

Economic Performance from the Perspective of Green Accounting and Environmental Disclosure

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ABSTRACT: Companies are regarded as entities that confer a multitude of advantages upon society, while simultaneously contributing to the detrimental effects of global warming. Economic growth has led to an increase in the number of industries and has become a magnet for migration, resulting in increasing amounts of industrial waste and domestic wastewater. One environmentally friendly practice undertaken by companies is the implementation of green accounting and environmental performance in accounting practices. Economic performance is needed as a measuring tool to assess a company's performance and financial health in investor decision-making, while still considering environmental and social factors. The purpose of this study is to examine the impact of green accounting and environmental disclosure on economic performance. The study population was all the companies listed on the Indonesia Stock Exchange (IDX) in 2019-2023. The sample selection used a purposive sampling method, resulting in a sample size of 97, or 485 observational data. The results show that green accounting has a positive effect on economic performance, while environmental disclosure has a negative effect on economic performance.

KEYWORDS: green accounting, environmental disclosure, economic performance

I. INTRODUCTION

Economic performance is a description of the results or achievements influenced by operational activities in an effort to utilize the resources owned by the company during a certain period of time. Economic performance information is very important information in economic decision-making. This information also provides a means for shareholders to understand that the company has generated economic resources optimally and provides an indication of how well management has carried out its responsibilities by utilizing the company's resources efficiently and effectively. Economic performance is a company's performance that is needed as a measuring tool to see the performance and financial health of a company in making decisions by investors. Good company economic performance will be a benchmark for investors in making decisions. The better the business actors, the more likely the company's goals will be achieved automatically and its business will run within the expected corridor (Haholongan, 2016).

Companies have been considered organizations that bring many benefits to society and also damage global warming. Significant human activities cause climate change primarily through increased greenhouse gas emissions, starting from the burning of fossil fuels, deforestation, industry, agriculture, and others. This causes global warming with impacts such as extreme weather and rising sea levels. Economic growth has led to an increase in the number of industries and become a magnet for population migration, which has an impact on increasing the amount of industrial waste and domestic liquid waste. Waste produced by factories is discharged into waterways such as sewers, rivers, or canals and ends up in the sea. Waste that is discharged into waterways without prior treatment can cause damage to aquatic ecosystems and even the death of living creatures in them (www.bps.go.id).

Environmental damage caused by corporate activities is beginning to attract public attention. One environmentally friendly practice undertaken by companies is the implementation of green accounting in their accounting practices. Green accounting is an accounting application in which companies include costs for environmental preservation or the well-being of the surrounding environment, known as environmental management costs. Generally, green accounting is a form of implementation of an entity's or organization's concern for the surrounding environment (Lubis et al., 2024). The implementation of green accounting in companies fulfills the desires of stakeholders, as stakeholders focus not only on the company's financial factors but also on the company's environmental factors.

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Green accounting and environmental disclosure contribute to economic performance by improving transparency, operational efficiency, and corporate reputation, ultimately attracting investors and increasing profitability. Green accounting measures environmental costs and benefits, while environmental disclosure is how companies report their environmental impacts, both of which aim to build a positive image and meet stakeholder demands. The implementation of green accounting is crucial for companies. With the implementation of green accounting, the value derived from a company's financial statements will be holistic.

II. LITERATURE REVIEW

This study uses legitimacy and stakeholder theories to support environmental disclosure. This is consistent with the opinions of several researchers, including Spence (2010), Lozano (2015), Rezaee (2016), and Bartolacci et al. (2022), Rouf and Siddique (2023, Del Gesso and Lodhi (2025) that legitimacy, institutional, and stakeholder theories are the most widely used theories to support non-financial disclosures related to green accounting, sustainability reporting and environmental disclosures. According to legitimacy theory, companies must operate in accordance with societal norms and values in order to continue operating and survive in the long term (Dowling & Pfeffer, 1975). This theory focuses on the interaction between companies and society, and considers society as an important factor that can provide or withdraw corporate legitimacy. Basically, legitimacy theory is a condition, state or status, which exists when a company's value system is congruent or in line with the value system of the social system that applies in the society of which the company is a part (Machdar, 2019). Corporate organizations must communicate environmental activities by making social environmental disclosures in order to gain legitimacy (Berthelot and Robert, 2011) and environmental disclosure is considered useful for restoring, improving, and maintaining the legitimacy that has been received (Azhara & Machdar, 2024).

According to Freeman (1984), stakeholder theory emphasizes that companies are not only responsible to shareholders (owners), but also to various other stakeholders, such as employees, customers, suppliers, the community, and the government. This is possible because the continuity and success of an organization depend on its ability to balance the interests of all stakeholders to create shared value. A company's responsibility is not limited to maximizing profits and shareholder interests, but must also consider the community, customers, and suppliers as part of the company's operations (Machdar, 2019). According to Daat and Pangayow (2019), economic performance is the relative performance of companies within the same industry, as indicated by the industry's annual returns. A company's economic performance is essential as a measuring tool for assessing its performance and financial health in investor decision-making.

Green accounting research that measures and presents environmental management costs is very useful for managerial decision-making and disclosure to stakeholders. This has been carried out by many researchers, including Khan & Gupta (2023), Adegbe et al. (2020), Bebbington et al. (2021), Chavez & Romi (2021), Cho et al. (2022), Gunarathne et al. (2021), and Thomson (2021). Cohen and Robbins (2011) define green accounting or environmental accounting as an accounting style that includes the indirect costs and benefits of economic activities, such as the environmental impacts and health consequences of business decisions and plans. By implementing green accounting, the Company focuses on three aspects of triple bottom lines that ensure a company can develop sustainably. These three aspects include people, profit and planet (Elkington, 1997). People (human/social) focus on the company's social responsibility towards employees, communities, and surrounding communities, profit (profit/economic) maintains the company's profitability, but is not the only measure of business success, and the planet (environment) encourages companies to minimize negative impacts on the environment and maintain natural sustainability. Protecting the environment is indeed an inherent principle of corporate social responsibility (Del Gesso & Lodhi, 2025).

According to Tu and Huang (2015), green accounting is accounting used to measure, record, and disclose the impact of a company's environmental activities on its financial status through a series of accounting systems. The goal is to encourage companies to implement effective and efficient environmental activities, thereby achieving sustainable development. Environmental cost accounting is a general term used for the addition of environmental cost information into various accounting practices to study the reciprocal relationship between accountants and ecology, awareness of environmental cost information, and allocation of it to appropriate products and processes (EPA, 1995). Environmental accounting aims to produce information that is in accordance with reality in an honest and impartial manner by considering the interests of the whole community and considering the concept of social responsibility (Tanc & Gokoglan, 2015).

Nisaa and Hidayati (2025) found that green accounting and environmental disclosure did not significantly impact firm value due to a lack of understanding and consistent implementation, particularly in developing countries, and investors' focus solely on financial indicators. Sapulette and Limb (2021) found that green accounting had no effect on firm value, while environmental performance showed a significant effect. Research by Lubis et al. (2024) showed that green accounting had no significant impact on the financial performance of manufacturing companies in the basic and chemical industries listed on the Indonesia Stock

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Exchange. This was due to the companies' focus on increasing profits, where environmental costs were considered expenses that could reduce profits. Rohmah and Wahyudin (2015) found that environmental performance had no significant effect on economic performance, while Rafianto (2015) stated that environmental disclosure had no effect on financial performance.

Khan et al. (2022) explain that environmental disclosure is a response to pressure from stakeholders, representing a company's efforts to manage public perception of the environmental impact of its activities. Environmental disclosure is a manifestation of corporate social responsibility through environmental disclosure in annual reports, where companies provide information to the public, and the public can monitor the activities carried out by the company in fulfilling its social and environmental responsibilities (Ningtyas & Triyanto, 2019). Widely recognized and implemented environmental disclosure standards will enable companies to define their responsibilities while enabling them to submit useful reports as needed. On the other hand, it also helps company management consider environmental issues in their operations (Nursasi, 2017).

III. HYPOTHESIS

Based on previous research, green accounting and environmental disclosure have inconsistent effects on company performance. Agyemang et al. (2024) provide empirical evidence that green accounting disclosure and environmental performance have a positive and significant effect on company performance. In this case, green accounting disclosure provides information related to environmental economics in a disciplined manner, resulting in high environmental performance scores. Nurunnisa (2018) found that implementing green accounting can increase a company's stock price. Dewi and Narayana (2020) showed that green accounting has a significant positive effect on firm value. Although many studies support this positive relationship, there are still research findings that show discrepancies. Based on the explanation above, the proposed hypothesis is: H1: Green accounting has a positive and significant effect on economic performance.

Akmal and Darmawati (2023) found that environmental disclosure has a significant positive effect on firm value when environmental management is considered as a moderating variable. Sari (2023) found that environmental disclosure positively influences firm value, particularly in the food and beverage sector. Prasetyo et al. (2018) found that environmental performance significantly influences economic performance. Harahap and Septiani (2019) found that CSR disclosure has a positive and significant effect on changes in firm performance. Research by Jitmaneeroj (2018) and Wardani (2020) confirms that environmental performance also has a positive correlation with financial performance and firm value. Based on the explanation above, the following hypothesis is proposed: H2: Environmental disclosure has a positive and significant effect on economic performance.

IV. RESEARCH METHODS

The population used in this study were basic materials companies listed on the Indonesia Stock Exchange during the 2019-2023 period. A purposive sampling of 97 companies was used, spanning a five-year study period, resulting in a final data set of 485 observations.

Company economic performance is measured by calculating the company's stock return. Stock return is the relative performance of a company within the same industry, characterized by the industry's annual return (Rahmawati & Subardjo, 2017). Stock return is calculated using the following formula (Daat & Pangayow, 2019):

$$ECPF_{it} = \frac{P_1 - P_0}{P_0}$$

Note: $ECPF_{it}$ = Economic performance of firm i in year t , P_1 = Stock price at the end of the year;; and P_0 = Stock price at the beginning of the year..

This green accounting system uses the GRI G4, which consists of 91 items. Each item is scored 1 if a company discloses it and 0 if it does not. The scores for all items are then summed to obtain a final score for each company. The formula is as follows (Dwi & Handayani, 2018).

$$GRAC_{it} = \frac{\sum X_{it}}{n_t}$$

CSR_{it} = Corporate social responsibility disclosure by firm i in year t . n_t = Total number of items that comply with GRI G4; X_{it} = The total number of items disclosed by firm i in year t . Environmental disclosure is measured using a dummy value. Each company that makes a disclosure is assigned a score of 1, and those that do not make any environmental disclosure are assigned a score of 0 (Dwi & Handayani, 2018).

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V. RESULTS AND DISCUSSION

The normality, multicollinearity, heteroscedasticity, and autocorrelation assumptions were tested in this study. All of the variables utilized in this study's descriptive statistics are shown in Table 1.

TABLE 1. DESCRIPTIVE STATISTICS

	N	MINIMUM	MAXIMUM	MEAN	STD. DEVIATION
ECPFit	585	0.98670	26.8571	0.12885	1.31871
GRACit	585	0.02200	0.89010	0.17790	0.1068
DISC _{it}	585	0.0000	1.00000	0.67049	0.4704

Description: ECPFit = Economic performance, GRACit = Green accounting index, DISC_{it} = Environmental Disclosure

Source: Data processed

TABLE 2. HYPOTHESIS TESTING RESULTS

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent variable: ECPFit				
C	-0.096479	0.142215	-0.678397	0.4978
GRACit	1.099427	0.555077	1.980.675	0.0482 **)
DISC _{it}	-0.247028	0.123518	-1.999.936	0.0460 **)

Description: ECPFit = Economic performance, GRACit = Green accounting index, DISC_{it} = Environmental Disclosure Output results; **), **), *) significant at 1%, 5%, and 10%, respectively, with the two-tailed tests and robust standard errors

SOURCE: DATA PROCESSED

Table 2 shows the test results for all variables that influence economic performance. Green accounting (GRACit) shows a coefficient of 1.099427 (positive direction) with a p-value of 0.0482. This indicates that green accounting has a positive and significant effect on economic performance (ECPFit). Thus, the first hypothesis is accepted. The greater the implementation of green accounting in an entity, the greater investor confidence in the company's sustainability and responsibility. This condition can increase stock market value, which in turn boosts the company's economic performance. The results of this study are in line with the findings of Nurunnisa (2018) and Dewi and Narayana (2020) that green accounting has a significant positive effect on company value. Therefore, the implementation of green accounting can increase a company's stock price, which ultimately boosts economic performance.

Table 2 shows that environmental disclosure (DISC_{it}) has a significant negative effect on economic performance (ECPFit). This is evident with a p-value of 0.0460 at a significance level of <0.05. H2 is rejected with a regression coefficient value of -0.247028 (negative). These results align with the findings of Ali et al., 2022, which found that environmental disclosure has a significant negative effect on economic performance. Environmental disclosure can negatively impact economic performance because it can increase operational costs, even though its primary purpose is to enhance corporate transparency and legitimacy. Several studies have found that higher levels of environmental disclosure lower economic performance, and vice versa, as demonstrated by analyses of the relationship between environmental disclosure and corporate profits.

VI. CONCLUSION

The purpose of this study is to examine the impact of green accounting and environmental disclosure on economic performance. Based on the research findings, it can be concluded that green accounting has a positive and significant effect on economic performance, while environmental disclosure has a negative and significant effect on economic performance. This study has limitations. Although disclosure quality is a complex, multidimensional concept, the number and types of dimensions discussed, as well as their relative relevance, are still debated. Its measurement remains subjective because it is determined by the perspective from which disclosure is assessed and measured.

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