



THE IMPACT OF GREEN ACCOUNTING IMPLEMENTATION ON THE PROFITABILITY OF FOOD AND BEVERAGE INDUSTRY SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE IN 2019-2023

PENGARUH PENERAPAN GREEN ACCOUNTING TERHADAP PROFITABILITAS PERUSAHAAN SEKTOR INDUSTRI MAKANAN DAN MINUMAN YANG TERDAFTAR DI BURSA EFEK INDONESIA TAHUN 2019-2023

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Abstract

This study aims to analyze the effect of green accounting implementation on the Company's profitability. This study was conducted on companies included in the food and beverage subsector listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period using a quantitative approach. Sample selection was carried out using the purposive sampling method, resulting in 80 observation data samples for five consecutive years. Data analysis techniques used include descriptive analysis using Microsoft Excel, hypothesis testing using SPSS 18 to test the effect of Green Accounting on Profitability. The results of this study indicate that Green Accounting has a negative and significant effect on Profitability.

Keywords: Choral reading strategy, improve, reading comprehension

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh penerapan green accounting terhadap profitabilitas Perusahaan. Penelitian ini dilakukan pada perusahaan yang tergabung dalam subsektor makanan dan minuman yang terdaftar di Bursa Efek Indonesia (BEI) selama periode 2019-2023 dengan menggunakan pendekatan kuantitatif. Pemilihan sampel dilakukan dengan metode purposive sampling, menghasilkan 80 sampel data observasi selama lima tahun berturut-turut. Teknik analisis data yang digunakan meliputi analisis deskriptif menggunakan microsoft excel, pengujian hipotesis menggunakan SPSS 18 untuk menguji pengaruh *Green Accounting* terhadap Profitabilitas. Hasil penelitian ini menunjukan bahwa *Green Accounting* berpengaruh negatif dan signifikan terhadap Profitabilitas.





Kata Kunci: Green Accounting, Profitabilitas dan Perusahaan Makanan dan Minuman

1. INTRODUCTION

In some year Lastly, the issue sustainability and responsibility answer social company the more become spotlight, both at global and international levels. national. Society, investors, and government are increasingly paying attention to the environmental impacts caused by industrial activities, including the food and beverage industry, which is known for its high use of natural resources and potential for environmental pollution. With increasing awareness of the environmental impacts caused by the industrial sector, companies are faced with the need to adopt environmentally friendly business practices. One important step taken is the implementation of green *accounting*. However, current waste management still focuses on reducing environmental impacts rather than sustainable prevention, such as through a multimedia approach by allowing for gas, liquid, and solid waste, as well as a holistic depiction of waste generated from upstream to downstream production processes (Damayanti and Shinta, 2023)

In this study, the consumer goods industry sector companies were chosen by researchers. The issue of environmental management is one of the efforts to create a comfortable, clean, and hygienic company environment in order to minimize environmental costs. Based on the still poor environmental conditions, it is possible for companies to disclose environmental activities that are closely related to company waste as additional reports to complete the required financial reports.

Profitability is very important for companies to maintain the sustainability of the company in the long term. This can happen because profitability shows whether the company has a guaranteed prospect or not in the future. Profitability refers to the company's ability to generate profits by using all of its capabilities and resources, including sales, capital, cash, number of employees, and the number of branch companies. There are many studies on things that affect profitability, but there are still few studies that link it to green accounting. It is linked to green accounting because this practice provides a more comprehensive insight into the company's financial performance by considering environmental impacts.

Companies should spend money to participate in supporting the implementation of green accounting, usually referred to as environmental costs. Environmental costs are costs incurred by companies as a result of a poor environmental management system caused by the company's poor production process. Environmental costs include costs related to processes that have an impact on the environment and costs related to repairing damage caused by waste generated in company activities. Environmental costs can be seen in the allocation of funds for environmental development programs listed in the company's annual report or financial report (Annas Lalo, 2021). If a company spends environmental costs, it will reduce the profits obtained and increase the company's costs. However, with green accounting, these costs will be recognized as assets in the form of environmental social responsibility investments (Vina Putri, 2021). It is important for companies to care about the environment, usually called corporate social responsibility (CSR) or commonly known as corporate social responsibility.

Green accounting and profitability have a significant relationship, especially in the context of how companies manage the environmental impact of their operations and how this impacts financial performance. Some key points that illustrate the relationship between green accounting and profitability are Long-Term Cost Savings, Green accounting encourages





companies to pay more attention to the efficiency of resource use, such as energy, water, and raw materials. In the long term, these waste reduction and energy saving efforts not only reduce environmental impacts but also reduce the company's operating costs. This efficiency can increase profit margins, thereby increasing the company's profitability.

Based on the description above, the purpose of this study is to determine the effect of *Green Accounting* on the profitability of companies in the Food and Beverage industry sector listed on the Indonesia Stock Exchange in 2019-2023.

2. RESEARCH METHOD

This research was conducted in September 2024 - March 2025, aiming to analyze the food and beverage industry sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2019 to 2023. The research approach used is descriptive with quantitative methods, which will test the hypothesis regarding the effect of *green accounting implementation* on profitability. Secondary data in the form of financial reports and annual reports of companies will be collected from the IDX and analyzed using descriptive statistics through Microsoft Excel to provide a data summary, as well as hypothesis testing using SPSS 18 after the data is tabulated and presented in tabular form, with variable analysis carried out based on the average value (mean) of each variable.

3. RESULTS AND DISCUSSION

In this chapter, the researcher presents data from the research that has been conducted. Hypothesis testing with SPSS 18 includes average scores and significant t-tests. The types of tests used are descriptive analysis tests, classical assumption tests, simple linear regression tests and t-tests. The test results can be seen as follows:

Table 1. Results of Descriptive Statistical Tests

	N	Minimum	Maximum	Mean	Std.deviation
Green Accounting	80	.0001802	2.7268153	.050328867	.3038039400
Profitability	80	.10	22.18	9.0125	4.64025
Valid N (listwise)	80				

Source: data processed using SPSS 18

The Green accounting variable (X), with a sample size of 80, has a minimum value of .0001802 obtained from the Ultrajaya Milk Industry & Trading Co Tbk (ULTJ) company. The minimum value in green accounting shows efficiency in environmental management, but also shows a lack of commitment to sustainable practices if the budgeted costs are too low. The maximum value of 2.7268153 was obtained from the Sawit Sumbermas Sarana Tbk (SSMS) company. The maximum value shows a large investment in environmental improvement, such as waste management programs or land rehabilitation initiatives, training, and community assistance. The average value is .050328867 and the standard deviation is .3038039400.

Profitability variable (Y), with a sample size of 80, has a minimum value of .10 obtained from the Sawit Sumbermas Sarana Tbk (SSMS) company. The minimum value in profitability indicates efficiency problems or ineffective policies in managing company assets, which require management





attention to improve the company's financial performance. The maximum value of 22.18 was obtained from the Akasha Wira International Tbk (ADES) company. The maximum value in profitability indicates the highest rate of return on company asset investment, indicating good operational efficiency and potential for sustainable growth. In 2022. The average value is 9.0125 and a standard deviation of 4.64025.

NORMALITY TEST

Table 2. Normality Test Results
One-Sample Kolmogorov-Smirnov Test

	Tronnogorov Simino	
		Unstandardize d Residual
N		80
Normal Parameters a,b	Mean	.0000000
	Std. Deviation	4.49669407
Most Extreme	Absolute	.147
Differences	Positive	.147
	Negative	077
Kolmogorov-Smirnov Z		1.311
Asymp . Sig. (2-tailed)		.064

- a. Test distribution is Normal.
- b. Calculated from data.

Source: processed data using SPSS 18

Based on table 2 above, it shows that the magnitude of Kolmogorov-smirnov Z is 1.311 and the significance is 0.64. Because the significant value is (0.64 > 0.05), it can be said that the research data is normally distributed.

Heteroscedasticity Test

Table 3. Heteroscedasticity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
1 (Constant)	3,764	.283		13,299	.000
Green	972	.925	118	-1.052	.296
Accounting					

a. Dependent Variable: ABS RES

The results of the Glejser Test are used to determine the significance value, which is 0.296. It can be concluded that there is no heteroscedasticity in the data used in this study because the value is greater than 0.05.

Autocorrelation Test

Table 4. Autocorrelation Test Results

Model	R	R-Square	Adjusted R Square	Std. Error the Estimate	Durbin-Watson
1	.677 ^a	.459	.451	.51201	1,991





a. Predictors: (constant), Green Accounting

b. Dependent variable: Profitability

Based on table 4.5 above, the DW value is 1.991. This value will then be compared with the table value using a value of 5% (0.05), a sample size of 80 (N) and the number of independent variables 1 (K = 1), then the dU value will be 1.662 and the dL value 1.6114 in the Durbin Watson table. The existing numbers are entered into the decision-making formula for the presence or absence of autocorrelation, namely: DU <DW <4 - DU, so 1.662 <1.991 <2.338. From this formula, it can be seen that DU <DW so it can be concluded that the hypothesis is accepted or there is no autocorrelation.

Simple Linear Regression Test

Table 5. Simple Linear Regression Test Results

Model		Unstandardized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta	T	Sig.
1	(Constant)	9.202	.513		17,940	.000
	Green Accounting	-3,770	1,676	247	-2.249	.027

a. Dependent Variable: Profitability

Based on the table above, the linear regression equation model can be formulated as follows:

$$Y = 9,202 (a) - 3,770 (X) + e$$

- a) Constanta (a) = 9.202 means that if green accounting is constant or fixed, then profitability is 9.202.
- b) The direction of the regression coefficient = (3.770) has a negative value, meaning that if green accounting increases by one unit, profitability decreases by 3.770.

Partial Hypothesis Test (T-Test)

Table 6. Partial Hypothesis Test (t-Test)

Model		Unstandardized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	9.202	.513		17,940	.000
	Green Accounting	-3,770	1,676	247	-2.249	.027

a. Dependent Variable: Profitability

Based on the partial statistical test from table 4.7, the statistical test results show the significance value of the Green accounting variable (X) of 0.027 which is greater than 0.05. In addition, the results of the calculation of simple linear regression show that the t-table value of 1.665 then the estimated t-count value of -2.249 is smaller. Therefore, **Ho is rejected and H1 is accepted**. So it can be concluded that the higher the level of green accounting, the higher the level of profitability will be.

Coefficient Determination (R 2)





Table 7. Determination Coefficient Test (Equation 1)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.677 ^a	.459	.451	.51201

a. Predictors: (constant) Profitability

The results of the determination coefficient analysis (adj. R2) are 0.451 or 45%. This means that green accounting affects the profitability variable by 45%, while the rest is influenced by other variables outside the research model.

Discussion

The test results show that green accounting has a negative and significant effect on income with a coefficient direction of -3.770 and a significant value (0.027 > 0.05). Based on these results, the hypothesis "The Implementation of *Green Accounting* Has a Positive and Significant Effect on Profitability" is rejected. This study shows that the profitability of the company is influenced by *green accounting*. If the implementation of *green accounting* increases, the profitability companies increase, on the other hand, if the implementation of green accounting tends to decrease, it will have a negative impact on a company.

The results of this study indicate that the higher the environmental costs incurred by the company will have an impact on the company's profitability. Environmental costs are costs incurred by the company to fulfill the company's social and environmental responsibilities. Environmental costs are used to prevent or repair environmental damage resulting from the company's operational activities. Environmental costs can have a negative impact on profitability because the benefits of incurring environmental costs cannot necessarily be felt immediately, the effects may only be felt the following year, or even several years after.

Stakeholder theory states that companies must meet the needs and interests of all stakeholders involved, including consumers, investors, communities, and the surrounding environment. The application of *green accounting* that discloses the company's environmental costs and impacts is a form of transparency that fulfills stakeholders' right to information. Although the application of *green accounting* can incur high environmental costs, thereby reducing profitability in the short term, it can increase the trust and image of the company in the eyes of stakeholders. Thus, companies strive to maintain good relations with stakeholders through responsible environmental reporting, even though it has a negative impact on current profitability.

Based on the legitimacy theory, it states that companies may engage in *green accounting practices* to gain legitimacy from the community and stakeholders. With *green accounting*, companies can improve their image as entities that care about the environment. The implementation of *green accounting practices* can influence positive perceptions of the community, customers, and investors. If consumers prefer to support environmentally friendly companies, this can increase sales and ultimately increase the company's profitability.





The implementation of *green accounting* is important for companies because it reflects a form of social responsibility towards the environment and society. With the implementation of green accounting, companies can evaluate environmental costs, increase resource efficiency, and increase transparency which can ultimately increase profitability. However, if environmental costs increase, it tends to reduce the company's profitability. This is in line with research by Widyowati, and Damayanti (2022) and Afifudin (2020) which states that the large number of environmental costs incurred in implementation of social and environmental responsibility, then it affects the decline in profitability. However, with the increase in environmental costs, it can be the first step in sustainability, so that it becomes an opportunity to increase profits and company value in the future.

Oktadifa and Widajantie's (2023) research shows inconsistent results with this study, that the implementation of green accounting has a positive and significant effect on profitability. Environmental disclosure will reflect how much the company cares about the condition of the natural environment and to find out how the company has formed a contract with the community. Then the company can continue to operate and optimize its productivity so that it can increase the company's economic growth. This is in line with stakeholder and legitimacy theory, companies that have a good image in society will get legitimacy from the community so that it is easy to carry out their operations and with the implementation of green accounting will increase investor confidence in a company, because with environmental disclosure it will be seen how the condition of the company is and this then becomes an important thing for investors as a basis for making investment decisions

4. CONCLUSION

Based on the results of the analysis and discussion conducted, it can be concluded that Green accounting has a negative and significant effect on profitability. It can be concluded that the more environmental costs incurred in implementing the company's social and environmental responsibilities, the more it can affect the decline in the company's profitability. With thus hypothesis in study This accepted.

5. REFERENCES

Achmad Ghozy, Alifi Mardian. 2024. "The Effect of Profitability and Investment Decisions on Company Value." *Journal of Accounting Science and Research* 13 (4): 1–16. doi:10.24036/jea.v2i4.321.

Adinda Natasya, IH (2024). The Effect of ROA and ROE on Profit Growth in Food and Beverage Companies Listed on the Indonesia Stock Exchange for the 2019-2023 Period. 3 (3), 399–417.

Ahsyam, F., Amril, A., & Ramly, R. (2024). The Effect of Green Accounting and Environmental Performance Implementation on Profitability in Food and Beverage Companies Listed on the Indonesia Stock Exchange in 2018-2022. *Tangible Journal*, 9 (1), 1–11. https://doi.org/10.53654/tangible.v9i1.448

Aida, N., Muhammad, N., Baharuddin, B., Susanto, SE, & Mus, NF (2024). The Effect of





- Green Accounting Implementation on Profitability in Basic Materials Sector Companies on the Indonesia Stock Exchange for the 2017-2021 Period. *Tangible Journal*, 9 (1), 163–179. https://doi.org/10.53654/tangible.v9i1.449
- Ananta Kumala Sari. (2023). The Role of Green Accounting on Green Campus at the University of August 17, 1945 Surabaya. *CEMERLANG: Journal of Management and Business Economics*, 3 (3), 222–240. https://doi.org/10.55606/cemerlang.v3i3.1365
- Angelina, N. (2021). The Effect of Green Accounting Implementation and Environmental Performance on Company Financial Performance. *Aerospace Management*, 14 (2), 211–224. https://doi.org/10.30640/akuntansi45.v3i2.873
- Anggitha Dellaconi, Vitriyan Espa, RK (2024). Towards Sustainability: The Role of Green Accounting, Environmental Performance, and Human Capital in Firm Value. *Of Accounting Research*, *13* (02), 158–173.
- Annas Lalo, & Muhammad Irwan Nur Hamiddin. (2021). The Effect of Environmental Costs and Environmental Performance on Profitability in Manufacturing Companies Listed on the Indonesia Stock Exchange. *Kompak: Scientific Journal of Computerized Accounting*, 14 (1), 196–204. https://doi.org/10.51903/kompak.v14i1.229
- Damayanti, A., & Shinta Budi Astuti. (2023). The Influence of Green Accounting on Company Financial Performance. *RELEVANT: Journal of Accounting Research*, 4 (2), 1–14. https://doi.org/10.35814/relevan.v2i2.3231
- Ghozali. (2021). Quantitative, Qualitative, and R&D Research Methods.
- Hanun, S. (2024). Analysis of the application of green accounting in the food and beverage industry in North Bogor District . PAKUAN UNIVERSITY, BOGOR.
- Hapsoro, D., & Ambarwati, A. (2020). Relationship Analysis of Eco-Control, Company Age, Company Size, Carbon Emission Disclosure, and Economic Consequences. *The Indonesian Journal of Accounting Research*, 23 (02), 41–52. https://doi.org/10.33312/ijar.487
- Herikusnanto, RS, & Sudjiman, LS (2022). The Effect of Audit Quality, Profitability and Solvency on the Value of Food and Beverage Sub-sector Companies Listed on the IDX in 2017-2020. *Economic Journal*, 15 (2), 173–197. https://doi.org/10.58303/jeko.v15i2.2977
- Kusuma, A., Desy, D., & Anggraini, I. (2023). The Effect of Green Accounting Implementation on Profitability in Manufacturing Companies. *Business, and Social*), 1 (1), 161–171.
- Lailatus Sa'adah. (2024). Profitability Ratio Analysis as a Measuring Tool for Financial Performance of PT Bank Central Asia. *Lokawati: Journal of Management Research and Research Innovation*, 2 (5), 144–155. https://doi.org/10.61132/lokawati.v2i5.1188
- Murniati, M., & Sovita, I. (2021). Application of Green Accounting to the Profitability of Food and Beverage Companies on the Indonesia Stock Exchange (IDX) 2015-2019. *Dharma*





- Andalas Journal of Economics and Business , 23 (1), 109–122. https://doi.org/10.47233/jebd.v23i1.208
- Niandari, N., & Handayani, H. (2023). Green Accounting, Environmental Performance, and Profitability. *Journal of Business Accounting*, 16 (1), 83–96. https://doi.org/10.30813/jab.v16i1.3875
- Niswatin, RT, & Mahdalena. (2024). Factors Affecting Islamic Corporate Social Responsibility (CSR) Disclosure in Islamic Banking in Indonesia. *JRAK: Journal of Accounting Research and Computerized Accounting*, 3 (1), 40–56. https://doi.org/10.33558/jrak.v5i2.1346
- Nurjanah, L., Berlianna, TM, Anggreani, RA, Mudzalifah, S., Adinugroho, TR, & Prasetyo, HD (2021). Profitability Ratio and Financial Performance Assessment of MSMEs. *Journal of Business Management*, 18 (4), 591–606. https://doi.org/10.38043/jmb.v18i4.3321
- Oktadifa, RM, & Widajantie, TD (2023). The Effect of Implementing Green Accounting, Material Flow Cost Accounting, and Environmental Performance on Company Profitability. *Al-Kharaj: Journal of Islamic Economics, Finance & Business*, 6 (3), 2896–2909. https://doi.org/10.47467/alkharaj.v6i3.4743
- Pilomonu, MRS (2023). Analysis of Greenhouse Gas Emission Disclosure Level in High Profile and Low Profile Companies. *Jambura Accounting Review*, 4 (1), 174–186. https://doi.org/10.37905/jar.v4i1.76
- Pratiwi, A., Nurulrahmatiah, NN, Haryanti, IH, Huda, NH, & Iftitah, II (2023). The Effect of Green Accounting Implementation on Profitability Levels in Pharmaceutical Companies Listed on the Indonesia Stock Exchange. *Satyagraha Scientific Journal*, 6 (1), 164–181. https://doi.org/10.47532/jis.v6i1.733
- Pratiwi, N., & Rahayu, Y. (2018). The Effect of Green Accounting Implementation on Stock Price Growth with Profitability as a Moderating Variable. *Journal of Accounting Science and Research*, 7 (8), 1–15.
- Prof. Dr. Sugiyono. (2022). Quantitative Research Methods (3rd ed.). Alfabeta CV.
- Puspitaningrum, HY, & Indriani, A. (2021). The Effect of Corporate Social Responsibility and Good Corporate Governance on Company Profitability with Company Size and Leverage as Control Variables. *Diponegoro Journal of Management*, 10 (2337–3792), 1–15.
- Putri, D., Alfian, N., & Rohmaniyah. (2023). Concern and Understanding of MSMEs Towards the Implementation of Green Accounting. *Journal of Management, Business and Organization (JUMBO)*, 7 (3), 477–484.
- Sahmin Noholo, Hasan Abdullah, M. (2024). Application of Green Accounting in Kurenai Beach Tourism in an Effort to Overcome Environmental Problems. *Al-Kharaj: Journal of Islamic Economics*, *Finance & Business*, 6 (7), 5082–5095. https://doi.org/10.47467/alkharaj.v6i7.2171





- Saputri, M., Abigail, HKC, & Livana, M. (2024). Application of Stakeholder Theory in Corporate Social Responsibility (CSR) Practices. *Journal of Management and Accounting*, 1 (4), 461–475. https://www.jstor.org/stable/27800897
- Siti Pratiwi Husain, Sahmin, Melisa, S. (2025). Green Analysis of Accounting Practice Implementation: Study on Sea Product Exporting Companies in Gorontalo City . 7, 34–42.
- Sugiyono. (2022). Quantitative and Qualitative Research Methods ((3rd ed.).).
- Suriani, N., Risnita, & Jailani, MS (2023). Population and Sampling Concepts and Participant Selection Reviewed from Scientific Educational Research. *IHSAN Journal: Journal of Islamic Education*, 1 (2), 24–36. https://doi.org/10.61104/ihsan.v1i2.55
- Tisna, RDA, Diana, N., & Afifudin. (2020). The Effect of Green Accounting Implementation on the Profitability of Manufacturing Companies Listed on the IDX in 2015-2018. *E-Jra*, 9 (1), 17–28.
- Titani, AM, & Susilowati, E. (2022). Public Share Ownership and Corporate Social Responsibility on Financial Performance. *Journal of Management and Bussines (JOMB)*, 4 (2), 948–963. https://doi.org/10.31539/jomb.v4i2.4451
- Vina Karmia Putri. (2021). THE EFFECT OF GREEN ACCOUNTING AND MATERIAL FLOW COST ACCOUNTING ON COMPANY SUSTAINABILITY (Empirical Study of Mining Companies Listed on the Indonesia Stock Exchange in 2015-2019). STIE PGRI DEWANTARA JOMBANG.

- Widyowati, A., & Damayanti, E. (2022). The Impact of Implementing Green Accounting Factors on the Profitability of Proper Participating Manufacturing Companies Listed on the Indonesia Stock Exchange in 2017-2019. *Krisnadwipayana Journal of Accounting and Business*, 9 (1), 559–571.
- Yulianti, A., Anggraini, LD, & Hendarmin, RMR (2024). The Influence of Green Accounting and Corporate Social Responsibility on the Profitability of the Metal Sub-Sector for the 2020-2023 Period on the Indonesia Stock Exchange . 3 (6), 2928–2947.