies (walhi.or.id, p. 2020). This phenomenon was reinforced by news reports from Antaranews.com that mining companies are less concerned with the environment because of awareness or responsibility. the company is still low on reforesting the ex-mining land. However, when viewed on the Indonesia Stock Exchange (IDX), the mining sector is currently considered very superior for investors to try to enter in the midst of a period of national economic recovery. One example of a mining company that investors are most interested in right now is PT. Merdeka Copper Gold Tbk. Promising and continuously increasing profits are what investors are concerned about.

Corporate value is characterized by a company that is responsible for the company's operational activities towards the environment. Where a responsible company can create an added value for the company. Apart from being responsible to the surroundings, it can also increase the attractiveness of inviting investors. The existence of environmental accounting reporting can increase investors and have an impact on company value. Environmental accounting is the activity of identifying, measuring and informing activities related to the costs of company activities (Sawitri, 2017). From the research of Ethika and Azwari (2019) in this study, it states that environmental accounting has a positive effect on company value. As for determining the value of environmental accounting reporting using the Hossain environmental disclosure index.

Corporate value is built through the consistency of environmental concern carried out by the company by providing environmental costs as the company's responsibility



for business processes for environmental management. Environmental costs or costs incurred by the company for the environmental management system the bad one. Giving fees by the company can make a good name for the company can also provide added value to stakeholder trust (Asjuwita & Agustin, 2020). Giving this fee can be a value in the form of public trust about corporate social responsibility. research conducted by Wulaningrum and Dyah (2020) concludes that there is a positive relationship between environmental costs and company value. Meanwhile, Dody and Rahandhika (2020) in their research show that environmental costs have a negative effect on company value. This is because the costs incurred by the company for the environment are considered by investors as a burden which can reduce the profits obtained.

The company has a responsibility to stakeholders, namely related to the company's environmental performance which will have an impact on rising stock prices which will increase the company's value. Environmental performance or environmental performance can be seen from the environmental management system, regarding environmental aspects that are controlled by the company. If financial performance can be carried out well accompanied by good environmental performance, it can increase the company's ability to compete so that it can attract stakeholders. (Wardhana, 2019). Research (Pratiwi & Setyoningsih, 2017) shows that environmental performance has a positive effect on company value.

Another thing that affects company value is Islamic Corporate Social Responsibility (ICSR) which is present as a form of corporate responsibility in a social aspect originating from the Islamic values of the Al-Quran and As-Sunnah called Islamic Corporate Social Responsibility. (Utami & Yusniar, 2020). This is because the religion of Islam requires that every human being is responsible for all his behavior tomorrow before God Almighty. So that it can make a positive value from the community to build a good image of the company to attract investors because companies that have superior company values. If environmental control can be carried out properly, investors can respond positively and vice versa (Erfani et al., 2019). From research from Khairiyani (2020) ICSR has a positive effect on company value.



Signal theory it is said that companies that have good quality will deliberately give signals to the market, so that the market can differentiate the quality of these companies from other companies (Rizki & Taufiq, 2019). So that if environmental accounting reporting, environmental cost and environmental performance, ICSR is done well, it becomes important and good news for the company so that it increases the value of the company. This good news is a positive signal for investors, because investors believe that the company's future prospects will be good.

B. Research Methods

Population and Sample

This research uses quantitative research. Quantitative research is in the form of an observation method based on the philosophy of positivism, which can be used to research certain populations and samples, by analyzing quantitative or statistical data (Sugiyono, 2016). Researchers took the research object at JII 70, and for research data obtained from annual reports and company sustainability reports for the period 2018–2021. These reports can be accessed through the websites of each company or the website of the Indonesia Stock Exchange (IDX). The population used in this study took all companies registered on JII 70 in the 2018-2021 period. The sampling technique used in this research uses the purposive sampling method, with sampling criteria with certain criteria as follows: (1) Companies that are still active and continuously registered on JII 70 for the period 2018-2021 (2) Currency used in financial reports is rupiah (3) Companies registered on JII 70 and participating in PROPER for the 2018-2021 period. With the research hypothesis as follows:

H1: Environmental accounting reporting has a positive effect on firm value, H2: Environmental cost has a negative effect on firm value, H3: Environmental performance has a positive effect on firm value, H4: ICSR has a positive effect on firm value, H5: ICSR can moderate Environmental accounting reporting on firm value company, H6: ICSR can moderate environmental costs on firm value, H7: ICSR can moderate environmental costs on firm value, H7: ICSR can moderate environmental costs on firm value, H7: ICSR can moderate environmental costs on firm value, H7: ICSR can moderate environmental costs on firm value, H7: ICSR can moderate environmental costs on firm value, H7: ICSR can moderate environmental performance on firm value.



Research Variable

The dependent variable in this research is company value as measured by Tobin's q. Tobin's q is an indicator to measure company performance, especially regarding company value, which shows a management performance in managing company assets. Tobin's q is the market value calculated by the year-end closing price multiplied by the number of ordinary shares outstanding plus the liquidation value of the outstanding preferred stock plus the book value of total liabilities divided by the book value of total assets. While the independent variable in this study is environmental accounting reporting as measured by the Hossain disclosure index by measuring the total disclosures made divided by the total disclosures that should have been made. The second independent variable, namely environmental cost, is measured by the environmental development program divided by net profit after tax. The third independent variable is environmental performance as measured by the PROPER rating of each company from the Ministry of Environment. After determining the dependent and independent variables, the researcher added a moderating variable, namely ICSR as measured by the ISR index by measuring the number of items disclosed divided by the total number of items that should be disclosed.

C. Result and Discussion

Stationary Test

The data in the research must be stationary because non-stationary data will create doubt in the regression analysis. In this study using the unit root test to determine the stationary data. Data is stationary when the probability value is less than 0.05. The following is a summary of the stationarity test results:

| No | Variable | Prob* | Information |
|----|---------------------------------------|--------|-----------------|
| 1 | Environmental accounting reporting | 0.0000 | Stationary data |
| 2 | Environmental costs | 0.0036 | Stationary data |
| 3 | Environmental performance | 0.0001 | Stationary data |
| 4 | ICSR | 0.0008 | Stationary data |
| 5 | The value of the company | 0.0158 | Stationary data |

Table 1. Stationary Test Results



According to these data, it can be concluded that the independent variable or the dependent variable has fulfilled the stationarity test requirements where the result of the probability value is below 0.05.

| Variables | coefficient | std. Error | t-Statistics | Prob. |
|---------------------------------------|--------------|---------------------|--------------|----------|
| | | | | |
| C | 1.532747 | 1.128556 | 1.358149 | 0.2115 |
| PILL | 0.448374 | 0.584754 | 0.766773 | 0.4652 |
| bl | -0.009786 | 0.004462 | -2.193049 | 0.0596 |
| KL | 0.318609 | 0.115173 | 2.766348 | 0.0244 |
| ICSR | -2.710310 | 1.677846 | -1.615351 | 0.1449 |
| | Effects Spec | rification | | |
| Cross-section fixed (dummy variables) | | | | |
| Root MSE | 0.103545 | R-sq1 | R-squared | |
| Mean dependent var | 1.135625 | Adjusted R-squared | | 0.915962 |
| SD dependent var | 0.505133 | SE of regression | | 0.146434 |
| Akaike info criterion | -0.697626 | Sum squared residue | | 0.171544 |
| Schwarz criterion | -0.311331 | Likelihood logs | | 13.58101 |
| Hannan-Quinn criter. | -0.677844 | F-statistics | | 24.35590 |
| Durbin-Watson stat | 2.211359 | Prob(F- | statistic) | 0.000086 |

| Table 2. Multiple Regression Test Results |
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Moderation Regression Analysis

 Table 3. Moderation Test Rsults for Environmental Accounting Variables

| Variables | coefficiet | std. Error | t-Statistics | Prob. |
|-----------|------------|------------|--------------|--------|
| С | -13.49051 | 89.24746 | -0.151158 | 0.8803 |
| PILL | 17.81557 | 107.0654 | 0.166399 | 0.8683 |
| ICSR | 37.66429 | 137.6824 | 0.273559 | 0.7852 |
| X1Z | -43.67923 | 165.0686 | -0.264613 | 0.7921 |

| Table 4. Moderation Test Results for Environmental Cost Variable | st Results for <i>Environmental Cost Variables</i> |
|--|--|
|--|--|

| Variables | coefficient | std. Error | t-Statistics | Prob. |
|-----------|-------------|------------|--------------|--------|
| С | -4.027943 | 6.456995 | -0.623811 | 0.5347 |
| bl | 0.114313 | 0.042236 | 2.706552 | 0.0085 |
| ICSR | 8.655896 | 9.906486 | 0.873760 | 0.3852 |
| X2Z | -0.164962 | 0.062636 | -2.633658 | 0.0103 |

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| Variables | coefficient | std. Error | t-Statistics | Prob. |
|-----------|-------------|------------|--------------|--------|
| C | -12.73825 | 32.80403 | -0.388314 | 0.6989 |
| KL | 4.037391 | 8.844549 | 0.456484 | 0.6494 |
| ICSR | 25.53755 | 50.14202 | 0.509304 | 0.6121 |
| X3Z | -6.953317 | 13.49806 | -0.515135 | 0.6080 |

 Table 5. Moderation Test Results for Environmental Performance Variables

Classic Assumption Test

Normality test

The results of the normality test show that *the Jarque-Bera Probability value* is 0.537586 > 0.05 so it can be concluded that the regression model tested is normally distributed.

Multicollinearity Test

In knowing whether one independent variable contributes to another independent variable or not, it is necessary to carry out a multicollinearity test. This test can be done by looking at the correlation coefficient between the independent variables. The test results can be seen in the following table:

| | PILL | bl | KL | ICSR | NP |
|------|----------|----------|----------|------------------|----------|
| PILL | 1 | 0.197324 | -0.06314 | <i>-</i> 0.15111 | -0.08674 |
| bl | 0.197324 | 1 | -0.60106 | -0.00609 | 0.45779 |
| KL | -0.06314 | -0.60106 | 1 | 0.474317 | -0.68236 |
| ICSR | -0.15111 | -0.00609 | 0.474317 | 1 | -0.15265 |
| NP | -0.08674 | 0.45779 | -0.68236 | -0.15265 | 1 |

Table 6. Multicollinearity Test Results

Based on these data it shows that there is no cross correlation that is worth more than 0.90 so that in this regression model it can be concluded that there is no multicollinearity problem.

Heteroscedasticity Test

Table 7. Heteroscedasticity Test Results

| F-statistics | 0.794594 | Prob. F (14,61) | 0.6711 |
|------------------------|----------|--------------------------|--------|
| Obs*R-squared | 11.72209 | Prob. Chi-Square (14) | 0.6286 |
| Scaled explained SS | 104.2395 | Prob. Chi-Square (14) | 0.0000 |

It can be seen that the probability is above 0.05 which is equal to 0.6286, so it can be concluded that there is no heteroscedasticity problem in this study



| Root MSE | 0.103545 | R-squared | 0.955180 |
|--------------------------|-----------|------------------------|----------|
| Mean dependent var | | Adjusted R- squared | 0.915962 |
| SD dependent var | 0.505133 | SE of regression | 0.146434 |
| Akaike info criterion | -0.697626 | Sum squared residue | 0.171544 |
| Schwarz criterion | -0.311331 | Likelihood logs | 13.58101 |
| Hannan-Quinn criter. | -0.677844 | F-statistics | 24.35590 |
| Durbin-Watson stat | 2.211359 | Prob(F-statistic) | 0.000086 |

Autocorrelation Test

| Root MSE | 0.103545 | R-squared | 0.955180 |
|--------------------------|-----------|------------------------|----------|
| Mean dependent var | 1.135625 | Adjusted R- squared | 0.915962 |
| SD dependent var | 0.505133 | SE of regression | 0.146434 |
| Akaike info criterion | -0.697626 | Sum squared residue | 0.171544 |
| Schwarz criterion | -0.311331 | Likelihood logs | 13.58101 |
| Hannan-Quinn criter. | -0.677844 | F-statistics | 24.35590 |
| Durbin-Watson stat | 2.211359 | Prob(F-statistic) | 0.000086 |

Table 8. Autocorrelation Test Results

The table results explain the Durbin-Watson value d = 2.211359 where the number of variables (k) = 3, sample (n) = 76, dl = 1.5836, du = 1.7243, 4-du = 4-1.7243 = 2,2757. According to the calculations that have been done, the equation is 1.7243 < 2.211359 < 2.2757, so du < d < 4 - du means that there is no autocorrelation.

Simultaneous Test F

From table 3, it is known that the Prob.(F-statistic) value is 0.000086 < 0.05, it can be concluded that simultaneously a significant effect exists between Environmental Accounting Reporting, Environmental Cost, Environmental Performance, ICSR on Firm Value.

T test (Test)

922

The basis for decision making in this T test is if the probability value of the variable used is less than 0.05, then the independent variable has a significant influence on the dependent variable. The results of the multiple regression test decide that there is 1 variable that has a value less than 0.05, that variable is *environmental performance* on firm value with a result of 0.0244. So from these results it can be concluded that there is 1 independent variable that has a significant influence on the dependent variable.

Moderation Regression Test

The basis for making decisions in this moderation test is if the probability value of the variable used is less than 0.05, then the moderating variable is able to moderate



between the independent variables and the dependent variable. The results of the moderation test decided that there was 1 variable that had a value of less than 0.05, that variable, ICSR, was able to moderate the relationship between environmental costs *and* company value with a result of 0.0244. So from these results it can be concluded that there is 1 moderating variable that has a significant influence on the dependent variable.

Determination Coefficient Test

In table 3, it can be seen that the Adjusted R-square is 0.915962. This means that 91.59% of the Company Value variable is influenced by *Environmental Accounting Reporting, Environmental Cost, Environmental Performance,* ICSR. Meanwhile, the remaining 8.41% is explained by variables other than this research

Discussion of Research Results

- 1. Environmental Accounting Reporting on Company Values
- *environmental accounting reporting* variable shows a significance value of 0.7921 which is greater than the significance level (0.05) but in a positive direction 0.448374. The first hypothesis which states that *environmental accounting reporting* has a positive effect is rejected. This is because investors do not feel that they do not need to see the environmental disclosures that have been made by the company, because the company should have carried out environmental responsibility so that the company does not get penalized. This research is in line with research (Jefriyadi & Etika, 2018) which states that *environmental accounting reporting* has no effect on company value.
- 2. Environmental Cost to Company Value

The environmental cost variable shows a significance value of 0.0596 which is greater than the significance level (0.05) t The second hypothesis states that *environmental costs* have no effect accepted because the test findings show empirically that the company's value is not affected by environmental *costs*. This can happen because not all companies specifically allocate costs related to the environment. Allocation of environmental costs can add to the company's burden. In line with research



(Hapsoro & Dody, 2020) in his research stated that environmental costs do not affect company value.

3. Environmental Performance on Company Value

The results of testing the third hypothesis are accepted because the significance value is below 0.05 towards a positive coefficient of 0.318609, a significant value of 0.0244. This is because investors believe that the company's *environmental performance* towards the surrounding environment can be proof that the company is able to manage it well. So that the company's expectations by carrying out good *environmental performance can increase the value of the company*. In line with research (Adyaksana & Pronosokodewo, 2020) which states that *environmental performance* affects company value.

4. ICSR on Company Value

The results of testing the fourth hypothesis were rejected because the significance value exceeded 0.05 with a negative coefficient of -2.710310, a significant value of 0.1449. The test findings show empirically that firm value is not affected by ICSR. This is because the application of ICSR by companies is considered to increase costs which can reduce company profits. In line with the research conducted. In line with research (Utami & Yusniar, 2020) that ICSR has no effect on company value.

- 5. *Environmental Accounting Reporting* on Corporate Values with ICSR as ModeratorThe results of testing the fifth hypothesis were rejected because the significance value exceeded 0.05 with a negative coefficient 43.67923, a significant value of 0.7921 ICSR could not significantly moderate the company's value and *environmental accounting reporting.* This matter does not support signaling theory which states that ICSR becomes environmental disclosure which is widely recognized as a construction of corporate strategy to increase firm value.
- 6. *Environmental cost* of Company Value with ICSR as Moderator

The results of testing the sixth hypothesis are accepted because the significance value is below 0.05 with a negative coefficient -0.164962, a significant value of 0.0103
ICSR is able to significantly moderate the company's value and *environmental costs*.
ICSR strengthens the effect of *environmental costs* on company value. Disclosure of



ICSR is an important source of information so that companies can increase efficient production.

7. Environmental performance on Corporate Values with ICSR as Moderator

The results of testing the seventh hypothesis were rejected because the significance value exceeded 0.05 with a negative coefficient – 6.953317, a significant value of 0.6080 ICSR could not significantly moderate the company's value and *environmental performance*. The research conducted (Veronica, 2019) shows that *environmental performance* has no significant effect on the relationship between ICSR and firm value.

D. Conclusion

The hypothesis in this study aims to test whether *environmental performance* has a positive effect on corporate value. This is accepted because companies with good *environmental performance* can increase corporate value through social responsibility in order to build a positive corporate *image*. The ICSR hypothesis can moderate the relationship between *environmental cost* and accepted firm value. This is because Disclosure of ICSR is an important source of information so that companies can increase production efficiently, reduce costs due to environmental damage so that the costs incurred by companies are not excessive so that the implementation of *corporate social* can increase company value so as to attract investors. While the research hypothesis of *environmental accounting reporting* and ICSR has a positive effect on company value is rejected. Likewise, the research hypothesis that ICSR is able to moderate the relationship between *environmental accounting* and *environmental performance* on company value is rejected.

E. Suggestion

Weaknesses of this study include the small sample size of 19 companies and relatively short observations, therefore it is suggested that researchers add an additional year of at least 5 years of research.



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