

Research Article

The Effect of the Implementation of Green Accounting on Company Value in the Pharmaceutical Sub-Sector Listed on the Indonesia Stock Exchange in 2019-2024

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Abstract: This study aims to determine the Effect of the Implementation of Green Accounting on Company Value in the Pharmaceutical Sub-Sector Listed on the Indonesia Stock Exchange in 2019-2024. The research object used is a Pharmaceutical Sub-Sector Company listed on the Indonesia Stock Exchange. This study uses a quantitative approach with a simple linear regression analysis method. The data used is secondary data in the form of annual reports and company sustainability reports published by the Indonesia Stock Exchange. The sample determination method used was purposive sampling with a total of 8 samples used during the 6-year observation period for a total of 48 samples. The results of the study show that the implementation of green accounting has a positive and significant effect on the Company's value. It can be seen that the higher the level of green accounting implementation, the greater the company's value that can be achieved.

Keywords: Green Accounting, Corporate Value, Pharmaceuticals, Indonesia Stock Exchange

1. Introduction

In Indonesia, there are many industrial conflicts related to environmental problems. These conflicts are generally caused by natural damage that is not balanced by adequate efforts to address the negative impacts caused (Yanti & Annisa, 2023). Indonesia has various industrial sectors that play an important role in the national economy, with each sector having different characteristics and types of products or services. One of them is the manufacturing industry, which focuses on processing raw materials into finished goods. As the manufacturing industry develops, negative impacts on the environment and health are inevitable. Processing activities carried out by industrial companies have the potential to contribute to environmental pollution, where one of the most dangerous impacts is industrial waste (Yunirman & Nurcahyo, 2019).

The results of the study show that optimal environmental performance has a positive influence on increasing company value. Companies that consistently manage environmental aspects will gain a good image and reputation in society, thereby increasing investor confidence and ultimately having an impact on increasing the company's value (Prasetio & Prijanto, 2024). A good company value can increase investors' confidence to invest in the company's stock. The value of the company can be perceived through the general legitimate price. If the stock price increases, the company's value will also increase (Ketut et al., 2023).

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From the perspective of legitimacy theory, companies not only prioritize the achievement of profits, but also need to adjust their operational activities to applicable values, norms, and social expectations. Meanwhile, stakeholder theory emphasizes that the company's responsibility is not only aimed at shareholders, but also to all stakeholders involved and affected by the company's activities, so as to create sustainable value.

Accounting science has an important role in disclosing environmental information, especially related to environmental costs incurred by companies that can be accommodated through the application of environmental accounting (Green Accounting) (Sapulette & Limba, 2021). Green Accounting is applied as one of the solutions to overcome problems between economic actors who carry out activities that have an impact on the environment and people who directly feel the consequences of these activities (A. Pratiwi et al., 2023). The pharmaceutical industry is one of the sectors that has the potential to produce waste. Pharmaceutical companies are business entities engaged in the health sector by providing products in the form of medicines, vitamins, medical devices, and consumable medical materials.

Cases that harm the environment due to the company's operational activities have become a concern for the public. According to pharmacy.uir.com, in 2021, a study showed the presence of paracetamol pollution in coastal seawater in Jakarta during the 2015-2021 period. The results of this study need to be further researched, considering that coastal areas are directly related to the marine sector and the community's economy. Waste from drug formulations that are considered to be poorly managed has polluted the waters at the location, and even groundwater is also contaminated. If such contaminated water is consumed, the impact that can occur includes triggering bacterial resistance and can even be fatal.

The rapid growth of society encourages companies to pay more attention to the application of social and environmental accounting. So far, many companies are still focused on maximizing profits and using resources in a sustainable manner, without considering the impact on the environment and society (Kholmi & Nafiza, 2022). In recent years, there has been instability in the value of companies, especially in the pharmaceutical sub-sector listed on the Indonesia Stock Exchange (IDX). Therefore, this research is very important to identify various factors that affect the rise and fall of the value of the company, which seems unstable at the moment. The first factor is the major impact of the Covid-19 pandemic, which has caused many companies, including pharmaceutical companies, to experience a decline in performance. The second factor is the company's performance that is not optimal during this period.

2. Methods

This study uses a quantitative approach that aims to examine the relationship between Green accounting, and the value of companies in manufacturing companies in the pharmaceutical sub-sector listed on the Indonesia Stock Exchange (IDX) during the period 2019–2024. The research population consisted of 34 pharmaceutical sub-sector companies, with samples selected by purposive sampling based on predetermined criteria so that the total sample was 8 companies. The data used are secondary data obtained from annual reports and sustainability reports available on the IDX's official website and PROPER data issued by the Ministry of Environment and Forestry.

The data analysis used included descriptive analysis using Microsoft Excel, hypothesis testing using SPSS 21, by testing the normality of linear regression and partial testing.

Table 1. Research Variables

Yes	Variable	Measurement
1	Green Accounting (X)	$ELR = \frac{\text{Environmental Cost}}{\text{Total Revenue}}$
2	Company Value (Y)	$Tobins Q = \frac{\text{Market Value of Equity} + \text{Total Liabilities}}{\text{Total Assets}}$

3. Results and Discussion

Descriptive Analysis

Table 2. Descriptive Statistics Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Green Accounting	48	,00	,03	,0069	,00760
Company Values	48	,15	3,64	1,2370	,79928
Valid N (listwise)	48				

Based on the table above, it is known that the number of samples is 48 observations with the following interpretation of variables:

1) Green Accounting

The table above shows the results of the descriptive statistical test on the Green Accounting (X) variable in the sample company during the 2019–2024 period with a total of 48 data showing a minimum value of 0.00, a maximum value of 0.03, a mean value of 0.0069, and a standard deviation of 0.00760. Meanwhile, the standard deviation value that is close to the mean illustrates the difference or variation between companies in terms of the implementation of green accounting. This can be interpreted that in the 2019–2024 period, green accounting practices in sample companies have begun to be seen, but the implementation is not even and there is still a gap between companies that implement it and those that have not.

2) Company Values

The results of the descriptive statistics analysis showed that the Company Value (Y) variable during the 2019–2024 period with a total of 48 data, obtained a minimum value of 0.15, a maximum value of 3.64, an average (mean) of 1.2370, and a standard deviation of 0.79928. This means, in the 2019–2024 range, the value of sample companies varies quite highly, influenced by internal and external factors, including the implementation of green accounting.

Classic Assumptions

In the classical assumption test, it is carried out to produce a regression model with predetermined criteria. This test can determine whether this model is feasible to be developed. Classical assumption testing using normality tests

1) Normality Test

Table 3. Normality Test Results

			One-Sample Kolmogorov-Smirnov Test	
			Unstandardized Residual	
N				48
Normal Parameters ^{a,b}	Mean			,0000000
	Std.Deviation			,65559783
Most Differences	Extreme	Absolute		,140
		Positive		,140
		Negative		-,107
Kolmogorov-Smirnov Z				,972
Asymp. Sig. (2-tailed)				,301

Based on the table of data processing results, a Kolmogorov-Smirnov Z value of 0.972 with a significance (Asymp. Sig. 2-tailed) of 0.301. Since the significance value is greater than 0.05, it can be concluded that the residual data is distributed normally.

Simple Linear Regression Test

Simple linear regression is a statistical technique used to model and investigate the influence of one independent variable on one dependent variable. The basis for decision-making, if the value of sig. < 0.05, then there is an influence of variable X on Variable Y. And if the value of t-calculated > t-table, then there is an influence of variable X on variable Y.

Table 4. Results of Simple Linear Regression Analysis

Coefficient Type	Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
	B	Std. Error			
(Constant)	,819	,130		6,293	,000
Green Accounting	60,183	12,724	,572	4,730	,000

$$Y = 0.819 + 60.183 (48) = 2,889,603$$

- The constant value indicates that if the green accounting value (x) is 0 (fixed) then the Company value (y) is given 0.819. However, it should be noted that this constant is not a relevant economic value, but rather is only a starting point in the regression model.
- The value of the regression coefficient of the green accounting variable of 60.183 shows that every increase in one unit of green accounting will increase the value of the company by 60.183. This positive value coefficient indicates a one-way relationship, meaning that the higher the implementation of green accounting, the more the company's value will increase.

Hypothesis Test (partial/t)

Partial tests or t-tests are performed to show how far an independent variable affects dependent variables by considering other independent variables to be constant

Table 5. Hypothesis Test Results

Coefficient					
Type	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
1 (Constant)	,819	,130		6,293	,000
Green Accounting	60,183	12,724	,572	4,730	,000

Green accounting has a calculated t-value of 4.730 with a significance of 0.000. Because the significant value is less than 0.05 ($0.000 < 0.05$) and the calculated t-value is greater than the table t of 1.679 ($t = (α; 48-3) n=45; α=0.05$), it can be concluded that the green accounting variable partially has a significant effect on the Company's Value. The application of green accounting is able to explain the change in the Company Value in this research sample, so that although the value of the constant is significant, the influence of green accounting on the Company Value is proven to have a partial effect.

Coefficient of Determination (R²)

Table 6 . Results of Determination Coefficient

Model Summary^b				
Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.572a	,327	,313	,66269

The results of the determination coefficient analysis (R²) showed that the R Square value was 0.327 or 32.7%, which means that the green accounting variable was able to explain the variation in the change in Company Value by 32.7%, while the remaining 67.3% was influenced by other factors outside the research model. In addition, the Adjusted R Square value of 0.313 indicates that this regression model well explains the relationship between independent and dependent variables, so it can be concluded that the contribution of green accounting to the Company Value is very large and significant.

Discussion of Research Results

The Influence of Green Accounting on Company Value

The test results show that green accounting has a positive effect on the company's value because there is a partial significant influence between green accounting on the company's value. Based on these results, the hypothesis of green accounting has an effect on income" was accepted. Based on the regression analysis carried out, the results of this study provide an important picture of the relationship between the application of Green Accounting principles and the company's value reflected in the Tobin's Q indicator, which describes the ratio between the market value of the company and the value of its assets.

The implementation of Green Accounting encourages companies to incur costs related to environmental responsibility. The application shows that the more optimal the implementation of green accounting, the higher the share price which is followed by an increase in the company's value. The results of this study are supported by (Muflihah et al., 2021) the results of the analysis show that Green Accounting has a significant effect on Company Value. According to (Sitanggang et al., 2024) green accounting has a significant and positive effect on company value. According to (Mahmudah et.al., (2021) green accounting has a positive effect on company value because there is a partially significant influence between green accounting on company value.

4. Conclusion

This study aims to determine the influence of Green Accounting on Company Value in the pharmaceutical sector on the Indonesia Stock Exchange from 2019 to 2024. Based on the results of the research, it can be concluded that Green Accounting has a significant effect on Company Value. Thus the hypothesis in this study is accepted.

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