

## DOES FINANCIAL PERFORMANCE MEDIATE THE RELATIONSHIP BETWEEN ESG PERFORMANCE AND FIRM VALUE?

### AUTHOR

<sup>1)</sup>Bela Nabila, <sup>2)</sup>Titi Dewi Warninda

### ABSTRACT

This study explores how ESG (Environmental, Social, Governance) performance influences firm valuation, using financial performance in a mediating capacity. Here, ESG acts as the independent variable, while Tobin's Q proxies for the dependent variable of firm value. Financial performance as mediator is gauged by Return on Assets (ROA) and Return on Equity (ROE). Data covers 49 firms from the IDX ESG Leaders Index over the 2020-2023 period. Panel data regression is employed to examine the direct relationship, followed by mediation analysis to assess the mediating effect and the Sobel test to assess the significance of indirect effects. The results indicate that ESG performance exerts no significant impact on firm value, nor does it affect ROA or ROE. Conversely, both ROA and ROE demonstrate a significant positive influence on firm value. Nevertheless, financial performance measured by ROA and ROE fails to mediate the link between ESG performance and firm value. One possible explanation for this result is that strong ESG practices do not automatically translate into short-term gains in a company's profitability. In the observed period, ESG initiatives are sometimes perceived as additional costs that may impose a financial burden on the firm, thereby limiting their ability to improve short-term financial performance and potentially reducing shareholder wealth.

### Keywords

ESG Performance, Financial Performance, Firm Value, Mediating Effect, Profitability, Sustainability

### AFFILIATION

Study Program  
Institution Name  
Institution Address

<sup>1,2)</sup>Management, Faculty of Economics and Business

<sup>1,2)</sup>Universitas Islam Negeri Syarif Hidayatullah

<sup>1,2)</sup>Jl. Ir. H. Djuanda No. 95, Ciputat, Kota Tangerang Selatan, Banten - 15412

### CORRESPONDENCE

Author  
Email

Bela Nabila  
[nabella53@gmail.com](mailto:nabella53@gmail.com)

### LICENSE



*This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).*

## I. INTRODUCTION

Regulations set by the Financial Services Authority No. 51/POJK. 03/2017, to monitor the use of sustainable financing for equality., publicly traded firms, and financial service providers, were released by the Financial Services Authority in its role as a regulator. As specified in Article 10 of these regulations, financial service providers, issuers, and public companies must create sustainability reports, starting from 2019. Sustainability reports have become an important component for companies, as they should be competence to clarify the company's outcomes and effects on those involved (Hidayat, 2023). Sustainability-oriented reporting, particularly within the integrated framework of ESG (Environmental, Social and Governance) is designed to broaden the boundaries of corporate disclosure by incorporating non-financial dimensions, which are predominantly voluntary in nature (Igbinoia & Agbadua, 2023).

ESG performance is increasingly being used these days to help companies meet ever-increasing environmental and social responsibility standards (Bifulco et al., 2023). This is because ESG is seen as a means for raising firm value and financial performance. Where, companies that strictly follow ESG rules, in particular, typically have lower failure rates, lower stakeholder disputes and lower risk of default. (Wu et al., 2022). Thus, when a firm discloses ESG (environmental, social, and governance) aspects, it is able to make a positive contribution to increasing the firm value, especially from the stakeholders perspective (Xaviera & Rahman, 2023). To promote sustainable investing, the Indonesia Stock Exchange (IDX) introduced a new index called IDX ESG Leaders in 2020, triggered by rising environmental, social, and governance consciousness among various issuers and investors within the national capital market environment (OJK, 2021). It is an index that evaluates the performance of equity prices recognized as leaders in ESG rankings, in the absence of substantial disputes, selected from those that demonstrate high trading liquidity and strong financial performance. Where the ESG assessment is carried out by the Sustainability assessment body (IDXESGL, 2021).

Previous empirical investigation on the correlation between ESG performance and firm value has shown an inconsistent relationship. Based on previous study reported by Zhou et al. (2022), Aydoğmuş et al. (2022), Rahelliamelinda & Handoko (2024), and Delvina & Hidayah (2023) showed that there is an influence of the correlation between ESG performance or firm value, this implies ESG performance can increase firm value. Study conducted by Igbinoia & Agbadua (2023), Putra & Budastra (2024) and Xaviera & Rahman (2023) shows results that are contrary to some previous studies, where the investigation's outcomes demonstrate that there ESG performance outcomes do not impact firm value. Previous research has found mixed results between ESG performance or firm value. In practice, various indirect variables can have an impact on the correlation. This implies that alternative factors might mediate the link between ESG and firm value. Consequently, within this study, financial performance represents a variable serving as an intermediary for the relationship connecting ESG performance to the firm value. According to Putra & Budastra (2024), Financial performance serves as a mediator that plays a crucial part in executing ESG to enhance firm value. This is because financial performance can be a translator of how ESG practices can contribute to increasing firm value, where companies with a good ESG score will establish better relationships with customers and ultimately increase profitability.

Referring on this background, this study is motivated by the presence of inconsistent empirical findings in prior literature concerning the effect of ESG performance in firm value. A key distinction of this research lies in the simultaneous use of Return on Assets (ROA) or Return on Equity (ROE) as a financial performance metric acting as a mediating variable, utilizing the Sobel test to offer more robust empirical proof regarding the indirect impact of financial performance within the connection on Environmental, Social, or Governance outcomes and the overall valuation of the firm. In line with this, the research investigates ESG performance's role in shaping firm value through the mediating effect on financial performance, targeting companies in the IDX ESG Leaders Index. Financial performance is captured via ROA and ROE as key profitability measures; robustness is bolstered by controls like firm size, leverage, TAT, age of the firm, and per capita GDP

## II. LITERATURE REVIEW

### 2.1. Literature Review

#### 2.1.1. Sustainable Development Theory

Considering sustainable development theory, the objective is to satisfy present demands without compromising the potential of subsequent generations (Shi et al., 2019). To fulfill the goals of sustainable development, companies need to achieve sustainable development by improving environmental protection and managing ESG performance by investing in pollution control technologies and environmental protection techniques that will improve production efficiency, reduce pollutants, and improve market competitiveness. This may contribute to greater financial achievement for the company (Zhou et al., 2022).

#### 2.1.2. Resource-Based Theory

The resource-based theory presented by Barney (1991) hold that a company's sustainable competitive advantage depends on its internal resources, which include real assets, intangible assets and organizational capabilities. Corresponding with this viewpoint, Zhou et al. (2022) argue that ESG performance can be viewed as a strategic resource that improves financial outcomes or operational efficiency.

#### 2.1.3. Stakeholder Theory

Based on stakeholder theory, companies have to produce value for both individuals and all stakeholders who has the ability to effects or be effected by the objectives of the organization or in other words those whose support is critical to the company's survival (Dmytriyev et al., 2021). This theory posits that sharing information about ESG acts as a means for businesses to address stakeholder inquiries regarding their commitments to social and environmental responsibilities that reflect their sustainability (Xaviera & Rahman, 2023).

#### 2.1.4. Information Asymmetry Theory

Information asymmetry pertains to a condition in which one side has superior or greater information than one side (Akerlof, 1970). This concept is closely associated with signaling theory, which is grounded in the assumption that information is unevenly distributed among market participants. Under this framework, management is inclined to disclose information to investors or shareholders when such information conveys a favorable outlook (Mustikasari & Mukhlisin, 2021).

#### 2.1.5. Signaling Theory

Signaling theory, initially presented by Spence (1973), describes how prospective workers addressing data asymmetry in the labor market by using signals such as education to express their productivity to employers. This theory focuses on how to communicate asymmetric information well between two parties (Connelly et al., 2011). In this context, Igbinovia & Agbadua (2023) suggest that the disclosure of ESG information can be interpreted as a signaling mechanism, whereby such information acts as a warning that can effects the firm value.

## 2.2. Hypothesis Development

### 2.2.1. The effect of ESG performance on firm value

ESG closely aligns with corporate social responsibility (CSR) principles, stressing equilibrium across environmental, social, or governance aspects within a sustainability framework. Implementing ESG strategies can elevate firm value by reducing capital costs and fostering economic-social progress, thereby enhancing reputation and overall market valuation (Putra & Budastra, 2024). Companies exhibiting strong ESG performance are generally perceived to generate greater market value, as investors use ESG factors more frequently while making decisions (Aydoğmuş et al., 2022). Nevertheless, prior empirical studies, including those research conducted by Aydoğmuş et al. (2022), Zhou et al. (2022), Delvina & Hidayah (2023), Espinosa-Méndez et al. (2023), Angir & Weli (2024),

and Rahelliamelinda & Handoko (2024) indicate that ESG performance has an insignificant effect in firm value. Considering on these outcomes, listed below are the hypotheses put out in the present investigation:

**H1:** ESG performance effects the firm value.

### 2.2.2. The effect of ESG performance on ROA

ESG performance may be interpreted as a means of gaining a competitive advantage that contributes for bettering a firm's financial performance. Firm that demonstrate greater transparency in ESG disclosure tend to exhibit superior operational efficiency, higher returns, and reduced risk levels. This can be attributed to the role of ESG performance in influencing long-term profitability, which can be assessed through ROA (Wanday et al., 2022). Empirical studies examining the connection on ESG performance or financial performance, as proxied by ROA, including those conducted by Kim & Li (2021), Aydoğmuş et al. (2022), Delvina & Hidayah (2023), and Putra & Budastra (2024), there is substantial evidence demonstrating that ESG practices exert a significant influence on ROA. Drawing upon these results, this research puts forward the hypotheses outlined below:

**H2:** ESG performance effects Return on Assets (ROA).

### 2.2.3. The Effect of ROA on Firm Value

Financial performance describes the economic condition of a company over a certain period to provide insight into the organization (Hasanudin et al., 2023). Financial performance is generally assessed by a measure of profitability (ROA), which indicates a firm's efficiency in financial management and its ability in order for creating revenue (Putra & Budastra, 2024). Increased profitability indicates a significant return on investment, thereby increasing shareholder confidence to continue their investment (Kristi & Yanto, 2020). Nevertheless, prior empirical studies, including those research conducted by Putra & Budastra (2024), Nursetya & Hidayati (2021) and Ridwansyah & Setijaningsih (2024) research indicates that a firm's Return on Assets (ROA) is a key determinant that significantly influences its market value. Referring on these insights, the research hypothesis is presented below:

**H3:** Return on Asset (ROA) effects the firm value.

### 2.2.4. The effect of ESG performance on ROE

ESG scores provide investors with a more comprehensive basis for evaluating a firm's sustainability performance. Companies that demonstrate strong Corporate social responsibility is more inclined to draw investors, thereby encouraging the allocation of capital to the firm (Triyani et al., 2020). Through the implementation of sustainable and efficient management practices, businesses might boost their earnings., which subsequently contributes to improvements in ROE. Empirical research investigating the correlation on ESG performance and ROE, such as the investigation was performed by Alareeni & Hamdan (2020), indicates that ESG performance has as significant effect in ROE. Considering these outcomes, listed below are the hypotheses put out in this investigation:

**H4:** ESG performance effects Return on Equity (ROE).

### 2.2.5. The Effect of ROE on Firm Value

A rise ROE indicates a higher effectiveness in how a business utilizes its capital to create net income or earnings. (Erawati et al., 2022). An augmentation in Return on Equity (ROE) signals favourably to investors, as it is typically succeeded by a rise in share price, so facilitating enterprises' access to financing sources (Virolita & Yuliana, 2020). Investigation on the effect of ROE in firm value has been conducted by Virolita & Yuliana (2020), Listyawati & Kristiana (2021) and Asni & Agustia (2022) which shows that the findings from the three studies indicate ROE has as significant

effect firm value. Considering these outcomes, listed below are the hypotheses put out in the present investigation:

**H5:** Return on Equity effects the firm value.

### 2.2.6. The Mediating Role of Financial Performance in the Relationship between ESG Performance and Firm Value

Previous investigation conducted by Kim & Li (2021), Aydoğmuş et al. (2022), Delvina & Hidayah (2023), and Putra & Budastra (2024) associated to the connection on ESG performance and ROA, showed ESG performance effects ROA. Another study on the connection between profitability and firm value conducted by Putra & Budastra (2024) and Ridwansyah & Setijaningsih (2024) shows that the findings of the two studies showed ROA effects firm value. In addition to being able to use ROA as a measurement of financial performance, ROE might furthermore be utilized as a financial performance. This is derived from earlier studies carried out by Alareeni & Hamdan (2020) which stated that ESG performance significant effect on ROE. Research conducted by Virolita & Yuliana (2020), Listyawati & Kristiana (2021) and Asni & Agustia (2022) indicates that the outcomes of the three research studies demonstrate a notable impact of ROE on firm value. Considering the outcomes of this investigation, financial performance, evaluated through ROA and ROE, acts as a mediating variable within the relationship connecting ESG performance to the total value of the firm. Considering these outcomes, listed below are the hypotheses put out in the present investigation:

**H6:** ROA and ROE (Financial Performance) can mediate the correlation between ESG performance and firm value.

## III. RESEARCH METHODS

### 3.1. Sample Selection and Data Sources

The research design utilized on this investigation is quantitative employing a panel data approach, utilizing secondary data derived from annual financial statements or ESG score of firms. The information is derived from the current research employing a quantitative research method via panel data analysis techniques, relying on secondary information gathered from annual reports and corporate ESG performance metrics. Financial or company-specific data are obtained via the Indonesia Stock Exchange (IDX), while broader macroeconomic indicators are retrieved from the official World Bank Group database. IDX (Indonesia Stock Exchange), while macroeconomic data are sourced from the official database of the World Bank Group. The investigation's panel dataset is uneven because of the quantity of observations varies across firms during the observation period. The population consists of the companies classified as ESG Leaders on the IDX. The sample is determined utilizing a purposive sampling method, with the selection conforming to the subsequent standards:

- 1) Companies listed in IDX ESG Leaders for the period 2020 – 2023.
- 2) Companies in IDX ESG Leaders that have complete financial data during the investigation period.

Following the application of predefined criteria, 49 companies were selected for inclusion in the study. In evaluating these suggested connections, this study utilizes *panel data regression* combined with mediation analysis or the Sobel test to determine the mediator's impact. The specific regression model utilized is presented below:

$$\text{Model I} \quad \text{TbQ}_{it} = \alpha_0 + \beta_1 \text{ESG}_{it} + \beta_2 \text{Size}_{it} + \beta_3 \text{Lev}_{it} + \beta_4 \text{TAT}_{it} + \beta_5 \text{FA}_{it} + \beta_6 \text{GDP}_{it} + \varepsilon_{1it}$$

$$\text{Model II} \quad \text{ROA}_{it} = \alpha_0 + \beta_1 \text{ESG}_{it} + \beta_2 \text{Size}_{it} + \beta_3 \text{Lev}_{it} + \beta_4 \text{TAT}_{it} + \beta_5 \text{FA}_{it} + \beta_6 \text{GDP}_{it} + \varepsilon_{1it}$$

$$\text{Model III} \quad \text{TbQ}_{it} = \alpha_0 + \beta_1 \text{ESG}_{it} + \beta_2 \text{ROA}_{it} + \beta_3 \text{Size}_{it} + \beta_4 \text{Lev}_{it} + \beta_5 \text{TAT}_{it} + \beta_6 \text{FA}_{it} + \beta_7 \text{GDP}_{it} + \beta_8 \text{GDP}_{it} + \varepsilon_{3it}$$

$$\text{Model IV} \quad \text{ROE}_{it} = \alpha_0 + \beta_1 \text{ESG}_{it} + \beta_2 \text{Size}_{it} + \beta_3 \text{Lev}_{it} + \beta_4 \text{TAT}_{it} + \beta_5 \text{FA}_{it} + \beta_6 \text{GDP}_{it} + \varepsilon_{4it}$$

$$\text{Model V} \quad \text{TbQ}_{it} = \alpha_0 + \beta_1 \text{ESG}_{it} + \beta_2 \text{ROE}_{it} + \beta_3 \text{Size}_{it} + \beta_4 \text{Lev}_{it} + \beta_5 \text{TAT}_{it} + \beta_6 \text{FA}_{it} + \beta_7 \text{GDP}_{it} + \beta_8 \text{GDP}_{it} + \varepsilon_{5it}$$

Where:

TBQ<sub>it</sub> : The firm value in the company (i) in period (t).

ROA<sub>it</sub> : ROA in the company (i) in period (t).

ROE<sub>it</sub> : ROE in the company (i) in period (t).

ESG<sub>it</sub> : ESG performance in the company (i) in period (t).

Size<sub>it</sub> : Firm size in the company (i) in period (t).

Lev<sub>it</sub> : Leverage in the company (i) in period (t).

TAT<sub>it</sub> : Total asset turnover in the company (i) in period (t).

FA<sub>it</sub> : Firm age in the company (i) in period (t).

GDP<sub>it</sub> : GDP per capita in the company (i) in period (t)

$\alpha_0$  : Constant.

$\beta_1 - \beta_8$  : Regression coefficient.

$\varepsilon_{it}$  : Error term in the company (i) period (t)

### 3.2. Variable Operational Definition

#### 3.2.1. Dependent Variables: Firm Value

This investigation measures firm value utilizing Tobin's q. Wibowo et al. (2021) define Tobin's q as an indicator used to assess corporate performance, especially with respect to valuation and asset utilization. The formula used in measuring Tobin's Q is (Cahyadi & Nelson, 2025):

$$\text{Tobin's } q = \frac{\text{MVE} + \text{Total Debt}}{\text{Total Assets}}$$

#### 3.2.2. Independent Variables: ESG Performance

To evaluate ESG performance, this research utilizes ESG score ratings sourced from the Indonesia Stock Exchange's official site. For the ESG evaluation, the Indonesia Stock Exchange partners with Morningstar Sustainalytics, in which case Morningstar Sustainalytics is an institution that assesses ESG scores while the IDX only displays the findings of assessments that have been carried out by Sustainalytics. The evaluation of ESG scores is categorized into five distinct groups, namely negligible with a risk score of 0-10, low with a risk score of 10-20, medium with a risk score of 20-30, high with a risk score of 30-40, and the last severe with a risk score of > 40.

#### 3.2.3. Mediating Variables

ROA (Return on Asset). ROA is defined as a firm's ability to utilize its assets on generate profits (Ramdhonah et al., 2019). Ross et al. (2020) formulated ROA (Return on Asset) by dividing net income or earning after tax by total assets or can be formulated as follows:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

ROE (Return on Equity). ROE is a financial metric that indicates the earnings generated for shareholders over a period of one year. The formula used in Return on Equity (ROE) is to divide net income or earning after tax by total equity or can be formulated as follows (Ross et al., 2020):

$$\text{ROE} = \frac{\text{Net Income}}{\text{Total Equity}}$$

#### 3.2.4. Control Variables

Firm Size. Firm size can be operationalized using various indicators, including revenue, market capitalization, number of employees, total capital, and total assets (Nurwulandari & Wibowo, 2021; Bakar & Rambe, 2025). The size of the company is formulated with:

$$\text{Size} = \ln(\text{total asset})$$

Leverage. This investigation utilizes the Debt to asset ratio utilized to identify leverage. DAR is a measure used to assess the correlation between debt and assets (Yustrianthe & Mahmudah, 2021; Dara & Nelson, 2025). The formula used to calculate DAR:

$$\text{DAR} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

TAT (Total Asset Turnover). TAT functions as a metric for how efficiently a firm manage its assets (Ross et al., 2020). The formula used to calculate the TAT:

$$\text{TAT} = \frac{\text{Sales}}{\text{Total Assets}}$$

assert that age is a significant determinant in business operations as it can influence firm valuation. The formula used to calculate FA:

$$\text{FA} = \text{Research Year} - \text{Year of the Company Listed on the IDX.}$$

GDP Per Capita. GDP per capita is a macroeconomic factor defined as a financial measurement that shows an estimate of economic output that can be attributed to the community by functioning as a measure of a country's wealth (Saaba & Yunita, 2022). In this study, the data obtained to measure the level of GDP per capita is using GDP per capita growth (annual %) acquired via the official site of the World Bank Group.

## IV. RESULTS AND DISCUSSION

### 4.1. Descriptive Statistic

**Table 1: Descriptive Statistic**

	Mean	Max	Min	Std. Dev.
ESG	22.41	29.74	11.31	4.90
TBQ	1.90	14.42	0.34	2.02
ROA	0.05	0.35	-1.67	0.17
ROE	0.16	2.38	-2.53	0.41
Size	31.43	35.32	28.44	1.70
Leve	0.51	0.90	0.00	0.25
TAT	0.64	4.47	0.04	0.76
FA	18.90	41.00	1.00	9.42
GDP	0.02	0.05	-0.03	0.03

Source of data processing: Eviews 12

The descriptive statistics presented in Table 1 indicate that, it is evident that the dependent variable (Tobins' q) has an mean score of 1.90, with the maximum value being 14.42 and the minimum value at 0.34, with a std. deviation of 2.02. The independent variable (ESG performance) shows an mean of 22.41, with its maximum value reaching 29.74 and its minimum at 11.31, while the std. deviation for this variable is 4.90. The initial mediating variable is ROA, which has a mean of 0.05, a maximum of 0.35, a minimum of -1.67, and with a std. deviation of 0.17. The subsequent mediating variable is ROE, exhibiting a mean of 0.16, a maximum of 2.38, a minimum of -2.53, and with a std. deviation of 0.41.

Control variables were integrated into the study to ensure analytical precision. Descriptive results reveal that firm size maintains a mean of 31.43 (SD = 1.70), fluctuating between 28.44 and 35.32. Leverage demonstrates an average of 0.51 (SD = 0.25), with extremes of 0.00 and 0.90. The mean TAT is 0.64 (SD = 0.77), with a observed range from 0.04 to 4.47. Additionally, firm age averages 18.90 years (SD = 9.42), covering a span of 1 to 41 years. Lastly, GDP per capita shows a mean of 0.02 (SD = 0.03), with minimum or maximum values of -0.03 and 0.05, respectively.

**4.2. Correlation Analysis**

Ghozali & Ratmono (2017), define the multicollinearity test as an assessment of the substantial connection between the regression model's independent variables. This investigation adopts a threshold criterion to address potential multicollinearity, whereby the correlation coefficient among independent variables is required to be below 0.80. A correlation exceeding this threshold may reveal an indication on multicollinearity within the regression model. The result of the correlation analysis in this investigation are presented as follows:

**Table 2: Correlation Analysis of the Correlation Between ESG Performance and Firm Value with ROA As a Mediating Variable**

	ESG	ROE	Size	Lev	TAT	FA	GDP
ESG	1						
ROE	-0.08	1					
Size	0.44	-0.17	1				
Leve	0.20	0.02	0.48	1			
TAT	-0.44	0.25	-0.41	0.03	1		
FA	0.22	0.27	0.21	0.25	0.11	1	
GDP	0.15	-0.03	0.02	-0.00	0.03	-0.01	1

Source of data processing: Eviews 12

As presented on table 3, the correlation coefficient of the regression model for the correlation between ESG performance or firm value, with ROA as the mediating variable, is below 0.80. These findings demonstrate that this regression model fails to possess a multicollinearity issue.

**Table 3: Correlation Analysis of the Correlation Between ESG Performance and Firm Value with ROE As a Mediating Variable**

	ESG	ROE	Size	Lev	TAT	FA	GDP
ESG	1						
ROE	-0.10	1					
Size	0.44	-0.13	1				
Leve	0.20	0.26	0.48	1			
TAT	-0.44	0.31	-0.41	0.03	1		
FA	0.22	0.42	0.21	0.25	0.11	1	
GDP	-0.15	0.03	0.02	-0.00	0.03	-0.01	1

Source of data processing: Eviews 12

As presented on Table 3, the regression model's correlation coefficient for the relationship between ESG performance or firm value, with ROE serving as the mediating variable, is less than 0.80. These findings demonstrate that this regression model fails to possess a multicollinearity issue.

**4.3. The regression analysis results investigating the relationship between ESG performance and firm value, with financial performance included as a mediating variable.**

**Table 4: Regression Result of the Relationship Between ESG Performance and Firm Value with ROA As a Mediating Variable**

Variable	Model 1 TBQ	Model 2 ROA	Model 3 TBQ
<b>c</b>	5.457 (5.613) [0.333]	0.534 (0.354) [0.134]	-20.790 (18.946) [0.277]
<b>ESG</b>	-0.010 (0.039) [0.810]	-0.000 (0.004) [0.935]	-0.057 (0.045) [0.210]
<b>ROA</b>	-	-	14.892 (2.841)

			[0.000]***
<b>Size</b>	-0.137 (0.187) [0.466]	-0.019 (0.012) [0.111]	0.822 (0.631) [0.198]
<b>Lev</b>	0.677 (0.997) [0.498]	0.023 (0.074) [0.751]	2.500 (1.491) [0.099]*
<b>TAT</b>	0.734 (0.354) [0.041]**	0.029 (0.024) [0.225]	-0.403 (0.533) [0.452]
<b>FA</b>	0.015 (0.026) [0.555]	0.005 (0.002) [0.003]***	-0.184 (0.126) [0.150]
<b>GDP</b>	-8.105 (2.700) [0.003]***	-0.150 (0.511) [0.769]	-5.572 (3.965) [0.165]
<b>R-squared</b>	0.141	0.146	0.954
<b>Adjusted R-squared</b>	0.096	0.101	0.915
<b>S.E. of regression</b>	0.693	0.165	0.590
<b>F-statistic</b>	3.097	3.225	24.252
<b>Prob (F-statistic)</b>	0.008	0.006	0.000
<b>Regression Model</b>	REM	CEM	FEM

**Note:** The value in () is Std. Error and [] is a probability value (\* significant at a significance level of 10%, \*\* significant at a significance level of 5%, and \*\*\* significant at a significance level of 1%). Source of data processing: Eviews 12

#### 4.3.1. The effect of ESG performance on firm value

Drawing on the regression output in Table 4, the examination of the link between ESG performance and firm value, with ROA positioned as a mediating variable, provides several findings. The first model, which tests the effect of ESG performance in firm value, reports a probability value of 0.810. Because this value exceeds the 0.10 significance level, ESG performance demonstrates no statistically significant effect on firm value. Therefore, hypothesis H<sub>1</sub>, which posits that ESG performance influences firm value, is formally and entirely rejected. The outcomes of this investigation are suspected to be because ESG is still seen as a cost (company expense). Companies that invest in it are considered not to use the funds for more productive purposes, thus adversely affecting the company's wealth and shareholder returns. Consequently, ESG does not substantially enhance the company's market position, nor does it effects the company's worth (Xaviera & Rahman, 2023).

The outcomes of this investigation are in conformity with those suggested by Junius et al. (2020), Igbinoia & Agbadua (2023), Xaviera & Rahman (2023), and Putra & Budastra (2024), which indicated that ESG performance fails to possess a significant effect on firm value. However, such outcomes differ from the evidence by Aydoğmuş et al. (2022), which indicates a significant connection between ESG performance or firm value.

#### 4.3.2. The effect of ESG performance on ROA

In the second model in Table 2, ESG performance also does not influence ROE, because it has a prob value. by  $0.935 > 0.10$ . Thus, the H<sub>2</sub> that ESG performance effects ROA is rejected. These findings suggest that even if companies disclose their sustainability activities, they are not directly associated with the profitability of assets under management. This is due to the public view that sustainability does not directly increase a company's value or influence consumers' purchasing decisions for services or products (Junius et al., 2020).

The outcomes of this investigation are in conformity with those reported by Junius et al. (2020) and Shobhwani & Lodha (2023), which indicate that ESG performance fails to possess a significant effect on ROA. However, these result are in contrast to the outcomes of Aydoğmuş et al. (2022), who report a significant correlation on ESG performance or ROA.

**4.3.3. The effect of ROA on firm value**

The third model evaluates the simultaneous effect of ESG performance and ROA on firm value. Based on the result reported in table 4, ESG performance fails to possess significant effect on firm value, whereas ROA is found to significantly effect firm value, as revealed by a probability score of 0.000, that is underneath the 10% significant level. Accordingly, H<sub>3</sub> which posits that ROA effect firm value, is accepted. These findings suggest that an increase in ROA enchances the firm’s return on investment, thereby strengthening shareholder confidence to sustain their investment (Kristi & Yanto, 2020). The result of this research are consistent with those of Asni & Agustia (2022) and Hasanah et al. (2023) the results indicate that ROA significantly influences firm value; however, this evidence diverges from the study by Putra and Sunarto (2021), which established that ROA does not have a meaningful impact on company valuation.

The result presented in Table 4 indicate that ROA doesn't operate as a mediating variable in the correlation between ESG performance and firm value. This occurs because ESG performance lacks a significant impact in firm value or ROA, although ROA demonstrates a direct impact in firm value. Consequently, ESG performance possesses no direct influence over firm value, and ROA fails to serve as a mediating variable within this specific empirical connection.

**Table 5: Regression Result of the Relationship Between ESG Performance and Firm Value with ROE As a Mediating Variable**

Variable	Model 1 TBQ	Model 4 ROE	Model 5 TBQ
<b>c</b>	5.457 (5.613) [0.333]	1.843 (1.084) [0.092]	3.700 (5.284) [0.485]
<b>ESG</b>	-0.010 (0.039) [0.810]	0.004 (0.008) [0.575]	-0.013 (0.037) [0.728]
<b>ROE</b>	-	-	1.011 (0.430) [0.020]**
<b>Size</b>	-0.137 (0.187) [0.466]	-0.076 (0.036) [0.038]**	-0.064 (0.177) [0.719]
<b>Lev</b>	0.677 (0.997) [0.498]	0.351 (0.193) [0.071]*	0.283 (0.952) [0.767]
<b>TAT</b>	0.734 (0.354) [0.041]**	0.096 (0.068) [0.163]	0.640 (0.337) [0.060]*
<b>FA</b>	0.015 (0.026) [0.555]	0.018 (0.005) [0.001]***	-0.001 (0.025) [0.957]
<b>GDP</b>	-8.105 (2.700) [0.003]***	0.219 (0.521) [0.675]	-8.256 (2.618) [0.002]***
<b>R-squared</b>	0.141	0.180	0.180
<b>Adjusted R-squared</b>	0.096	0.136	0.129
<b>S.E. of regression</b>	0.693	0.146	0.694

<b>F-statistic</b>	3.097	4.128	3.516
<b>Prob (F-statistic)</b>	0.008	0.001	0.002
<b>Regression Model</b>	REM	REM	REM

Note: The value in () is Std. Error and [] is a probability value (\* significant at a significance level of 10%, \*\* significant at a significance level of 5%, and \*\*\* significant at a significance level of 1%). Source of data processing: Eviews 12

#### 4.3.4. The effect of ESG performance on ROE

Table 5 presents the effect of ESG performance in firm value, with ROE serving as the mediating variable. Specifically, the fourth model tests the link on ESG performance and ROE. Since the resulting p-value of 0.575 is higher than the 0.10 significance level, we conclude that ESG performance lacks a statistically significant effect on ROE. Consequently, H<sub>4</sub> which posits that ESG performance effects ROE is rejected. The outcomes are correspond with prior evidence regarding the connection on ESG performance and ROA, signifying that firms with more extensive sustainability disclosures do not necessarily (Atan et al., 2018). This implies that the availability and transparency of sustainability information have not substantially differentiated firms in the context of financial performance.

The outcomes of this investigation are in conformity with those reported by Atan et al. (2018), Junius et al. (2020) and Shahrin et al. (2023), which indicate that ESG performance fails to possess significant effect on ROE. However, these result are in contrast to the outcomes of Alareeni & Hamdan (2020), who document a statistically significant association on ESG performance or ROE.

#### 4.3.5. The effect of ROE on firm value

Model 5 in Table 5 jointly examines the links among ESG performance, ROE, and firm value. The findings demonstrate that ESG performance lacks a statistically significant impact on firm value, whereas ROE exhibits a significant influence in firm value. This is made clear by the probability value of ROE on firm value, which is 0.020 and below of the 10% significant level, leading to the acceptance of H<sub>5</sub>, which posits that ROE effect firm value. These findings suggest that a higher ROE reflects the firm's ability to utilize its equity efficiently. ROE quantifies the ratio of net income compared to shareholders equity, where a greater ROE denotes an improved return on investment, while a lower ROE reflects a reduced return. Consequently, a rise in ROE gives shareholders a positive signal (Virolita & Yuliana, 2020).

The outcomes of this investigation are in conformity with those reported by Virolita & Yuliana (2020), Listyawati & Kristiana (2021), and Asni & Agustia (2022), which confirms the significant effect of ROE on firm value. However, these result are in contrast to the outcomes of Wulandari et al. (2021), the current findings contrast with evidence suggesting an insignificant link between ROE and company value. Additionally, the data demonstrates that ROE does not function as an intermediary variable between ESG performance or firm value. This trend is clarified by the lack of statistically significant impact from ESG on firm value and ROE, despite ROE exhibiting a distinct, direct influence on the overall firm value.

#### 4.4. Sobel Test Results

In this investigation, the Sobel test is executed to reinforce the analysis of the mediating effect. This examination is utilized to establish whether the inclusion of a mediating variable significantly reduces the influence on the independent variable in the dependent variable, where statistically significant result indicate the presence of either full or partial mediation (Abu Bader & Jones, 2021). The formula applied for this test in this investigation is as follows:

$$Z = \frac{a \times b}{\sqrt{b^2 \times S_a^2 + a^2 \times S_b^2}}$$

Where:

Z : Z Value

a : The regression coefficient of the influence of independent variables on the mediating variable.

b : The regression coefficient of the effect of the mediating variable on the dependent variable.

S<sub>a</sub> : Standard Error a.

S<sub>b</sub> : Standard Error b

From the Sobel test calculation, it was found that:

**Table 6: Sobel Test Result**

	Z	t-table	Sig.
ESG → ROA → FV	-0.082	2.013	5%
ESG → ROE → FV	0.547	2.013	5%

Source of data processing by researchers

As presented in Table 6, the outcome of the Sobel test reveal that the Z-value for the effect of ESG performance on firm value with ROA as the mediating variable is -0.082, that is in excess of the essential t-value of 2.013 at the 5% significant level. These findings demonstrate that *ROA* does not serve as an *intermediary variable* for the connection between ESG performance and firm value, failing to transmit ESG impacts. Similarly, when ROE is the mediating variable, the Z-value is 0.547, which is lower than the 2.013 critical t-value at the 5% significance level. This implies that ROE is likewise unable to mediate the relationship between ESG performance and firm value.

The Sobel test results are consistent with the regression findings, showing that ROA and ROE fail to function as a mediator within the connection between ESG performance and firm value. Generally, ESG performance lacks a direct impact on firm value, or financial performance cannot operate as an intervening variable for this relationship. Consequently, hypothesis H<sub>6</sub>, proposing that financial performance mediates the link between ESG or firm value, is not empirically supported by the current research data.

Financial outcomes, reflected through profitability indicators such as ROA and ROE, do not function as an intermediary in linking ESG performance to firm value. One possible explanation is that strong ESG practices do not automatically translate into short-term gains in a company's profitability, as ESG initiatives are sometimes perceived as additional costs that may impose a financial burden on the firm and potentially reduce shareholder wealth in the short term. The outcomes on this investigation are correspond with those of Zhou et al. (2022), which indicate that financial performance, proxied by profitability ratios, does not mediate the relationship ESG performance or firm value. However, these outcomes contradict the conclusions Putra & Budastra (2024), who report that financial performance, when measured using profitability ratios, is able to mediate the correlation between ESG performance or firm value.

## V. CONCLUSION

Considering the outcome of the hypothesis testing, this leads to the conclusion that ESG performance fails to possess a significant effect in firm value, nor does it influence ROA and ROE. In contrast, ROA and ROE is demonstrates to possess a significant impact in firm value. Moreover, ESG performance demonstrates no direct influence on firm value, and financial performance, measured through ROA or ROE, cannot mediate the relationship linking ESG performance to the total valuation of the firm in this research. This investigation acknowledges several limitations. Accordingly, future research is recommended to employ alternative proxies for firm value, expand the population and sample beyond companies listed in the IDX ESG Leaders Index, prolong the time for observation, and think about utilizing substitute proxies for the mediating variable.

## REFERENCE

- Abu Bader, S., & Jones, T. V. (2021). Statistical Mediation Analysis Using the Sobel Test and Hayes SPSS Process Macro. *International Journal of Quantitative and Qualitative Research Methods*, 9(1), 42–61.
- Akerlof, G. A. (1970). The Market For “Lemons”: Quality Uncertainty And The Market Mechanism. In *Quarterly Journal of Economics* 84 (Vol. 84). ACADEMIC PRESS, INC. <https://doi.org/10.1016/b978-0-12-214850-7.50022-x>.
- Alareeni, B. A., & Hamdan, A. (2020). ESG impact on performance of US S&P 500-listed firms. *Corporate Governance (Bingley)*, 20(7), 1409–1428. <https://doi.org/10.1108/CG-06-2020-0258>.
- Angir, P., & Weli, W. (2024). The Influence of Environmental, Social, and Governance (ESG) Disclosure on Firm Value: An Asymmetric Information Perspective in Indonesian Listed Companies. *Binus Business Review*, 15(1), 29–40. <https://doi.org/10.21512/bbr.v15i1.10460>.
- Asni, N., & Agustia, D. (2022). The mediating role of financial performance in the relationship between green innovation and firm value: evidence from ASEAN countries. *European Journal of Innovation Management*, 25(5), 1328–1347. <https://doi.org/10.1108/EJIM-11-2020-0459>.
- Atan, R., Alam, M. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance: Panel study of Malaysian companies. *Management of Environmental Quality: An International Journal*, 29(2), 182–194. <https://doi.org/10.1108/MEQ-03-2017-0033>.
- Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, 22, S119–S127. <https://doi.org/10.1016/j.bir.2022.11.006>.
- Bakar, A., & Rambe, D. (2025). The Role of Profitability as A Mediator Between Company Value, Company Liquidity, And Dividend Policy in Companies in the 2017-2021 Period. *Jurnal Akuntansi Dan Bisnis Indonesia (JABISI)*, 6(1), 1–15. <https://doi.org/https://doi.org/10.55122/jabisi.v6i1.1652>.
- Barney, J. (1991). Firm Resources ad Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/https://doi.org/10.1177/014920639101700108>.
- Bifulco, G. M., Savio, R., Paolone, F., & Tiscini, R. (2023). The CSR committee as moderator for the ESG score and market value. *Corporate Social Responsibility and Environmental Management*, 30(6), 3231–3241. <https://doi.org/10.1002/csr.2549>.
- Cahyadi, S., & Nelson, C. I. (2025). Pengaruh beban pajak tangguhan, perencanaan pajak dan profitabilitas terhadap nilai perusahaan. *Jurnal Akuntansi Dan Bisnis Indonesia (JABISI)*, 6(1), 39–49. <https://doi.org/https://doi.org/10.55122/jabisi.v6i1.1622>.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>.
- Dara, A. W. A., & Nelson, C. I. (2025). Pengaruh Leverage, Firm Size, Dan Audit Report Lag Terhadap Going Concern Audit Opinion. *Jurnal Akuntansi Dan Bisnis Indonesia (JABISI)*, 6(2), 147–158. <https://doi.org/https://doi.org/10.55122/jabisi.v6i2.1872>.
- Delvina, E. M., & Hidayah, R. (2023). Value And Company Performance Pengaruh Kinerja ESG (Lingkungan, Sosial Dan Tata Kelola) Terhadap Nilai Perusahaan. *Management Studies and Entrepreneurship Journal*, 4(5), 5436–5444.
- Dmytriiev, S. D., Freeman, R. E., & Hörisch, J. (2021). The Relationship between Stakeholder Theory and Corporate Social Responsibility: Differences, Similarities, and Implications for Social Issues in Management. *Journal of Management Studies*, 58(6), 1441–1470.

<https://doi.org/10.1111/joms.12684>.

- Erawati, D., Shenurti, E., & Kholifah, S. N. (2022). Analisis Return on Asset (ROA ), Return on Equity ( ROE ) dan Corporate Social Responsibility (CSR) yang mempengaruhi Nilai Perusahaan pada Perusahaan Manufaktur. *Jurnal Akuntansi Dan Manajemen (JAM)*, 1(0), 1–10. <https://doi.org/https://doi.org/10.36406/jam.v19i01.539>.
- Espinosa-Méndez, C., Maquieira, C. P., & Arias, J. T. (2023). The Impact of ESG Performance on the Value of Family Firms: The Moderating Role of Financial Constraints and Agency Problems. *Sustainability (Switzerland)*, 15(7), 1–20. <https://doi.org/10.3390/su15076176>.
- Ghozali, I., & Ratmono, D. (2017). *Analisis Multivariat dan Ekonometrika* (2nd ed.). Badan Penerbit Universitas Diponegoro.
- Hasanah, U. N., Masdar, M., & Zakariah, J. (2023). Pengaruh Profitabilitas Terhadap Nilai Perusahaan Pada Perusahaan Food and Beverages yang Terdaftar di Bursa Efek Indonesia. *INNOVATIVE: Journal Of Social Science Research*, 3(3), 8901–8914.
- Hasanudin, A. I., Arifin, B., & Datara, S. (2023). The Effect of Good Corporate Governance and Capital Structure on Firm Value with Financial Performance as an Intervening Variable. *International Journal of Integrative Sciences (IJIS)*, 2(11), 1743–1756.
- Hidayat, T. (2023). The Influence Of Environmental, Social, Governance (ESG) Disclosures On Financial Performance. *Jurnal Ekonomi, Manajemen Dan Perbankan (Journal of Economics, Management and Banking)*, 9(3), 225–240. <https://doi.org/10.35384/jemp.v9i3.454>.
- IDXESGL. (2021). Bursa Efek Indonesia.
- Igbinovia, I. M., & Agbadua, B. O. (2023). Environmental, Soc. *Jurnal Dinamika Akuntansi Dan Bisnis*, 10(2), 149–162. <https://doi.org/10.24815/jdab.v10i2.30491>.
- Junius, D., Adisurjo, A., Rijanto, Y. A., & Adelina, Y. E. (2020). The Impact of ESG Performance to Firm Performance. *Jurnal Aplikasi Akuntansi*, 5(1), 21–41.
- Kim, S., & Li, Z. (2021). Understanding the impact of esg practices in corporate finance. *Sustainability (Switzerland)*, 13(7), 1–15. <https://doi.org/10.3390/su13073746>.
- Kristi, N. M., & Yanto, H. (2020). The Effect of Financial and Non-Financial Factors on Firm Value. *Accounting Analysis Journal*, 9(2), 131–137. <https://doi.org/10.15294/aaaj.v8i2.37518>.
- Listyawati, I., & Kristiana, I. (2021). Pengaruh Return on Equity, Current Ratio, Size Company dan Debt to Equity Ratio Terhadap Nilai Perusahaan. *MAKSIMUM: Media Akuntansi Universitas Muhammadiyah Semarang*, 10(2), 47. <https://doi.org/10.26714/mki.10.2.2020.47-57>.
- Murti, G. T., Saraswati, R. S., Fadly, M., & Faizi, N. (2024). Pengaruh Kepemilikan Institusional , Umur Perusahaan , dan Struktur Modal Terhadap Nilai Perusahaan. *Owner: Riset & Jurnal Akuntansi*, 8(1), 414–423.
- Mustikasari, Y. F., & Mukhlisin. (2021). Earnings Response Coefficient : Analisis Berdasarkan Audit Switching dan Kepemilikan Asing dalam Perspektif Teori Sinyal. *Prosiding Working Papers Series In Management*, 2, 538–555. <https://doi.org/https://doi.org/10.25170/wpm.v13i2.4551>.
- Nursetya, R. P., & Hidayati, L. N. (2021). How Does Firm Size and Capital Structure Affect Firm Value. *Journal of Managment and Entrepreneurhip Research*, 01(2), 67–76. <https://doi.org/https://doi.org/10.34001/jmer.2020.12.01.2-7>.
- Nurwulandari, A., & Wibowo, Y. (2021). Effect of Liquidity , Profitability , Firm Size on Firm Value with Capital Structure as Intervening Variable. *Jurnal Ilmiah Akuntansi*, 4(2), 257–271. <https://doi.org/https://doi.org/10.57178/atestasi.v4i2.271>.
- OJK. (2021). *Suistanable Investment in Indonesia Capital Market Webinar*. Ojk.Go.Id.

<https://doi.org/https://www.ojk.go.id/ojk-institute/id/capacitybuilding/past/351/sustainable-investment-in-indonesia-capital-market-webinar>.

- Putra, F. K., & Budastra, M. A. (2024). the Mediating Role of Financial Performance in Environmental, Social, and Governance (Esg) and Firm Value. *Jurnal Akuntansi Bisnis*, 17(1), 1. <https://doi.org/10.30813/jab.v17i1.4931>.
- Rahelliamelinda, L., & Handoko, J. (2024). Profitabilitas Sebagai Moderating Pengaruh Kinerja ESG , Green Innovation , Eco-Efficiency terhadap Nilai Perusahaan. *Jurnal Informasi, Perpajakan, Akuntansi, Dan Keuangan Publik*, 19(1), 145–170. <https://doi.org/http://dx.doi.org/10.25105/jipak.v19i1.19191>.
- Ramdhonah, Z., Solikin, I., & Sari, M. (2019). Pengaruh Struktur Modal, Ukuran Perusahaan, Pertumbuhan Perusahaan, dan Profitabilitas terhadap Nilai Perusahaan. *Indonesian Journal of Strategic Management*, 7(1), 67–82. <https://doi.org/10.17509/jrak.v7i1.15117>.
- Ridwansyah, R., & Setijaningsih, H. T. (2024). The Effect Of Environment, Social, Governance (ESG Disclosure) And Profitabilitiy On Firm Value With Audit Fee As Moderating Variable : Study Of Energy Sector Companies Listed On The Indonesian Stock Exchange Period 2019 - 2022. *Journal of Economic, Bussines and Accounting (COSTING)*, 7(3), 3818–3825. <https://doi.org/10.31539/costing.v7i3.8557>.
- Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2020). *Essentials of Corporate Finance* (10th ed.). McGraw-Hill Education.
- Saaba, V. E., & Yunita, I. (2022). Pengaruh Lar, Dar, Nieta, Pdb Per Kapita, Inflasi Dan Smcggdp Terhadap Roa Sub Sektor Perbankan Yang Terdaftar Di Bei Periode 2016-2020. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 6(3), 1102–1123. <https://doi.org/10.31955/mea.v6i3.2471>.
- Shahrin, N. S. B., Ramasamy, S., & Yen, Y. Y. (2023). The effect of environmental, social and governance criteria on the corporate value of listed companies in Malaysia. *Asian Economic and Financial Review*, 13(5), 338–352. <https://doi.org/10.55493/5002.v13i5.4782>.
- Shi, L., Han, L., Yang, F., & Gao, L. (2019). The Evolution of Sustainable Development Theory : Types , Goals , and Research Prospects. *Sustainability (Switzerland)*, 11(24), 1–16. <https://doi.org/10.3390/su11247158>.
- Shobhwani, K., & Lodha, S. (2023). Impact of ESG Risk Scores on Firm Performance: An Empirical Analysis of NSE-100 Companies. *Asia-Pacific Journal of Management Research and Innovation*, 19(1), 7–18. <https://doi.org/10.1177/2319510x231170910>.
- Spence, M. (1973). JOB MARKET SIGNALING. In *UNCERTAINTY in ECONOMICS: Readings and Exercises* (Vol. 87). ACADEMIC PRESS, INC. <https://doi.org/10.1016/B978-0-12-214850-7.50025-5>.
- Triyani, A., Setyahuni, S. W., & Kiryanto, K. (2020). The Effect Of Environmental, Social and Governance (ESG) Disclosure on Firm Performance: The Role of Ceo Tenure. *Jurnal Reviu Akuntansi Dan Keuangan*, 10(2), 261. <https://doi.org/10.22219/jrak.v10i2.11820>.
- Virolita, N., & Yuliana, I. (2020). Pengaruh Roe Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderating (Sub Sektor Makanan Minuman Tahun 2016-2018). *Jurnal Ekonomi : Journal of Economic*, 11(1). <https://doi.org/10.47007/jeko.v11i1.2918>.
- Wanday, J., Ajour, S., & Zein, E. (2022). Higher expected returns for investors in the energy sector in Europe using an ESG strategy. *Frontiers in Environmental Science*, 1–20. <https://doi.org/10.3389/fenvs.2022.1031827>.
- Wibowo, R. Y. K., Asyik, N. F., & Bambang, S. (2021). Pengaruh Struktur Kepemilikan, Arus Kas Bebas, Ukuran Perusahaan terhadap Nilai Perusahaan Melalui Struktur Modal. *Jurnal Ekonomi*

*Dan Keuangan*, 5(3), 321–345. <https://doi.org/10.24034/j25485024.y2021.v5.i3.4799>.

- Wu, S., Li, X., Du, X., & Li, Z. (2022). The Impact of ESG Performance on Firm Value: The Moderating Role of Ownership Structure. *Sustainability (Switzerland)*, 14(21), 1–22. <https://doi.org/10.3390/su142114507>.
- Wulandari, B., Albert, A., Harianto, F., & Sovi, S. (2021). Pengaruh DER, ROE, SG, NPM, CR, DPR terhadap Nilai Perusahaan Sektor Industri yang terdaftar di BEI. *Owner: Riset & Jurnal Akuntansi*, 5(1), 96–106. <https://doi.org/10.33395/owner.v5i1.326>.
- Xaviera, A., & Rahman, A. (2023). Pengaruh Kinerja ESG Terhadap Nilai Perusahaan dengan Siklus Hidup Perusahaan sebagai Moderasi : Bukti dari Indonesia. *Jurnal Akuntansi Bisnis*, 16(2), 226–247. <https://doi.org/http://dx.doi.org/10.30813/jab.v16.i2.4382>.
- Yustrianthe, R. H., & Mahmudah, S. (2021). Return on Equity , Debt to Total Asset Ratio, and Company Value. *Riset: Jurnal Aplikasi Ekonomi Akuntansi Dan Bisnis*, 3(2), 534–549. <https://doi.org/https://doi.org/10.37641/riset.v3i2.88>.
- Zhou, G., Liu, L., & Luo, S. (2022). Sustainable development, ESG performance and company market value: Mediating effect of financial performance. *Business Strategy and the Environment*, 31(7), 3371–3387. <https://doi.org/10.1002/bse.3089>.