Uncovering the Nexus Between Corporate Governance and Environmental, Social, and Governance (ESG) Score of Indonesia-Listed Companies Assessed by Sustainalytics

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Abstract. ESG Score measurement by the Sustainalytics institute, in collaboration with the Indonesia Stock Exchange (IDX), started in 2023. This study analyzes how corporate governance affects the ESG scores of companies assessed by Sustainalytics, addressing inconsistencies in previous research, and contributing to studies in Indonesia. The research object is unique due to its assessed ESG score, necessitating further investigation into the influencing factors. This study examines the factors influencing the ESG score of companies assessed by Sustainalytics, focusing on corporate governance aspects: board diligence, board gender diversity, and board size, with company age and size as control variables. The sample consists of 78 observations. The multiple regression analysis was conducted. The findings of this study show that board gender diversity has a negative effect on ESG scores, while board diligence and board size show no effect. Future research can explore other variables that affect ESG scores, such as financial ratios and green investments. Companies should consider these governance factors in their evaluations, and investors can use ESG scores from independent institute as criteria for investment decisions.

Keywords: Board diligence, Board gender diversity, Board size; ESG.

1 INTRODUCTION

In Indonesia, ESG has taken center stage after the government announced its commitment to achieving the Sustainable Development Goals (SDGs) by 2030. The Ministry of National Development Planning / National Development Planning Agency (Bappenas), has developed the National Long-Term Development Plan (RPJPN) 2025-2045 to support the realization Indonesia Emas Vision 2045, aiming to establish Indonesia as a "Sovereign, Advanced, and Sustainable Archipelago." (Bursa Efek Indonesia, 2024)

The company's ESG score measures how much corporate activities impact the environment, social, and governance. According to Sustainalytics, a low ESG score signifies effective management in these areas, resulting in minimal adverse effects on the environment, social, and governance.

S. Kusairi et al. (eds.), *Proceedings of the International Conference on Sustainable Collaboration in Business, Technology, Information, and Innovation (SCBTII 2024)*, Advances in Economics, Business and Management Research 303,
https://doi.org/10.2991/978-94-6463-558-4_22

According to the Indonesia Stock Exchange's ESG assessment, it is stated that for Indonesia to achieve sustainability, the SDGs, and Indonesia Emas 2045, it is expected that on average, companies in Indonesia have well-assessed ESG criteria. However, the reality indicated by Sustainalytics' assessment, reported on the Indonesia Stock Exchange website in 2023, shows that the ESG scores of companies in Indonesia still fluctuate, with some even falling into the severe category. This classification denotes companies considered to have a significant ESG impact due to their non-compliance with ESG principles.

Based on Indonesia's imperative to achieve sustainability and Indonesia Emas 2045, supported economically by the industry's attention to and enhancement of environmental, social, and governance factors, companies particularly those listed on the Indonesia Stock Exchange (IDX) are found to have ESG scores that are still rated poorly by the Sustainalytics assessment agency. This study focuses on analyzing the influence of corporate governance, board diligence, board gender diversity, and board size on ESG scores, considering control variables such as company age and size. This research aims to contribute to the Indonesian research landscape and pave the way for future studies in this field.

Previous research conducted by (Nuhu & Alam, 2024) suggests that board diligence has a positive effect on ESG Score, while (Grannes, 2023) indicates a negative effect. Similarly, (Manita et al., 2018) found that board gender diversity has a negative effect on ESG, whereas (Arayssi et al., 2020) show a positive effect. (Husted & Sousa-Filho, 2019) concluded that board size positively affects ESG, whereas (Arayssi et al., 2020) report a negative effect.

This study aims to examine the impact of corporate governance that represent by board diligence, board gender diversity, and board size alongside company age and company size as control variables on the ESG scores of companies listed on the Indonesia Stock Exchange (IDX), as assessed by Sustainalytics for the 2023 period. The research seeks to analyze these factors both simultaneously and individually to provide insights into their influence on ESG performance.

2 LITERATURE REVIEW

2.1 Stakeholder Theory

According to Freeman (1984 in; Andriof et al., 2017), stakeholders in an organization are defined as "Any group or individual who can affect or be affected by the achievement of organizational goals." This theory recommends that companies engage in ESG activities to maintain legitimacy, and effective corporate governance mechanisms can safeguard the interests of all stakeholders (Alsayegh et al., 2020). Stakeholder theory posits that managers and stakeholders engage in a contractual relationship where managers are responsible for representing and fulfilling the needs of various stakeholder groups. Moreover, this theory serves as a motivation for companies to enhance non-financial performance, thereby benefiting stakeholders (Haque & Ntim, 2018). Therefore, robust corporate governance not only

influences the implementation of regulations and legislation but also protects the interests of numerous stakeholders, potentially fostering sustainability (Al Kurdi et al., 2023).

2.2 Environmental, Social, and Governance (ESG) Score

The IDX collaborates with the Sustainalytics rating agency to conduct assessments and ratings of companies listed on the Indonesia Stock Exchange (IDX). Only ratings issued by Sustainalytics are displayed by the IDX. These ratings are intended to assist investors in evaluating the environmental, social, and governance (ESG) impact factors of portfolios. Sustainalytics determines ratings through a bottom-up assessment of corporate sustainability reports within portfolios, utilizing its methodology for assessing companies' ESG impacts.

The calculation of Sustainability ratings involves several steps to accurately reflect a company's ESG impact, resulting in a categorization from 1 to 5 for each eligible portfolio. Sustainalytics, a subsidiary of Morningstar, is a prominent independent company specializing in corporate governance research, ratings, and analysis. It supports investors worldwide in developing and implementing responsible investment strategies (Sustainalytics, 2021).

Table 1 presents the ESG ratings, which measure the degree to which a company's value is influenced by ESG factors. More specifically, they quantify the magnitude of a company's unmanaged ESG risks. A company's ESG rating comprises quantitative scores that categorize companies into one of five risk levels: negligible, low, medium, high, or severe. These categories are absolute, indicating that a high-risk rating reflects a significant level of unmanaged ESG impact by the company. The table below outlines the categories based on assessments conducted by the Sustainalytics rating:

Table 1. ESG Sustainalytics Rating Categories

ESG Score	Categories	Description
0-10	Negligible	Considered to have a negligible impact on ESG
10-20	Low	Considered to have a low impact on ESG
20-30	Medium	Considered to have a moderate impact on ESG
30-40	High	Considered to have a high impact on ESG
>40	Severe	Considered to have a severe impact on ESG

Source: (Sustainalytics, 2023).

2.3 Corporate Governance

The corporate governance structure defines the allocation of rights and responsibilities among the various components of a company, including the board, managers, shareholders, and other stakeholders. It outlines the rules and procedures for decision-making on corporate matters (Garzón Castrillón, 2021). One widely accepted definition of corporate

governance is proposed by (Cadbury, 1992), who defines it as: "Corporate governance is a system that aims to provide control and direction to the organization to achieve its goals".

The concept of corporate governance is often synonymous with leadership, as it encompasses the guidance and oversight of companies to ensure the achievement of corporate objectives and the conduct of corporate affairs in a responsible and principled manner, as articulated by (Asogwa et al., 2019). In addition, leadership emerges as a fundamental constituent of effective corporate governance, shaping the ethos, culture, and paradigm of organizational decision-making, thereby ensuring that the firm operates in the interest of its stakeholders (Asogwa et al., 2019). Corporate governance is an effective mechanism for building sustainable businesses that engage in ESG activities and cooperate with various stakeholders (Ellili, 2023). It is a set of guidelines aimed at managing companies to encourage good, transparent, and fair relationships between interested parties (Khaeria & Kristianti, 2023). Corporate governance mechanisms help establish compliance with social and environmental standards and policies (Alhossini et al., 2021).

2.4 Board Diligence

Board diligence is one of the attributes that can enhance board member effectiveness. Board diligence is determined by the number of board meetings. The frequency of board meetings can indicate that the board's performance is actively reviewed and is able to maintain performance consistent with the interests of stakeholders (Nuhu & Alam, 2024). From the perspective of stakeholder theory, increased competition, operations, and uncertainty in the current business environment have heightened the need to hold frequent meetings to address the concerns of various stakeholders and better evaluate various company risks, including those related to ESG challenges (Hussain et al., 2018).

Based on 33/POJK.04/2014 (POJK, 2014), the board of directors must hold regular board meetings at least once per month. The board of directors meeting serves as an important forum for discussion and decision-making on strategic and operational matters (Kamaludin et al., 2022). This ensures that the information shared can encourage quality decision-making. Board diligence is measured by the total number of board meetings at the end of the financial year (Nuhu & Alam, 2024) as a follow:

$$BD = \sum \text{Board of Directors Meeting at the End of the Year} \quad (1)$$

where: BD = Board Diligence
$\sum$ = Total

The author assumes that board diligence has a negative effect on the environmental, social, and governance (ESG) score, meaning that the higher the board diligence value, the lower the ESG score. This indicates that the company can manage its ESG well. This is in line with previous research conducted by (Grannes, 2023), which concluded that board diligence has a negative effect on the company's ESG score.

$H_{a1:}$ Board diligence has a negative and significant effect on the ESG score, with firm age and firm size as control variables

2.5 Board Gender Diversity

Corporate board gender diversity results in strategic variation and change (Samara et al., 2023). Empirical evidence shows that female directors bring many benefits, especially in developed countries where gender equality is more common. Previous research comparing developed and developing countries shows that the number of female directors significantly improves ESG in developed countries, but the same effect is not observed in developing countries (Mohammad & Wasiuzzaman, 2021).

Gender diversity on the board is operationalized using the Blau Index. As stated by (Romano et al., 2020) in their literature, this measure simultaneously considers the number of genders represented (male and female) as well as the equitable distribution of directors in each category. Gender diversity on the board is operationalized using the Blau Index. The Blau Index formula is as follows.

$$\text{BI} = 1 - \sum_{i=1}^{n} P_i^2 \quad (2)$$

where: BI = Blau Index
i = Gender differences on the board (male and female)
n = Assumed value of 2 (male and female genders)
P = Board gender ratio i (male and female genders)

The author assumes that board gender diversity has a negative effect on the company's ESG score, meaning that higher board gender diversity results in a lower ESG score, indicating that the company manages its ESG well. This is in line with previous research conducted by (Abdelkader et al., 2024), which concluded that board gender diversity negatively affects the company's ESG score.

$H_{a2:}$ Board gender diversity has a negative and significant effect on the ESG score, with firm age and firm size as control variables

2.6 Board Size

According to stakeholder theory, a large board size is better able to monitor and control opportunistic managerial behavior. This is because the board has more skills, expertise, and knowledge diversity. This theory asserts that larger boards work to promote the values and interests of stakeholders (Al Amosh et al., 2023). Board size refers to the number of members in the board of directors' structure (Husted & Sousa-Filho, 2019). The measurement of board size is based on the total number of members on the board of directors (Yadav & Prashar, 2023) as a follow:

$$\text{BS} = \sum\text{Board Size} \quad (3)$$

where: BS = Board Size
∑ = Total

The author assumes that board size has a negative effect on the environmental, social, and governance (ESG) score, meaning that a larger board size results in a lower ESG score, indicating that the company manages its ESG well. This is in line with previous research conducted by Nuhu & Alam (2024), which concluded that board size negatively affects the company's ESG score.

H_{a3} : Board board size has a negative and significant effect on the ESG score, with firm age and firm size as control variables

2.7 Firm Age

Firm age can be defined as the length of time a company has been operating (Vora, 2019). The age of a firm is measured by the number of years from its establishment until the research period (Suttipun, 2021) as a follow:

FAge = ∑Firm Age (4)

where: FAge = Firm Age
∑ = Total

2.8 Firm Size

Firm size is a scale used to identify the size of a firm based on its total assets (Brigham and Houston, 2021). The natural logarithm of total assets (Ln (Total Asset)) is a measurement used to reflect the size of the firm. A higher Ln (Total Asset) value indicates a larger firm (Khalid et al., 2022). Measurement of firm size as a follow:

Fsize = Ln (*Total Asset)* (5)

where: FSize = Firm Size
Ln = Log Natural

This study contributes to the latest research on the ESG scores of companies listed on the Indonesia Stock Exchange, as measured, and assessed by the ESG Sustainalytics assessment institution, which refers to the Global Reporting Initiative (GRI) standard. Based on the theoretical basis, previous research, and explanation of the theoretical framework, figure 1 states the theoretical framework in this study is as follows:

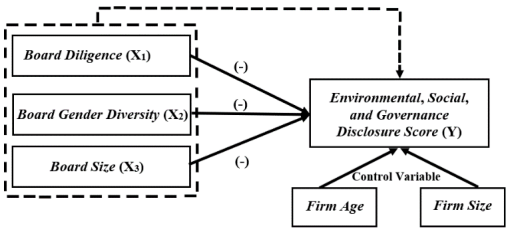

Fig 1. Theoretical Framework
Source: Processed by Researcher (2024)

Based on the theoretical framework, previous research, and the conceptual framework, the researcher formulates the following research hypotheses:

- H_a: Board diligence, board gender diversity, and board size affect the Environmental, Social, and Governance Score with the control variables firm age and firm size.
- H_{a1}: Board diligence negatively affects the Environmental, Social, and Governance Score with the control variables firm age and firm size.
- H_{a2}: Board Gender Diversity negatively affects the Environmental, Social, and Governance Score with the control variables firm age and firm size.
- H_{a3}: Board Size partially negatively affects the Environmental, Social, and Governance Score with the control variables firm age and firm size.

3 RESEARCH METHODOLOGY

The study uses descriptive methods and a quantitative approach for analysis. The data used is published data from external sources, the author does not modify the data but sources it from the Sustainalytics appraisal institution, which publishes its data officially and is then processed by the researchers. The data collection period used in this study is cross-section. The data collection technique employed is observation, which involves the observation and recording of facts needed by the researchers. This study uses a non-probability sampling technique, specifically purposive sampling, to collect data sources. Non-probability sampling is a technique that does not provide equal opportunities for each member of the population to be selected as a sample member (Abubakar, 2021). In this study, operational definitions are used for variable measurement. Data analysis is used to test the hypotheses.

This study uses one dependent variable, three independent variables, and two control variables' as follows:

1. Dependent Variable
   The dependent variable, which is the focus of the research, is the variable that is influenced by the independent variable. The dependent variable studied in this research is the environmental, social, and governance (ESG) score.

2. Independent Variable
   Independent variables are variables that cause changes, either positively or negatively, to the dependent variable (Sekaran & Bougie, 2016). The independent variables studied in this research are board diligence, board gender diversity, and board size, which are described in the operational definition and variable measurement table.

3. Control Variable

Control variables are variables that are considered in the relationship between the independent and dependent variables. These variables are controlled or kept constant to ensure that the effect of the independent variable on the dependent variable is not influenced by external factors not examined in the study, thereby improving the quality of the adjusted R-Square value (Sugiyono, 2014). The control variables in this study are company age and company size.

The following table 2 presents the operational definitions and variable measurements are based on the description above:

Table 2. Operational Definition Variable

Variable	Definition	Indicator	Scala
	Dependent Variable		
ESG *Score* (Y)	ESG refers to three main factors in measuring sustainability and ethical impacts for investment decision-making: Environmental, Social, and Governance (ESG). ESG assessment is crucial for evaluating the implementation of ESG practices in companies, based on the GRI standard (Indonesia Stock Exchange, 2022).	Company's ESG Score (Sustainalytics, 2021)	Ratio
	Independent Variable		
Board Diligence (X_1)	Board diligence is assessed by the frequency of board meetings held in a year; a higher number of meetings indicates a productive board (Fahad & Rahman, 2020).	BD = ∑Board of Directors Meeting at the End of the Year (Nuhu & Alam, 2024)	Ratio
Board Gender Diversity (X_2)	Gender diversity on corporate boards refers to the representation of female directors, expressed as the percentage of women serving on a company's board (Arvanitis et al., 2022).	Blau Index: $BI = 1 - \sum_{i=1}^{n} P_i^2$ i: Represents gender differences on the board (male and female), n: Assumed value of 2 (representing male and female genders), P: Denotes the Board gender ratio i (male and female genders). (Romano et al., 2020)	Ratio
Board Size (X_3)	Board size refers to the total number of members on the board of directors. Whether the number of board members is small or large, they still have to fulfill their responsibilities (Badru et al., 2020).	BS = ∑Board Size (Yadav & Prashar, 2023)	Ratio
	Variable Control		
Firm Age (Control)	Firm age is defined as the length of time a company has been operating since its establishment (Vora, 2019).	FAge = ∑Firm Age (Suttipun, 2021)	Ratio
Firm Size (Control)	Company size is a measure used to determine the scale of a company based on its total assets (Brigham and Houston, 2021).	Firm Size: Log of Total Assets	Ratio

		(Khalid et al., 2022)

Source: Processed by Researcher (2024)

A. Population And Sample

In this study, the population consists of 79 companies listed on the Indonesia Stock Exchange (IDX) that were assessed by the Sustainalytics institute. The data is limited to the year 2023 because the Indonesia Stock Exchange (IDX) sourced its ESG scores from Sustainalytics, which were only published on the IDX website in 2023. Based on predefined criteria, a total of 78 observations were included in this study, representing companies with assessed ESG scores for the 2023 period by the Sustainalytics.

Table 3 explains the sampling criteria established for this study are as follows:

Table 3. Sample Selection Criteria

No	Sampling Criteria	Total
1	Public companies listed on the Indonesia Stock Exchange (IDX) for the period 2023 that have been assessed by the Sustainalytics agency	79
2	Public companies listed on the Indonesia Stock Exchange (IDX) for the period 2023 and assessed by the Sustainalytics institute, but do not meet the research variable requirements	(1)
3	Total sample of public companies with ESG scores assessed by the Sustainalytics institute for the period 2023 and meeting research variable requirements	78
	Total research sample	78

Source: Processed by Researcher (2024)

4 RESULT

4.1 Descriptive Statistics

Descriptive statistics provide essential outputs including maximum, minimum, mean, standard deviation, and variance (Sekaran & Bougie, 2016). The descriptive statistical results for each variable are detailed in the table below:

Table 4. Descriptive Statistics Test Results

	ESG	BD	BGD	BSIZE	FAGE	FSIZE
Mean	29.32885	26.47436	0.218590	6.282051	42.83333	19.79628
Median	28.21500	12.00000	0.240000	6.000000	40.00000	18.44000
Maximum	53.10000	156.0000	0.500000	15.00000	127.0000	31.81000
Minimum	12.67000	12.00000	0.000000	3.000000	1.000000	12.53000
Std. Dev	9.709855	24.06848	0.196176	2.557888	24.20390	4.193083

Source: Eviews 12 Version Ouput (2024)

Table 4 presents the descriptive test results in the form of minimum, mean, and standard deviation values for each research variable: ESG score, board diligence, board gender diversity, board size, firm age, and firm size. According to Table 4, the results indicate that the mean or average values of the dependent, independent, and control variables are greater than their respective standard deviation values. These findings suggest that the data in this study are tightly clustered and exhibit low variability.

4.2 Classic Assumption Test

1. Normality Test

Data can be considered normal if the probability value of the test results is greater than the predetermined alpha (significance level). The significance level in this study is based on probability (Asymptotic Significance), and data is deemed normal if the probability value is ≥ 0.05 (Robinson Sihombing, 2021). The following are the results of the normality test in the study using the Jarque-Bera Test method.

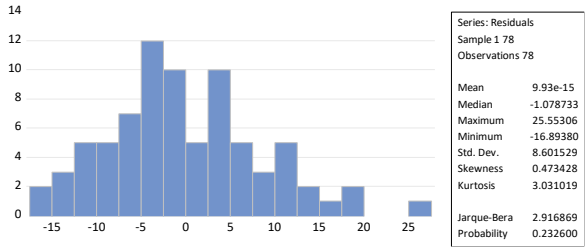

Fig 2. Normality Test Results

Based on Figure 2, which shows the results of the normality test in this study, the probability value is 0.232600. Since this probability value is greater than 0.05, it can be concluded that the observation data used in this study is normally distributed according to the probability (Asymptotic Significance).

2. Multicollinearity Test

The multicollinearity test is conducted to determine whether there is a high correlation between the independent variables in the multiple linear regression model. The statistical tool used to test for multicollinearity is the Variance Inflation Factor (VIF). The assumption regarding multicollinearity in the regression model, if the VIF value is less than 10, there is no multicollinearity. However, if the VIF value is 10 or greater, multicollinearity exists in the regression model (Robinson Sihombing, 2021).

Table 5. Multicollinearity Test Results

Variance Inflation Factors
Date: 06/06/24 Time: 10.05
Sample: 178
Included observations: 78

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	37.94151	37.40242	NA
BD	0.002179	2.734052	1.228442
BGD	27.43695	2.319914	1.027563
BSIZE	0.175868	7.961644	1.119775
FAGE	0.002304	5.479774	1.313318
FSIZE	0.062213	25.09900	1.064465

Based on Table 5, which shows the results of the multicollinearity test in this study, it is known that the Variance Inflation Factor (VIF) values, as seen from the centered VIF values of each variable, are 1.228442, 1.027563, 1.119775, 1.313318, and 1.064465. Since all VIF values are less than 10, it can be concluded that there is no multicollinearity among the independent variables in this study.

3. Heteroscedasticity Test

The purpose of the heteroscedasticity test is to determine whether there is inequality in the variance of residuals across different observations in a regression model. To detect the presence of heteroscedasticity in this study, we examine the probability value of each variable. If the probability value is less than 0.05, heteroscedasticity is present. Conversely, if the probability value is 0.05 or greater, heteroscedasticity is absent (Robinson Sihombing, 2021). This study uses the Glejser test method to identify signs of heteroscedasticity.

Table 6. Heteroscedasticity Test Results

Heterokedasticity Test: Gleiser
Null hypothesis: Homokedasticity

F-statistic	1.343558	Prob. F (5,72)	0.2559
Obs* R-squared	6.656532	Prob. Chi-Square (5)	0.2475
Scaled explained SS	5.789543	Prob. Chi-Square (5)	0.3272

Based on Table 6, the results of the heteroscedasticity test using the Glejser test method show that the Chi-Square Probability value for Obs*R-Square is 6.656532, which is greater than 0.05. Therefore, it can be concluded that there is no heteroscedasticity in this data.

B. Multiple Linear Regression Analysis

This study employs multiple regression analysis tools, which are multivariate techniques. Multiple regression analysis objectively assesses the degree and nature of the relationship between the independent and dependent variables. The regression coefficient indicates the relative importance of each independent variable in predicting the dependent variable. The following are the results of the multiple regression analysis used in this study.

Table 7. Multiple Linear Regression Analysis Results

Dependent Variable: ESG
Method: Least Squares
Date: 06/06/24 Time: 10.04
Sample: 178
Included observations: 78

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	47.17867	6.159668	7.659288	0.0000
BD	-0.010203	0.046681	-0.218567	0.8276
BGD	-17.81541	5.238029	-3.401167	0.0011
BSIZE	-0.451588	0.419366	-1.076834	0.2851
FAGE	-0.025097	0.047996	-0.522883	0.6027
FSIZE	-0.793708	0.249426	-1.979377	0.0516

The multiple linear regression model test results in Table 7 show the following regression equation:

Y = 47,178674 – 0,010202BD – 17,815409BGD – ,451587BSIZE – 0,025096FAGE – 0,493707FSIZE

4.3 Hypothesis Test

1. Coefficient of Determination (R^2)

Table 8 presents the coefficient of determination (R^2) results which indicates the proportion of the variance in the dependent variable (Y) that is explained by the variance in the independent variable (X). Its serves to measure how much of the variation in the dependent variable can be attributed to the independent variables (Sekaran & Bougie, 2016). In this study, the coefficient of determination assesses the ability of the independent variables board diligence, board gender diversity, and board size along with the control variables firm age and firm size, to explain variations in the dependent variable, ESG score.

Table 8. Coefficient of Determination (R^2) Results

R-squared	0.215260	Mean dependent var	29.32885
Adjusted R-squared	0.160764	S.D. dependent var	9.709855
S.E. of regression	8.895181	Akaike info criterion	7.282700
Sum squared resid	5696.946	Schwarz criterion	7.463985
Log likelihood	-278.0253	Hannan-Quinn criter.	7.355272
F-statistic	3.950023	Durbin-Watson stat	0.481525
Prob(F-statistic)	0.003199		

It is observed that the Adjusted R-Square value in this study is 0.160764, approximately 16%. This value indicates that the independent variables board diligence, board gender diversity, and board size along with the control variables firm age and firm size, collectively explain only 16% of the variance in the dependent variable, ESG score. Consequently, based on the coefficient of determination, it can be inferred that the remaining 84% (100%

- 16%) of the influence on the dependent variable ESG score is attributed to other variables not included in this study.

2. Simultaneous Test (F Test)

Simultaneous hypothesis testing or the F test aims to ascertain whether the independent variables (X) collectively have a significant impact on the dependent variable (Y) (Priyono, 2009). In this study, the F test is utilized to determine whether the independent variables (X) comprising board diligence, board gender diversity, and board size along with the control variables firm age and firm size, collectively influence the dependent variable ESG score.

Based on the results from Table 8 of the F test, the Prob (F-Statistic) value in this study is 0.003199, which is smaller than the significance level of 0.05. This indicates that the alternative hypothesis (H_a) is accepted. Therefore, it can be concluded that the independent variables (X) board diligence, board gender diversity, and board size along with the control variables firm age and firm size, collectively have a significant influence on the dependent variable ESG score.

3. Partial Test (T Test)

Table 9 indicates the partial hypothesis testing or t-test aims to determine whether each independent variable (X) board diligence, board gender diversity, and board size along with the control variables firm age and firm size, individually influences the dependent variable (Y) ESG score. The significance level for the partial test is set at $\alpha = 0.05$. In this study, the assumption is that if the probability value (p-value) is less than 0.05, then H_0 (null hypothesis) is rejected, and H_a (alternative hypothesis) is accepted, indicating that the independent variable partially affects the dependent variable. Conversely, if the p-value is 0.05 or greater, then H_0 is accepted, and H_a is rejected, indicating that the independent variable does not have a partial effect on the dependent variable.

Table 9. Partial Test (T Test) Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	47.17867	6.159668	7.659288	0.0000
BD	-0.010203	0.046681	-0.218567	0.8276
BGD	-17.81541	5.238029	-3.401167	0.0011
BSIZE	-0.451588	0.419366	-1.076834	0.2851
FAGE	-0.025097	0.047996	-0.522883	0.6027
FSIZE	-0.493708	0.249426	-1.979377	0.0516

- The board diligence variable (X_1) has a probability value (p-value) of 0.8276 > 0.05. Then H_{01} is accepted and H_{a1} is rejected, with a Prob value > 0.05 indicating that board diligence has no effect on ESG score with the control variables firm age and firm size.

- The board gender diversity variable (X_2) has a probability value (p-value) of 0.0004 ≤ 0.05. Then H_{02} is rejected and H_{a2} is accepted, then it is known that the coefficient value is -19.12989, which means that board gender diversity has a significant effect with a negative direction on ESG score with the control variable firm age and firm size.
- The board size variable (X3) has a probability value (p-value) of 0.2851 > 0.05. Then H03 is accepted and H_{a3} is rejected, with a Prob value > 0.05 indicating that board diligence has no effect on ESG score with the control variables firm age and firm size.

5 DISCUSSION

This study found a significant negative relationship between board gender diversity and ESG scores. This result aligns with (Yadav & Prashar, 2023; Manita et al., 2018;Abdelkader et al., 2024), which found that board gender diversity affects ESG scores. According to stakeholder theory, women bring unique characteristics to the board, such as experience, skills, and viewpoints that may improve the internal decision-making process and the company's ability to meet the needs of various stakeholders. The gender diversity of corporate boards is proven to produce variations and strategic changes, particularly in focusing on ESG (Samara et al., 2023). This result indicates that higher board gender diversity is associated with lower ESG scores, suggesting that companies manage their ESG aspects well

Nevertheless, this study shows that the board diligence variable has no effect because some corporate entities in the research sample conduct a minimal number of internal board meetings per year, typically once a month. This result aligns with Suttipun (2021), which states that board diligence has no effect on ESG scores. The average number of internal meetings is extremely low, indicating that companies listed on the Indonesia Stock Exchange and assessed by Sustainalytics do not hold meetings frequently. This suggests an inactive board or low diligence, which has an insignificant effect on ESG score disclosure. According to stakeholder theory, the activities of the board of directors are directly proportional to the interests of stakeholders. Therefore, the low frequency of board meetings is directly proportional to a decrease in the company's ESG score. Also, the results of this study indicate that the board size variable has no effect on the company's ESG score. This finding aligns with Nuhu and Alam (2024), which state that board size has no impact on ESG scores. According to the study, board size can become counterproductive when it exceeds a certain limit, and both large and small board sizes have no effect on ESG scores, in accordance with stakeholder theory.

6 CONCLUSION AND RECOMMENDATION

The partial hypothesis testing indicates that board diligence and board size do not significantly influence ESG scores with the control variables of firm age and firm size. However, board gender diversity shows a significant impact on ESG scores, albeit in a negative direction. The scope of this study is limited to a single year, as the Indonesia Stock Exchange

(IDX) only started reporting ESG scores in collaboration with Sustainalytics in 2023. Consequently, the analysis is confined to this specific time.

Given the findings, future research is recommended to build on this study by further examining the relationship between corporate governance and the Sustainalytics ESG score. Researchers should consider investigating additional variables not explored in this study and expanding the dataset to cover multiple years. The inclusion of control variables like firm age and size is essential, but future studies should also explore additional factors such as profitability, leverage ratio, and liquidity. Additionally, other independent variables, including financial ratios and green investments, should be explored for their potential impact on ESG scores. For investors, this research provides a new analytical tool for making informed investment decisions in companies that prioritize sustainability. By evaluating a company's ESG score, investors can potentially enhance the value of their investments while contributing positively to the sustainability of the earth and humanity.

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