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Analysis of the Influence of Environmental, Social, and Governance (ESG) Disclosure on the Firm Value of ESGQ45 KEHATI Companies Listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023

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Abstract:

The objectives of this study are to: (1) examine the ESG trends of companies listed and remaining in the ESGQ45 index between 2020 and 2023; (2) determine the impact of environmental disclosure on the firm value of companies listed in the ESGQ45 KEHATI index; (3) determine the impact of social disclosure on the firm value of companies listed in the ESGQ45 KEHATI index; (4) determine the impact of governance disclosure on the firm value of companies listed in the ESGQ45 KEHATI index; and (5) determine whether firm size and leverage act as moderating variables influencing the firm value of companies implementing ESG principles. The research sample consists of 21 companies selected via purposive sampling from a total population of 45 companies. The data analysis method employed is Panel Data Regression using Eviews 13, based on secondary data. Descriptive statistical results indicate that the average firm value, proxied by Price to Book Value (PBV) for companies in the ESGQ45 KEHATI index from 2020 to 2023 was 2.30. The average values for environmental, social, and governance disclosures were 0.48, 0.49, and 0.59, respectively. Companies included in the KEHATI ESGQ45 index from 2020 to 2023 were predominantly medium-to-large in size, with an average value of 32.13. Corporate leverage levels ranged from low to moderate, indicating a relatively low-to-moderate reliance on debt, with an average value of 3.06. The research results indicate that environmental and social disclosures do not have a significant effect on firm value (PBV), whereas governance disclosure has a significant effect on firm value. Firm size moderates the effect of governance disclosure on firm value but does not moderate the effects of environmental and social disclosures on firm value. Leverage does not moderate the effects of environmental, social, and governance disclosures on firm value.

Keywords: *Environmental Disclosure, Social Disclosure, Governance Disclosure, Firm Value (PBV), Firm Size, Leverage.*

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1. Introduction

The Indonesia Stock Exchange (IDX) is the institution responsible for providing and organizing securities trading in Indonesia, including stocks, bonds, and other capital market instruments. IDX also classifies listed companies into various stock indices based on specific criteria. These indices provide investors with information that facilitates the assessment and comparison of the performance and characteristics of listed companies (Indonesia Stock Exchange, 2026). One of the sustainability-oriented indices listed on the IDX is the Environment, Social, and Governance Quality 45 KEHATI (ESGQ45 KEHATI) Index.

The ESGQ45 KEHATI Index was launched by the Indonesia Stock Exchange and the Indonesian Biodiversity Foundation (Yayasan Keanekaragaman Hayati Indonesia/KEHATI) in December 2021. The index consists of 45 companies selected based on their performance in environmental, social, and governance (ESG) aspects as well as financial quality and stock liquidity. The index is intended to provide an alternative investment instrument for investors who consider sustainability and social responsibility in their investment decisions (Indonesia Stock Exchange, 2021). The development of the ESGQ45 KEHATI Index reflects the increasing integration of sustainability considerations into investment and corporate decision-making.

The assessment of companies included in the ESGQ45 KEHATI Index covers three major dimensions: environmental, social, and governance performance. ESG assessment is conducted using various sources of information, including financial reports, sustainability reports, company websites, external data providers, questionnaires, and other relevant sources (Indonesia Stock Exchange, 2021). Among these sources, sustainability reports provide important information regarding a company's commitment and implementation of ESG practices. Therefore, ESG disclosure can serve as an important mechanism for communicating corporate sustainability performance to investors and other stakeholders.

The performance of the ESGQ45 KEHATI Index also shows fluctuations in line with developments in the capital market. During 2022, the ESGQ45 KEHATI, IDX30, and LQ45 indices experienced relatively high volatility, which was associated with the economic recovery following the COVID-19 pandemic and global market uncertainty. Nevertheless, the three indices generally demonstrated growth toward the end of the year. In 2023, fluctuations in the ESGQ45 KEHATI Index were also influenced by changes in the companies included in the index, while increasing public awareness of environmental issues and corporate commitment to ESG contributed to the growing interest in sustainable investment (Firdaus, 2025). These developments indicate that ESG-related considerations are becoming increasingly relevant in the capital market.

The growing importance of ESG practices is also associated with changes in the business environment following the COVID-19 pandemic. Companies have faced various challenges, including disruptions to global supply chains, fluctuations in profitability, and increases in benchmark interest rates that have raised borrowing costs (Rambe, 2025). These conditions may influence investors' perceptions and ultimately affect firm value. Consequently, companies are increasingly expected not only to achieve financial performance but also to demonstrate responsible environmental, social, and governance practices.

Firm value represents an important indicator of how the market evaluates a company's performance and prospects. Hery (2017), as cited in Gunawan and Ayerza (2022), defines firm value as a condition achieved by a company that reflects public confidence accumulated through the company's activities since its establishment. Firm value can also be understood as investors' perceptions of a company, which are often associated with its stock price (Sujoko & Soebiantoro, 2007). One commonly used measure of firm value is Price to Book Value (PBV), which compares a company's market price per share with its book value per share. A higher PBV generally indicates that the market assigns a higher value to the company relative to the accounting value of its equity (Septariani, 2017).

Data from companies included in the ESGQ45 KEHATI Index indicate that firm value, as measured by PBV, fluctuated during the 2020–2023 observation period. Based on the processed data, the average PBV was 2.97 in 2020, decreased to 2.88 in 2021, increased slightly to 2.91 in 2022, and declined to 2.86 in 2023. The overall average PBV during the four-year period was 2.91. Although the fluctuations were relatively moderate, the variation indicates that the market valuation of companies included in the ESGQ45 KEHATI Index was not entirely stable. Differences in PBV were also observed across individual companies, suggesting that companies with similar ESG-oriented characteristics may receive different market valuations.

The relationship between ESG disclosure and firm value remains inconclusive in previous studies. Margareta (2025) found that ESG disclosure had a negative and significant effect on firm value, both simultaneously and across individual ESG dimensions. This finding suggests that greater ESG disclosure does not necessarily translate into higher market valuation and may even be associated with a decline in firm value. In contrast, Afdhal and Andayani (2024) reported that environmental and governance disclosures had no significant effect on firm value, whereas social disclosure had a positive and significant effect. Their findings indicate that the contribution of ESG practices to firm value may differ across individual ESG dimensions.

Meanwhile, Farrel and Dewi (2025) found a positive and significant effect of ESG disclosure on firm value. However, after competitive advantage was introduced as a moderating variable, the direct effect of ESG disclosure on firm value became insignificant, while the interaction between ESG disclosure and competitive advantage had a positive and significant effect on firm value. This finding suggests that ESG practices alone may not be sufficient to increase firm value and that their benefits may depend on the company's ability to translate sustainability practices into a strong competitive position.

The inconsistent findings of previous studies indicate that the relationship between ESG practices and firm value remains an important issue for further investigation. The differences in empirical findings may be associated with differences in research objects, measurement approaches, observation periods, and the specific ESG characteristics of the companies examined. In addition, the ESGQ45 KEHATI Index represents a specific group of companies selected based on ESG performance, financial quality, and liquidity. Therefore, examining companies included in this index provides an important context for understanding whether ESG-oriented corporate practices are reflected in market-based firm value.

Based on these considerations, further research is needed to examine the relationship between ESG and firm value among companies included in the ESGQ45 KEHATI Index. The present study therefore focuses on the effect of environmental, social, and governance performance on firm value, as measured by Price to Book Value (PBV), among companies included in the ESGQ45 KEHATI Index during the observation period. The results are expected to contribute to the empirical literature on sustainable investment and provide insights for investors and corporate managers regarding the relevance of ESG performance in enhancing firm value.

2. Methodology

This study employed a quantitative approach with a causal research design to examine the effect of *Environment, Social,* and *Governance* (ESG) disclosure on firm value and the moderating roles of firm size and leverage. The research focused on companies included in the ESGQ45 KEHATI Index and listed on the Indonesia Stock Exchange (IDX) during 2020–2023. The population consisted of 45 companies, while the sample was selected using *purposive sampling* based on the criteria of companies listed in the ESGQ45 KEHATI Index, reporting in Indonesian rupiah, remaining in the index until the June 2024 major evaluation, and consistently disclosing ESG information during 2020–2023. Based on these criteria, 21 companies were selected, resulting in 84 firm-year observations.
The study used secondary data obtained through documentation of annual reports, financial statements, and sustainability reports. ESG disclosure was measured using a GRI-based disclosure index calculated as the number of disclosed items divided by the relevant total items. Firm value was proxied by *Price to Book Value* (PBV), firm size by ln(total assets), and leverage by the *Debt to Equity Ratio* (DER). Data were analyzed using descriptive statistics, panel data regression, and *Moderated Regression Analysis* (MRA). Panel model selection was performed using the Chow,

Hausman, and Lagrange Multiplier tests to determine the appropriate CEM, FEM, or REM model. Hypotheses were tested using the t-test at a 5% significance level.

3. Empirical Findings/Result

Regression Analysis
Model Selection Analysis
The method used to interpret and analyze the data was panel data regression, which was performed using EViews 13. The initial stage involved determining the most appropriate regression model through the Chow Test, Correlated Random Effects–Hausman Test, and Lagrange Multiplier (LM) Test.
a. Chow Test

Table 1. Chow Test Results

Effects Test	**Statistic**	**d.f.**	**Prob.**
Cross-section F	13.957582	(20,60)	0.0000
Cross-section Chi-square	145.496632	20	**0.0000**

Source: EViews 13 Output (2026)
Based on the Chow Test results presented in Table 1, the Chi-square probability value is 0.0000 < 0.05. This result indicates that the *Fixed Effect Model* (FEM) is the appropriate model.

b. Correlated Random Effects–Hausman Test

Table 2. Correlated Random Effects–Hausman Test Results

Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	2.76624	3	**0.4291**

Source: EViews 13 Output (2026)
Based on the Hausman Test results in Table 2, the probability value for the cross-section random effect is 0.4291 > 0.05. This result indicates that the *Random Effect Model* (REM) is the appropriate model.

c. Lagrange Multiplier Test

Table 3. Lagrange Multiplier Test Results

Test	**Cross-section**	**Period**	**Both**	**Prob.**
Breusch-Pagan	67.874710	1.293992	69.1687	**0.0000**
	-0.2553			0.0000

Source: EViews 13 Output (2026)
Based on the LM Test results presented in Table 3, the cross-section Breusch-Pagan probability value is 0.0000 < 0.05. This result indicates that the *Random Effect Model* (REM) is the appropriate model.

Panel Data Regression Analysis

Table 4. Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.547853	0.592090	4.303154	0.0000
X1	-0.024066	0.410352	-0.058648	0.9534
X2	1.031162	1.131410	0.911396	0.3648
X3	-1.244723	0.537936	-2.313884	0.0232

Source: EViews 13 Output (2026)

The regression equation is:

$$\mathbf{Y = 2.55 - 0.02X1 + 1.03X2 - 1.24X3}$$

The results in Table 4 indicate that environmental disclosure (X1) has a negative coefficient of -0.024066, indicating a negative relationship with firm value. However, the effect is statistically insignificant, as indicated by a probability value of 0.9534 > 0.05. Social disclosure (X2) has a positive coefficient of 1.031162, indicating a positive relationship with firm value. However, the effect is statistically insignificant, with a probability value of 0.3648 > 0.05. Governance disclosure (X3) has a negative coefficient of -1.244723, indicating a negative relationship with firm value. The effect is statistically significant, as the probability value of 0.0232 is < 0.05.

F-Test Before Moderation

Table 5. F-Test Before Moderation

Statistic	Value
R-squared	0.064735
Adjusted R-squared	0.029662
F-statistic	1.845746
Prob(F-statistic)	**0.145548**
Durbin-Watson stat	1.035832

Source: EViews 13 Output (2026)

Before moderation, the R-squared value was 0.064735, indicating that environmental, social, and governance disclosures jointly explained 6.47% of the variation in firm value, while the remaining 93.53% was explained by other factors outside the model. The F-statistic probability value was 0.145548 > 0.05, indicating that the independent variables jointly did not have a statistically significant effect on firm value.

F-Test with Firm Size as a Moderating Variable

Table 6. F-Test with Firm Size as a Moderating Variable

Statistic	Value
R-squared	0.202332

Adjusted R-squared	0.128863
F-statistic	2.753963
Prob(F-statistic)	**0.013250**
Durbin-Watson stat	1.067639

Source: EViews 13 Output (2026)

After incorporating firm size as a moderating variable, the R-squared value increased to 0.202332. This indicates that the model explained 20.23% of the variation in firm value, while 79.77% was explained by other factors outside the model. Compared with the pre-moderation R-squared value of 0.064735, the increase to 0.202332 indicates an improvement of 13.76 percentage points in the explanatory power of the model. The probability value of the F-statistic was 0.013250 < 0.05, indicating that the independent variables, firm size, and their interaction terms jointly had a statistically significant effect on firm value. Thus, firm size strengthens the relationship between ESG disclosure and firm value.

F-Test with Leverage as a Moderating Variable

Table 7. F-Test with Leverage as a Moderating Variable

Statistic	Value
R-squared	0.098285
Adjusted R-squared	0.015233
F-statistic	1.183409
Prob(F-statistic)	0.322418
Durbin-Watson stat	1.076823

Source: EViews 13 Output (2026)

After incorporating leverage as a moderating variable, the R-squared value increased from 0.064735 to 0.098285. This indicates that the model explained 9.82% of the variation in firm value, while 90.18% was explained by other factors outside the model. The increase in R-squared was 3.35 percentage points. However, the probability value of the F-statistic was 0.322418 > 0.05, indicating that the independent variables, leverage, and their interaction terms jointly did not have a statistically significant effect on firm value. Therefore, although leverage increased the explanatory power of the model, its moderating effect was not statistically significant.

Hypothesis Testing (t-Test)

Table 8. Hypothesis Testing Results (t-Test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.547853	0.592090	4.303154	0.0000
X1	-0.024066	0.410352	-0.058648	0.9534
X2	1.031162	1.131410	0.911396	0.3648
X3	-1.244723	0.537936	-2.313884	0.0232

Source: EViews 13 Output (2026)

$$\mathbf{Y = 2.55 - 0.02X1 + 1.03X2 - 1.24X3}$$

1. First Hypothesis: Environmental Disclosure (*Environment*) Has a Positive and Significant Effect on Firm Value (PBV)
   Based on Table 8, environmental disclosure (X1) has a coefficient of -0.024066, a probability value of 0.9534 ($p > 0.05$), and a *t*-statistic of -0.058648. These results indicate that environmental disclosure has a negative but statistically insignificant effect on firm value (PBV). Therefore, the first hypothesis is rejected.
2. Second Hypothesis: Social Disclosure (*Social*) Has a Positive and Significant Effect on Firm Value (PBV)
   The results show that social disclosure (X2) has a coefficient of 1.031162, a probability value of 0.3648 ($p > 0.05$), and a *t*-statistic of 0.911396. These results indicate that social disclosure has a positive but statistically insignificant effect on firm value (PBV). Therefore, the second hypothesis is rejected.
3. Third Hypothesis: Corporate Governance Disclosure (*Governance*) Has a Positive and Significant Effect on Firm Value (PBV)
   Based on Table 8, governance disclosure (X3) has a coefficient of -1.244723, a probability value of 0.0232 ($p < 0.05$), and a *t*-statistic of -2.313884. These results indicate that governance disclosure has a negative and statistically significant effect on firm value (PBV). Therefore, the third hypothesis is rejected because the direction of the effect is negative, despite the effect being statistically significant.

Moderated Regression Analysis

Moderated Regression Analysis with Firm Size as the Moderating Variable

Table 9. Moderated Regression Analysis with Firm Size

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	27.75133	9.377483	2.959358	0.0041
X1	-16.71155	16.77307	-0.996332	0.3223
X2	24.18579	20.76384	1.164803	0.2477
X3	-24.05035	10.15540	-2.368234	0.0204
Z1	-0.784565	0.292046	-2.686442	0.0089
X1Z1	**0.506162**	0.506925	0.998495	**0.3212**
X2Z1	**-0.718648**	0.647023	-1.110699	**0.2702**
X3Z1	**0.716745**	0.315295	2.273255	**0.0258**

Source: EViews 13 Output (2026)

The regression equation is:

$$\mathbf{Y = 27.75 - 16.71X1 + 24.18X2 - 24.05X3 - 0.78Z1 + 0.51X1Z1 - 0.72X2Z1 + 0.72X3Z1}$$

The interaction between environmental disclosure (X1) and firm size (Z1) has a positive coefficient of 0.506162. However, the interaction effect is statistically insignificant, as indicated by a probability value of 0.3212 > 0.05. Thus, firm size strengthens the relationship between environmental disclosure and firm value, but the effect is not statistically significant. Therefore, the fourth hypothesis is rejected. The interaction between social disclosure (X2) and firm size (Z1) has a negative coefficient of -0.718648. The interaction effect is statistically insignificant, with a probability value of 0.2702 > 0.05. Thus, firm size weakens the relationship between social disclosure and firm value, but the effect is not statistically significant. Therefore, the sixth hypothesis is rejected.

The interaction between governance disclosure (X3) and firm size (Z1) has a positive coefficient of 0.716745 and is statistically significant, with a probability value of 0.0258 < 0.05. This indicates that firm size significantly strengthens the effect of governance disclosure on firm value. Therefore, the eighth hypothesis is accepted. Overall, firm size can either strengthen or weaken the effects of the three ESG dimensions on firm value. However, its moderating effects are not statistically significant for environmental and social disclosure, while firm size significantly strengthens the effect of governance disclosure on firm value.

Moderated Regression Analysis with Leverage as the Moderating Variable

Table 10. Moderated Regression Analysis with Leverage

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.134492	0.756887	4.141297	0.0001
X1	-0.062070	0.492111	-0.126130	0.9000
X2	0.514406	1.477130	0.348247	0.7286
X3	-1.659546	0.676565	-2.452898	0.0165
Z2	-0.228760	0.169716	-1.347897	0.1817
X1Z2	**-0.081754**	0.220536	-0.370706	**0.7119**
X2Z2	**0.287282**	0.402729	0.713338	**0.4778**
X3Z2	**0.166902**	0.160194	1.041872	**0.3008**

Source: EViews 13 Output (2026)

The regression equation is:

$$\mathbf{Y = 3.13 - 0.06X1 + 0.51X2 - 1.66X3 - 0.23Z2 - 0.08X1Z2 + 0.29X2Z2 + 0.17X3Z2}$$

The interaction between environmental disclosure (X1) and leverage (Z2) has a negative coefficient of -0.081754. However, the interaction effect is statistically insignificant, with a probability value of 0.7119 > 0.05. Thus, leverage weakens the relationship between environmental disclosure and firm value, but the effect is not statistically significant. Therefore, the fifth hypothesis is rejected. The interaction between social disclosure (X2) and leverage (Z2) has a positive coefficient of 0.287282. However, the interaction effect is statistically insignificant, with a probability value of 0.4778 > 0.05. Thus, leverage strengthens the relationship between social disclosure and firm value, but the effect is not statistically significant. Therefore, the seventh hypothesis is rejected.

The interaction between governance disclosure (X3) and leverage (Z2) has a positive coefficient of 0.166902. However, the interaction effect is statistically insignificant, with a probability value of 0.3008 > 0.05. Thus, leverage strengthens the relationship between governance disclosure and firm value, but the effect is not statistically significant. Therefore, the ninth hypothesis is rejected.Overall, leverage can either strengthen or weaken the relationship between the ESG dimensions and firm value. However, none of the interaction effects between leverage and environmental, social, or governance disclosure is statistically significant.

4. Discussion

The Effect of Environmental, Social, and Governance Disclosure on Firm Value (PBV)

Based on the statistical test results presented in Table 8, environmental disclosure has no significant effect on firm value. This indicates that the capital market has not fully considered environmental disclosure as a primary criterion in assessing firm value. Investors tend to perceive environmental disclosure as largely narrative and as having no direct short-term financial impact on the company's cash flows (Healy & Palepu, 2001). In addition, perceptions of *greenwashing* may lead investors to become skeptical and regard environmental disclosure merely as a formal compliance mechanism under *legitimacy theory*, without being supported by tangible operational efficiency. Consequently, such disclosure may not receive a positive response from the capital market (Deegan, 2002; Xaviera & Rahman, 2023).

Social disclosure also has no significant effect on firm value. This finding indicates that investors and capital market participants have not yet considered social responsibility a primary criterion in assessing a company's market value. Based on *legitimacy theory*, investors may perceive social disclosure as largely narrative and primarily intended to fulfill regulatory requirements (Deegan, 2002). Furthermore, expenditures on social activities may be considered additional operating costs that generate *disclosure costs*, thereby failing to provide an immediate positive signal regarding cash flows or profitability in the short term (Healy & Palepu, 2001; Afifah et al., 2021).

In contrast, governance disclosure has a significant effect on firm value. Based on *signalling theory*, comprehensive governance disclosure sends a positive signal to the market that management is strongly committed to transparency and accountability (Spence, 1973). The market may respond to this signal through an increase in stock prices, reflecting greater investor confidence in the company's business sustainability. Furthermore, according to *agency theory*, strong governance disclosure can reduce information asymmetry and minimize *agency costs* arising from potential conflicts of interest between managers and shareholders (Jensen & Meckling, 1976). By reducing operational risks and the cost of capital, improved corporate efficiency can subsequently contribute to an increase in the company's market value (Healy & Palepu, 2001; Siek & Murhadi, 2015).

Overall, the findings indicate that environmental and social disclosures do not have significant effects on firm value, whereas governance disclosure has a significant effect. This suggests that good governance disclosure is more capable of providing positive signals to investors and the market (Spence, 1973). According to Friedman (2017), the primary objective of a company is to increase shareholder wealth; therefore, non-financial aspects that are not perceived as direct signals of economic value may be considered less effective by investors. Unlike environmental and social disclosure, increases or decreases in these two ESG dimensions have not been able to provide sufficiently strong positive signals to investors and may instead be perceived as formal compliance efforts (Deegan, 2002). In the post-pandemic period, ESG disclosure has become an important consideration for investors who are increasingly concerned about the impact of corporate activities on the environment. For companies, ESG disclosure is also regarded as a means of fulfilling stakeholder demands placed upon them (Prayogo et al., 2023). However, not all investors prioritize ESG disclosure, which may potentially create agency conflicts.

Safriani and Utomo (2020) found that investors may perceive ESG-related activities as costly and potentially detrimental to shareholder interests. This perception may discourage investors from investing in companies, ultimately reducing firm value. Similarly, Reijonen (2021) stated that corporate sustainability disclosure may be perceived as a waste of resources and may increase corporate debt, thereby reducing financial performance. Consequently, the market may react negatively when companies increase their environmental responsibilities if such activities are perceived as providing limited benefits to firm value. Other studies have also reported that there is no significant difference in firm value between companies that disclose ESG information and those that do not (Atan et al., 2018). This may occur because investors consider other factors when making investment decisions rather than relying solely on corporate ESG practices.

Firm Size as a Moderating Variable in the Effect of Environmental, Social, and Governance Disclosure on Firm Value (PBV)

In the direct-effect test without a moderating variable, environmental and social disclosures had no significant effect on firm value, whereas governance disclosure had a significant effect on firm value. After incorporating firm size as a moderating variable, the results showed that firm size significantly strengthened the effect of governance disclosure on firm value. This finding indicates that larger companies that implement and disclose good corporate governance practices can enhance investors' and the market's assessment of the company. This result is consistent with Prayogo et al. (2023), who stated that large-scale companies that properly implement and disclose good corporate governance concepts have greater sustainability capabilities.

In addition, companies with good governance disclosure tend to have more developed markets and better corporate growth compared with smaller companies or companies that have not properly implemented good governance practices (Prayogo et al., 2023). Large companies generally have more comprehensive monitoring, transparency, and accountability systems, which are closely considered by investors. Therefore, governance disclosure can serve as a strong signal for increasing firm value. This finding is consistent with Signalling Theory, which states that signals conveyed by large-scale companies are more likely to be trusted by investors than those conveyed by smaller companies. The findings are also consistent with Agency Theory, which explains the principal agent relationship, in which the delegation of authority may give rise to conflicts of interest. Governance mechanisms are therefore necessary to align the interests of the principal and the agent. Firm size, as a proxy for organizational complexity and resource availability, can strengthen the function of corporate governance.

In contrast to governance disclosure, firm size was unable to moderate the effects of environmental and social disclosures on firm value. This finding is inconsistent with Legitimacy Theory. Legitimacy Theory suggests that larger companies should disclose more environmental and social information because they are expected to demonstrate greater transparency and have greater financial resources to support the welfare of the market and investors (Akhter et al., 2023).

***Leverage* as a Moderating Variable in the Effect of Environmental, Social, and Governance Disclosure on Firm Value (PBV)**

Based on the research findings, *leverage* is unable to moderate the effects of environmental, social, and governance disclosures on firm value. In this study, the level of corporate debt neither strengthens nor weakens the effects of environmental, social, and governance disclosures on firm value. This may occur because investors focus more on the quality of disclosure and business prospects than on the company's financing structure when evaluating ESG disclosure. These findings are inconsistent with Signalling Theory, which states that the level of debt can serve as a signal to the company, the market, and investors. However, when the market and investors perceive a company as having a strong reputation or consistent performance, changes in *leverage* may no longer be considered relevant signals (Rahayu et al., 2025).

Based on Trade-Off Theory, the use of debt at an optimal level can increase firm value through the tax-shield benefits. However, when a company faces high debt-related risk, investors may no longer consider whether the company performs well in ESG, as the potential benefits of ESG disclosure can be overshadowed by the company's high *leverage*. Conversely, ESG disclosure by companies with low *leverage* may also not contribute to an increase in firm value (Febriani et al., 2026). In addition, *leverage* is directly associated with financial distress risk and debt repayment obligations, and therefore does not necessarily intervene in the relationship between ESG disclosure dimensions and the company's market value (Brigham & Houston, 2019). It can therefore be concluded that the level of corporate *leverage* neither strengthens nor weakens the effect of ESG disclosure on firm value.

5. Conclusions

Based on the results of the analysis and discussion, it can be concluded that environmental and social disclosures do not have a significant effect on firm value, as measured by the Price to Book Value (PBV). In contrast, governance disclosure has a significant effect on the firm value of companies listed in the ESGQ45 KEHATI Index during the 2020–2023 period. Furthermore, firm size is unable to moderate the effects of environmental and social disclosures on firm value, although firm size may statistically strengthen or weaken these relationships. Meanwhile, firm size is proven to moderate and strengthen the effect of governance disclosure on firm value. This indicates that large-scale companies that properly implement and disclose good corporate governance practices tend to receive greater appreciation from the market, thereby increasing firm value and investor confidence in the company. On the other hand, leverage is unable to moderate the effects of environmental, social, and governance disclosures on firm value. The level of corporate leverage does not significantly strengthen or weaken the effect of ESG disclosure on the firm value of companies listed in the ESGQ45 KEHATI Index during the 2020–2023 period. Therefore, leverage cannot be used as a moderating variable in the relationship between ESG disclosure and firm value because leverage is more directly associated with financial distress risk and the company's debt repayment obligations.

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