



# The Effect of Sustainability Accounting and Environmental Performance on Financial Performance (Study of Manufacturing Companies Listed on IDX in 2018-2021)

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**ABSTRACT:** As producers of waste that has great potential to damage the environment, companies must show their responsibility by implementing sustainability accounting through the disclosure of information on economic, environmental, and social dimensions and improving their environmental performance. Both aspects can affect stakeholders' perceptions of the company which in turn will affect the company's financial performance. This study aims to determine the effect of sustainability accounting implementation and environmental performance on financial performance. This research uses quantitative methods. Using a purposive sampling technique, the research sample is manufacturing companies listed on the Indonesia Stock Exchange in 2018-2021 (4 years). The data used is secondary data obtained from financial reports and annual reports published by the Indonesia Stock Exchange ([www.idx.com](http://www.idx.com)) and sustainability reports published through the company's website. Data analysis and hypothesis testing using multiple linear regression analysis. The results showed that partially, the application of sustainability accounting in the economic dimension has no effect on financial performance, the application of sustainability accounting in the environmental dimension has a negative and significant effect on financial performance, the application of sustainability accounting in the social dimension has a positive and significant effect on financial performance, and environmental performance has a negative and significant effect on financial performance. Simultaneously, the four variables have a positive and significant effect on financial performance.

**KEYWORDS:** Environmental Performance, Financial Performance, Sustainability Accounting.

## INTRODUCTION

One of the businesses in Indonesia that continues to grow regularly from time to time is the manufacturing industry. Currently, the industry continues to experience an increase which can be seen through the Purchasing Managers Index (PMI) figures. PMI illustrates how optimistic business sector players are about the economy with a reference value of 50. If the PMI value is more than 50, it is said that the sector is experiencing growth. As of September 2022, the PMI of manufacturing companies in Indonesia reached 53.7 points. This achievement is an increase in manufacturing industry activity as a result of the ongoing economic recovery due to the impact of the supply chain disruption crisis and the Covid-19 pandemic (Moegiarsa, 2022).

Business growth must of course be balanced with an increase in its performance, which can be seen in terms of its financial performance. There are several indicators to assess the financial performance of a company, one of which is the profitability ratio. Profitability is measured using ratios and aims to evaluate the company's financial performance. One measure of profitability is Return On Assets (ROA). ROA shows how much profit a company can generate by using its assets. The higher the ROA, the better the company is at generating profits and the better the use of its assets. Therefore, the higher the ROA, the better the performance of a company (Aprianingsih, 2016).

Regarding manufacturing companies, financial performance as measured by ROA still shows fluctuations over the past 4 years as shown in Figure 1.

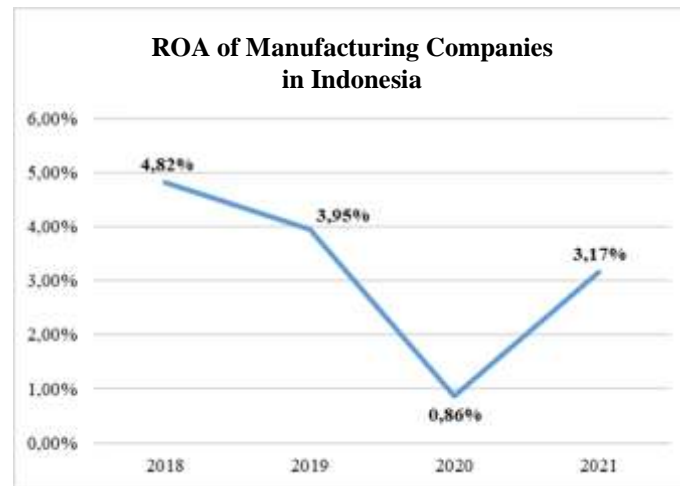


Figure 1. ROA of Manufacturing Companies in Indonesia 2018-2021

From Figure 1 above, it can be seen that ROA has increased once, but has decreased twice. The second decline was most likely triggered by the Covid-19 pandemic, but the first decline that occurred before the Covid-19 pandemic and in normal economic situations can be caused by various factors both internal and external. Therefore, it does not rule out the possibility that the decline in profitability occurred due to companies that do not care about the environment.

Currently, environmental issues are getting more attention and are considered an important issue. Indirectly, we are starting to feel the impact of the many cases of environmental damage that occur. On January 29, 2020, Perkumpulan Hukum Lingkungan Hidup dan Pertambangan Nasional (PHLHPN) made a complaint report on waste pollution in the Tapak Kuda River, North Sumatra by PT Japfa Comfeed Indonesia Tbk. Farm I because it allegedly polluted river water so that it could not be used by the surrounding community and made farms irrigated by the river fail to harvest and were completely damaged due to B3 waste that was discharged directly into the river without a filter pool first (Handru & Tina, 2020). Furthermore, on June 15, 2022, members of the Aliansi Zero Waste Indonesia (AZWI) urged PT Unilever Indonesia Tbk. to stop the production and consumption of sachets because consistently, the company is in the top three positions as a polluting company in several major cities in brand audits. In addition, the CreaSolv chemical recycling technology promoted by the company has also been unsuccessful. The sachet packaging cannot be recycled safely and sustainably, Refuse-Derived Fuel (RFD) also pollutes air quality and waterways, and can worsen climate change and environmental conditions (Aliansi Zero Waste Indonesia, 2022).

The two cases above prove that environmental management as a company's contribution is also an important topic of discussion, especially for companies that generate relatively more waste than other sectors. If the waste is not treated properly and adequately before being disposed of, it means that the company has polluted the environment (Meiyana & Aisyah, 2019). Environmental pollution indicates that the company's environmental performance is not good.

Environmental performance is a company's performance of its concern for the surrounding environment. Good environmental performance can provide external benefits such as attracting attention from investors which has a positive impact on financial performance (Hansen & Mowen, 2018). The comparison of the amount of waste treated compared to the amount of waste generated referred to as the Toxic Release Inventory (TRI) is one of the important environmental performance measures/indicators (Verma et al., 2001; Patten, 2002; Al-Tuwaijri et al., 2004; Burhany & Nurniah, 2012; Nelwan, 2016).

Various studies on the effect of environmental performance on financial performance have been conducted. Among them are Adhima (2012); Zainab & Burhany (2020); Prasetyo (2021); Ramadhani et al. (2022) who found that environmental performance has a positive effect on financial performance. In contrast to some of the above studies, the results of research by Meiyana & Aisyah (2019); Sahputra et al. (2020); Istiq et al. (2021) state that environmental performance has no significant effect on financial performance.



In today's era of information disclosure, companies should not only make financial reports that contain company financial information, but also social and environmental reports. Companies that are socially and environmentally committed usually report their sustainability in the form of a sustainability report or Corporate Social Responsibility (CSR) report. This information is considered a form of corporate responsibility to stakeholders and other parties (Manisa & Defung, 2017). This can also increase awareness that company performance is not only measured from the financial side, but also companies must grow sustainably by looking at their non-financial performance (Sergius & Murwaningsari, 2016).

The issue of sustainability is currently being discussed. Sustainability is a balance between people, planet, and profit, commonly known as the Triple Bottom Line (TBL) concept. Sustainability lies in the meeting between three aspects, namely people-social; planet-environment; and profit-economic (3P). Therefore, to achieve sustainability, companies must pay attention to the 3Ps (Manisa & Defung, 2017).

The issue of sustainability has also been accommodated by accounting science with the development of sustainability accounting which has the potential to be a very effective mechanism. It allows individual organizations and various stakeholders to better assess the economic, environmental, and social aspects of a company's operations in terms of assessing, evaluating, and considering an organization's dependence on economic, environmental, and social contexts. Sustainability accounting also has the potential to uncover matters previously overlooked by traditional accounting systems. Thus, the range of information for organizational decisions and evaluation of organizational success will increase (Laine et al., 2022).

The presence of sustainability accounting is inseparable from the concept of sustainable development, which makes the country's development not only the obligation of the government, but the contribution of society is also needed to achieve social welfare and natural sustainability. The application of sustainability accounting produces accounting information output in the form of reports related to economic, environmental, and social aspects commonly referred to as sustainability reports. Sustainability reports must be prepared based on sustainability reporting standards. Several reporting standards have been introduced in various countries, namely the Sustainability Accounting Standards Board (SASB) and the Global Reporting Initiatives (GRI) (Aziza & Sukoharsono, 2021).

Based on previous research, the effect of sustainability accounting implementation on financial performance still shows mixed results. The results of research by Soelistyoningrum (2011); Adhima (2012); Bukhori & Sopian (2017) state that sustainability accounting has a positive effect on financial performance. In contrast to some of the research above, the results of Chandra & Augustine (2019); Setyadi (2020); Istiq et al. (2021) found that sustainability accounting has no positive effect on financial performance, while Zahra (2020) found that sustainability accounting hurts financial performance.

The differences in the results of previous studies have encouraged the authors to re-examine the topic of sustainability accounting implementation and environmental performance which is very important and relevant today due to the lack of corporate environmental responsibility indicated by environmental pollution due to the disproportionate amount of waste treated to the amount of waste generated by the company and the phenomenon of the company's ROA which is still fluctuating in manufacturing companies in 2018-2021. This research refers to research conducted by Hutasoit & Sembiring (2020) and then developed with an emphasis on sustainability reporting as an output of sustainability accounting and a focus on TRI as a measure of environmental performance.

Based on the description above, the authors are interested in conducting research with the title "**The Effect of Sustainability Accounting Implementation and Environmental Performance on Financial Performance (Study of Manufacturing Companies Listed on the IDX in 2018-2021)**".

## LITERATUR REVIEW AND HYPOTHESIS DEVELOPMENT

### Legitimacy Theory

Legitimacy theory is one of the most frequently mentioned theories in accounting studies to develop the theory of social and environmental responsibility disclosure (Badjuri et al., 2021). Legitimacy theory asserts that companies continuously strive to operate by the framework and norms that exist in society or their environment, where they seek to ensure that their activities are accepted by others as "legitimate" (Deegan, 2004).



## Stakeholder Theory

In 1963, the Stanford Research Institute (SRI) put forward stakeholder theory for the first time which was further developed in more depth by Freeman in 1984. Stakeholder theory emphasizes organizational responsibility beyond simple economic or financial performance (Deegan et al., 2000). This theory claims that organizations will voluntarily choose to disclose information about environmental, social, and intellectual performance in addition to their mandatory requests, to meet the real or perceived expectations of stakeholders.

## Triple Bottom Line, Sustainable Development, Sustainability

The theory of Triple Bottom Line (TBL) concept was introduced by Elkington in 1988 which means people, planet, and profit (3P) which can become a pillar to measure the value of the company's success performance by looking from three dimensions, namely economic (profit), environmental (planet), and social (people).

The concept of TBL cannot be separated from the concept of sustainable development. In 1987, the World Commission for Environment and Development (WCED) defined sustainable development that launched the concept into the global political and business agenda. They defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987 in Laine et al., 2022:14). Laine et al., (2022:12) also explain that sustainability is about living within the limits of the Earth. Sustainability can be considered as a desired state, while sustainable development can be understood as the process of getting there.

## Sustainability Accounting

Laine et al., (2022:24) define sustainability accounting as a set of techniques, tools, and practices used in the measurement, planning, control, and accountability of organizations related to economic, environmental, and social issues. Thus, sustainability accounting can be interpreted as a tool to identify, evaluate, record, summarize, report, and disclose an object related to economic, environmental, and social aspects.

Therefore, companies that want to implement sustainability accounting must first define environmental and social factors and interpret the relationship between economic, environmental, and social concepts as the three dimensions of sustainability. Incorporating the concept of sustainable accounting into the reporting process is in the interest of business, so by preparing sustainability reports, companies can communicate data related to their financial structure to stakeholders and other parties outside the company (Çalıyurt, 2021).

In this study, sustainability accounting is focused on the reporting stage. The report is the output generated from an accounting process as a result of the previous stages. Thus, this application can be seen in the sustainability report produced by a company.

## Environmental Performance

Bennet and James (1999) in (Burhany & Nurniah, 2013) define environmental performance as the achievement of a company in managing the interaction between company activities, products or services, and the environment. Meanwhile, according to Ramadhani et al. (2022), environmental performance is defined as an assessment of the company's effectiveness in increasing the strength and maintenance of the environment both around and outside operations. Thus, it can be concluded that environmental performance is the company's performance on its concern for the environment both around and outside the company due to operational activities carried out.

Measurement of environmental performance in this study is carried out by comparing the amount of waste treated with the amount of waste generated commonly referred to as Toxic Release Inventory (TRI) because it can reduce environmental impacts, make a major contribution to sustainable development, and has great potential in increasing the participation of other companies in improving environmental performance. This is in line with research (Verma et al., 2001; Patten, 2002; Al-Tuwaijri et al., 2004; Burhany & Nurniah, 2012; Nelwan, 2016).

## Financial Performance

Financial performance is the level of success of a company by mobilizing its various efforts in generating profits for all aspects, where the level of success can be measured in terms of business prospects, business growth, and business potential using existing resources



(Iswandika et al., 2014). The good financial performance of a company complies with current regulations that have been implemented properly and correctly (Fahmi, 2018).

The measurement of financial performance in this study uses the Return on Assets (ROA) ratio. ROA is known as the earning power ratio which describes the ability of a company to generate profits based on available resources (Sirait, 2017). The formula for ROA is as follows.

$$\text{ROA} = (\text{Net Income} / \text{Total Assets}) \times 100\%$$

### **The Effect of Economic Dimension Sustainability Accounting on Financial Performance**

The financial performance of a company is generally associated with economic dimension sustainability accounting which is reported as a form of the company's contribution to the economic system. The sustainability of the economic dimension can take into account an entity to carry out further operational activities effectively in the long term and its contribution to the size of the economic system. The topics disclosed in the economic dimension include economic performance, market presence, indirect economic impacts, procurement practices, anti-corruption, anti-competitive behavior, and taxation (Global Sustainability Standards Board, 2016).

According to Christie & Ekadjaja (2020), economic dimension sustainability accounting has no significant effect on financial performance. This happens because many elements of the economic dimension are intangible so in the short term, it cannot improve the company's financial performance directly. In contrast to Christie & Ekadjaja, the results of research conducted by Hutasoit & Sembiring (2020); Bukhori & Sopian (2017) state that the application of economic dimension sustainability accounting has a significant effect on financial performance, so the following hypothesis can be formulated.

H<sub>1</sub> : The application of sustainability accounting in the economic dimension affects financial performance

### **The Effect of Environmental Dimension Sustainability Accounting on Financial Performance**

In addition to the economic dimension, the environmental dimension is also very important to show the existence and commitment of the company to overcoming environmental problems. Disclosure of the environmental dimension is also considered as a dialog between the company and stakeholders because environmental problems concern the interests of the wider community which can disrupt their quality of life. The era of globalization has encouraged products to be sold to be environmentally friendly, investors who invest in companies that can develop environmental strategies and programs, as well as NGOs and environmentalists who are increasingly critical of companies that do not care about the environment make companies encouraged to pay attention to the interests of these stakeholders.

According to Widati (2016), sustainability accounting in the environmental dimension does not have a significant effect on the company's financial performance because the disclosure affects the company's financial performance indirectly through various stages, starting from affecting the company's value, affecting the market, to affecting financial performance which certainly occurs in a long time. However, the results of research by Adhima (2012); Gunarsih & Ismawati (2018); Christie & Ekadjaja (2020); environmental dimension sustainability accounting has a significant effect on financial performance, so the following hypothesis can be formulated.

H<sub>2</sub> : The application of sustainability accounting in the environmental dimension affects financial performance

### **The Effect of Social Dimension Sustainability Accounting on Financial Performance**

The social dimension is no less important than the economic and environmental dimensions. In sustainability accounting, the social dimension relates to the organization's impact on the society in which it operates, and describes the risks from interactions with other social entities it manages. According to Sejati & Prastiwi (2015), disclosure of the social dimension can influence stakeholders' perceptions of how the company engages with the surrounding human resources. Companies need creative, competitive, effective, and reliable resources to manage the company's capital and assets to be able to get maximum profit or profit from the company's capital and assets. Therefore, it can be said that stakeholders such as employees, suppliers, investors, government, activist groups, and the community around the business are very important to consider because without the trust and credibility they provide, the company's business cannot run well.

Meanwhile, according to Gunarsih & Ismawati (2018), social dimension sustainability accounting does not affect financial performance. This can be caused because in carrying out social responsibility, several costs are required which of course have the



potential to reduce the company's profitability. The results of research conducted by Widati (2016); Christie & Ekadjaja (2020); Hutasoit & Sembiring (2020); show that social dimension sustainability accounting has a significant effect on financial performance. Based on the results of these studies, the following hypothesis can be formulated.

H<sub>3</sub> : The application of sustainability accounting in the social dimension affects financial performance

### **The Effect of Environmental Performance on Financial Performance**

In addition to the application of sustainability accounting, environmental performance is one way to improve financial performance. The company's financial performance is influenced by various factors, including consumers or customers who want environmentally friendly products, and their use and disposal do not damage the environment (Hansen & Mowen, 2018). This means that companies that can produce good environmental performance will get more attention from consumers so that they have the potential to increase sales, which of course has a positive impact on financial performance.

According to Sahputra et al. (2020), environmental performance does not affect company profitability projected through ROA. This is because the community and stakeholders expect companies to be able to carry out environmental management that is more than the applicable requirements. However, the results of research by Adhima (2012); Zainab & Burhany (2020); Prasetyo (2021); Ramadhani et al. (2022), that environmental performance has a significant effect on financial performance. Based on the results of these studies, the following hypothesis can be formulated.

H<sub>4</sub> : Environmental performance affects financial performance

### **The Effect of Sustainability Accounting and Environmental Performance on Financial Performance**

Based on previous hypotheses supported by Soelistyoningrum (2011); Adhima (2012); Widati (2016); Bukhori & Sopian (2017); Gunarsih & Ismawati (2018); Christie & Ekadjaja (2020); Hutasoit & Sembiring (2020); Zainab & Burhany (2020); Prasetyo (2021); Weerathna et al. (2021); Ramadhani et al. (2022), then the next hypothesis can be formulated which involves the effect of sustainability accounting and environmental performance simultaneously on financial performance as follows.

H<sub>5</sub> : The application of sustainability accounting and environmental performance simultaneously affects financial performance

## **METHODS**

The research method used in this study is a quantitative method with data in the form of numbers and the analysis uses statistical analysis to test the causal relationship between measured variables. The type of data used is documentary data with secondary data sources obtained from financial reports, annual reports, and sustainability reports published on the Indonesia Stock Exchange (IDX) website and also the company website.

The population of this study is manufacturing companies listed on the IDX in 2018-2021, totaling 170 companies. Research samples determined through purposive sampling techniques are manufacturing companies listed on the IDX for the 2018-2021 period and not delisted during the study period, publish financial reports and sustainability reports or annual reports for the 2018-2021 period, disclose the amount of waste treated with the amount of waste generated explicitly, and use rupiah currency in their reporting so that a research sample of 9 companies is obtained. The companies include PT Indocement Tunggul Prakarsa Tbk, PT Industri Jamu & Farmasi Sido Muncul Tbk, PT Japfa Comfeed Indonesia Tbk, PT Kalbe Farma Tbk, PT Merck Indonesia Tbk, PT Phapros Tbk, PT Semen Indonesia (Persero) Tbk, PT Solusi Bangun Indonesia Tbk, and PT Unilever Indonesia Tbk. These companies are engaged in the cement industry, herbal medicine and pharmaceuticals, agriculture, animal husbandry, fisheries, industry, trade, building materials, and consumer goods. With a total observation period of 4 years, the total number of samples is 36 samples.

The data analysis techniques used are descriptive statistical analysis and multiple linear regression equipped with classical assumption tests, calculation of the coefficient of determination ( $R^2$ ), t-test (partial hypothesis test), and F test (simultaneous hypothesis test).

## **RESULTS AND DISCUSSION**

### **Descriptive Statistics**

The descriptive analysis produces an overview of the variables used in the study. The results of the descriptive analysis of the variables of this study can be seen in the following table.



**Table 1.** Descriptive Statistics

Variable	N	Minimum	Maximum	Average	Standard Deviation
The economic dimension of sustainability accounting	36	0,06	0,41	0,2418	0,09409
The environmental dimension of sustainability accounting	36	0,19	0,78	0,4358	0,17245
The social dimension of sustainability accounting	36	0,08	0,65	0,3146	0,14410
Environmental Performance	36	0,66	1,00	0,9766	0,07577
Financial Performance	36	- 0,04	0,92	0,1405	0,17690

Based on Table 1, it is obtained that the highest value of the application of sustainability accounting in the economic dimension is 0.41 owned by PT Japfa Comfeed Indonesia Tbk. in 2018, 2020, and 2021 periods, the lowest value is 0.06 owned by PT Indocement Tunggul Prakarsa Tbk. in 2018 to 2020 period, and the average value is 0.2418 with a standard deviation of 0.09409. Then, the highest value of environmental dimension sustainability accounting implementation is 0.78 owned by PT Kalbe Farma Tbk. in 2018 period, the lowest value is 0.19 owned by PT Indocement Tunggul Prakarsa Tbk. in 2021 period, and the average value is 0.4358 with a standard deviation of 0.17245. Furthermore, the highest value of the application of social dimension sustainability accounting is 0.65 owned by PT Japfa Comfeed Indonesia Tbk. in 2020 period, the lowest value is 0.08 owned by PT Indocement Tunggul Prakarsa Tbk. in 2018 and 2019 periods, and the average value is 0.3146 with a standard deviation of 0.14410. For environmental performance as measured using the ratio between the amount of waste treated and the amount of waste generated, the highest value of 1.00 is owned by PT Indocement Tunggul Prakarsa Tbk., PT Japfa Comfeed Indonesia Tbk., PT Kalbe Farma Tbk., PT Phapros Tbk., PT Semen Indonesia (Persero) Tbk. and PT Solusi Bangun Indonesia Tbk. in 2018-2021 period, the lowest value of 0.66 is owned by PT Merck Indonesia Tbk. in 2018 period, and the average value is 0.9766 with a standard deviation of 0.07577. As for financial performance as measured using the ratio between net profit after tax and total assets (ROA), the highest value of 0.92 was owned by PT Merck Indonesia Tbk. in 2018 period, and the lowest value was -0.04 owned by PT Solusi Bangun Indonesia Tbk. in 2018 period, and the average value was 0.1405 with a standard deviation of 0.17690.

**Classical Assumption Testing**

Classical assumption testing is carried out to avoid the appearance of bias in data analysis and to avoid misspecification of the regression model used. The classical assumption test consists of a normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Based on the test results through the IBM SPSS version 23 program, the results show that the data is normally distributed, the regression model is free from multicollinearity problems, there is no heteroscedasticity, and there is no autocorrelation. Thus, this research data meets the requirements for use in multiple regression models.

**Multiple Linear Regression Equation Model**

The multiple regression equation models is useful for predicting the value of the dependent variable based on the value of the independent variables. The results of multiple linear regression analysis can be seen in the following table.

**Table 2.** Multiple Linear Regression Equation Results

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(constant)	1,924	0,386	
The economic dimension of sustainability accounting	- 0,392	0,388	- 0,195
The environmental dimension of sustainability accounting	- 0,560	0,188	- 0,510
The social dimension of sustainability accounting	0,577	0,286	0,439
Environmental Performance	- 1,474	0,378	- 0,589



Then the resulting multiple regression equation models are as follows.

$$ROA = 1,924 - 0,392 SRDI_{ec} - 0,560 SRDI_{en} + 0,577 SRDI_{so} - 1,474 TRI + e$$

Description:

- ROA : Return on Assets
- SRDI<sub>ec</sub> : Sustainability Report Disclosure Index Economic Dimension
- SRDI<sub>en</sub> : Sustainability Report Disclosure Index Environment Dimension
- SRDI<sub>so</sub> : Sustainability Report Disclosure Index Social Dimension
- TRI : Toxic Release Index
- e : Error

The equation above shows that ROA can be predicted by the four independent variables, namely sustainability accounting (economic, environmental, and social dimensions) and environmental performance. If the variables SRDI<sub>ec</sub>, SRDI<sub>en</sub>, SRDI<sub>so</sub>, and TRI are zero, then ROA will increase by 1.924. The application of sustainability accounting in the economic dimension can predict a decrease in ROA by 0.392. Likewise, the environmental dimension of sustainability accounting can predict a decrease in ROA by 0.560. The social dimension of sustainability accounting can predict an increase in ROA of 0.577, while environmental performance can predict a decrease of 1.474.

**Determination Coefficient Calculation**

Calculation of the coefficient of determination or R<sup>2</sup> is done to determine the magnitude of the influence of the independent variables on the dependent variable. Based on calculations through SPSS, the R<sup>2</sup> value is 0.407 or 40.7%. This means that the ability of the independent variables, namely the application of sustainability accounting (economic, environmental, and social dimensions) and environmental performance in explaining the dependent variable is quite limited. The R<sup>2</sup> value of 0.407 is greater than 0.33 but lower than 0.67 classified into the moderate category, so the effect of the independent variable on the dependent variable in this study is moderate. The Adjusted R<sup>2</sup> result of 0.330 or 33.0% means that the variation of sustainability accounting application variables (economic, environmental, and social dimensions) and environmental performance can explain 33.0% of financial performance variables, while the remaining 67.0% is influenced by other factors that can affect financial performance.

**Hypothesis Testing (Test Results t)**

The t-statistical test is conducted to determine the extent of the influence of one independent variable in explaining variations in the dependent variable individually. This test is determined by looking at the significant value and the comparison between the t-statistic value and the critical point according to the table. The results of the t-statistical test are outlined in the following table.

**Table 3.** Test Results t

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(constant)	1,924	0,386		4,978	0,000
The economic dimension of sustainability accounting	- 0,392	0,388	- 0,195	- 1,011	0,320
The environmental dimension of sustainability accounting	- 0,560	0,188	- 0,510	- 2,980	0,006
The social dimension of sustainability accounting	0,577	0,286	0,439	2,017	0,052
Environmental Performance	- 1,474	0,378	- 0,589	- 3,903	0,000

With the number of n = 36 and α = 0.05, the t<sub>table</sub> is 2.039. Based on Table 3, it can be seen that the economic dimension of sustainability accounting has a Sig. value greater than 0.05, namely 0.320, reinforced by the t<sub>count</sub> value which is lower than the t<sub>table</sub> so that the null hypothesis (H<sub>01</sub>) is accepted and the alternative hypothesis (H<sub>a1</sub>) is rejected, which means that the economic dimension of sustainability accounting does not affect financial performance. Then, environmental sustainability accounting has a Sig. value smaller than 0.05, namely 0.006, but the t<sub>count</sub> value is greater than the t<sub>table</sub> so that the null hypothesis (H<sub>02</sub>) is rejected and the alternative





hypothesis ( $H_{a2}$ ) is accepted, which means that environmental sustainability accounting has a negative and significant effect on financial performance. Then, social dimension sustainability accounting has a Sig value. 0.052 which when rounded, the value becomes 0.05 which is certainly at the limit of significance, reinforced by the  $t_{count}$  value which is equivalent to the  $t_{table}$  value so that the null hypothesis ( $H_{03}$ ) is rejected and the alternative hypothesis ( $H_{a3}$ ) is accepted, which means that social dimension sustainability accounting does not affect financial performance. Furthermore, the environmental performance has a Sig. value smaller than 0.05, namely 0.000, but the  $t_{count}$  value is greater than the  $t_{table}$  so that the null hypothesis ( $H_{04}$ ) is rejected and the alternative hypothesis ( $H_{a4}$ ) is accepted, which means that environmental performance has a negative and significant effect on financial performance.

**Hypothesis Testing (Test Results F)**

The F test is conducted to determine whether or not there is a simultaneous influence of all independent variables in this study, namely the application of sustainability accounting (economic, environmental, and social dimensions) and environmental performance on financial performance as the dependent variable. The results of the F test can be seen in the following table.

**Table 4.** Test Results F

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	0,511	4	0,128	5,309	0,002 <sup>b</sup>
Residual	0,746	31	0,024		
Total	1,257	35			

With the number  $n = 36$  and  $\alpha = 0.05$ , the  $F_{table}$  is 2.68. Based on Table 4, it can be seen that the Sig. value is smaller than 0.05, namely 0.002, reinforced by the  $F_{count}$  value which is greater than  $F_{table}$ , which is 5.309 so that the null hypothesis ( $H_{05}$ ) is rejected and the alternative hypothesis ( $H_{a5}$ ) is accepted, which means that sustainability accounting and environmental performance simultaneously have a positive and significant effect on financial performance.

**DISCUSSION**

Based on the test results that have been conducted, the application of sustainability accounting in the economic dimension does not affect financial performance. This means that the intensity of the application of sustainability accounting in the economic dimension in the financial statements, annual reports, and sustainability reports disclosed by the company does not play a role in improving the financial performance projected through ROA. This result is not in line with research conducted by Hutasoit & Sembiring (2020) and Bukhori & Sopian (2017) which state that the application of economic dimension sustainability accounting has a positive and significant effect on the company's financial performance, but is in line with research conducted by Susanto & Tarigan (2013); Widati (2016); Gunarsih & Ismawati (2018); and Christie & Ekadjaja (2020). This finding can be caused by the existence of indicators that have not been implemented by all of these companies because they are considered unable to improve the company's financial performance, such as the proportion of senior-level executives from the local community, approaches to taxation, governance, supervision, and tax risk management, stakeholder engagement, and tax responsibility management, and country-based reporting. This can result in a lack of support from stakeholders in providing funds to the company, which of course can be used as capital to increase business production so that sales are not maximized and cannot increase company profitability. Furthermore, the lack of positive response from the community to the products offered by the company so that the products cannot be accepted by the community properly can also be another factor in this case. In addition, although there are regulations that have been implemented in Indonesia in the form of Peraturan Otoritas Jasa Keuangan (POJK) No. 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies and the existence of sustainability reporting standards that have been introduced in various countries, namely the Sustainability Accounting Standards Board (SASB) and the Global Reporting Initiatives (GRI), there are no restrictions on the items that must be disclosed in sustainability reports. This makes most companies disclose sustainability reports only to fulfill obligations and avoid sanctions so that there are no companies that disclose all items or indicators in their sustainability reports.



Furthermore, the test results show that the application of environmental sustainability accounting has a negative and significant effect on financial performance. This means that the greater the application of sustainability accounting in the environmental dimension, the greater the costs that must be incurred by the company so that the financial performance projected through ROA will decrease. This finding is in line with the results of research conducted by Tarigan & Semuel (2014); Eliyana & Subakir (2020); Yuanasti & Ethika (2022); and Minggu et al. (2023). This can happen because disclosing sustainability accounting in the environmental dimension requires costs to be incurred. Large environmental costs are triggered by internal environmental failures and external environmental failures that are large enough to reduce the company's financial performance. Internal environmental failure is seen from the amount of hazardous waste generated in large quantities so it requires large costs to treat it before disposal. Meanwhile, external environmental failures can be seen from the disposal of hazardous waste without prior treatment, which requires costs to overcome the impact, both environmental impacts and further impacts on the surrounding community. According to Hansen & Mowen (2018), a good environmental cost allocation is to increase environmental prevention costs and environmental detection costs to prevent and reduce the amount of hazardous waste generated by the company to reduce the costs of internal failure and external failure. Therefore, companies must improve their environmental cost allocation to produce efficient costs so that companies can continue to implement sustainability accounting in the environmental dimension without overriding the stability of their financial performance.

Then, the test results state that the application of sustainability accounting in the social dimension has a positive and significant effect on financial performance. This means that the intensity of the application of social dimension sustainability accounting in the financial statements, annual reports, and sustainability reports disclosed can increase the company's ROA. This finding is in line with the results of previous research conducted by Widati (2016) and Hutasoit & Sembiring (2020). Although the numbers show that the application of sustainability accounting in the social dimension as outlined in the company's annual report and sustainability report is still low, it has a positive effect on the company's financial performance. This means that in the eyes of the public, the company has a good image because it is empathetic and sympathetic for the benefit of the surrounding community by being responsible for its operational activities so that it can increase people's desire to continue consuming the company's products which of course can improve the company's financial performance. Indirectly, this high financial performance can also improve the skills and welfare of employees so that employees have confidence and trust in the company to make the best contribution for the achievement of company progress and optimal financial performance.

Next, the test results show that environmental performance has a negative and significant effect on financial performance. This means that the higher the environmental performance, which is shown through the percentage ratio of waste treated to waste generated, the higher the costs that must be incurred so that the company's financial performance will decrease. This finding is by the results of research conducted by Mutiara (2016); B. Widyasari (2017); and A. Widyasari, (2023). This can happen because its implementation requires a large enough cost so that it does not rule out the possibility of reducing the company's profitability. This is certainly a concern for companies to survive in the long term and grow sustainably. The amount of environmental costs incurred can be caused by high waste treatment costs that have the potential to increase internal and external failure costs. Therefore, companies should not be fixated on the treatment of waste generated alone, but can also optimize the prevention and assessment of their operational activities to minimize the generation of waste generated. As stated by Hansen & Mowen (2018), to ensure the quality of the company's products and reduce the costs of internal and external failures, companies must increase the allocation of prevention and assessment costs so that the processing costs that must be incurred become more efficient. For this reason, companies must improve their environmental cost allocation to improve environmental performance without neglecting the stability of their financial performance.

Simultaneously, the test results state that the application of sustainability accounting (economic, environmental, and social dimensions) and environmental performance has a positive and significant effect on financial performance. Although partially the economic dimension sustainability accounting variable does not affect financial performance and the environmental dimension sustainability accounting variable and environmental performance have a negative influence on financial performance, all of these variables are still covered by the social dimension sustainability accounting so that if the company continues to maintain the application of sustainability accounting (economic, environmental, and social dimensions) and environmental performance well, it can have a positive influence on the company's financial performance. By striving to implement sustainability accounting (economic, environmental, and social dimensions) and environmental performance by treating the waste produced, then optimizing the cost of prevention and assessment of the company's operational activities, then implementing policies related to cost limits in treating the



waste produced, and including this information in full in the sustainability report and annual report as a form of corporate disclosure, this can improve the company's good image, stakeholder trust and attract the attention of investors to provide funding which can further improve the company's financial performance. Thus, the company can continue in the long term and grow sustainably.

## CONCLUSION

Based on the results of the study, it can be concluded that the application of sustainability accounting in the economic dimension does not affect financial performance, the application of sustainability accounting in the environmental dimension has a negative and significant effect on financial performance, the application of sustainability accounting in the social dimension has a positive effect on financial performance, the environmental performance has a negative and significant effect on financial performance, and the application of sustainability accounting (economic, environmental, and social dimensions) and environmental performance has a positive and significant effect on financial performance.

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