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The Effect Of Green Accounting On Profitability In Mining and Agriculture Sector Companies Listed On The Indonesian Stock Exchange In 2019-2021

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Abstract

This research aims to test and analyze the influence of Green Accounting on profitability in mining and agricultural companies listed on the Indonesia Stock Exchange. The sample in this study used a purposive sampling method, data was obtained from 16 mining and agricultural companies in 2019-2021. This research method uses a panel data approach, namely the Random Effect Model. Data processing in this research uses Eviews 12. Based on the results of data processing, the data shows a significant negative influence between the Green Accounting variable (X) on Profitability (Y). Causes of these negative impacts may involve additional investments in environmentally friendly practices, compliance with strict environmental regulations, and additional operational costs associated with environmental conservation efforts.

Keywords
Green Accounting, Profitability

1. Introduction

Every business person will always make adjustments in developing their business to make a profit. The current business world has made changes to people's views on the value of companies that only want to increase profitability without caring about the beauty and sustainability of the surrounding environment. over time and following the development of the current business world, of course, companies are no longer only to pursue profitability, but companies must also be responsible for the state and preservation of the surrounding environment by running an environmentally friendly and sustainable business.

If a company is able to apply *green accounting* principles to its company, of course this will help the company in the future not to incur considerable costs in dealing with all obstacles related to the surrounding environment, of course this will affect the company's profitability level. According to Suaidah Yuniep Mujati & Prayitno Langgeng (2018), profitability is a science that analyzes a company's ability to generateprofits and can be assessed from Return On Asset (ROA).

From year to year, the earth's temperature has increased continuously, which is a result of human activity. Climate change does not only affect temperature changes, but it has brought extreme events such as floods, rising seas, droughts that can threaten the existence of living things. This can certainly bring changes from a social and economic point of view. An example is another case of environmental pollution, namely the case of the Steam Power Plant (PLTU). Launching news from the CNN Indonesia page (2020) that there is a report submitted by Isabella as an analysis from CREA (*Center For Research On Energy And Clean Air*), conveying that with the existence of this PLTU, funds of Rp. 5.1 trillion per year are needed to overcome the impact of pollution that results in air pollution from coal-fired power plant activities. This figure arises through the calculation of Jabodetabek economic costs, which are calculated based on health care costs for diseases that arise due to air pollution. The diseases that can arise are heart disease, stroke, respiratory disease, lung cancer(www.cnnindonesia.com)

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From the many cases of environmental pollution that have occurred and the increasing number of parties who have felt the negative impact due to environmental damage, various parties have responded well in order to be more concerned about the environment. Responses and commitments made by various parties in realizing it are very diverse, ranging from the formation of a community of environmentalists, the Government that issues all regulations related to environmental sustainability and companies that run their businesses to be able to think about how they should carry out economic activities that take place without polluting the environment. Therefore, there is accounting in the environmental field which aims to organize and manage all activities and solutions to solve company and environmental problems and the surrounding community.

The government through the Ministry of Environment (KLHl) also provides support to businesses by holding PROPER (Company Performance Rating Program) activities in environmental management. With PROPER, the government will give awards to companies that are able to carry out environmental performance optimally, where there are five levels in PROPER from the lowest to the highest, namely black, red, blue, green, and gold.

In addition to financial reports that can attract investors in order to increase the value of a company, but the company must also fulfill aspects consisting of (3P) namely *profit, people and planet.* The publication of the company's financial statements must be able to fulfill the 3P aspect and be able to provide an overview of the value of a company to *stakeholders* and *shareholders.* The implementation of good *green accounting* will be a positive value for a company in the eyes of *stakeholders*, because the company is considered to have paid attention to the impact of the surrounding environment and the company is considered not only focused on seeking profit. Of course, this will increase investor interest in investing in the company. There is research conducted to be able to prove that *green accounting* is able to increase the value of the company to achieve profitability.

According to research conducted by Ningtyas & Triyanto (2019) which states that *green accounting* has no positive effect on company profitability and is in line with research conducted by Kholmil & Nafiza (2022) that *green accounting* has no significant effect on company profitability. According to Pasaribu Ezra (2022) states that *green accounting* has a significant positive effect on the profitability of companies that have endeavored and carried out environmental management in accordance with existing laws, it can increase the level of profitability and corporate image in the eyes of *stakeholders*.

1.1 Objectives
The purpose of this study was to determine the effect of *Green Accounting* on the level of profitability of mining and agricultural companies listed on the Indonesia Stock Exchange in 2019-2021.

2. Literature Review
2.1. Legitimacy Theory
Legitimacy theory is a theory that discusses strategic factors in a company in order to provide development in the company sector in the future (Sutomo, 2017). This is in line with Grey's research (2018) which states that this legitimacy theory is a strategic factor with the aim of developing the corporate sector in the future. From this opinion, it can be concluded that this legitimacy theory is a form of managing a company today and in the future by maintaining structure and strategy. This legitimacy can also be used to make corrections or company plans in order to survive and the company becomes more developed. Companies that carry out legitimacy are a form of establishing relationships with*shareholders*(*shareholders*) and also parties who have an interest (*stakeholders*). The company must provide good performance to be able to develop the company and generate *profits* because it is an assessment for *shareholders* and *stakeholders* to invest in the company.

2.2. Stakeholder Theory
Stakeholder theory is a theory that provides an explanation that the sustainability of a company cannot be separated from the role of stakeholders (Dewi & Edward Narayana, 2020). Stakeholder theory is a collection of policies, as for things related to stakeholders are values, fulfillment of legal provisions, respect for society and the environment, and a commitment to the business world in order to contribute to sustainable development (Wati, 2019). Companies no longer only care about their own interests, but companies can also provide benefits to stakeholders. There are strategies that can be done to maintain relationships with *stakeholders* and *shareholders of* the company, namely by disclosing sustainability reports that provide information about economic, social and environmental performance to all company stakeholders. With this disclosure, the company is expected to be able to fulfill all the information needs needed and can manage *stakeholders* to get support from *stakeholders* who have an influence on the survival of the company.

2.3. Profitability

According to Sutomo (2017), profitability is an ability of the company to be able to generate profits in managing assets, liabilities, and equity obtained through revenue and financing carried out by the company in a period. According to Fahmi Irham (2018) profitability is an effective tool to be able to measure the extent to which the level of management effectiveness in generating profits in large or small levels that can be obtained due to a relationship with sales or investment. Based on this opinion, it can be concluded that profitability is a financial tool or indicator to be able to measure the extent of the level obtained by the company to be able to generate profits, if there is a high ratio level in the company then the company is considered good at running the company but if the ratio level is low then the company has not succeeded in achieving the predetermined target. According to Kasmir (2021: 199), there are objectives and benefits in using profitability ratios for internal and external parties of the company, namely to measure the profit that has been obtained in a certain period, assess the profit position for the previous year and the current period, assess profit development, the level of net profit calculated after tax with own capital, and measure all activities of company funds used such as own capital and loan capital. Based on the objectives and benefits in achieving profitability, there are several types of profitability ratios that can be used, namely :

1. Profit Margin On Sales*, according to the opinion of Kasmir (2021: 201) in the use of profit margin on sales or can also be referred to as the profit margin ratio is a ratio used to measure the level of profit margin on sales. Several steps that can be used in obtaining the level of profit margin, namely :
    a. Gross Profit Margin, which shows a relatively low amount of profit for the company by subtracting net sales from cost of goods sold. This ratio can be used in the application of Cost of Goods Sold.

$$\text{Gross Profit Margin} = \frac{\text{Sales - COGS}}{\text{Sales}}$$

    b. Net Profit Margin, which shows the size of the total profit by providing a comparison between earnings after interest and taxes compared to sales, this ratio shows net income on company sales. A good Net Profit Margin is more than 3.92%.

$$\text{Net Profit Margin} = \frac{\textit{Earning After Interest and Tax (EAIT)}}{\text{Sales}}$$

2. Return On Asset Ratio, is a profitability ratio that is used as a tool to measure the percentage level of the amount of profit obtained from the company related to the resources or total assets, it will be known the level of efficiency of the company to be able to manage assets in order to generate profits (profit). The good ROA value is more than 5.98%.

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}} = 100\%$$

3. Return On Equity, ROE is a ratio consisting of own capital where this is a comparison between net profit after tax and total equity, as well as a measurement of the income available to interested parties, either ordinary shareholders or on capital invested in the company. The good ROE value is more than 8.32%.

$$\text{ROE} = \frac{\text{Earning After Intretest and Tax}}{\text{Total Equity}}$$

4. Earning Per Share Of Common Stock, is a ratio to measure the success of management in achieving profits. This ratio also shows the level of ability per share in generating profits (*profit)* and illustrates the number of dollars earned for ordinary shares.

$$\text{EPS} = \frac{\text{Earnings on Common Stock or Preferred Stock}}{\text{Outstanding Common or Preferred Stock}}$$

Based on the research objectives that have been set and the data that has been owned, the main indicator used to represent the profitability ratio is *Return On Asset* (ROA), this ratio is able to reflect the percentage of net profit earned by the company through the total assets available (Kholmi & Nafiza, 2022).

2.4. Green Accounting

Green accounting is a form of corporate responsibility for the impacts arising from the company's operational activities (Saint et. al, 2019). Green Accounting is a method of assessing the costs and benefits of all activities related to the environment which has the aim of reducing the environmental impact of the production process. With this *green accounting* implementation program, it is hoped that an environment can be maintained in beauty and sustainability, because with this application the company will comply with all policies issued by the government around the company in its business processes.

According to Saputra Komang et al., (2019: 20), currently many companies in industry and services in the world have implemented the concept of green accounting. The purpose of developing green accounting is as a management tool in the environmental field and as a communication tool with the community. According to Saputra Komang et al., (2019: 20) in the application of green accounting, of course, it must apply several principles, namely equitable distribution of welfare, equity and economic justice, intergenerational equity, internalization of externalities, and maintaining biodiversity.

According to Sutomo (2017), there are three characteristics of green accounting that are very useful in assessment for decision making, namely :

  a. Accountability, is accounting information that discusses an entity's information, which relates to economic, social, environmental responsibility, costs, and benefits of existing impacts.
  b. Integrated and Comprehensive, is accounting resulting from the integration of financial accounting information with social accounting information.
  c. Transparency, is an accounting that must be presented in an accountable and transparent manner so that there is no misunderstanding when receiving information with related parties for the economic or non-economic decision-making process.

Klasifikasi dari biaya lingkungan dibagi menjadi empat kategori (Hansen & Mowen,2017: 405) yaitu Environmental Prevention Cost, Environmental Detection Cost, Environmental Internal Failure Cost, dan Environmental External Failure Cost.

Indicators in green accounting according to Kasmir (2021), measurements or indicators of good green accounting will have a good impact on environmental performance. According to Lako (2018l), the environmental performance of a company can be measured by the PROPER program where it is a way carried out by the Ministry of Environment (KLH) with the aim of increasing the activities of the Company for environmental management programs.

3. Methods

In this reasearch, the research object was chosen in accordance with the problems to be studied, namely the effect of Green Accounting as an independent variable on Profitability as the dependent variable. The type of data used in this study is quantitative data and the data source used is secondary data in the form of annual financial reports and sustainability reports from mining and agriculture sector companies listed on the Indonesia Stock Exchange for the 2019-2021 period. The method used to analyze data and test hypotheses is to use descriptive statistics, classical assumption tests and hypothesis testing in this study using EViews software. The sample technique used in this study is purposive sampling technique. According to Sugiyono (2018: 85) purposive sampling is a method of taking research using criteria based on the object being studied. There are several criteria in sampling for research, namely mining and agriculture sub-sector companies listed on the Indonesia Stock Exchange in 2019-2021, mining and agriculture sub-sector companies that publish financial reports on the Indonesia Stock Exchange in 2019-2021, and mining and agriculture sub-sector companies that measure green accounting using the PROPER method in 2019-2021.

4. Result

The researcher will describe the results of the research and the results of the hypotheses tested in accordance with the research method previously described which consists of numerical results, graphical results, proposed improvements, and validation.

4.1. Numerical Results

Descriptive Statistical Analysis aims to analyze data by providing an overview or descriptive of data that can be seen from the number of average, maximum, minimum, standard deviation values (Ghozali, 2019: 19). The results of the calculation of descriptive statistical analysis in this study can be seen in the following table :

Table 1. Descriptive Statistics

	Green Accounting (Proper)	ROA
Mean	1.979167	0.020833
Median	2.000000	0.020000
Maximum	3.000000	0.390000
Minimum	1.000000	-0.580000
Std. Dev.	0.601048	0.128259
Skewness	0.006103	-1.643857
Kurtosis	2.823954	12.39483
Jarque-Bera	0.062282	198.1437
Probability	0.969339	0.000000
Sum	95.00000	1.000000
Sum Sq. Dev.	16.97917	0.773167
Observations	48	48

Source: Data processed using *Eviews 12.0*, 2024

Based on the data in table 1, the following explanation follows :

a.   Green Accounting (Proper)
The mean value of 1.979167 with a high average indicates that most of the data has a value close to 2; The median value is 2.000000 which is relatively similar to the mean indicating a fairly symmetrical distribution of the data; The maximum value is 3.000000 which indicates that there are observations with a very high level of Green Accounting; The minimum value is 1. The minimum value is 1.000000 which indicates that there is significant variation in the data, including observations with lower levels of Green Accounting; The standard deviation of 0.601048 measures the extent to which the data is dispersed from its mean value, where the relatively low value indicates a fairly high level of consistency around the mean value.

b.   Return on Assets (ROA)
The mean value is 0.020833 which is close to zero indicating that most of the data has a relatively low ROA; The median value is 0.020000 which is relatively the same as the mean indicating a fairly symmetrical data distribution; The maximum value is 0.390000 indicating that there are observations with very high ROA levels; The minimum value is -0. 580000 which indicates that there are observations with negative ROA levels indicating poor financial performance; Standard deviation of 0.128259 measures the extent to which the data is dispersed from its mean value, where the relatively low value indicates a fairly high level of consistency around the mean value.

4.2. Graphical Results

4.2.1. Classic Assumption Test

Before the data can be analyzed further, the data must first meet the classical assumption test. The classic assumption tests required in this study include normality, heteroscedasticity, and autocorrelation tests.

4.2.1.1. Normality Test

This test is carried out to identify whether the regression model is normally distributed, provided that if the probability value> 0.05 then the variable distribution is considered normal and the hypothesis is accepted, but if the probability value <0.05 then the variable distribution is considered abnormal and the hypothesis is rejected.
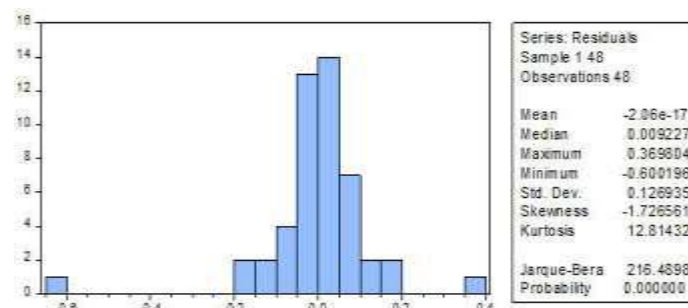
Figure 1. Normality Test Before Correction

Source: Data processed using Eviews 12.0, 2024

Based on Figure 1, it is known that the probability value is 0.0000 <0.05 so there is a problem in the normality test. To improve normality, it is necessary to delete data (Outliers) which are considered to have extreme data so that the results can pass normality.
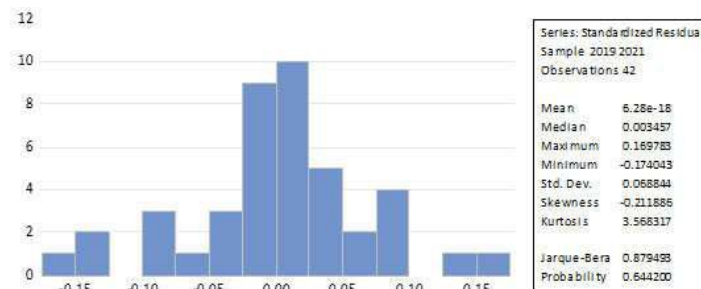

Figure 2. Normality Test Correction

Source: Data processed using Eviews 12.0, 2024

Based on Figure.2 after outliers, it is known that the probability value is 0.6442> 0.05 so that there are no symptoms of normality in this study. From the data above, it is known that there are 6 numbers of extreme sample data issued consisting of 2 companies, namely Mitrabara Adiperdana Tbk (MBAP) and Bakrie Sumatera Plantations Tb (UNSP), so that the sample data used is 42 samples from 48 previous data samples. The data reduction is due to outlier data issued in the study so that further research will use 42 sample data.

4.2.1.2. Heteroscedasticity Test

The heteroscedasticity test is a test to determine whether the residual variation changes from one observation to the next. Based on the results of data processing, the heteroscedasticity test obtained is as follows:

Tabel 2. Heteroscedasticity Test

Heteroskedasticity Test: Glejser
Null hypothesis: Homoskedasticity

F-statistic	1.025453	Prob. F(1,40)	0.3173
Obs*R-squared	1.049812	Prob. Chi-Square(1)	0.3056
Scaled explained SS	1.250532	Prob. Chi-Square(1)	0.2635

Source: Data processed using Eviews 12.0, 2024

Based on table 2, it is known that the Prob. F value of 0.3173> 0.05, so there are no symptoms or problems in the Heteroscedasticity test.

4.2.1.3. Autocorrelation

The autocorrelation test is conducted to detect the presence of residual dependence in a serial regression model. Autocorrelation occurs when the residual value of one observation is correlated with the residual value of another observation, which often occurs in time series data. To test for autocorrelation, the Durbin-Watson test is often used,

which measures the first level of autocorrelation in the residuals of a regression model.Based on the results of data processing, the autocorrelation test obtained is as follows :

Table 3. Autocorrelation Test

R-squared	0.073679	Mean dependent var	0.022762
Adjusted R-squared	0.050521	S.D. dependent var	0.071530
S.E. of regression	0.069700	Akaike info criterion	-2.442796
Sum squared resid	0.194321	Schwarz criterion	-2.360050
Log likelihood	53.29872	Hannan-Quinn criter.	-2.412467
F-statistic	3.181580	Durbin-Watson stat	0.460460
Prob(F-statistic)	0.082061		

Source: Data processed using Eviews 12.0, 2024

Based on table 3, it is known that the Durbin-Watson value is $0.460460 > 0.05$ so that there are no symptoms or problems in the autocorrelation test.

4.2.2. Panel Data Regression Estimation Model Testing

To assess the estimation of the panel data regression model used in this study, the Fixed Effect, Random Effect, and Pooled Ordinary Least test results will be used. The best model among the three models will be evaluated later by comparing their values. The panel data regression model evaluation method is as follows :

1. Chow Test
   Chow test or chow test is a test to determine the most appropriate Common Effect or Fixed Effect model used in estimating panel data. The hypothesis in the Chow test is H0: Common Effect Model or pooled OLS and Ha: Fixed Effect Model.

Table 4. Chow Test

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

Effects Test	Statistic	d.f.	Prob.
Cross-section F	9.514068	(13,27)	0.0000
Cross-section Chi-square	72.212308	13	0.0000

Source: Data processed using Eviews 12.0, 2024

Based on table 4 above, the probability value is 0.0000. This shows that the probability value is smaller than the significance level (0.05), so H0 for this model is rejected and Ha is accepted, so the better estimation used is the Fixed Effect Model (FEM) method, then proceed to the Hausman test.

2. Hausman Test
   The Hausman test is a statistical test to choose whether the fixed effect or random effect model is most appropriate. If the Hausman statistical value is smaller than the critical value (0.05) then Ha is accepted (the right model is the fixed effect model) and vice versa. The hypothesis in the Hausman test is H0: Random Effect Model and Ha: Fixed Effect Model.

Table 5. Hausman Test

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

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
			0.522
Cross-section random	0.408493	1	7

Source: Data processed using Eviews 12.0, 2024

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Based on table 5 above, the probability of 0.5227 is obtained which shows that the probability value is greater than the significance level (0.05) so it can be concluded that H0 for this model is accepted and Ha is rejected. The appropriate estimation model used is the Random Effect Model (REM). Because there are differences in the models used from the results of the Chow and Hausmant tests, it is necessary to conduct a Lagrange Multiplier Tests.

3. Lagrange Multiplier Test

The lagrange test is used to determine the model to be used in panel data regression analysis. The hypothesis proposed is as follows H0: Common Effect and Ha: Random Effect.

Table 6. Lagrange Multiplier Test

Lagrange Multiplier Tests for Random Effects
Null hypotheses: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided
        (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	21.73481 (0.0000)	0.311374 (0.5768)	22.04618 (0.0000)
Honda	4.662060 (0.0000)	-0.558009 (0.7116)	2.902002 (0.0019)
King-Wu	4.662060 (0.0000)	-0.558009 (0.7116)	1.182865 (0.1184)
Standardized Honda	5.002176 (0.0000)	-0.142080 (0.5565)	0.197499 (0.4217)
Standardized King-Wu	5.002176 (0.0000)	-0.142080 (0.5565)	-0.909478 (0.8185)
Gourieroux, et al.	--	--	21.73481 (0.0000)

Source: Data processed using Eviews 12.0, 2024

Based on the output results in table 6, it is known that the Breusch-Pagan probability value is 0.0000 <0.05. Then H0 is accepted and Ha is rejected, so the right model for further analysis is the Random Effect Model (REM)..

4.2.3. Panel Data Regression Models

This analysis is used to see the effect of independent variables on the dependent variable in the form of panel data consisting of a combination of time series and cross section data using panel regression estimation with the Random Effect Model (REM) approach.

Tabel 7. Test of REM Model

Dependent Variable: Y
Method: Panel EGLS (Cross-section random effects)
Date: 07/10/24   Time: 01:00
Sample: 2019 2021
Periods included: 3
Cross-sections included: 14
Total panel (balanced) observations: 42
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.103511	0.028439	3.639702	0.0008
X	-0.040861	0.011305	-3.614488	0.0008

Effects Specification			S.D.	Rho
Cross-section random			0.062498	0.7518
Idiosyncratic random			0.035911	0.2482

Weighted Statistics				
R-squared	0.248821	Mean dependent var		0.007167
Adjusted R-squared	0.230042	S.D. dependent var		0.040639
S.E. of regression	0.035659	Sum squared resid		0.050863
F-statistic	13.24966	Durbin-Watson stat		1.748992
Prob(F-statistic)	0.000773			

Unweighted Statistics				
R-squared	0.064437	Mean dependent var		0.022762
Sum squared resid	0.196260	Durbin-Watson stat		0.453274

Source: Data processed using Eviews 12.0, 2024

4.3. Proposed Improvements

For further research, it is expected to add other independent variables that can affect firm value in order to get better results and expand the research sample with other sectors. Researchers also suggest that future researchers add a period of years, because the longer the time period given, the more optimal results will be obtained.

4.4 Validation

Hypothesis testing has the aim of being able to test whether or not there is an influence of the independent variable on the dependent variable. In hypothesis testing, usually it can be done simultaneously, as a whole or partially or it can also be done one by one with the f test hypothesis and t test.

4.4.1. Simultaneous Test (f-test)

The results of Eviews data processing in the F test are to see whether or not the independent variables jointly influence the dependent variable and to test whether the model used is fixed or not. The results of data processing in table 7 above show a significant value of 0.0008 (Sig 0.0008 <0.05). This means that it shows that the regression equation obtained is reliable or the model used is fixed. then this means that variable X is able to explain the dependent variable (Y) together or there is a simultaneous influence of the independent variables on the dependent variable.

4.4.2. Partial Hypothesis Testing (t-test)

Decision making on the rejection or acceptance of the hypothesis with the amount of data 42 and with a significance level of 5% with the formula t table = t $(\alpha/2; n-k-1)$ = t $(0.05/2; 42 -1 -1)$ = $(0.025; 40)$ so that the t-table value is selected on data 40 of 2.02108 based on the following criteria:

- If t-count ≤, then H0 is accepted and Ha is rejected (there is no effect).
- If t-count ≥, then H0 is rejected and Ha is accepted (there is an influence).

Based on the hypothesis in table 7 above, there is a significant negative effect between the Green Accounting (X) variable on Profitability (Y), because the t-count> t-table value (-3.61448> 2.02108) and a significance value of 0.0008 <0.05. So that there is an influence between variable X on Y, or in other words, H0 is rejected and Ha is accepted.

5. Discussion

Based on the results of data processing, it is known that there is a significant negative effect between the Green Accounting (X) variable on Profitability (Y), because the t-count> t-table value (-3.61448> 2.02108) and a significance value of 0.0008 <0.05. So that there is an influence between variable X on Y, or in other words H0 is rejected andHa is accepted from these results it can be concluded that Green Accounting has a significant negative effect on the level of company profitability, which means that the application of Green Accounting cannot help companies to increase profits in companies seen from company performance (ROA). This is due to the large expenditure of environmental disclosure costs where it is caused by environmental damage that occurs due to the company's own operational activities. the effect of implementing green accounting can also increase company profitability through efficient use of natural resources and reduced pollution costs (Shalihah et al., 2023). In addition, it can also help companies to improve these performance ratings through the PROPER program. Where in this study there are 16 companies that are used as samples with an average PROPER rating obtained, namely green and gold ratings. This shows that the company has tried to manage the environment well. The application of Green Accounting is expected to increase the profitability (ROA) of the company through the efficient use of natural resources, reducing pollution costs, and improving the company's image. The implementation of Green Accounting brings several potential benefits to the company, and one of them is an increase in profitability through an increase in Return on Assets (ROA). According to (Afni & Achyani, 2023) there are several ways that Green Accounting can contribute to ROA including: efficient use of natural resources, reduction of pollution costs, and compliance with environmental regulations. In the early stages of Green Accounting implementation, companies face a decrease in productivity as employees adapt to the new system. Training and procedural changes can disrupt work routines, cause a decrease in efficiency, and potentially reduce profitability (Wulandari et al., 2023). Although Green Accounting has a negative effect on Profitability (ROA) in this study, according to (Wati et al., 2019) Green Accounting has many benefits, including improving the company's image, reducing regulatory risk, and reducing operational costs.

The results of this research are in line with the results of research (Romadloni, 2022) and (Harianja & Riyadi, 2023) which found that there is a significant influence between Green Accounting on profitability (ROA). Then the results of this research are not in line with the results of research (Efria et al., 2023) and (Asti, 2021) which found that there is no influence between Green Accounting on Profitability.

6. Conclusion

Based on the analysis of mining and agriculture sector companies listed on the Indonesia Stock Exchange during the 2019-2021 period and partial testing (t test), it can be concluded that there is a significant negative effect between Green Accounting on Profitability (Return on Assets / ROA) with a value of :

- t count> t table, namely -3.61448> 2.02108 or probability sig 0.0008 <0.05 so that Ha is accepted and H0 is rejected .
- the coefficient on the green accounting variable is 0.040861.

The cause of this negative effect may involve additional investment in environmentally friendly practices, compliance with strict environmental regulations, and additional operating costs associated with environmental conservation efforts.

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