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# The Influence of Environment, Social & Governance (ESG) Values on Financial Performance: The Role of Leverage as Moderation

**Elma Fitriana[1], Sri Hartoko[2]**

[1,2]Sebelas Maret University, Surakarta, Indonesia

**ABSTRACT:** This study examines the effect of Environmental, Social, and Governance (ESG) performance on corporate financial performance with leverage as a moderating variable, using data from non-financial companies listed on the Indonesia Stock Exchange for the period 2019–2022. The ESG index used is the measurement result from the Bumi Global Karbon Foundation (BGK), which adopts international standards while adjusting the Indonesian context. The analytical methods applied are multiple linear regression and Moderated Regression Analysis (MRA) to test the relationship and moderating role of leverage on Return on Assets (ROA). The results of the study show that Governance performance has a positive and significant effect on profitability, while Environmental performance shows a positive trend that is not yet significant and Social performance has a negative effect on Financial Performance. The moderation findings reveal that Leverage weakens the positive impact of Environmental performance, but strengthens the relationship between Social and Governance performance on corporate profitability. These results emphasize the importance of capital structure management in supporting the implementation of an effective sustainability strategy to achieve optimal financial performance.

**KEYWORDS:** Financial Performance, ESG, Leverage, BGK foundation

## I. INTRODUCTION

In recent years, the business world has faced major challenges due to climate change, the global pandemic, and geopolitical tensions. Climate disasters such as extreme weather and temperature fluctuations have disrupted business operations, damaged supply chains, and reduced productivity and revenues (Chen & Xie, 2022; Kalkuhl & Wenz, 2020; Pankratz et al., 2023). These impacts have been exacerbated by the Covid-19 pandemic, which has shaken financial markets and created global economic uncertainty (Bodhanwala & Bodhanwala, 2023), and conflicts such as the Russia-Ukraine war, which have caused spikes in production costs and depressed profitability (Izzeldin et al., 2023; Xu et al., 2022).

These conditions cause fluctuations in financial performance across sectors, especially in terms of return on assets (ROA). Amid these pressures, attention to Environmental, Social, and Governance (ESG) aspects is increasingly strengthening as a sustainability approach that not only aims to maintain reputation but also create long-term economic value (Alsayegh et al., 2020; Kay et al., 2020). Several studies have concluded that good ESG practices can improve operational efficiency, stakeholder trust, and company profitability (Drempetic et al., 2020; Guo et al., 2024; Shahrun et al., 2024). However, several other studies have recorded mixed results, including negative or insignificant effects between ESG scores and financial performance, especially during times of crisis (Atan et al., 2018; Bodhanwala & Bodhanwala, 2023; Bruno et al., 2024).

In this relationship, Leverage is one of the important internal factors but is still rarely studied as a moderating variable. Leverage can strengthen or weaken the influence of LSG on financial performance, depending on the capital structure, risk level, and economic conditions (Ahmed et al., 2024; Kiymaz et al., 2024). Several studies show that high leverage increases financial pressure and decreases profitability, while other studies find that leverage can drive efficiency and firm value (Abdullah & Tursoy, 2021; Nikmah & Hung, 2024).

This study has novelty in two main aspects. First, the study uses the LSG index developed by the Bumi Global Karbon Foundation (BGK Foundation), an organization that designs sustainability indicators based on OJK regulations and international standards (such as GRI, CDP, SASB, TCFD, and IFRS S1 S2), and is contextually adjusted for Indonesian companies. This provides higher local relevance than the global index often used in previous studies. Second, this study examines the moderating role of

Leverage in the relationship between each LSG dimension and financial performance, an approach that is still limited in the literature, especially in the context of emerging markets such as Indonesia.

## II. LITERATURE REVIEW

### a. Financial performance

Financial performance is a key indicator that reflects the extent to which a company has successfully managed its financial resources to achieve business goals (Le Thi Kim et al., 2021; Rufaida, 2024). This performance is usually measured through financial statement analysis using financial ratios, especially profitability ratios such as net profit, which show the company's effectiveness in generating profits (Harmono, 2022; Mahrani & Soewarno, 2018; Subramaniam & Wasiuzzaman, 2019). This evaluation is important as a basis for managerial decision making and as a benchmark for the company's future growth potential.

### b. Environment, Social and Governance (LSG)

Environmental, Social, and Governance (ESG) is a set of non-financial factors used to assess the sustainability and ethical impact of a company's activities (Truant et al., 2024). These three aspects reflect the company's responsibility towards the environment, society, and internal governance (Vo et al., 2019). The Environmental aspect covers issues such as carbon emissions, energy efficiency, and waste management. Social highlights things like human rights, occupational health and safety, and contribution to the community. While Governance covers the structure of the board of directors, transparency, and protection of shareholder rights (Ahmed et al., 2024; Ryu et al., 2024). The LSG score, which typically ranges from 0 to 100, is obtained through an assessment of a company's sustainability practices and reports (Drempetic et al., 2020). In general, LSG serves as a long-term risk evaluation tool as well as an indicator of a company's value in the eyes of stakeholders and investors (Chen et al., 2023; Dai & Tang, 2022).

### c. Leverage

Leverage is a measure of the extent to which a company uses debt to finance its operational and investment activities (Ahmad et al., 2015). This ratio reflects the company's financing structure, especially the comparison between external funding sources (debt) and equity. One common indicator is the Debt to Equity Ratio (DER), which is the ratio between total liabilities and total equity (Iqbal & Usman, 2018). High leverage indicates a heavy reliance on debt, which can increase financial risk if the company is unable to meet its long-term obligations (Yuan et al., 2022). Conversely, optimal leverage can help companies increase profitability through tax efficiency and strengthening returns on capital (Abdullah & Tursoy, 2021).

### d. Environmental Performance and Financial Performance

Sustainability issues, especially those related to environmental aspects, are increasingly becoming a major concern in modern business practices (Yiheng et al., 2024). Several studies have found that increased disclosure of environmental information and the implementation of environmentally friendly practices are positively correlated with a company's profitability and market value (Aydoğmuş et al., 2022; Buallay, 2019; German et al., 2023; L. Liu et al., 2024). Environmental accounting practices such as carbon emission reporting and environmental cost measurement have also been shown to contribute to improved financial performance (Mondal et al., 2024).

Compliance with environmental practices also drives competitive advantage and increases the company's readiness to face crises (Clarkson et al., 2011). In this context, Huang (2021) emphasized that the influence of environmental performance on financial performance is more significant than social and governance aspects. However, several studies also show the opposite results. Excessive investment in environmental aspects can reduce profitability in the short term (Rao et al., 2023), especially if it is not balanced with holistic management of social and governance aspects (Taddeo et al., 2024). However, long-term commitment to environmental practices has been shown to increase efficiency and create corporate value through innovation and technology (Pellegrini et al., 2019).

H1: Environmental Performance has a positive effect on Financial Performance.

### e. Social Performance and Financial Performance

The Social Aspect in LSG includes the company's efforts to pay attention to employees and the community, which are considered to play an important role in driving business performance (Rohendi et al., 2024). A high Social score reflects a company's commitment to social responsibility and contributes to better profitability and market performance (Maji & Lohia, 2023; Shahrun et al., 2024). In addition, strong social trust in the surrounding environment also increases the effectiveness of LSG practices and supports positive relationships with stakeholders (Zhu & Wang, 2024).

However, empirical findings related to the influence of Social Performance on Financial Performance are still mixed. Several studies found a negative or insignificant relationship ((Atan et al., 2018; Buallay, 2019; Grisales & Caracuel, 2021; Fuadah et al., 2022), which may be due to variations in the implementation of social practices between companies (Rao et al., 2023). Conversely, other studies show that social initiatives have a positive impact on financial success. Liu et al. (2024) emphasized that social aspects are often more effective in improving financial performance than environmental and governance aspects, mainly due to their faster implementation (Aydoğmuş et al., 2022). Social activities also help reduce information asymmetry, build reputation, and create intangible assets that strengthen the company's competitiveness (Cui et al., 2018; Shabbir & Wisdom, 2020). Furthermore, social responsibility can boost productivity, reduce legal risks, strengthen supplier relationships, and increase customer satisfaction (Aguilera et al., 2007; Ailawadi et al., 2014; Flammer & Luo, 2017; Yawar & Seuring, 2017). This ultimately supports improved Financial Performance (Baird et al., 2012; Barnett & Salomon, 2012).

H2: Social Performance has a positive effect on Financial Performance.

**f. Governance Performance Has a Positive Impact on Financial Performance**

Quality corporate governance plays an important role in the operation and growth of a company by assisting managers in decision making and risk control (Yiheng et al., 2024). Velte (2017) showed that overall, LSG performance has a positive effect on financial performance (ROA), with governance having a more significant effect than environmental and social aspects. Han et al. (2016) also found that governance performance positively affects financial indicators such as ROA, market-to-book ratio, and stock returns. However, Rao et al. (2023) reported different results, namely that governance practices can reduce the profitability of shareholders' equity. Pedersen et al. (2021) assert that governance in LSG investment offers stability and trust to investors through transparency, integrity, and strict oversight. This reduces risks and costs, and increases the value and reputation of the company (Al-ahdal et al., 2020).

H3: Governance performance has a positive effect on financial performance.

**g. The Influence of Environmental Performance on LSG and Corporate Financial Performance with Leverage as a Moderating Variable**

Priem & Gabellone (2024) found that high LSG scores make it easier for companies to increase leverage by obtaining loans more easily, although this has an impact on the cost of debt (Ilham et al., 2022). Adeneye et al. (2023) showed that the Environmental pillar most significantly affects the speed of adjustment of a company's financial structure to the leverage target. Gao et al. (2022) stated that LSG disclosure can affect the cost of debt, especially for companies operating in disaster-prone environments. Ginglinger & Moreau (2023) found that extreme climate risk encourages companies to reduce debt and implement conservative leverage policies, because managers focus on short-term profitability and compensation (Gaies & Jahmane, 2022).

On the other hand, when profits are low, LSG practices are used to strengthen corporate legitimacy (DasGupta & Roy, 2023). Elnahas et al. (2018) also reported that companies in disaster-prone areas tend to apply more cautious leverage due to operational disruptions and financial constraints. According to Elfeky (2017), stakeholder theory suggests that companies with high leverage face greater pressure to meet environmental responsibilities. However, Mandagie et al. (2024) stated that high leverage can increase the benefits of effective LSG implementation. Morais et al. (2024) added that although companies with high LSG scores have large debts, market value actually considers them more stable and less risky, thus facilitating financial management (Gharsalli, 2019) and reducing the risk of financial irregularities (Yuan et al., 2022).

H4: Leverage moderates the effect of Environmental Performance on Financial Performance.

**h. The Influence of Social Performance on LSG and Financial Performance with Leverage as a Moderating Variable**

Companies with high Social performance tend to have low leverage due to caution in using debt, which has an impact on the company's risk and performance (A. N. Khan et al., 2024). Ho et al. (2021) added that companies with good Social performance adjust leverage more slowly. In addition, Bae et al. (2019) showed that social responsibility activities increase positive market perceptions, helping to reduce financial risks due to high leverage. Leverage also affects sustainable investment decisions such as CSR. Mandagie et al. (2024) found that companies with high DER tend to reduce CSR costs to meet creditor obligations. Bodhanwala & Bodhanwala (2023) revealed that companies with high LSG scores usually have better profitability and lower leverage. Limkriangkrai et al. (2017) added that companies with high governance ratings prefer equity issuance to debt. In general, Asimakopoulos et al. (2023) stated that LSG ratings do not always change leverage significantly. However, Yiheng et al. (2024) emphasized that high leverage tends to reduce profitability, so large companies with high debt need to strengthen Environmental and Social responsibility to maintain reputation and legitimacy (Drempetic et al., 2020).

H5: Leverage moderates the effect of Social Performance on Financial Performance.

**i. The Influence of Governance Performance in LSG and Financial Performance with Leverage as a Moderating Variable**

Corporate leverage affects the level of manager openness in disclosing LSG practices. The higher the debt, the more managers are encouraged to provide more detailed sustainability information to maintain creditor trust (Atan et al., 2018; Lanis & Richardson, 2012). However, companies with high leverage tend to reduce the complexity of disclosure, especially in the governance aspect (Anh et al., 2024). Companies with superior LSG performance find it easier to obtain loans with favorable terms due to high creditor trust (Morais et al., 2024; Yunica & Rokhim, 2023). LSG practices also facilitate wider access to capital in the capital market (Hoang et al., 2023). Research shows a positive relationship between environmental responsibility and leverage, and that companies with high debt tend to increase voluntary social activities to meet stakeholder expectations (Andrikopoulos et al., 2014; Z. Chen & Xie, 2022; Elfeky, 2017). However, Fuadah et al. (2022) found that leverage did not play a significant role in mandatory LSG disclosure.

H6: Leverage moderates the effect of Governance Performance on Financial Performance.

## III. RESEARCH METHOD

This study uses a quantitative approach based on secondary data to analyze the influence of Environmental, Social, and Governance (ESG) Performance on a company's Financial Performance, as well as to test the role ofleverageas a moderating variable. Data were obtained from the company's annual report published through the company's official website and the Indonesia Stock Exchange (IDX), while the LSG score was taken from the Bumi Global Karbon Foundation (BGK) which provides an assessment of the sustainability performance of companies in Indonesia. The observation period was set from 2019 - 2022. The population in this study includes all companies listed on the IDX during the observation period. The sample was selected using the method purposive sampling and the financial sector was excluded from the sample due to significantly different regulatory and reporting characteristics. In addition, companies that did not have an LSG score or an accessible annual report were also excluded. After going through the screening process, 78 companies were obtained from eight non-financial industry sectors, resulting in a total of 312 annual observations.

The independent variables in this study consist of three dimensions of LSG environmental, social, and governance performance, each of which is measured based on the scores provided by BGK. Financial performance as the dependent variable is proxied by Return on Assets (ROA) (Ika et al., 2025), while leverage as a moderating variable measured by the ratio of total debt to total assets (Odhiambo et al., 2022). To increase the validity of the model, this study also includes two control variables, namely company age (calculated from the year of establishment to the year of observation) andgrowth opportunities (growth opportunity), which is proxied by the annual total asset change ratio. Data analysis was carried out with the help of SPSS software version 25. The analysis techniques used included multiple linear regression to test the direct influence of each LSG dimension on financial performance, as well asModerated Regression Analysis (MRA) to test the moderating roleleverage. The interaction model was developed by adding interaction variables between each LSG dimension andleverageinto the regression equation, in order to evaluate whetherleveragestrengthen or weaken the influence of LSG on the company's ROA.

## IV. RESULT

### *A. Descriptive Statistics*

**Table 1: Descriptive Statistic**

| Variables | Minimum | maximum | Mean | Std. Dev. |
|---|---|---|---|---|
| Environment (L) | 0,02 | 0,99 | 0.3154 | 0,24027 |
| Social (S) | 0,0004 | **0,94** | 0,3033 | 0,21846 |
| Governance (G) | 0,0008 | 0,96 | 0,3096 | 0,18833 |
| Financial performance | -1,27 | 0,26 | 0,0400 | 0,06186 |
| *Leverage* | 0,06 | 149.86 | 2,4889 | 9,70075 |
| Company Age | 5,00 | 109.00 | 40,366 | 18,5011 |
| Growth Opportunities | -0,74 | 2,03 | 0,0850 | 0,29394 |

***Source:*** *Spss 25 Output Results*

The relatively small mean value indicates that the majority of companies in the sample still have limited LSG practices or are in the early stages of implementation. This could be due to low awareness, limited resources, or less than optimal regulatory pressure. The large variation in scores indicates significant differences between companies, reflecting varying levels of LSG maturity and commitment. A negative ROA value indicates that some companies are experiencing losses, which can occur due to declining sales, high operating costs, or external impacts such as an economic crisis or pandemic. Large differences between companies can reflect different business sectors, risk management, and business strategies. A high DER indicates that the company uses more debt to finance operations, which can increase financial risk if not managed properly. Conversely, a low DER indicates that the company is more conservative and relies on its own capital.

### *B. Data Normality Test Results*

**Table 2: Normality Test**

| **One-Sample Kolmogorov-Smirnov Test** | | |
|---|---|---|
| | | **Unstandardized Residual** |
| N | | 202 |
| Normal Parameter S[ab] | Mean | 0,0000000 |
| | Std. Deviation | 0,04219206 |
| Most Extreme Differences | Absolute | 0,059 |
| | Positive | 0,057 |
| | Negative | -0,059 |
| Test Statistic | | 0,059 |
| Asymp. Sig. (2-tailed) | | 0.079[c] |

***Source:*** Spss 25 Output Results

The results of the normality test using the One Sample Kolmogorov-Smirnov Test showed an Asymp. Sig. (2-tailed) value of 0.079. This value is greater than α = 0.05, which means that the data is normally distributed, so that the normality assumption in the regression analysis is met.

### *C. Multicollinearity Test Results*

**Table 3: Multicollinearity Test**

| | **Collinearity Statistics** | |
|---|---|---|
| | **Tolerance** | **VIF** |
| L | 0,193 | 5,170 |
| S | 0,127 | 7,878 |
| G | 0138 | 7,259 |
| *Leverage* | 0,978 | 1,021 |
| Age | 0,948 | 1,055 |
| Growth | 0,883 | 1,132 |

**Source:** Spss 25 Output Results

The results of the tolerance value calculation show that there are no independent variables with values below 0.10, which means that there is no correlation between independent variables of more than 95%. In addition, the results of the Variance Inflation Factor (VIF) calculation also show that all independent variables have values below 10, so there is no multicollinearity. Thus, it can be concluded that the regression model is free from multicollinearity problems, so that the analysis can be carried out more accurately.

### *D. Heteroscedasticity Test Results*

**Table 4: Heteroscedasticity Test**

| | **Unstandardized Coefficients** | | |
|---|---|---|---|
| | **Std. Error** | **T** | **Say.** |
| (Constant) | 0,024 | 1,961 | 0,052 |
| L | 0,019 | -0,652 | 0,515 |
| S | 0,006 | -0,930 | 0,354 |
| G | 0,009 | 1,383 | 0,169 |

| | | | |
|---|---|---|---|
| Der | 0,002 | -0,439 | 0,662 |
| Age | 0,004 | 0,421 | 0,674 |
| Growth | 0,002 | 0,663 | 0,508 |

**Source:** Spss 25 Output Results

The SPSS output above shows that no independent variables have a statistically significant effect on the dependent variable. This is evidenced by the probability of significance of each variable exceeding the 5% confidence level. Therefore, it can be concluded that the regression model is free from heteroscedasticity problems.

***E. Autokoreation Test Results***

**Table 5: Durbin-Watson Test**

| Durbin-Watson Statistics | OF | D | 4-DU | Conclusion |
|---|---|---|---|---|
| 1.913 | 1.838 | 1.913 | 2.162 | There is no autocorrelation, positive or negative. |

**Source:** Spss 25 Output Results

According to the Durbin Wason test criteria, the data must show a du value < d < 4-du to be free from autocorrelation symptoms. Based on the SPSS output above, it can be concluded that the data does not have autocorrelation.

***F. Mulltiple Regression Analysis Result***

MRA is a statistical technique that analyzes the role of moderator variables in influencing the relationship between independent and dependent variables (Sharma et al., 1981). In this study, MRA is used to examine how variables L, S, G affect Financial Performance by consideringLeverageas a moderator.

$KK=\beta0+\beta1L+\beta2S+\beta3G+\beta4LV+\beta5(L\times LV)+\beta6(S\times LV)+\beta7(G\times LV)+\beta8A+\beta9P+\epsilon$

Where:

- KK is Financial Performance.
- L is Environmental Performance
- S is Social Performance
- G is Governance Performance
- LV is Leverage
- A is Company Age
- P is Company Growth
- B0 is a Constant
- β1, β2, β3, β4, β5, β6 are the Regression Coefficients.
- ϵ is the Error Term.

**Table 6: Moderation Test**

| Variable | Coefficient | Std. Error | t-statistic | Prob. |
|---|---|---|---|---|
| **L** | 0.048 | 0.028 | 1.748 | 0.082 |
| **S** | -0.141 | 0.036 | -3.925 | 0.000 |
| **G** | 0.121 | 0.038 | 3.189 | 0.002 |
| ***Leverage*** | -0.032 | 0.005 | -6.324 | 0.000 |
| **L*Leverage*** | -0.006 | 0.002 | -2.964 | 0.003 |
| **S*Leverage*** | 0.050 | 0.015 | 3.254 | 0.001 |
| **G*Leverage*** | 0.004 | 0.000 | 2.460 | 0.015 |
| **Company age** | 0.004 | 0.005 | 0.674 | 0.501 |
| **Growth Opportunities** | 0.068 | 0.009 | 7.412 | 0.000 |

**Source:** Spss 25 Output Results

a. Leverage Moderation on the Relationship between Environmental Performance and Financial Performance

The regression results show that Environmental Performance does not have a direct significant effect on ROA. However, the interaction between Environment and Leverage shows significance ($p = 0.003$), indicating that Leverage acts as a quasi moderator. This finding is in line with Adeneye et al. (2023), which states that the environmental pillar has a significant effect on accelerating capital structure adjustments towards target leverage. In addition, Ginglinger & Moreau (2023) emphasize that high environmental risk encourages companies to adopt a more prudent debt structure, affecting the relationship between environmental practices and financial performance.

b. Leverage Moderation on the Relationship between Social Performance and Financial Performance

Social Performance has a significant negative effect on ROA ($t = -3.925$, $p = 0.000$), indicating that increasing social activity can actually reduce profitability. However, the interaction between Social*Leverage is significant ($p = 0.001$), indicating a quasi-moderator role. This result is consistent with Mandagie et al. (2024), which shows that companies with high leverage tend to suppress social costs in order to maintain profitability. Bae et al. (2019) added that social responsibility can provide a positive signal to the market, but its effect depends on the condition of the company's capital structure.

c. Leverage Moderation on the Relationship between Governance and Financial Performance

Governance has a significant positive effect on ROA ($p = 0.002$), and the interaction term Governance*Leverage is also significant ($p = 0.015$). This indicates that Leverage functions as a quasi-moderator in strengthening the contribution of governance to financial performance. Morais et al. (2024) found that companies with high governance scores despite having large debt levels are still considered stable by investors. Limkriangkrai et al. (2017) also noted that companies with strong governance are more likely to choose equity financing over debt, which has an impact on capital structure and performance.

d. Direct Influence of Leverage on Financial Performance

Leverage has a significant negative effect on ROA (coefficient = -0.032, $p = 0.000$), which means that the higher the proportion of debt, the lower the company's profitability. Yiheng et al. 92024) and Panda et al. (2019) explain that high leverage burdens companies with interest costs and financial risks, thereby reducing the rate of return to shareholders. In addition, Gharsalli (2019) notes that companies with high debt are more vulnerable to financial stress and require strict risk management strategies to maintain profitability.

Based on the results of the Hypothesis and MRA tests above, the test results can be summarized as follows:

**Table 7: Result Moderation Test**

| No. | Hypothesis | Results |
|---|---|---|
| **1.** | $H_1$: Environmental Performance has a positive effect on Financial Performance. | **Rejected** |
| **2.** | $H_2$: Social Performance has a positive effect on Financial Performance. | **Rejected** |
| **3.** | $H_3$: Governance performance has a positive effect on Financial Performance. | **Accepted** |
| **4.** | $H_4$: *Leverage*Moderating the Effect of Environmental Performance on Financial Performance. | **Accepted** |
| **5.** | $H_5$: *Leverage*Moderating the Effect of Social Performance on Financial Performance. | **Accepted** |
| **6.** | $H_6$: *Leverage*Moderating the Effect of Governance Performance on Financial Performance. | **Accepted** |

## V. DISCUSSION

### The Impact of Environmental Performance on Financial Performance

The results of the analysis show that the Environmental performance variable has a positive influence on Financial Performance (ROA), with a t-statistic value of 1.748 and a significance level of 0.082. Although this relationship is not statistically significant at the conventional level ($\alpha = 0.05$), this positive tendency is sufficient to reflect the contribution of the Environmental aspect to the company's financial achievements. However, this finding does not support Hypothesis 1, which states that Environmental performance has a significant effect on Financial Performance. This finding is in line with several previous studies which concluded that Environmental disclosure has a negative impact on Financial Performance, especially when measured using ROA. (Rao et al., 2023; Shobhwani & Lodha, 2024). According to Alareeni & Hamdan (2020), the insignificance of the relationship between Environmental scores and Financial Performance may be due to the high costs incurred by companies to implement Environmental disclosure practices. According to Aydoğmuş et al. (2022), Environmental projects are generally long-term and take years to produce a tangible financial impact. On the other hand, the results of this study contradict the findings of (Doshi et al., 2024; Wu et al., 2024) which state that corporate transparency in disclosing environmental information can actually increase investor confidence and strengthen the company's image. This in turn has a positive impact on profitability. In addition, according to Cerciello et al. (2023), good environmental management should be viewed as a long-term strategic investment, which not only contributes to the company's value but also to its operational sustainability.

### The Influence of Social Performance on Financial Performance

The results of the analysis show that Social performance has a negative and significant effect on Financial Performance (ROA), with a t-statistic value of -3.925 and a significance level of 0.000. This finding rejects Hypothesis 2, which states that there is a positive effect between Social performance and Financial Performance. This result is in line with research conducted by Shahrun et al. (2024), which found that companies with higher Social scores tend to have lower ROA. A similar explanation was put forward by Harjoto (2017), who stated that investment in Social activities can incur quite large fixed operating costs, while its contribution to increasing profit margins is relatively small in the short term. In this context, Social activities are viewed more as a cost burden than as a source of direct added value. Furthermore, Rao et al. (2023) added that companies that focus too much on Social responsibility are at risk of experiencing decreased effectiveness in maximizing profits, because some of the company's resources are allocated to Social interests that do not always have a direct impact on Financial Performance. However, several previous studies, such as those conducted by (Chen et al., 2023), show that companies with a high level of Social responsibility tend to have better Financial Performance. In line with that, (Chen et al., 2022; Sindhu et al., 2024) emphasize that effectively implemented Social initiatives can strengthen a company's reputation and increase trust from stakeholders, which ultimately contributes positively to Financial Performance in the long term.

### The Impact of Governance Performance on Financial Performance

Based on the analysis results, the Governance variable shows a t-statistic value of 3.189 with a significance level of 0.002, indicating that its influence on Financial Performance (ROA) is positive and significant. Thus, Hypothesis 3 is accepted, which means that good corporate governance can contribute significantly to improving Financial Performance. This finding is consistent with several previous studies. For example, Peng et al. (2021) stated that strong corporate governance can improve operational efficiency and increase profitability. In addition, research by (Y. Ma et al., 2024; Velte, 2017) revealed that governance elements such as equity structure balance, board size and composition, and executive incentive schemes have a positive impact on company performance. However, the results of this analysis are not in line with several previous studies. Research conducted by (Alareeni & Hamdan, 2020; Buallay, 2019; Doshi et al., 2024) found a negative relationship between Governance scores and Financial Performance, indicating that in certain contexts, strengthening Governance does not always correlate with increased profitability. In fact, Pellegrini et al. (2019) noted an inverse relationship between Governance quality and the level of company profitability, which may be due to high costs of implementing Governance or the mismatch of Governance structures with industry characteristics.

### Role Leverage in Moderating the Relationship between LSG and Financial Performance

1. **Role Leverage in Moderating Environmental Performance on Financial Performance**

The results of the analysis show that the interaction between environmental performance and Leverage (L*Leverage) has a negative and significant effect on Financial Performance, especially Return on Assets (ROA), with a coefficient of -0.006 and a significance level of 0.003. This finding indicates that Leverage acts as a moderating variable that weakens the positive influence of environmental performance on corporate profitability. This means that the higher the level of Leverage company, the weaker the influence of environmental performance on improving financial performance.

This finding is in line with Tarigan's research (2024) which states thatLeveragedoes not strengthen the relationship between Environmental performance and Financial Performance. In fact,the last (Budi & Gusni, 2025) found that Leverage does not play a significant role in strengthening or weakening the relationship between LSG and profitability, because the sustainable value generated by LSG is more determined by internal strategy than external financial structure. And the results of Ma et al. (2025) state that companies that are committed to environmental issues tend to maintain a sustainable financial structure. Leverage stable. When the company has a stable level of Leverage high, the allocation of financial resources becomes limited due to the pressure to meet debt obligations. In this condition, companies tend to prioritize debt payments rather than investing in long-term and costly environmental programs (Arhinful & Radmehr, 2023). As a result, the financial benefits of Environmental activities cannot be realized optimally (Aydoğmuş et al., 2022).

Meanwhile, Ratnasari & Zulfikar (2024) confirms that companies with a high level of Leverage high prefer to allocate funds to sectors that support direct productivity rather than to reporting or sustainability initiatives. So companies will be more careful in spending, including reducing investment in Environmental programs. (Ratnasari & Zulfikar, 2024). In line with that, Meiryani et al. (2023) found that the level of Leverage which is negatively correlated with carbon disclosure, reflecting the limited allocation of resources to sustainability activities when financial pressures increase.

2. **Role Leverage in Moderating Social Performance on Financial Performance**

The results of the analysis show that Leverage plays a role in moderating the relationship between Social Performance and Financial Performance, with a t-statistic value of 3.254 and a significance of 0.001. This means that companies with a high level of

Leverage high tend to gain greater benefits from their Social activities, especially in terms of increasing profitability. This finding is in line with the results of research (Ali et al., 2020; Liu et al., 2022), which shows that companies with high social responsibility tend to get external funding more easily. Transparency, ethics, and good corporate reputation are key factors in increasing access to financing and enabling structural adjustments. Leverage more efficiently (Do et al., 2023). Bansal (2024) also supports these results by stating that a company's social performance is greatly influenced by its structure. Leverage-nya. Optimization Leverage within the framework of Socially Responsible Investment enables companies to improve Financial Performance while still providing value to stakeholders (Tan & Wei, 2023).

Research by Saeed et al. (2024) even found that companies in environmentally sensitive industries, such as manufacturing, energy, and mining, gain greater benefits from implementing Corporate Social Responsibility (CSR) when Leverage its finances are managed effectively. Furthermore, research by Nirino et al. (2021) added that shareholders respond positively to the company's involvement in LSG practices, because it can strengthen the company's image and reputation. However, the level of Leverage which is too high or excessive can actually reduce the trust and legitimacy of the company in the eyes of investors and the public. However, this result contradicts the research of Oware and (Harjoto, 2017; Oware & Mallikarjunappa, 2019), who argue that CSR activities increase fixed operating costs without generating sufficient margin contributions, and have a negative correlation with the level of Leverage.

**3. Role Leverage in Moderating Governance Performance on Financial Performance**

The regression results show that the interaction between Corporate governance and Leverage gives a positive coefficient of 0.004 and is significant at the probability level of 0.015. This shows that Leverage significantly strengthens the influence of Governance on Financial Performance (ROA). In other words, the quality of Governance has a greater impact on profitability when the company relies on debt in its financing structure. Strong governance enables companies to manage the pressures of financial obligations more responsibly, while maintaining a commitment to sustainability principles and business ethics (Mahmood et al., 2023). Conceptually, good governance helps companies improve efficiency, manage risk, and build trust with various parties. This contributes to increased profitability while supporting sustainable and ethical growth (Akbar et al., 2016; Hazaea et al., 2022; Maharani et al., 2024).

The results of this study support the findings of Khan et al. (2019), which stated that Leverage encourage companies to maintain credibility in the eyes of creditors, thereby strengthening the role of Governance in improving performance. Meanwhile, Ronoowah & Seetanah (2022) affirms that good governance enables companies to take advantage of Leverage strategically to support expansion, which ultimately creates value for all stakeholders. Khan et al. (2019) also added thatLeveragecan strengthen the influence of board structure including board size and the presence of outside directors on performance, because debt is a driver for companies to access the resources needed to implement growth strategies.

However, the results of this study are not in line with previous studies. Shakri et al. (2025) noted that companies with high levels of governance compliance tend to have Leverage lower, because strong internal controls reduce the need for external discipline. Meanwhile, Asimakopoulos et al. (2023) remind that excessive use of debt can exacerbate agency conflicts and hinder the monitoring function, especially if the quality of governance is inadequate. A similar view is expressed by Ghofar et al. (2022) who emphasize that strengthening governance plays a greater role in the effectiveness of risk management than the influence Leverage on company value. Mwaungulu et al. (2023) also stated that strong governance tends to reduce dependence on debt because it can limit opportunistic behavior and excessive investment practices that endanger long-term stability. Similarly, with the issue of sustainability, the last Budi & Gusni (2025) added that Leverage high can reduce the company's flexibility in allocating resources to LSG initiatives, because the company's focus is more on fulfilling short-term financial obligations.

## CONCLUSIONS

This study aims to analyze the influence of each dimension of Environmental, Social, and Governance (ESG) on the Financial Performance of companies, and to test the role of Leverage as a moderating variable in the relationship. Empirical results show that the influence of the three dimensions of ESG on financial performance is not uniform, reflecting the complexity of the relationship between sustainability responsibility and business performance. DimensionsGovernance proven to have a significant positive effect on Financial Performance. This confirms the importance of good governance practices such as transparency, accountability, and effectiveness of supervision in building investor confidence, increasing operational efficiency, and minimizing risk, which ultimately has a positive impact on company profitability. On the other hand, the dimensions Social shows a negative impact on Financial Performance. This finding indicates that the social initiatives run by the company have not been fully able to create short-term economic value, or can actually cause cost burdens when not aligned with the company's core business strategy.

Meanwhile, the dimensions Environment does not show a significant relationship to Financial Performance during the observation period. This indicates that the economic benefits of environmentally friendly activities tend to be long-term and have not been fully reflected in short-term financial performance.

Role Leverageas a moderating variable shows complex dynamics. Leverage weakens the positive influence between environmental performance and financial performance, indicating that financial pressure due to debt burden can limit the company's room to make long-term and risky environmental investments. On the other hand, Leverage actually strengthens the influence of the Social and Governance dimensions on financial performance. In this case, high leverage encourages companies to improve the quality of governance and social responsibility in order to meet creditor expectations and maintain market confidence. Commitment to good governance and strong social initiatives are often seen as indicators of managerial discipline and effective risk management, which ultimately contribute positively to the company's financial performance.

Overall, these findings emphasize the importance of a selective and strategic approach in implementing LSG policies, as well as the need to consider the company's financial condition, especially the level of leverage, in evaluating the impact of sustainability on financial performance.

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