

The Effect of Tax Planning, Profitability, and Carbon Emission Disclosure on Firm Value

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This study aims to analyze the effect of tax planning, profitability, and carbon emission disclosure on firm value in basic materials sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period. The sampling technique employed was purposive sampling. Based on the established criteria, 31 companies were selected, resulting in 124 research observations. The results indicate that tax planning and profitability have a positive and significant effect on firm value, whereas carbon emission disclosure does not have a significant effect on firm value. Furthermore, the findings reveal that tax planning, profitability, and carbon emission disclosure simultaneously have a significant effect on firm value.

Keywords: Tax Planning, Profitability, Carbon Emission Disclosure, Firm Value.

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1. Introduction

The rapid development of the business world requires companies to continuously adapt to current dynamics, as every appropriate decision generates value that is essential for the sustainability of the company. In an increasingly competitive environment, companies are not only required to focus on achieving profits but also on implementing sustainability strategies and good corporate governance in order to survive and gain a competitive advantage. A high firm value reflects management's success in managing resources, provides a positive signal regarding the company's future prospects, increases market confidence, attracts investors, and maximizes shareholder wealth (Nini & Chandika, 2025). Firm value is often reflected in stock prices, where an increase in stock prices indicates positive company performance and strengthens investor confidence in making investment decisions.

A high firm value is influenced by the interaction between tax planning, profitability, and carbon emission disclosure, which are the primary focus of this study. According to Muslim and Junaidi (2020), tax planning is the initial step in tax management. Tax planning is one of the efforts made by taxpayers to avoid engaging in tax evasion (Kurniyawati et al., 2023). If a company can properly assess the risks and benefits associated with tax planning, its implementation can be highly effective. The better a company performs tax planning, the greater the potential increase in firm value.

Companies with high profitability levels demonstrate stronger and more reliable performance. This condition becomes one of the key considerations for investors when making investment decisions. According to Soetardjo and Nurmawati (2024), profitability plays a strategic role in enhancing investment attractiveness and increasing stakeholder confidence in a company. The profitability earned by a company also affects the amount of dividends distributed, which in turn can influence firm value.

Carbon emission disclosure refers to a company's effort to transparently communicate information regarding the amount and management of carbon emissions generated from its operational activities to

stakeholders. Fibriyanti et al. (2025) argue that carbon emission disclosure is a fundamental aspect that can influence perceptions of firm value. Companies with a high level of carbon emission disclosure tend to have a positive public image and are considered more responsive to market demands concerning environmental issues.

Research conducted by Soetardjo and Nurmawati (2024) shows that tax planning has a positive and significant effect on firm value, while carbon emission disclosure also has a positive effect on firm value. However, independent commissioners do not significantly affect firm value. Nevertheless, carbon emission disclosure and independent commissioners simultaneously have a positive effect on firm value. In contrast, research by Leilani and Andayani (2025) found that carbon emission disclosure does not significantly affect firm value, whereas profitability has a positive and significant effect on firm value. Therefore, this study examines the effects of tax planning, profitability, and carbon emission disclosure on firm value in basic materials sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period.

2. Literature Review

Theoretical Foundation

This study is based on Signaling Theory, introduced by Michael Spence (1973). This theory explains the signals or information provided by company management that reflect the condition of a company in order to generate benefits or advantages for investors (information recipients). According to Brigham and Houston (2019), a signal is an action taken by company management to provide guidance to investors regarding how management views the company's prospects. Signaling theory explains how companies should provide signals to users of financial statements, particularly investors who intend to make investment decisions. These signals may take the form of information regarding actions undertaken by management to realize investors' expectations.

Research Hypotheses

Research conducted by Nini and Chandika (2025) states that tax planning has a positive and significant effect on firm value. According to Kusumanegara et al. (2023), their findings indicate that tax planning significantly affects firm value. Choyrunnisa (2023) also found that tax planning has a positive and significant effect on firm value. Similarly, Tarigan et al. (2024) reported that tax planning significantly influences firm value. Furthermore, studies by Ekonomi et al. (2025) and Fibriyanti et al. (2026) demonstrate that tax planning has a significant effect on firm value. Based on these findings, the following hypothesis is proposed:

H1: Tax planning is hypothesized to have a significant effect on firm value.

Research by Taufiq and Trianti (2021) shows that profitability has a positive and significant effect on firm value. Muslim and Junaidi (2020) also found that profitability significantly affects firm value. Similar findings were reported by Purwanti (2020) and Gamar and Widoretno (2024), who concluded that profitability has a significant influence on firm value. Based on these findings, the following hypothesis is proposed:

H2: Profitability is hypothesized to have a significant effect on firm value.

Research conducted by Bariansyah and Ginting (2022) indicates that carbon emission disclosure has a positive and significant effect on firm value. According to Setianingsih et al. (2025), carbon emission disclosure positively and significantly influences firm value. Noor and Ginting (2022) also found that carbon emission disclosure has a significant effect on firm value. Similarly, Gamar and Widoretno (2024) reported that carbon emission disclosure has a significant impact on firm value. Additional studies by Fibriyanti and

Widagdo (2022) and Vera et al. (2025) also demonstrate that carbon emission disclosure significantly affects firm value. Based on these findings, the following hypothesis is proposed:

H3: Carbon emission disclosure is hypothesized to have a significant effect on firm value.

Research by Nini and Chandika (2025) indicates that tax planning and profitability simultaneously affect firm value. Setianingsih et al. (2025) found that profitability and carbon emission disclosure have a positive and significant effect on firm value. Similarly, Soetardjo and Nurmawati (2024) reported that tax planning, carbon emission disclosure, and independent commissioners simultaneously influence firm value. Furthermore, studies by Kusumanegara et al. (2023) and Choyrunnisa (2023) concluded that tax planning and profitability jointly have a positive and significant effect on firm value. Based on these findings, the following hypothesis is proposed:

H4: Tax planning, profitability, and carbon emission disclosure are hypothesized to simultaneously affect firm value.

3. Research Methods

This study employs a quantitative research approach using financial statement data from Basic Materials sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period. The sampling technique applied in this study is purposive sampling. Based on the established criteria, the sample consists of 31 companies, resulting in 124 research observations. The data were analyzed using descriptive statistical analysis with quantitative data. Hypothesis testing was conducted using Moderated Regression Analysis (MRA) with STATA 14.2 software (Sharma et al., 1981). MRA is an analytical approach that maintains sample integrity and provides a basis for controlling the influence of moderating variables (Sugiyono, 2018).

4. Results

Descriptive statistical analysis is used to describe the distribution or dispersion pattern of the research variables, including the minimum and maximum values, mean values, and standard deviations of each variable. The descriptive statistics of the research variables are presented in the following table.

Table 1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Firm Value	124	1.363548	1.321372	0.18	7.13
Tax Planning	124	0.406371	0.5473994	0.02	4.49
Profitability	124	0.0721774	0.0590929	0.01	0.31
Carbon Emission Disclosure	124	0.4431452	0.1605598	0.11	0.72

Source: Processed data using STATA (2026).

Table 1 shows that the dependent variable, firm value, has a mean value of 1.363548, a minimum value of 0.18, a maximum value of 7.13, and a standard deviation of 1.321372. The independent variables in this study are tax planning, profitability, and carbon emission disclosure. Tax planning has a minimum value of 0.02, a maximum value of 4.49, a standard deviation of 0.5473994, and a mean value of 0.406371. Profitability has a mean value of 0.0721774, a minimum value of 0.01, a maximum value of 0.31, and a standard deviation of 0.0590929. Carbon emission disclosure has a mean value of 0.4431452, a standard deviation of 0.1605598, a minimum value of 0.11, and a maximum value of 0.72. The results of testing the first, second, and third hypotheses are presented in the following table.

Table 2. t-Test Results

Variable	Coef.	Std. Err.	t	P > t
Tax Planning	1.083259	0.172169	6.29	0.000
Profitability	8.873969	1.615762	5.49	0.000
Carbon Emission Disclosure	0.6109845	0.5944225	1.03	0.306
Constant (_cons)	0.0120885	0.2947171	0.04	0.967

Source: Processed data using STATA (2026).

Table 2 shows that the tax planning variable significantly affects firm value, with a probability value of less than 0.05 (0.000). Based on these results, Hypothesis 1 is accepted. Table 2 also indicates that the profitability variable has a probability value of less than 0.05 (0.000) and a t-value of 5.49. These findings demonstrate that profitability has a significant effect on firm value. Therefore, Hypothesis 2 is accepted.

Furthermore, Table 2 shows that carbon emission disclosure has a probability value greater than 0.05 (0.306). This indicates that carbon emission disclosure does not significantly affect firm value. Therefore, Hypothesis 3 is rejected. The results of testing the fourth hypothesis are presented in the following table.

Table 3. Simultaneous Test (F-Test)

Description	Value
F-statistic	3.90
Prob > F	0.0000

Source: Processed data using STATA (2026).

The results of the simultaneous test indicate that the F-statistic is 3.90 with a probability value (Prob > F) of 0.0000, which is less than 0.05. This finding demonstrates that tax planning, profitability, and carbon emission disclosure simultaneously have a significant effect on firm value. Therefore, Hypothesis 4 is accepted. Based on Table 3, the calculated F-value is 3.90, with a significance value of 0.0000, which is lower than 0.05 ($0.0000 < 0.05$). These results indicate that all independent variables simultaneously have a significant effect on the dependent variable, namely firm value.

Discussion

The results of this study indicate that tax planning has a significant effect on firm value. In this study, tax planning is measured using the Effective Tax Rate (ETR). The resulting ETR provides an indication of whether a company has effectively managed its tax burden, as reflected by an ETR lower than the applicable statutory tax rate. A lower ETR indicates a higher level of tax aggressiveness because it reflects a tax burden that is relatively smaller than the company's pre-tax income. Higher profits relative to tax expenses demonstrate the company's efficiency in managing its finances and enhancing shareholder value. This condition ultimately contributes to an increase in the company's market value, as reflected in investors' perceptions of the company's performance and future prospects. These findings are consistent with the studies conducted by Nini and Chandika (2025), Kusumanegara et al. (2023), Choyrunnisa (2023), and Tarigan et al. (2024), which concluded that tax planning has a positive and significant effect on firm value.

The findings also show that profitability has a significant effect on firm value. A high level of profitability attracts investors to invest in a company because it demonstrates the company's ability to generate long-term returns. Companies with higher profitability tend to have greater growth potential, thereby increasing firm value. These findings are consistent with the studies of Taufiq and Trianti (2021), Muslim and Junaidi (2020), Purwanti (2020), and Gamar and Widoretno (2024), which concluded that profitability has a positive and significant effect on firm value.

Based on the test results, carbon emission disclosure does not have a significant effect on firm value. Environmental emission reporting has not yet been able to significantly influence market perceptions directly. This condition may be attributed to the limited attention of investors, who still tend to focus more on short-term financial performance, such as the company's profitability, rather than on environmental disclosures, which remain largely voluntary in nature. The costs incurred by companies to measure, manage, and report carbon emissions may still be perceived by investors as additional financial burdens that do not provide immediate and tangible benefits to shareholders. These findings are in line with the study conducted by Rambe and Rustam (2025), which found that carbon emission disclosure does not have a significant effect on firm value.

The results further indicate that tax planning, profitability, and carbon emission disclosure simultaneously influence firm value. Effective tax planning can legally minimize costs, thereby increasing net income. High profitability reflects a company's ability to generate earnings and enhance investor confidence. In addition, comprehensive carbon emission disclosure demonstrates a company's commitment to environmental responsibility. Collectively, these three variables can strengthen investor confidence, encourage investment, and enhance firm value.

These findings are consistent with the study by Nini and Chandika (2025), entitled *The Effect of Tax Planning and Profitability on Firm Value in Food and Beverage Subsector Companies Listed on the Indonesia Stock Exchange for the Period 2019–2023*, which demonstrated that financial fundamentals such as tax planning and profitability are key considerations for investors when evaluating firms. Likewise, the study by Setianingsih et al. (2025), entitled *The Effect of Profitability, Carbon Emission Disclosure, and Green Accounting on Firm Value*, concluded that combining financial performance indicators with non-financial factors such as carbon emission disclosure creates a more comprehensive signal for the market, thereby collectively enhancing firm value.

5. Conclusion

This study concludes that tax planning and profitability have a positive and significant effect on firm value, whereas carbon emission disclosure does not have a significant effect on firm value. Furthermore, the findings indicate that tax planning, profitability, and carbon emission disclosure simultaneously influence firm value. The limitation of this study lies in the relatively limited sample size and the variables examined. Therefore, future research is recommended to expand the scope of analysis by considering additional factors, such as environmental performance and leverage, in explaining firm value.

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