
Application of green accounting to company values through profitability

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ABSTRACT

The objective of this study is to investigate the impact of the adoption of green accounting practices on the valuation of firms, specifically by analyzing its influence on profitability. This study assesses green accounting through the utilization of two sub-variables: environmental performance, which is evaluated based on the PROPER rating, and disclosure of environmental costs, which is measured using a dummy variable. Additionally, profitability is evaluated by means of Return on Assets (ROA), while company value is determined using Tobin's Q. The research methodology employed in this study is a quantitative approach utilizing an associative research design. The sample for this research comprises non-financial firms that are publicly listed on the Indonesia Stock Exchange (IDX) during the period from 2016 to 2020. The findings indicate that there was only a partial impact of environmental performance and disclosure of environmental costs on profitability. The environmental performance and disclosure of environmental costs have a partial impact on the valuation of firms. The impact of profitability on firm value is limited. There is no discernible impact on firm value through profitability as a result of environmental performance and the disclosure of environmental costs.



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INTRODUCTION

In today's increasingly competitive era of industrialization and globalization, all kinds of community needs can be met through massive and fast production and distribution processes. There are various companies that are ready to provide various needs of the community, this encourages continuous business competition. Intense competition in both domestic and international markets requires the company to continue to maintain its position in the market by continuing to produce and be ready to supply market demand. Maintaining and also increasing its profitability is the company's main goal by focusing on the company's operational and financial activities (Erlangga et al., 2021). In the profit maximization concept, The parameter used to measure the effectiveness of the company's management is the amount of profit the company gets from sales (Kasmir, 2017). The company's ability to create profits from normal business activities is called profitability (Hery, 2017).

In order to achieve short-term objectives, it is imperative for a reputable organization to exhibit the capacity to generate substantial profits. Conversely, for long-term aspirations, the company must strive to optimize its overall value. The company's valuation significantly influences investor confidence in both its present and future performance. Investors assess the company's performance according to the company's ability to manage its resources to increase profitability (Erlangga et al., 2021). The COVID-19 pandemic has had a major impact on most issuers in all sectors in Indonesia. The Executive Director of the Indonesian Issuers Association, Samsul Hidayat, detailed that there were several sectors that were most depressed due to the impact of the Covid-19 pandemic because of a significant drop in income. Among them are the hotel and tourism industry, transportation, manufacturing, property and agriculture. In fact, many companies have stopped their operations due to the covid 19 pandemic. This of course has an impact on the achievement of company profits that are not optimal and even lose. In addition, the COVID-19 outbreak has hit various economic fields such as the capital market (Syahrizal Sidik, CNBC Indonesia.). The coronavirus (COVID-19) pandemic has had a significant impact on trading on the stock exchange. This is indicated by the decline in the Composite Stock Price Index (IHSG) on the Indonesia Stock Exchange (IDX) (Darmayanti et al., 2021)

When the company is only oriented towards maximizing profit without considering the environmental and social impacts, it will have a negative impact on the community environment due to the company's daily operational activities (Pflieger et al., 2005). To achieve the company's goal in obtaining maximum profit is to get the attention of consumers through giving attention to the interests of the environment. Through Green Accounting, companies try to reduce or avoid losses from environmental damage in the future and create competitive advantages through environmentally friendly production (Kusumaningtias, 2013). The green accounting factors that can affect the level of company profitability include environmental performance, environmental costs and environmental disclosure (Wangi & Lestari, 2020). Environmental performance is the company's performance in creating a good environment and preserving the environment (Suratno, 2007). The index proper is employed as the metric for assessing environmental performance in this study. Proper is an environmental management Company Performance Rating Program that was initiated by the Ministry of Environment (KLH) in 1995. Its primary objective is to incentivize companies to enhance their environmental management practices. The company's image and reputation are contingent upon its effective management of the environment, as determined through a comprehensive assessment. The image is categorized based on its color composition, which includes gold, green, blue, red, and black hues. The gold property is regarded as the most superior property, as it signifies the company's successful implementation of a comprehensive and ongoing environmental management system. The source of the information is the official website of the Ministry of Environment and Forestry of the Republic of Indonesia, accessible at men

In the Triple Bottom Line concept that when good company performance is followed by good environmental performance, it will increase the company's good competitive ability in the eyes of its stakeholders (Tisna et al., 2020). Environmental costs (environmental costs) are costs incurred due to poor environmental quality. Environmental costs are associated with the creation, detection, recovery, and prevention and degradation of environmental conditions (Mowen et al., 2017:414).

The environmental costs included in the company's annual report are able to improve the company's reputation which can affect competitive advantage so that it can be a company strategy in increasing company sales and profits (Camilia, 2016). The increase in performance results by the company will be followed by the creation of value for the company. (Mazda Eko Sri Tjahjono, 2013). A good image can also increase the attractiveness of investors' investment. An increase in the index for investors is indicated by an increase in the company's stock price. In this way, it sends a separate signal that the company needs to provide information to external parties to maintain the company's image (Omran & Ramdhony, 2015).

The current phenomenon in Indonesia is that there are several non-financial companies listed on the Indonesia Stock Exchange (IDX) that have good environmental performance conditions but have poor company values.

Table 1 Data on several companies listed on the IDX Have Low Company Value

Company	Year	Proper Index	Disclosure of Environmental Costs in the Annual Report	Company Value (Tobis Q)	
PT. Adaro	2019	Gold	√	0.92	
Energy Tbk	2020	Gold	√	0.94	
PT. Unggul	2016	Blue	√	0.59	Mark
Indah Cahaya Tbk	2017	Blue	√	0.72	Tobins Q healthy > 1
PT. Kimia	2018	Blue	√	0.76	
Farma Tbk	2019	Blue	√	0.73	

Table 1 above describes several non-financial companies listed on the Indonesia Stock Exchange (IDX) that have good proper index conditions and have disclosed environmental costs in their annual reports, but still have low company values when measured using Tobins Q. the interest of researchers to do further research with the theme of applying green accounting to firm value through profitability

The environmental performance of a company refers to its efforts and effectiveness in participating in the preservation and conservation of the natural environment. The assessment of environmental performance is quantified through a rating system established by an institution specializing in environmental matters (Wibisono, 2013). The Ministry of the Environment conducts the PROPER rating assessment to measure environmental performance assessment. The primary objective of the assessment is to enhance the organization's operational efficacy in the realm of environmental preservation (Mazda Eko Sri Tjahjono, 2013).

Environmental performance is the company's performance to make the environment better in order to reduce the environmental damage caused. Environmental performance is guided by the magnitude of environmental damage caused by company activities. When environmental performance increases, less damage is caused. On the other hand, the lower the environmental performance of an organization, the more damage it causes Lako (2018:105).

Environmental disclosure refers to the act of providing information pertaining to environmental matters within the reports issued by companies Rizkan et al.,(2017).Environmental disclosure refers to the act of providing information pertaining to social and environmental matters within a company's annual report. The study conducted by Fragrant and Lestari (2020) is of academic significance. Based on the aforementioned information, it can be inferred that the disclosure of environmental costs pertains to the provision of information within a company's annual report concerning the expenses associated with social and environmental matters that have been released.

Profit is a summary of the net results of business operations over a certain period of time. Conceptually, profit aims to provide a measurement of the company's shareholder wealth over a period and an estimate of the current business profitability, namely the extent to which the business can cover operating costs and earn returns for its shareholders. Subramanyam (2017:98). The company's goal is profit maximization because with maximum profit the company can improve the welfare of stakeholders and improve product quality. This causes management to be required to meet the profit targets that have been set. Cashmere (2017:196).

Firm value is an investor's perception of the manager's level of success in managing the company's resources entrusted to him which is often associated with stock prices. (Indrarini, 2019, p. 2). The purpose of the company to maximize the value of the company is to increase the value of wealth so that it can prosper the welfare of shareholders, because if the value of the company is high, then the prosperity of shareholders is also high. (Israel et al., 2018)

Based on stakeholder theory, the survival of the company depends on the support of stakeholders so that the company must maintain relationships with stakeholders by accommodating the wants and needs of stakeholders (Gray et al., 1995 in Ali et al, 2017). Companies with good performance will get the attention of stakeholders so that they can improve their financial performance(Freeman & McVea, 2001). The company's participation in PROPER organized by the Ministry of the Environment shows the company's commitment to environmental management is able to legitimize the company's activities so as to improve the company's image in front of stakeholders, especially consumers as end-product users as a form of appreciation for companies that have performed good environmental performance so as to increase company profits (Sulistawati, 2016).

The company carries out disclosures aimed at managing the company's relationship with stakeholders (Putri et al., 2020). According to Rahmawati & Subardjo (2017) the implementation of environmental disclosure is expected so that the company will gain social legitimacy and maximize profits in the long term.

In line with stakeholder theory which states that environmental performance is a stakeholder relationship with the company, the fulfillment of demands such as good environmental performance management in the company will give a good response from stakeholders, the good response will create good company value. (Pratama et al., 2019). Environmental performance when viewed theoretically in legitimacy theory will increase the value of the company (Khairiyani et al., 2019). Meanwhile, when viewed from signal theory, environmental performance with proper assessment can be used as a tool by management to provide good information or positive signals to stakeholders to be interested in investing in companies (Rosaline & Wuryani, 2020). Therefore, the better the proper value, the higher the firm value (Pratama et al., 2019).

Earning high profits will increase dividend payments so that it affects the increase in stock prices (Sari, 2020). According to Ningtyas & Triyanto (2019) Disclosure made by the company can produce many benefits such as increasing public trust and improving the company's image in the eyes of the public as consumers. Mowen et al. (2016) argues that through competitive advantages offered by companies with environmental and social concerns will bring a good image for the company. Khairiyani et al. (2019) states that the environmental performance reflected in the PROPER scale has an impact on financial performance. When companies disclose corporate social responsibility, profitability as an intermediate variable can increase the value of the company (Erlangga et al., 2021).

Research objectives in this study are to determine how the influence of environmental performance and disclosure of environmental costs on profitability. How does profitability affect firm value. How do environmental performance and disclosure of environmental costs affect firm value. How do environmental performance and disclosure of environmental costs affect firm value through profitability.

RESEARCH METHODS

The objective of this study is to investigate the impact of the implementation of green accounting, specifically through environmental performance and disclosure of environmental costs, on profitability. Additionally, the study aims to examine the influence of environmental performance and disclosure of environmental costs on firm value, as well as the relationship between profitability and firm value. Lastly, the study seeks to explore the indirect effect of environmental performance and disclosure of environmental costs on firm value, mediated by profitability. The research methodology employed in this study is a quantitative approach utilizing an associative research design. The purpose of this study is to ascertain the characteristics of the research subject and examine the relationship between the independent variable and the dependent variable, which is mediated by the presence of an intermediary variable. The approach employed involves gathering data from the annual report of the company.

This study has four variables, namely environmental performance is measured using PROPER rating, disclosure of environmental costs is measured using a dummy, given a score of 1 if it discloses environmental costs and 0 if it does not disclose environmental costs, profitability is measured using Return On Assets (ROA), and firm value is measured using Tobins Q. This study uses secondary data, namely financial information contained in the company's Annual Report. The strategy used in this research is to identify indicators for each variable, tabulate data, process data, analyze data, then draw conclusions. Sampling technique using purposive sampling.

The study focuses on two distinct characteristics of the population: (1) non-financial companies that have maintained consecutive listings on the Indonesia Stock Exchange (IDX) throughout the period from 2016 to 2020, and (2) non-financial companies listed on the Indonesia Stock Exchange (IDX) that actively participated in the Program for Pollution Control, Evaluation, and Rating (PROPER) during the same period from 2016 to 2020. The study encompassed a total population of 610 companies, with a sample size of 330 companies.

The data processing method in this research is started by collecting research samples, identifying indicators for each variable, tabulating data, processing and analyzing data, and making conclusions. The data analysis method used in this study is path analysis to test the effect of the intervening variable and is an extension of simple and multiple regression analysis, Sobel test. Meanwhile, the hypothesis testing used is a partial test (t test) and a significant Sobel test using E-Views version 9 Enterprise.

Hypothesis

- H1: Environmental performance affects profitability
- H2: Disclosure of environmental costs has an effect on profitability
- H3: Profitability has an effect on firm value
- H4: Environmental performance has an effect on firm value
- H5: Disclosure of environmental costs has an effect on firm value.
- H6: Environmental performance has an effect on firm value through profitability
- H7: Disclosure of environmental costs has an effect on firm value through profitability

The structural equations that show the relationship between variables on the path diagram in this study are as follows:

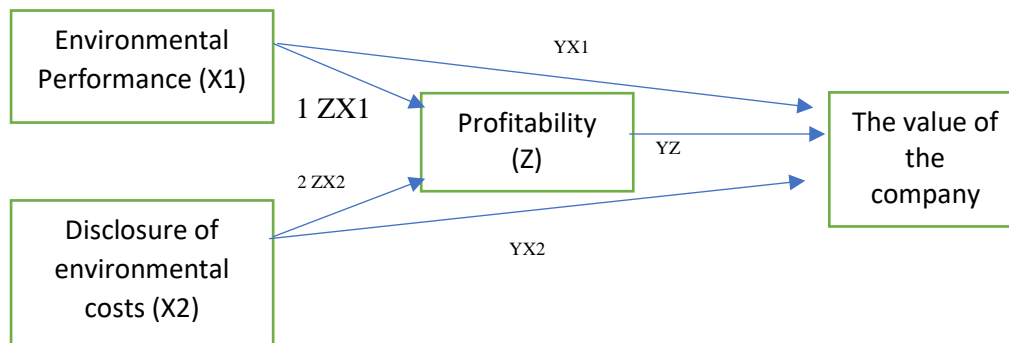


Figure 1 Diagram X₁, X₂, Z and Y line paths

RESULTS AND DISCUSSION

This analysis aims to provide a detailed description of the variables studied as a whole. The results of descriptive statistics on the sample companies, namely all non-manufacturing companies for the period 2006-2020 can be seen in the table below:

Table 2 Descriptive Statistics of Environmental Performance Variables, Environmental Costs, Profitability and Firm Value

Information	Environmental performance	Environmental costs	Return on Assets	Firm Value (Tobins Q)
Mean	3.120807	0.651515	47%	2.025654
Maximum	5	1	7704.04%	23,28575
Minimum	2	0	-105%	0.288700
Std Deviation	0.497791	0.477214	5.082880	2.807919

Source: Processed Data 2021

According to the data presented in Table 5.1, it is evident that out of the 330 companies included in the sample, the overall environmental performance, as assessed by the PROPER rating, falls within the blue rating category. The average environmental performance score is calculated to be 3.12. The blue rating indicates that the sampled companies have, on average, fulfilled their environmental management obligations in accordance with the Environmental Regulations. Among the 330 non-financial companies listed on the Indonesia Stock Exchange (IDX) during the period of 2016-2020, PT. Adaro Energy, Tbk, PT. Bukit Asam Tbk, and PT. Aneka Tambang Tbk. have been identified as the companies with the highest PROPER rating, specifically a rating of PROPER 5. These companies consistently exhibit environmental excellence in their production processes, engage in ethical business practices, and demonstrate responsibility towards the community. PT. Mustika Ratu Tbk, PT. Kino Indonesia, and PT. Kimia Farma Tbk hold the lowest ranking value, as indicated by their PROPER 2 rating. This observation indicates that the company's environmental management initiatives are not yet aligned with the stipulations outlined in the legislation.

Disclosure of environmental costs as measured by dummy variables shows an average value of 0.6515, this indicates that the average sample companies disclose CSR costs in their Annual Reports. Of the 330 samples studied, as many as 114 companies that do not disclose CSR Costs and 186 samples disclose CSR Costs in their Annual Reports. Companies that do not disclose CSR costs in their annual reports include PT. Jababeka Industrial Estate, PT Mustika Ratu, Tbk, PT. Unilever, Tbk. PT. Wilma Cahaya Indonesia, Tbk, PT. Multi Bintang Indonesia, Tbk, PT. Indofood, Tbk, PT. Delta Djakarta, Tbk, PT. KMI Wire Cable Tbk, etc.

Profitability by using the Return On Asset (ROA) measurement tool in the companies studied has an average value of 47%. Profitability trends in this sector show conditions that tend to decline, so it can be concluded that the average profitability of non-financial companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period has an unhealthy condition, meaning that the average

company has not been able to manage its assets. properly so that it can produce poor profits. The dominant decline in profitability occurred in 2019-2020 where the condition was during the covid 19 pandemic. The company that has the highest Return On Asset (ROA) value is PT. Indorama Syantec Tbk with an ROA value of 7704.04% in 2018. While the company that has the lowest ROA value is PT. Tirta Mahakam Resources,

Markcompanies using the Tobins Q measurement tool in the companies studied have an average value of 2.025654 which is greater than 1. So it can be concluded that the value of non-financial companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period has good condition. The company that has the highest company value is PT. Unilever Indonesia Tbk in 2017 with a Tobins Q value of 23.29, while the lowest company value was owned by PT. Lippo Cikarang Tbk, 2017 with a Tobins Q value of 0.29.

Classical Assumption Test

Normality testing is carried out on the residual value (error term) of the regression equation to meet good regression assumptions if the residual value of the estimated regression model is normally distributed.

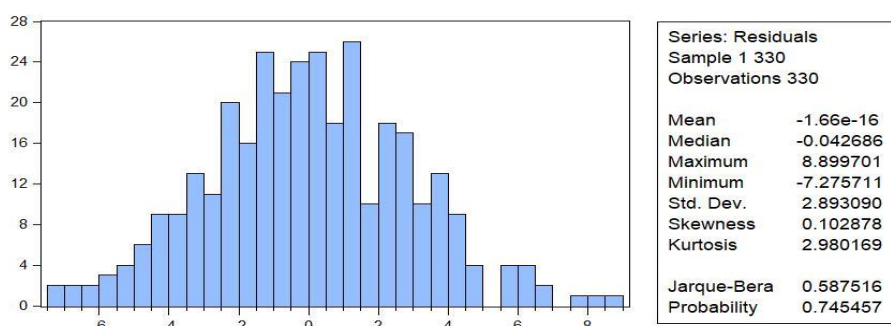


Figure 2 Normality Test Results

Figure 2 shows the results of the normality test, based on the table it can be seen that the probability value in the test is 0.745457. This value is greater than 0.005 as the fault tolerance used in this study. So it can be concluded that the data used is normally distributed.

Table 3 Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test:

F-statistics	0.341134	Prob. F (2,324)	0.7112
Obs*R-squared	0.693442	Prob. Chi-Square (2)	0.7070

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 11/15/21 Time: 20:11

Samples: 1 330

Included observations: 330

Presample missing value lagged residuals set to zero.

Variable	Coefficien	t	Std. Error	t-Statistics	Prob.
C	-0.071569	1.000626	-0.071524	0.9430	
ROA	0.002059	0.030890	0.066642	0.9469	
KL	0.024498	0.304865	0.080356	0.9360	
BL	-0.008444	0.324837	-0.025995	0.9793	
RESID (-1)	-0.031742	0.055808	-0.568766	0.5699	
RESID (-2)	0.032660	0.055803	0.585273	0.5588	

R-squared	0.002101	Mean dependent var	-1.66E-16
Adjusted R-squared	-0.013298	SD dependent var	2.893090
SE of regression	2.912263	Akaike info criterion	4.993753
Sum squared resid	2747,934	Schwarz criterion	5.062827
Likelihood logs	-817.9692	Hannan-Quinn Criter.	5.021305
F-statistics	0.136454	Durbin-Watson stat	1.992988
Prob(F-statistic)	0.983798		

The table presented above, Table 3, displays the outcome of the Breusch-Godfrey Serial Correlation LM test. This test is employed to examine the presence of autocorrelation within the regression model. Based on the given hypothesis test criteria, it is evident that the calculated probability value of 0.7070 is greater than the significance level of 0.05 (α). Therefore, we can infer that the null hypothesis (H_0), which suggests the absence of autocorrelation in the regression model, should be rejected in favor of the alternative hypothesis (H_a).

Table 4 Multicollinearity Test Results

Variance Inflation Factors
 Date: 11/15/21 Time: 20:12
 Samples: 1 330
 Included observations: 330

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.989666	38.66345	NA
ROA	0.000944	1.009287	1.003574
KL	0.091691	36.09479	1.004852
BL	0.104866	2.927524	1.001279

Table 4 above is the result of multicollinearity test in which the centered VIF value for Profitability (ROA) is 1.003574, Environmental Performance is 1.004852, and Environmental costs are 1.001279. Where the three centered VIF values are all less than 10, it can be concluded that there is no multicollinearity problem in the prediction model.

Table 5 Heteroscedasticity Test Results

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistics	1.999925	Prob. F (3,326)	0.1139
Obs*R-squared	5.963636	Prob. Chi-Square (3)	0.1134
Scaled explained SS	5.762231	Prob. Chi-Square (3)	0.1238

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 11/15/21 Time: 20:14

Samples: 1 330

Included observations: 330

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	-0.391520	4.007175	-0.097705	0.9222
ROA	0.149888	0.123768	1.211040	0.2268
KL	2.604101	1.219711	2.135014	0.0335
BL	0.768138	1.304404	0.588880	0.5563
R-squared	0.018072	Mean dependent var		8.344607
Adjusted R-squared	0.009035	SD dependent var		11.76023
SE of regression	11.70698	Akaike info criterion		7.770295
Sum squared resid	44679.44	Schwarz criterion		7.816345
Likelihood logs	-1278,099	Hannan-Quinn Criter.		7.788664
F-statistics	1.999925	Durbin-Watson stat		2.115563
Prob(F-statistic)	0.113854			

Table 5 above shows the results of the heteroscedasticity test in the regression model. The hypothesis (Ho) of the chi squared test is that there is no heteroscedasticity in the regression model, and the alternative hypothesis (Ha) is the presence of heteroscedasticity symptoms in the resulting regression model. Based on the value of Prob.Chi-Square (3) is $0.1134 > 0.05$, which means rejecting Ho, there is no symptom of heteroscedasticity in the tested regression model.

Regression Analysis

Regression analysis is a statistical technique employed to assess the strength of the association between two or more variables. It also aids in determining the direction of the relationship, specifically from the independent variable to the dependent variable. Consequently, regression analysis facilitates the evaluation of previously formulated hypotheses. The regression analysis findings are presented in the following tables:

Table 6 Multiple Linear Regression Environmental Performance on Profitability

Dependent Variable: ROA
 Method: Least Squares
 Date: 10/25/21 Time: 20:17
 Sample (adjusted): 1 330
 Included observations: 330 after adjustments

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.986335	1.780595	0.553936	0.5800
KL	-0.308319	0.576671	-0.534653	0.5933
BL	0.691971	0.601537	1.150340	0.2508
R-squared	0.004297	Mean dependent var		0.474961
Adjusted R-squared	-0.001793	SD dependent var		5.082880
SE of regression	5.087435	Akaike info criterion		6.100474
Sum squared resid	8463.412	Schwarz criterion		6.135011
Likelihood logs	-1003.578	Hannan-Quinn Criter.		6.114250
F-statistics	0.705604	Durbin-Watson stat		0.956937
Prob(F-statistic)	0.494561			

Source: research data processing, 2021

Table 6 above shows that the variable of implementing green accounting through environmental performance has a probability of $0.5933 > 0.005$, which means that the environmental performance variable has no significant effect on profitability and has a negative relationship with a regression coefficient of -0.308319 meaning that profitability will not increase by 0.31 if the company has a good environmental performance.

Table 7 Multiple Linear Regression Disclosure of Environmental Costs on Profitability

Dependent Variable: ROA
 Method: Least Squares
 Date: 10/25/21 Time: 20:17
 Sample (adjusted): 1 330
 Included observations: 330 after adjustments

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.986335	1.780595	0.553936	0.5800
KL	-0.308319	0.576671	-0.534653	0.5933
BL	0.691971	0.601537	1.150340	0.2508
R-squared	0.004297	Mean dependent var		0.474961
Adjusted R-squared	-0.001793	SD dependent var		5.082880
SE of regression	5.087435	Akaike info criterion		6.100474
Sum squared resid	8463.412	Schwarz criterion		6.135011
Likelihood logs	-1003.578	Hannan-Quinn Criter.		6.114250
F-statistics	0.705604	Durbin-Watson stat		0.956937
Prob(F-statistic)	0.494561			

Table 7 above shows that the variable of implementing green accounting through the disclosure of environmental costs has a probability result of $0.2508 > 0.005$, which means that the variable environmental cost disclosure does not have a significant effect on profitability.

Table 8 Simple Linear Regression Profitability Variables Against Company Value

Dependent Variable: TQ
 Method: Least Squares
 Date: 10/25/21 Time: 20:18
 Sample (adjusted): 1 330
 Included observations: 330 after adjustments

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	2.031761	0.155441	13.07098	0.0000
ROA	-0.012858	0.030494	-0.421658	0.6736
R-squared	0.000542	Mean dependent var		2.025654
Adjusted R-squared	-0.002505	SD dependent var		2.807919
SE of regression	2.811434	Akaike info criterion		4.911308
Sum squared resid	2592,564	Schwarz criterion		4.934333
Likelihood logs	-808.3659	Hannan-Quinn Criter.		4.920493
F-statistics	0.177796	Durbin-Watson stat		0.422375
Prob(F-statistic)	0.673551			

Source: research data processing, 2021

Table 8 above shows the profitability variable (ROA) has a probability value of $0.6736 > 0.05$, which means that the profitability variable has no effect on the projected firm value with Tobins Q.

Table 9 Multiple Linear Regression Environmental Performance Variables on Company Value

Dependent Variable: TQ
 Method: Least Squares
 Date: 10/25/21 Time: 20:25
 Sample (adjusted): 1 330
 Included observations: 330 after adjustments

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.294700	0.967805	0.304504	0.7609
ROA	-0.005916	0.030043	-0.196919	0.8440
KL	0.772245	0.313427	2.463874	0.0143
BL	-1.037988	0.327460	-3.169818	0.0017
R-squared	0.039962	Mean dependent var		2.025654
Adjusted R-squared	0.031128	SD dependent var		2.807919
SE of regression	2.763871	Akaike info criterion		4.883189
Sum squared resid	2490.309	Schwarz criterion		4.929238
Likelihood logs	-801.7261	Hannan-Quinn Criter.		4.901557
F-statistics	4.523341	Durbin-Watson stat		0.456498
Prob(F-statistic)	0.004002			

Source: 2021 data processing

Table 9 above shows that the variable of implementing green accounting through environmental performance has a probability result of $0.0143 < 0.05$, meaning that the environmental performance variable has a significant influence on the firm value projected by Tobins Q and has a positive relationship direction with a regression coefficient value of 0.772245, which means the firm value. will increase by 0.77 if the company has a good environmental performance.

Table 10 Multiple Linear Regression Disclosure of Environmental Cost Variables on Firm Value

Dependent Variable: TQ
 Method: Least Squares
 Date: 10/25/21 Time: 20:25
 Sample (adjusted): 1 330
 Included observations: 330 after adjustments

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.294700	0.967805	0.304504	0.7609
ROA	-0.005916	0.030043	-0.196919	0.8440
KL	0.772245	0.313427	2.463874	0.0143
BL	-1.037988	0.327460	-3.169818	0.0017
R-squared	0.039962	Mean dependent var		2.025654
Adjusted R-squared	0.031128	SD dependent var		2.807919
SE of regression	2.763871	Akaike info criterion		4.883189
Sum squared resid	2490.309	Schwarz criterion		4.929238
Likelihood logs	-801.7261	Hannan-Quinn Criter.		4.901557
F-statistics	4.523341	Durbin-Watson stat		0.456498
Prob(F-statistic)	0.004002			

Table 10 above shows that the variable of implementing green accounting through the disclosure of environmental costs has a probability result of $0.0017 < 0.05$, meaning that the environmental cost disclosure variable has a significant influence on the firm value projected by Tobins Q and has a negative relationship direction with a regression coefficient value of -1.037988 which means the value of the company will not increase by 1.03 if the company discloses environmental costs in its annual report.

The path analysis model is used to show the direction of the relationship between research variables that are influenced by the presence of mediating or intervening variables in the variable influence path, the following is a diagram of the direction of the research variable's influence path and the magnitude of the resulting regression coefficient.

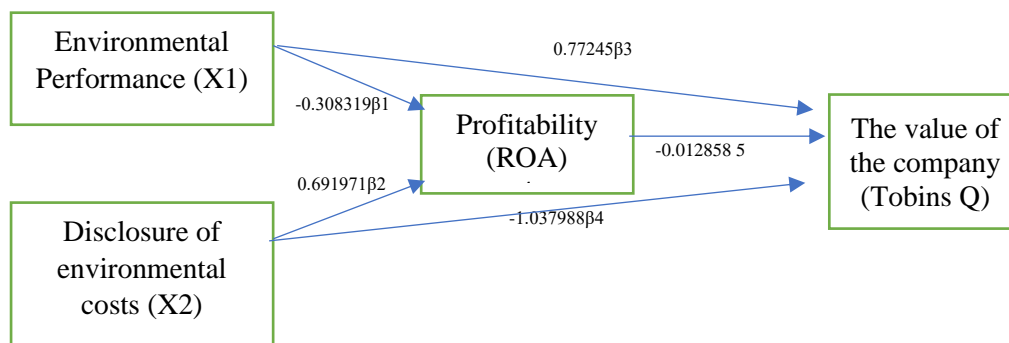


Figure 3 Path Analysis Coefficient Diagram

The results of the path coefficient are searched for the indirect path coefficient value first by multiplying the estimated variable X to Y with the estimated value of the Y to Z variable then compared with the Z Sobel Score obtained with the Sobel formula below:

Table 11 Sobel Significant Test Results Environmental Performance Variables & Environmental Cost Disclosure Towards Company Value Through Profitability

Indirect Influence		Z Sobel	Information
Environmental Performance > ROA > Tobins Q	0.0004927057	0.33108294	Z Sobel > 1.96 (Significant indirect effect)
Environmental Costs > ROA > TobinsQ	0.0088973631	0.39589841	Z Sobel > 1.96 (Significant indirect effect)

Source: Processed data source 2021

The Z Sobel result is calculated by finding the Sobel statistical test value by calculating the critical ratio between the correlation coefficients of the indirect relationship between X and Y variables with a standard error, so the Z score results can be found. Based on table 5.10 above, it shows that the influence of environmental performance on firm value through profitability obtains a Z sobel value of $0.33108294 < 1.96$, so it can be concluded that environmental performance has no effect on firm value through profitability. Meanwhile, on the effect of disclosure of environmental costs on firm value through profitability, it can be concluded that there is no effect of disclosure of environmental costs on firm value through profitability.

Discussion

The Effect of Environmental Performance on Profitability

Variable of implementing green accounting through environmental performance has a probability result of $0.5933 > 0.005$, which means that the environmental performance variable has no significant effect on profitability. This happens because the knowledge of the people in Indonesia regarding the PROPER rating which is a government award for the company's efforts to protect the environment is still very minimal. The average company in the sample has a blue PROPER rating, meaning that on average the company has carried out environmental management as required by the Environmental Regulations but the average ROA shows a low value, meaning that the PROPER rating in Indonesia has not been able to encourage people to buy products that have been approved. take good care of the environment. This is not in accordance with the economic level of the majority of people in developing countries such as Indonesia. People in general still pay attention to products with low prices, while products produced by companies that protect the environment tend to have higher prices. The results of this study are in line with research (Faizah, 2020) and (Wiranty & Kartikasari Dwi, 2018) which revealed that the environmental performance assessment through PROPER had no effect on financial performance.

The Effect of Disclosure of Environmental Costs on Profitability

Variable of implementing green accounting through the disclosure of environmental costs has a probability result of $0.2508 > 0.005$, which means that the variable environmental cost disclosure has no effect on profitability. This happens because the companies studied on average have paid attention to and disclosed environmental costs in their annual reports, but the trend of profitability tends to decrease. This means that the disclosure of environmental costs has not been able to encourage increased sales and profits as expected by the company. The condition of the Covid-19 pandemic has made the average sales and profitability in the company sector studied tend to decline. People in Indonesia in general still pay more attention to low prices when deciding to buy a product, do not care about the importance of implementing green accounting in a company, so it is not compatible with the economic level of people living in developing countries like Indonesia. This is in line with research (Faizah, 2020) which states that the disclosure of environmental costs has no effect on profitability because companies are more likely to be profit-oriented.

The Effect of Profitability on Firm Value

The results of the research on the profitability variable (ROA) have a probability value of $0.6736 > 0.05$, which means that the profitability variable has no effect on the company value projected by Tobins Q. This happens because when investors will take an investment decision, there are many things. that need to be considered not only financial factors (profitability) but also non-financial factors

including environmental performance and disclosure of environmental costs. Investors today are paying attention to how companies can realize a sustainable green industry.

The Effect of Environmental Performance on Company Value

Variable of implementing green accounting through environmental performance has a probability result of $0.0143 < 0.05$, meaning that the environmental performance variable has a significant effect on firm value and has a positive relationship direction. This is in line with research (Khairiyani et al, 2019) which states that companies participating in PROPER are able to pay attention to environmental management properly, so that the existence of these companies will be responded positively by the public/investors. The existence of a positive response will improve the image or image of the company.

Effect of Disclosure of Environmental Costs on Firm Value

Variable of implementing green accounting through the disclosure of environmental costs has a probability result of $0.0017 < 0.05$, meaning that the variable of environmental cost disclosure has a significant influence on firm value and has a negative relationship direction. Disclosure of environmental information will increase the transparency of the amount of environmental costs incurred by the company, this can make the reports produced reliable by investors. However, it does not mean that the large environmental costs represent that the company is already good at managing its environment, investors consider environmental management accounting or environmental cost efficiency carried out by the company to have an important role so that the costs incurred by the company are responsible for the responsibility of the company. The more a company is able to streamline its environmental costs, the company is considered capable of managing the company well. This will certainly increase investor interest and have an impact on increasing share prices and company value.

The Effect of Environmental Performance on Company Value Through Profitability

The results of the Sobel test show that the profitability variable (ROA) has a regression path coefficient value of the indirect relationship between environmental performance and firm value, which is $0.0004927057 < 0.772245$, which means it is lower than the direct relationship. This illustrates the mediating ability of the profitability variable on the effect of environmental performance on firm value that has not been proven in this study.

The results of data analysis in this study indicate that environmental performance does not directly affect profitability but has a direct effect on firm value. This happens because public knowledge about the PROPER rating in Indonesia is still very lacking, people's decisions to buy products are still strongly influenced by the price and quality of the products produced, it has not yet reached the stage of how important environmentally friendly products are and how important it is for companies to pay attention to the environment in running their business so that not have a negative impact on the environment in the future. This is indicated by the trend of the company's profitability which tends to decline, even though on average the company already has a good PROPER rating. The results of this study are not in line with Erlangga et al. (2021) research which found that when companies disclose corporate social responsibility, profitability as an intermediary variable can increase firm value.

The Effect of Disclosure of Environmental Costs on Firm Value Through Profitability

Results Sobel test shows the profitability variable (ROA) has a regression path coefficient value of the indirect relationship between disclosure of environmental costs and firm value is $0.0088973631 < 1.037988$ which means it is lower than the direct relationship. This illustrates the mediating ability of the profitability variable on the effect of disclosing environmental costs on firm value that has not been proven in this study.

Results Data analysis in this study shows that the disclosure of environmental costs has no effect on profitability but has a direct effect on firm value. This happens because the companies studied on average have paid attention to and disclosed environmental costs in their annual reports, but the trend of profitability tends to decrease. This means that the disclosure of environmental costs has not been able to fully encourage public awareness in Indonesia to buy environmentally friendly products so that

the expectation of increasing profits has not been achieved properly. Companies that pay attention to the environment tend to have higher product prices, so they are not compatible with the economic level of people living in developing countries like Indonesia. The results of this study are not in line with Camilia (2016) research which found that the environmental costs included in the company's annual report are able to improve the company's reputation which can affect competitive advantage so that it can be a company strategy in increasing company sales and profits.

CONCLUSION

Based on the discussion that has been described previously, it can be concluded that environmental performance and disclosure of environmental costs have no effect on profitability, this is because people in Indonesia generally decide to buy products that still pay attention to low prices without paying attention to whether the company producing the purchased product has paid attention to it. environment. Profitability has no effect on firm value. Environmental performance has a significant positive effect on firm value, disclosure of environmental costs has a significant negative effect on firm value. Environmental performance and disclosure of environmental costs do not affect the value of the company through profitability, meaning that investors when making an investment decision tend to consider whether the company in carrying out its operations has paid attention to the environment, not just looking at the profits it has.

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