Green Economics: International Journal of Islamic and Economic Education
Volume. 2 Nomor. 1 Tahun 2025
E-ISSN : 3063-623X; P-ISSN : 3063-5829, Hal 112-127
DOI: https://doi.org/10.70062/greeneconomics.v2i1.85
Available online at: https://economics.ifrel.org/index.php/GreenEconomics

Synergy of Green Accounting, Operational Efficiency, and Marketing Effectiveness in Optimizing Corporate Financial Performance

Putri Sari Nuraini[1] , Ana Kadarningsih[2]
[1,2] Management Department, Universitas Dian Nuswantoro, Semarang, Indonesia
Email : putrisarinuraini27@gmail.com [1]*, ana.kadarningsih@dsn.dinus.ac.id [2]

***Abstract**. The purpose of this study is to examine the effect of green accounting, operational efficiency, and marketing effectiveness on financial performance in mining companies listed on the Indonesia Stock Exchange (IDX) in 2021-2023. This study uses a quantitative method based on annual financial report data and annual reports for 3 years (2021-2023) from Mining Companies listed on the Indonesia Stock Exchange (IDX). The research sample includes 83 companies with a total of 249 observation data for (3) periods. Data analysis was carried out using Eviews 12 software with the Multiple Regression Analysis method based on panel data with the Common Effect Model (CEM) method. The results of the study show that Green Accounting has a positive and significant effect on financial performance. Conversely, Operational Efficiency does not have a significant effect on financial performance, while Marketing Effectiveness has a positive and significant effect on financial performance.*

***Keywords** Green Accounting, Operational Efficiency, Marketing Effectiveness, Financial Performance*

1. INTRODUCTION

In recent times, the importance of environmental issues has increased both locally and globally. With increased public awareness about the importance of environmental sustainability, industries today are required to perform environmental practices (Qatrunnada, 2023). However, in an effort to maximize profits and raise money, businesses often ignore the environmental impact of their activities that can cause damage. The operational activities of mining companies can cause environmental damage, one of which is the problem of using mining waste that damages the environment (Suryaningrum & Ratnawati, 2024). Therefore, the existence of the company is fundamentally associated with the interests of different parties, but improving the company's financial performance, one of which involves assessing the performance of a company is to see whether or not the enterprise exhibits good financial stability (Yuniarti et al., 2023).

Basically, the purpose of financial performance emerges from a decision centered on assessing the organization's capability to earn revenue. Financial performance is utilized by management as a reference for overseeing the resources entrusted to the company (Hidayat & Aris, 2023). Nevertheless, awareness of environmental sustainability is also important, realized through environmental information disclosure reports and submission of environmental costs in the company's annual report and financial statements, which are indicators of the measurement dimension of green accounting (Nianty et al., 2023).

Received December 14, 2024; Revised December 25, 2024; Accepted January 25, 2025; Published : January 31, 2025

Green accounting itself is the application of accounting that collects, analyzes and reports environmental costs through financial statements to reduce environmental impacts (Zalukhu et al., 2022). In the context of mining companies, green accounting practices include the use of renewable and environmentally conscious raw materials and waste management that does not pollute or damage the surrounding environment (Efria et al., 2023).

Green accounting occupies a pivotal function in supporting the financial performance of mining companies by integrating environmental considerations within operations and financial statements (Damayanti & Astuti, 2022). Environmental damage due to mining activities, such as waste that pollutes the environment, often leads to government sanctions, as experienced by PT. Andaro Energy Tbk in 2022 with a temporary suspension of operations due to water pollution of the Musi River. These sanctions have a negative impact on the company's profitability and financial performance (Suryaningrum & Ratnawati, 2024).

The application of green accounting is regulated to support responsible environmental management and enhance the company's financial performance through environmental impact management. This can be seen in PT. Gas Negara Tbk, which implements green accounting by reducing waste and minimizing environmental impacts through the replacement of mercury lamps with LEDs to reduce hazardous waste (Khasanah et al., 2023). PT Toba Pulp Lestari Tbk is also involved in environmental issues related to waste pollution in Lake Toba, showing the importance of implementing green accounting in preventing environmental damage (Santika et al., 2023). In addition, there are also case studies on the application of green accounting in mining companies, as an approach to enhance the company's image, increase public trust, and support profitability as measured by ROA (*Return on Assets*) (Fatimah et al., 2023).

Operational efficiency is also a crucial element in defining the success of mining companies, given the high production costs and environmental risks faced. Operational efficiency in this sector can be measured through the *Expense to Sales* ratio, which reflects how well the company can manage resources optimally (Tania & Abdi, 2023). Operational efficiency plays a critical part in enhancing in improving the company's financial performance, especially in the mining sector quoted on the Indonesia Stock Exchange, efficiency in managing working capital and asset utilization is a key factor in influencing the company's profitability (Jamal et al., 2022).

Previous research discusses the effect of operational efficiency regarding the financial performance of food and baverage companies listed on the Indonesia Stock Exchange, the results showed that operational efficiency has an important role in increasing company profitability (Gabriel & Abdi, 2022). While other research, discussed operational efficiency within the pharmaceutical sector registered through the Indonesia Stock Exchange, the outcomes showed the way operational efficiency can affect financial performance and operational cost plays a crucial role in enhancing financial performance (Sahlan & Abdi, 2022).

The embrace of operational efficiency through green accounting in mining companies is an important strategy to improve financial performance in a sustainable manner. Operational efficiency allows companies to manage resources optimally, reduce production costs, and minimize environmental risks that can cause sanctions or financial losses (Suryaningrum & Ratnawati, 2024; Tania & Abdi, 2023). By integrating green accounting, companies can identify and report environmental costs transparently, encourage the use of eco-friendly raw materials, and improve waste management (Efria et al., 2023; Zalukhu et al., 2022). Efficiency in cost management and environmentally responsible business practices will ultimately improve the profitability and financial stability of the company, which can be seen from indicators such as the *Expense to Sales* ratio and *Return on Assets* (ROA) (Damayanti & Astuti, 2022; Jamal et al., 2022).

Marketing effectiveness also plays a strategic role towards financial performance in mining companies that can increase sales, expand markets, and increase profits. In the mining industry, effective marketing not only increases product demand, but also builds a strong corporate image and can contribute to better financial performance (Tania & Abdi, 2023). Financial performance reflects not only the profitability of a company, but also factors involving effective marketing strategies that may affect the stability and growth of the company (Handayani et al., 2023).

Previous research discusses the effect of marketing effectiveness on financial performance in retail sub-sector companies listed on the Indonesia Stock Exchange, shows that marketing effectiveness is essential for improving asset management in achieving corporate financial goals (Lendrawati & Abdi, 2021). While other research, discussed marketing effectiveness at the coal mining sector featured on the Indonesia Stock Exchange, found that marketing effectiveness is crucial for optimizing company assets to support the achievement of better financial targets (Tania & Abdi, 2023).

Previous research result, are only limited to testing the impact of green accounting on company performance in the mining sector featured on the IDX 2020-2021 (Santika et al., 2023). Meanwhile other research, provides a different perspective by examining Financial Performance on Operational Efficiency and Marketing Effectiveness in non-mining companies listed on the IDX 2016-2020 (Lendrawati & Abdi, 2021). So far, no previous research has been found that specifically discusses how green accounting, operational efficiency, and marketing effectiveness on financial performance in mining companies in Indonesia. Investigations in Mining Companies need to be conducted separately as the sector has a large environmental impact, is governed by green accounting regulations, and requires operational efficiency and responsible resource management to support sustainable financial performance.

Thus, the state of the art (uniqueness) of this research is the application of green accounting as an integrated strategy with operational efficiency and marketing effectiveness in mining companies in Indonesia. This research was undertaken to with the aim of analyzing the impact of establishing green accounting on the financial performance of mining companies, by paying attention to how operational efficiency and marketing effectiveness play a role in maximizing company profitability. Hopefully, this research provides a more comprehensive understanding of how mining companies can sustainably improve financial performance through the integration of green accounting practices with environmentally responsible operational and marketing strategies.

2. LITERATURE REVIEW

a. Legitimacy Theory

The concept of *legitimacy theory* was first stated by Dowling and Pfeffer (1975). Legitimacy theory expounds the relationship between businesses and local communities, regardless of the positive relationship that has been established. Since social values and norms influence acceptable behavior, this theory is important for organizations. In analyzing organizational behavior, it is important to consider the effects of the environment and how it impacts the organization. Interactions can be harmoniously integrated if businesses consistently uphold accepted standards and values and never violate them (Syaputra, 2024).

b. Du Pont Analysis

The *Du Pont* analysis was first developed by Donaldson Brown, chief financial officer of *Du Pont Corporation*, in 1920 (Athirah, 2022). *Du Pont* Analysis includes all asset usage ratios and profit levels of the commercialization process to illustrate how these ratios impact profitability levels. This analysis allows companies to evaluate financial performance based on how effectively assets are used to generate net income. In conclusion, this analysis allows the central company to make the right decisions (Susanto et al., 2023).

c. Financial Performance

Financial performance refers to the evaluation of the effectiveness and efficiency of a company's operations, as well as the quality of its business operations, throughout a certain accounting period. The purpose of analyzing financial performance is to determine the extent to which a company complies with its financial regulations (Istiani & Kadarningsih, 2023). The company's financial performance helps measure the company's progress and opportunities. The choice of the right ratio relies on the specific attributes of the study object and the goals of the research, although there are many indicators that can be used to estimate financial performance (Le Thi Kim et al., 2021). The company's financial performance can be measured by *Return On Assets* (ROA) with indicators from research (Dianty & Nurrahim, 2020).

$$\textbf{Return on Assets} = \frac{\textit{Net Profit}}{\textit{Total Asset}} \times \mathbf{100\%}$$

d. Green Accounting

In addition to conventional accounting data, green accounting includes information about environmental actions (Riyadh et al., 2020). Green Accounting is a way to reduce, and avoid effects on the environment by including environmental costs in financial reports that can help internal and external parties to make decisions (Dianty & Nurrahim, 2020). The measurement of Green Accounting in this study is done by applying *Dummy Variables*. If a company does not have an environmental cost component in the *Annual Report* and *Sustainability Report* are given a value of 0, but if the company has an environmental cost component in the *Annual Report* and *Sustainability Report* are given a value of 1 (Budi & Zuhrohtun, 2023).

e. Operational Efficiency

Operational Efficiency is a cost that shows how well an organization optimizes the use of resources to provide high-quality services and goods to customers (Ali et al., 2021). One way to measure operational efficiency is to calculate the expense-to-income ratio, which shows how heavy a company's expenses are on the revenue it generates (Sahlan & Abdi, 2022). The expenses include selling expenses, general and administrative expenses, interest and finance expenses and other expenses. The following is an operational efficiency equation proxied by *Expense to Sales* (ETS) (Gabriel & Abdi, 2022).

$$\textbf{Expense to Sales} = \frac{\textit{Total Expense}}{\textit{Sales}}$$

f. Marketing Effectiveness

Marketing Effectiveness is defined as how well a marketing strategy is executed by producers and consumers and how well the results meet their targets and expectations. The greater the producer's goals, the more successfully the marketing strategy (Handayani et al., 2023). In this study, marketing effectiveness is proxied by *Total Asset Turnover* (TATO) (Gabriel & Abdi, 2022). Below is the Total Asset Turnover formula.

$$\textbf{Total Asset Turnover} = \frac{\textit{Sales}}{\textit{Total Asset}}$$

Hypothesis

The Influence of Green Accounting on Financial Performance

Companies use Green Accounting to show that they care about the environment and bear the costs associated with the environment in the financial statements (Zalukhu et al., 2022). Companies that pay attention to the environment and strive to create a positive reputation in the eyes of stakeholders and investors will definitely incur costs to the environment, not avoid it. Therefore, if the company applies transparent environmental accounting with many disclosures, its environmental performance will improve, and will influence the improvement of the company's financial performance (Ramadhani et al., 2022). Previous research revealed that Green Accounting has a positive effect on financial performance (Wardianda & Slamet Wiyono, 2023). Other examination declares that Green Accounting positively and significantly on financial performance (Suryaningrum & Ratnawati, 2024). This means that companies that record environmental expenditures in their reports tend to be more successful in attracting investors and increasing ROA. Hence, the hypothesis in this study asserts:

H1 = Green accounting has a positive and significant effect on financial performance

The Influence of Operational Efficiency on Financial Performance

Operational Efficiency in this study is proxied by Expense to Sales. This can be seen from companies that produce maximum output with minimal input usage (Lendrawati & Abdi, 2021). The better the company’s operational efficiency in executing business activities, the greater the profit that can be obtained (Millenia & Abdi, 2022). Therefore, to increase efficiency, management needs to try to improve its operations in order to ensure that inputs and outputs reach the specified target (Sahabuddin et al., 2022). From previous research revealed that Operational Efficiency has a positive and significant effect on financial performance (Dermawantika et al., 2020). Other studies point out that Operational Efficiency has a positive and significant effect on financial performance (Musthafa & Hidayat, 2023). This means that the higher the operational efficiency, the lower the financial performance. Accordingly, the hypothesis established in this study indicates:

H2 = Operational efficiency has a positive and significant effect on financial performance

The Influence of Marketing Effectiveness on Financial Performance

In order to determine the degree of Marketing Effectiveness, a total asset turnover ratio (TATO) analysis is carried out to assess the degree to which the company utilizes its assets in generating revenue (Handayani et al., 2023). TATO analyzes the comparison between sales and total assets owned by the company. This ratio illustrates how company managers (marketing) manage all assets owned to increase productivity and increase profitability in order to achieve targeted sales levels (Sahlan & Abdi, 2022). The more efficient the activities carried out by a company, the greater the results that can be achieved to achieve company goals (Lendrawati & Abdi, 2021). From previous research, it was revealed that Marketing Effectiveness on financial performance had a positive effect (Sahlan & Abdi, 2022). Other studies indicate that marketing effectiveness has a positive and significant effect on financial performance (Handayani et al., 2023). This means that the better the marketing effectiveness, the better the financial performance. Accordingly, the hypothesis established in this study indicates:

H3 = Marketing effectiveness has a positive and significant effect on financial performance.

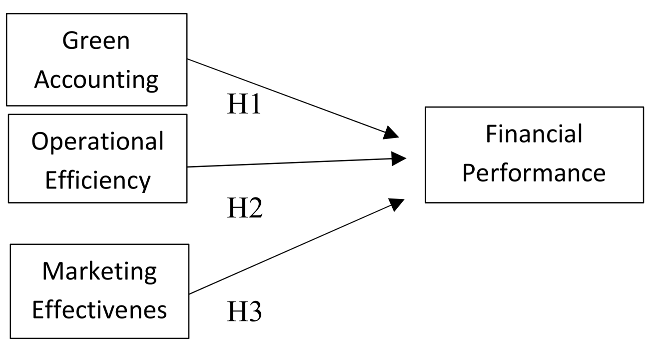

Figure 1. Workforce Attraction Framework

3. METHODS

This inquiry employs a quantitative approach with secondary data from Annual Financial Reports and Annual Reports of Mining Compenies listed on the Indonesia Stock Exchange (IDX) during the period 2021-2023. The dependent variable is Financial Performance measured using *Return on Asset* (ROA), while the independent variables include

Green Accounting (*Dummy Variable*), Operational Efficiency (*Expense to Sales*), and Marketing Effectiveness (*Total Asset Turnover*). The study population consisted of 103 Mining Companies listed on the IDX, with a sample of 83 companies that met the purposive sampling criteria, resulting in a total data of 249 observations. Data obtained through the official IDX website (idx.co.id). The analysis method used is descriptive analysis, panel data regression test, t test, f test, and r^2 test, with *Eviews version 12* as an analysis tool.

4. RESULTS

Description of Sample Data

Table 1. Description of Sample Data

Variable	Mean	Median	Maximum	Minimum	Std.Dev	Frequency (Green Accounting)
Operational Efficiency	0.23	0.13	5.55	0.01	0.43	
Marketing Effectiveness	0.90	0.69	6.95	0.00	0.93	
Financial Performance	0.01	0.00	0.23	-0.19	0.05	
Green Accounting						
- Not Implemented (0)						94
- Implemented (1)						155

As indicated in the table 1, it can be deduced that the green accounting variable, which uses a dummy variable with a value of 1 indicating that the company has implemented green accounting and 0 otherwise. This indicates that the majority of companies in the sample have implemented green accounting. Meanwhile, the operational efficiency variable shows a relatively low average of 0.23 with a much higher maximum value of 5.55 compared to the average value. This suggests there are companies with very high operational efficiency, although most companies have lower values. Marketing effectiveness has an average of 0.90, indicating that companies' marketing effectiveness is generally quite good. However, the standard deviation of 0.93 indicates significant differences between companies, with some companies having significantly higher effectiveness of 6.95 than the average. Furthermore, the financial performance variable has a very low average of 0.01 with a minimum value of -0.19

and a maximum of 0.23. This indicates that some companies experienced negative financial performance, while others showed better results.

Regression Analysis

Regression analysis aims to estimate regression models by employing panel data which is feasible using 3 (three) central approaches, namely Common Effect, Fixed Effect and Random Effect. Determining the appropriate panel data regression model is undertaken through various tests, such as the Chow Test, Hausman Test, and Lagrange Multiplier (LM) Test which are adjusted to the characteristics of the data used.

Table 2. Chow test

	Prob.
Cross-section F	0.7301
Cross-section Chi-square	0.2181

Source: Eviews 12, 2024

Based on table 2 Chow test obtained cross-section F value of 0.7301 where (>0.05) and cross-section Chi-square obtained 0.2181 where (>0.05). In the Chow test criteria if the value (>0.05), One can conclude that the model employed in the chow test represents the Common Effect Model (CEM).

Table 3. Lagrange Multiplier Test

	Cross-section	Time	Both
Breusch-Pagan	0.755131 (0.3849)	10.32761 (0.0013)	0.3849 0.0009)

Source: Eviews 12, 2024

Based on the data in Table 3, the Lagrange Multiplier Test obtained a Breusch-Pagan cross-section value of 0.3849 where (>0.05), in the lagrange multiplier test criteria if the value obtained (>0.05), It can be inferred that the framework selected in the Chow test is the Common Effect Model (CEM). It can be concluded that the model determining the panel data regression through the chow test and the lagrage multiplier (LM) test, then this research model is to use the Common Effect Model (CEM).

The following panel data regression test results produce an equation:

$$\mathbf{Y = -0.009421 + 0.017263X_1 - 0.005230X_2 + 0.007070X_3}$$

The regression equation for panel data is interpreted as follows:

The regression constant of -0.009421 indicates that if there is no influence from the green accounting variable (X1), operational efficiency (X2), and marketing effectiveness (X3), then ROA (Y) is predicted to decrease by 0.9421%. The regression coefficient for green accounting of 0.017263 indicates that the application of green accounting will improve financial performance by 1.7263%. This indicates that companies that apply green accounting (value 1) are more likely to have better financial performance than those that do not apply it (value 0). In contrast, the coefficient for operational efficiency of -0.005230 indicates a negative relationship, so that a 1% increase in operational efficiency will lead to a decrease in financial performance by 0.5230%. Finally, the coefficient for marketing effectiveness of 0.007070 indicates that every 1% increase in marketing effectiveness will increase financial performance by 0.7070%, which shows a positive relationship between marketing effectiveness and financial performance.

Table 4. F Test

F-statistic	4.752486
Prob(F-statistic)	0.003064

Source: Eviews 12, 2024

According to the results of the F Test shown in the table above, the F Statistic value is 4.752486 with a Prob. (F-Statistic) value of 0.003064 which is smaller than the threshold of 0.05. Thus, One can conclude that at the same time, the independent variable green accounting, efficiency operational, and marketing effectiveness significantly affects the dependent variable financial performance.

Table 5. Test of Determination Coefficient (R^2)

R-squared	0.054993
Adjusted R-squared	0.043422

Source: Eviews 12, 2024

Based on the Adjusted R-Squared value of 0.043422, it shows that the green accounting variable, operational efficiency, and marketing effectiveness are able to explain the financial performance variable by 4.3422%, while the remaining 95.6578% is explained by other variables outside this study.

Hypothesis Testing

Table 6. Hypothesis Test Results

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	-0.009421	0.006469	-1.456401	0.1466
X1 (Green Accounting)	0.017263	0.006077	2.840578	0.0049
X2 (Operational Efficiency)	-0.005230	0.007037	-0.743189	0.4581
X3 (Marketing Effectiveness)	0.007070	0.003251	2.174982	0.0306

Source: Eviews 12, 2024

Based on testing with the T test or hypothesis listed in the table above, it can be interpreted with the following details:

The Green Accounting coefficient value (X1) is 0.017263 with a probability value of 0.0049 below the threshold of 0.05. Based on this value, it can be concluded that the X1 variable has a significant positive effect on the Y variable. The value of the Operational Efficiency coefficient (X2) is -0.005230 with a probability value of 0.4581 above the threshold value of 0.05. Based on this value, it can be concluded that the X2 variable has a insignificant to variable Y. The Marketing Effectiveness coefficient value (X3) is 0.007070 with a probability value of 0.0306 lower than the threshold of 0.05. Therefore, it can be concluded that the X3 variable has a significant positive effect on the Y variable.

5. DISCUSSION

Green Accounting's Effect on Financial Performance

Through the acquisition of hypothesis testing analysis, it shows that green accounting has a positive and significant effect on financial performance. These results reveal that carrying out implementation of environmental accounting in a transparent and accurate manner not only improves the company's reputation in the eyes of investors, but also gives confidence to the public as stakeholders. This shows that enterprises employing green accounting have a great opportunity to increase *Return on Assets* (ROA).

The evidence from of this study align with prior research that showed green accounting has a positive and significant effect on financial performance (Wardianda & Slamet Wiyono, 2023) and (Suryaningrum & Ratnawati, 2024). However, the outcomes from this study are not consistent with previous research which found that green accounting has no significant effect on financial performance (Putri et al., 2023).

Operational Efficiency's Effect on Financial Performance

Through the acquisition of hypothesis analysis, it states that operational efficiency has no significant effect on financial performance. This indicates that even though the company is able to optimize operational costs, it does not necessarily improve financial performance. This finding suggests that other factors, such as marketing strategy or market dynamics, may have a greater role in influencing financial performance.

This study is consistent with previous research that operational efficiency has no significant effect on financial performance (Villocino et al., 2022). However, this study contradicts other studies which state that operational efficiency is significant to financial performance (Gabriel & Abdi, 2022) and (Sahlan & Abdi, 2022).

Marketing Effectiveness's Effect on Financial Performance

Through the acquisition of this hypothesis analysis, it states that marketing effectiveness has a positive and significant effect on financial performance. This confirms that companies able to utilize their assets effectively to generate revenue have a greater chance of increasing profitability. *Total Asset Turnover* (TATO), as a proxy for marketing effectiveness, shows an important role in ensuring the efficient use of assets to achieve sales targets.

This research aligns with previous studies which demonstrated that marketing effectiveness has a positive and significant effect on financial performance (Sahlan & Abdi, 2022) and (Handayani et al., 2023). However, this study contradicts other studies which state that marketing effectiveness is positively insignificant to financial performance (Gabriel & Abdi, 2022).

6. CONCLUSION

This study found that green accounting has a positive and significant effect on the financial performance of mining companies, indicating that concern for environmental issues increases investor confidence and corporate reputation. In contrast, operational efficiency is not significantly impactful, indicating that cost optimization alone is not enough. Meanwhile, marketing effectiveness has a positive effect on financial performance, indicating the importance of asset utilization to increase sales and profitability. Overall, environmental stewardship and marketing effectiveness are key to improving financial performance, while operational efficiency needs to be considered alongside other factors.

The researcher's suggestion is that companies should be more serious in implementing environmentally friendly accounting practices, such as waste management, efficient use of resources, and transparency of environmental reports. In addition, companies also need to improve their marketing strategies, such as expanding their target market. In subsequent studies, researchers can consider adding other variables that have the potential to be moderating or mediating factors. In addition, it is recommended to expand the scope of the study by involving different industrial sectors to examine the stability of research results across sectors.

7. LIMITATION

This study has limitations that may affect accuracy or cause bias, namely observations were only made for three years between 2021-2023. In addition, in gauging financial performance, this study utilizes the *Return on Asset* proxy. There are various other proxies that can serve to assess the company's financial performance, so the result could be different if other alternative proxies are used. The low Adjusted R-Squared value indicates that there are still many other variables outside the model that contribute to explaining variations in financial performance.

8. REFERENCES

Ali, M. A., Shuib, M. S., & Nor, A. M. (2021). Protection of bank's wealth: How is islamic banks's financial performance affected by asset quality and operational efficiency. *Universal Journal of Accounting and Finance*, *9*(4), 745–756. https://doi.org/10.13189/ujaf.2021.090420

Athirah, A. (2022). Financial Performance Analysis with the Du Pont Method at Pt Semen Tonasa (Persero) for the 2016-2020 Period. *CEMERLANG : Jurnal Manajemen Dan Ekonomi Bisnis*, *2*(4), 16–27. https://doi.org/10.55606/cemerlang.v2i4.422

Budi, E. C., & Zuhrohtun, Z. (2023). The Effect of Green Accounting, Environmental Performance and Environmental Costs on Financial Performance. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, *12*(10), 1942. https://doi.org/10.24843/eeb.2023.v12.i10.p05

Damayanti, A., & Astuti, S. B. (2022). The Effect of Green Accounting on Company Performance (Empirical Study on Mining and Chemical Industry Companies listed on the IDX for the 2017-2020 Period). *Relevan*, *2*(2), 116–125.

Dermawantika, J., Wardiningsih, S. S., Wardiningsih, S. S., Utami, S. S., & Utami, S. S. (2020). Analysis of the Influence of Credit Risk, Market Risk, and Operating Efficiency on Financial Performance at Bumn Commercial Banks Listed on Bei for the Period 2014 - 2018. *Jurnal Ekonomi Dan Kewirausahaan*, *20*(2), 186–193. https://doi.org/10.33061/jeku.v20i2.4327

Dianty, A., & Nurrahim, G. (2020). The Effect of Green Accounting Implementation and Environmental Performance on Financial Performance. *E-Profit*, *2*(02), 1–11.

Efria, D. A., Baining, M. E., & Orinaldi, M. (2023). The Effect of Green Accounting and Environmental Performance on the Financial Performance of Mining Companies Listed in Issi in 2019-2021. *Al Fiddhoh: Journal of Banking, Insurance, and Finance*, *4*(2), 77–88. https://doi.org/10.32939/fdh.v4i2.2568

Fatimah, N., Agustina, Y., & Setiadi, I. (2023). The Effect of Green Accounting and Material Flow Cost Accounting on Financial Performance. *Kurs: Jurnal Akuntansi, Kewirausahaan Dan Bisnis*, *8*(2), 197–209.

Gabriel, F., & Abdi, M. (2022). The Effect of Efficiency, Effectiveness, and Leverage on the Financial Performance of Public Companies Food and Beverages. *Jurnal Manajerial Dan*

Kewirausahaan, *4*(4), 971–978. https://doi.org/10.24912/ jmk.v4i4.20560

Handayani, F., Kuntadi, C., & Pramukti, R. (2023). The Effect of Marketing Effectiveness, Dividend Policy, and Company Size on Financial Performance of Retail Business Public Companies. *Jurnal Manajemen, Akuntansi, Dan Logistik (JUMATI)*, *1*, 584–593. https://ciptakind-publisher.com/jumati/index.php/ojs/ article/view/69

Hidayat, N. S., & Aris, A. M. (2023). The Effect of Corporate Social Responsibility, Green Accounting and Environmental Performance on Financial Performance. *Management Studies and Entrepreneurship Journal*, *4*(6), 8395–8404. http://journal.yrpipku.com/ index.php/msej

Istiani, D., & Kadarningsih, A. (2023). Good Corporate Governance and Financial Ratios in Increasing Profitability. *Jurnal Akuntansi, Ekonomi Dan Manajemen Bisnis*, *3*(3), 426–438. https://doi.org/10.55606/jaemb.v3i3.2286

Jamal, S. W., Fauziah, F., Latief, A., & Al Syahrin, M. N. (2022). Relationship between Operational Efficiency and Profitability. *JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi*, *9*(1), 45–60. https://doi.org/10.30656/jak.v9i1.3651

Khasanah, D. U. I., Luhendri, Sabaruddin, & Asmanah, S. (2023). The Effect of Green Accounting and Good Corporate Governance on Financial Performance: Empirical Study of Mining Companies on the Indonesia Stock Exchange 2019-2021. *UTILITY: Jurnal Ilmiah Pendidikan Dan Ekonomi*, *7*(2), 96–106. http:// journal. stkipnurulhuda.ac.id/index.php/utility

Le Thi Kim, N., Duvernay, D., & Le Thanh, H. (2021). Determinants of financial performance of listed firms manufacturing food products in Vietnam: regression analysis and Blinder–Oaxaca decomposition analysis. *Journal of Economics and Development*, *23*(3), 267–283. https://doi.org/10.1108/JED-09-2020-0130

Lendrawati, A., & Abdi, M. (2021). The Effect of Efficiency, Effectiveness, and Leverage on the Financial Performance of Business Public Companies Ri[1] M. Yusuf and S. Surjaatmadja, "International Journal of Economics and Financial Issues Analysis of Financial Performance on Profitability with Non Perfo. *Jurnal Manajerial Dan Kewirausahaan*, *3*(3), 591.

Millenia, B., & Abdi, M. (2022). The Effect of Efficiency, Effectiveness and Financial Leverage on ROE of Plantation and Food Crops Subsector Companies. *Jurnal Manajerial Dan Kewirausahaan*, *4*(3), 674–682. https://doi.org/10.24912/ jmk.v4i3.19761

Musthafa, H., & Hidayat, W. W. (2023). The Effect of Capital Adequacy Ratio, Non-Performing Financing and Operating Cost of Operating Income on Company Financial Performance Endah Prawesti Ningrum Universitas Bhayangkara Jakarta Raya. *Jurnal Riset Ilmu Akuntansi*, *2*(3), 170–184. https://doi.org/10.55606/ akuntansi.v2i3.337

Nianty, D. A., Rachma, N., Susanti, A., & Nurfaulia, N. (2023). Green Accounting on Financial Performance with Environmental Performance as Intervening Variable. *Jurnal Manajemen STIE Muhammadiyah Palopo*, *9*(2), 205. https://doi.org/ 10.35906/jurman.v9i2.1696

Putri, A. Y., Wibowo, A. S., & Rosel, R. (2023). The Effect of Green Accounting Implementation on Financial Performance with Good Corporate Governance as Moderator (Empirical Study of Manufacturing Sector Companies Listed on the Indonesia Stock Exchange for the 2016-2020 Period. *Jurnal Manajemen Sains Dan Organisasi*, *3*(3), 221–231. https://doi.org/10.52300/jmso.v3i3.7543

Qatrunnada, R. C. (2023). The Effect of Green Accounting on Corporate Financial Performance in Cement, Chemical and Mining Sector Companies Listed on the Indonesia Stock Exchange for the 2017-2022 Period. *Jurnal Ekonomi Trisakti*, *3*(2), 3149–3160. https://doi.org/10.25105/jet.v3i2.17853

Ramadhani, K., Saputra, M. S., & Wahyuni, L. (2022). The Effect of Green Accounting Implementation and Environmental Performance on Financial Performance with Corporate Governance as a Moderating Variable. *Jurnal Akuntansi Trisakti*, *9*(2), 229–244. https://doi.org/10.25105/jat.v9i2.14559

Riyadh, H. A., Al-Shmam, M. A., Huang, H. H., Gunawan, B., & Alfaiza, S. A. (2020). The analysis of green accounting cost impact on corporations financial performance. *International Journal of Energy Economics and Policy*, *10*(6), 421–426. https://doi.org/10.32479/ijeep.9238

Sahabuddin, R., Anwar, & Rahman, D. A. (2022). The Effect of Credit Risk and Operational Efficiency on Financial Performance at PT. Bank Sulselbar. *Accounting, Accountability and Organization System (AAOS) Journal E-ISSN*, *3*(2), 111–123. https://journal.unifa.ac.id/index.php/aaos_

Sahlan, V., & Abdi, M. (2022). The Effect of Operational Efficiency, Marketing Effectiveness, and Financial Leverage on Company Financial Performance. *Jurnal Manajerial Dan Kewirausahaan*, *4*(1), 243. https://doi.org/10.24912/ jmk.v4i1.17197

Santika, Y., Wicaksono, B., & Iqbal, A. (2023). The Effect of Green Accounting Implementation on Company Performance. *Jae (Jurnal Akuntansi Dan Ekonomi)*, *8*(3), 146–158. https://doi.org/10.29407/jae.v8i3.21323

Suryaningrum, R., & Ratnawati, J. (2024). The Effect of Environmental Performance, Environmental Costs, Public Share Ownership, Green Accounting, and Capital Structure on Financial Performance. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *8*(1), 1270–1292. https://doi.org/10.31955/mea.v8i1.3848

Susanto, A., Surya Putra, D., Suprihatin, E., Indrawan, & Sunardi, N. (2023). Du Pont System Analysis to Assess the Company's Financial Performance (Case Study of Food and Beverage Companies Listed on the IDX for the 2018-2022 Period). *Jurnal Ekonomi, Manajemen Dan Akuntansi*, *1*(3), 217–226. http://jurnal.kolibi.org/ index.php/neraca

Syaputra, R. J. E. (2024). *The Effect of Green Accounting Implementation on Corporate Financial Performance in Proper Recipient Companies Listed on the Indonesia Stock Exchange in 2020-2022*. *4*(2), 1187–1198.

Tania, & Abdi, M. (2023). *The Effect of Operational Efficiency, Marketing Effectiveness, and Financial Leverage on the Financial Performance of Public Companies*. *05*(01), 76–83.

Villocino, D., Kurniawati, E., Akuntansi, P., Ekonomi, F., Bisnis, D., & Batam, U. (2022). *The Effect of Intellectual Capital, Financing Risk, and Operational Efficiency on the Financial Performance of Islamic Commercial Banks Listed in the Financial Services Authority (2017-2021)*. *12*(3), 2022.

Wardianda, A. B. W., & Slamet Wiyono. (2023). The Effect of Green Accounting on Financial Performance with Moderation of Corporate Governance for Property and Real Estate Companies Listed on the Indonesia Stock Exchange (Bei) 2018-2021. *Jurnal Ekonomi Trisakti*, *3*(2), 3183–3190. https://doi.org/10.25105/jet.v3i2.17411

Yuniarti, N., Ranidiah, F., Nurlaili, O., & Astuti, B. (2023). The Effect of Green Accounting Implementation, Corporate Social Responsibility, Environmental Performance on

Corporate Financial Performance (Empirical Study of Mining Sector Companies Listed on the Indonesia Stock Exchange in 2019-2021). *Prosiding Seminar Nasional Ekonomi Bisnis & Akuntansi*, *3*(2020), 1238–1248.

Zalukhu, R. S., Hutauruk, R. P. S., Hutabarat, M. I., & Andini, N. S. (2022). The Effect of Green Accounting Implementation and Capital Structure on Company Performance. *Akuntansi 45*, *3*(2), 208–217. https://doi.org/10.30640/ akuntansi45.v3i2.873