

## Corporate Governance: Implications for Environmental, Social, and Governance (ESG) Performance

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### Abstrak

This research was conducted to examine the impact of board diversity on the ESG (environmental, social, and governance) performance of companies. The study investigates board diversity in terms of board attributes such as board size, board gender diversity, and board independence. The data used is secondary data obtained from financial and sustainability reports of manufacturing companies listed on the Indonesia Stock Exchange from 2018 to 2022. The sample of this research consists of 29 companies, with a total of 145 data points. The sampling method used to obtain data is purposive sampling based on certain criteria. The analysis method used is panel regression, and STATA software is employed for data processing. The results of the study indicate that board gender diversity and board size do not affect ESG performance. However, board independence does have an impact on ESG performance.

### Kata Kunci

*Board gender diversity, board size, board independence, and ESG*

## INTRODUCTION

Nowadays, companies in conducting their business activities should not only prioritize profits but also consider the impact of their business activities on their surrounding environment and corporate social responsibility. Companies implement ESG (Environmental, Social, and Governance) as an innovation in the business sector that integrates environmental and social aspects into corporate activities as a strategic step to create corporate value. Companies that pay attention to environmental, social, and governance (ESG) issues can attract investor interest in making socially responsible investment decisions (De Lucia et al., 2020).

The essence of ESG in corporate governance systems and its regulation in Indonesia is still limited, only at the level of OJK (Financial Services Authority) regulations, such as OJK Regulation No. 51 of 2017, which regulates the Implementation of Sustainable Finance for Financial Service Institutions, Issuers, and Public Companies. According to the regulation, Article 10, Financial Service Institutions (LJK), Issuers, and Public Companies are required to prepare sustainability reports starting in 2019. The application of ESG aspects in companies is also continuously evolving, especially in manufacturing companies. Indonesian manufacturing companies listed on the Indonesia Stock Exchange (IDX) that apply ESG continue to exploit resources massively for financial gain, leading to significant environmental damage. Companies implement ESG because it has the potential and long-term impact on the sustainability of the company to attract the attention of investors and stakeholders (Almeyda & Darmansyah, 2019).

According to Serly and Susanti (2021), corporate governance is a system that involves the relationship between management, shareholders, and other stakeholders. In fact, the characteristics and composition of the Board of Directors are crucial in determining strategic decisions related to ESG dimensions and socially responsible behavior (Menicucci & Paolucci, 2022). In this context, the Board of Directors plays a fundamental role in incorporating sustainability into their business strategy and in aligning the interests of the company and shareholders with ESG performance (Qaderi et al., 2022). The success of a business is influenced by the board of directors as they are responsible for the company and business ethics, enhancing corporate culture, overseeing the achievement of strategic goals, and approving corporate governance systems.

According to Arayssi et al. (2020), one of the key factors in increasing the level of ESG disclosure is board gender diversity in terms of the proportion of women on the board. Female directors are also more sensitive to social, environmental, and ethical issues and more attentive to relevant interests compared to men (Zahid et al., 2020). Additionally, women have educational backgrounds more related to non-financial issues and are more likely to behave ethically and avoid violations of social and environmental policies compared to men (Wasiuzzaman & Wan Mohammad, 2020). This enhances internal decision-making processes and facilitates access to critical resources and the alignment of corporate strategy with the external environment. Women on boards support companies in adopting environmentally and socially responsible behaviors, which promote increased ESG disclosure where companies give importance to ESG performance (Nicolò et al., 2022).

According to (Cucari et al., 2018), board independence reflects the structure of the board as it plays a crucial role in ensuring effective board oversight and serves as a link between corporate strategic policies and the interests and expectations of stakeholders. In line with stakeholder theory, the presence of independent directors on the board encourages management activities to protect stakeholders and reduce conflicts of interest among them (Ortas et al., 2017). Boards composed of independent members are more aware of environmental issues and stakeholder interests compared to other members, thus promoting greater corporate social responsibility practices. Independent boards are more attentive to ESG factors such as considering the social objectives set by the company and therefore adopting and adhering to socially responsible behaviors. This greater attention to ESG aspects can be explained by the fact that their reputation is at stake (García-Sánchez et al., 2018).

The next factor is board size. The functions of the board of directors are executive oversight and risk monitoring, which can be influenced by the level of responsibility and workload assigned to them, as well as their personal and professional skills. The effectiveness and efficiency of these functions depend on the board size. According to Miranda et al. (2023), consistent with resource dependency theory, a larger board is an indicator of diversity as it equips the board with different perspectives and expertise from management. On the one hand, in line with the legitimacy perspective, smaller boards may provide a lower level of diversity in terms of gender, expertise, education, and stakeholder representation. According to Tapver (2019), a larger board size is considered to have members with diverse skills, knowledge, and perspectives, who are highly oriented towards sustainability culture, and who are socially engaged and committed to responsible actions that enhance their ESG performance.

This research is important as it discusses how corporate governance affects Environmental, Social, and Governance (ESG) in the manufacturing sector. There are several reasons why this research is necessary:

- 1. Lack of Research in the Manufacturing Sector**

Many previous studies have focused more on the banking sector, whereas the manufacturing sector has a larger environmental impact due to high resource consumption and waste production. Therefore, this research seeks to fill this gap by examining how the composition of the board of directors can influence ESG in the manufacturing industry.

- 2. The Increasing Importance of ESG Globally, but Still Not Maximized in Indonesia**

In many countries, ESG has become a key factor in assessing corporate sustainability and is even considered by investors. However, in Indonesia, the application of ESG is still limited, as many companies remain more focused on financial profit. This research aims to provide an overview of how corporate governance can help improve transparency and compliance with ESG.

### 3. **Contribution to Regulations and Policies**

Currently, ESG-related regulations in Indonesia are still limited. For instance, the Financial Services Authority Regulation No. 51 of 2017 only mandates financial sector companies to implement sustainability principles. Meanwhile, the manufacturing sector lacks strong regulations regarding ESG. The findings of this research could serve as a consideration for the government and the Financial Services Authority (OJK) to tighten regulations and encourage companies to be more transparent in their ESG reporting.

### 4. **The Importance of Corporate Governance in Improving ESG**

Good corporate governance can help companies become more accountable to environmental and social factors, rather than just focusing on profits. This research examines whether board diversity, board independence, and board size have an impact on ESG. By understanding this relationship, companies can develop more effective strategies to improve their ESG performance.

The objective of this research is to examine whether board size, board gender diversity, and board independence impact ESG performance in manufacturing companies. Previous studies ((Miranda et al., 2023);(Birindelli et al., 2019) have focused on the banking sector. This study differs from previous research, as it focuses on the manufacturing sector, which has not been widely used in previous research.

## **LITERATURE REVIEW**

In this study, there are two theories that support the relationship between corporate governance and ESG performance, namely stakeholder theory and legitimacy theory. First, stakeholder theory is a broad perspective that links corporate governance practices and ESG exposure with a focus on the important role of the corporate board (Nicolò et al., 2022). Stakeholder theory posits that companies are obligated to be responsible and beneficial to their stakeholders because their existence is highly dependent on the support of stakeholders to maintain the company's sustainability. The growing issue of sustainability has led stakeholders to shift their views that a company's performance is not only measured by financial performance but also by non-financial performance, such as environmental, social, and governance factors. Through ESG disclosure, the information in the report shows that the company has fulfilled the stakeholders' rights regarding sustainability aspects in the company's operations.

Second, legitimacy theory aims to gain legitimacy from society by ensuring that the company is consistent in all its activities with the values and social norms prevailing in the society in which the company operates. The company seeks to ensure that its activities are perceived as "legal." According to the literature on legitimacy theory, larger companies are more likely to be subjected to public scrutiny and are expected to have a greater influence on environmental practices. Therefore, larger companies with a high social presence tend to show a greater interest in gaining legitimacy and enhancing their image, as well as making direct contributions to social and environmental responsibility compared to smaller companies (Fianica et al., 2021). As a result, the company will gain recognition from society for creating alignment between the company's values and norms with those of society, which will impact the company's sustainability and result in superior performance.

### **Board Gender Diversity**

According to Romano et al. (2020), gender diversity is increasingly playing an important role in broader academic research that analyzes the impact of corporate governance on company performance, and the results are not always clear. With gender diversity on the board of directors, they will be more cautious in handling socially responsible activities and making ESG disclosures

that align with the company's sustainability (Shakil et al., 2020). From this perspective, according to agency theory Fama and Jensen (2020), it can be said that gender diversity enhances the attitudes of board members toward the board of directors, which positively impacts company performance (Romano et al., 2020). Men and women differ from each other in terms of values, beliefs, experiences, perspectives, and work styles, with women being more oriented toward ESG performance (García-Sánchez et al., 2018); Birindelli et al., 2018)

According to Eagly and Wood (2020), the positive impact of gender diversity is due to women's different understanding of their leadership roles in the company, while men tend to focus more on the primary needs of shareholders, and women seem more willing to give their attention to the interests of stakeholders (Adams et al., 2021). According to Pucheta-Martínez et al. (2021), women play an important moderating role in social and environmental disclosures as a means of sustainable development. Studies on the relationship between the proportion of women on the board of directors and ESG performance show contradictory results, and there is still no consensus on this relationship. Some studies highlight a positive relationship (Birindelli et al., 2018; Shakil et al., 2020; Galletta et al., 2022; Lu & Wang, 2021), while others indicate a negative relationship (Husted & Sousa-Filho, 2019). However, positive influences are largely evidenced. Therefore, the first hypothesis proposed is as follows:

H<sub>1</sub>: Gender diversity has a positive impact on ESG performance.

### **Board Independence**

According to Menicucci and Paolucci, (2022), board independence is the most frequently used variable by researchers to study board characteristics, as it is essential in evaluating the orientation of a company's strategic policies toward the interests and expectations of stakeholders. García-Sánchez et al. (2018), suggest that independent board members consider not only profit maximization but also ESG goals. This study finds evidence of a positive impact of board independence on social issues, indicating that they are more concerned about the environment and socially responsible, making their reputation at stake. According to Maxfield et al. (2018), resource dependency theory advocates encourage boards to consist of independent members as they can contribute their professional experience and external relationships.

According to Lu and Wang (2021), there is a negative relationship between board independence and ESG performance. However, other studies show the opposite conclusion, namely a positive relationship. Haque and Ntim (2018) find evidence of improved environmental performance when board independence is present. This is due to the balance of ESG factors and the extensive knowledge and experience of independent board members, which ultimately helps minimize conflicts of interest among stakeholders and encourages managers to take environmental action. According to Cucari et al. (2018), there is evidence that companies with more independent members influence ESG disclosure. For all the reasons presented, the following hypothesis is developed:

H<sub>2</sub>: Board independence has a negative impact on ESG performance.

### **Board Size**

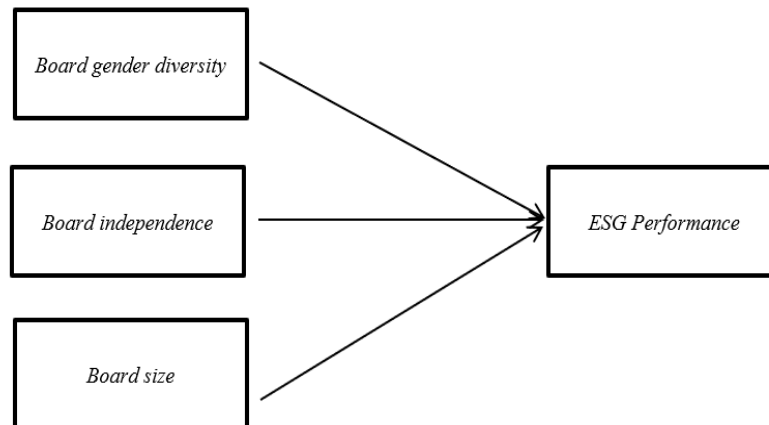
According to Miranda et al. (2023), the board of directors is responsible for executive oversight and risk monitoring, which can be influenced by the level of responsibility and workload assigned to them, as well as their personal and professional expertise. The effectiveness and efficiency of these activities depend on board size. On the one hand, smaller board sizes are naturally more effective and efficient in monitoring and overseeing the ESG strategy implemented, committed to higher levels of accountability, and have greater power to moderate potential opportunistic behavior of managers (Birindelli et al., 2018). Such boards are more likely to reach consensus with stakeholders, thereby protecting their interests.

On the other hand, larger board sizes lead to slower decision-making processes (Bătae et al., 2021). These boards are characterized by greater diversity in terms of stakeholder representation, making them more effective when they have greater workloads and responsibilities compared to smaller board sizes. Therefore, larger board sizes are considered to have members with diverse

skills, knowledge, and perspectives, who are highly oriented towards sustainability culture, and who are socially engaged and committed to responsible actions that enhance their ESG performance (Tapver, 2019).

According to Birindelli et al. (2018), there is a positive relationship between board size and ESG performance, and other studies reach the same conclusion (Jizi, 2017);Lagasio & Cucari, 2019; Menicucci & Paolucci, 2022). Based on the above, the following hypothesis is developed:

H<sub>3</sub>: Board size has a positive impact on ESG performance.



**Figure 1. Model Framework**

**RESEARCH METHOD**

**Sample**

The sample for this research consists of 29 manufacturing companies listed on the Indonesia Stock Exchange (IDX). The timeframe considered is 5 years, from 2018 to 2022. Purposive sampling was used as the sampling method. This method was chosen due to the specific criteria of the sample, which are considered to have certain characteristics related to the dependent and independent variables. The specifications obtained align with IDX standards. The following are the criteria for data collection:

1. Manufacturing companies listed on the Indonesia Stock Exchange.
2. Companies that published annual reports from 2018 to 2022.
3. Companies that used the GRI standards in their sustainability reports from 2018 to 2022.
4. Companies that provided complete information according to the research variables, particularly those with female directors.

**Variable Operational Definition**

This study uses ESG as the dependent variable, employing the GRI standard index, which represents the company’s sustainability reporting. The measurement of ESG has been conducted in several studies (Bătae et al., 2021; Birindelli et al. 2018; La Torre et al., 2021; Shakil et al., 2020; Tasnia et al., 2020). The ESG score provides a transparent and objective measure of a company's ESG performance, engagement, and effectiveness based on publicly disclosed data. The independent variables used are board gender diversity, board independence, and board size. Table 1 provides a brief explanation of the measurement of these variables and the expected relationship with ESG performance.

**Tabel 1. Description of Variables**

VARIABLE NAME	MEASUREMENT	STUDIES
DEPENDENT VARIABLE		

<b>ESG PERFORMANCE</b>	ESG score range from global reporting initiative (GRI)	(Comoli et al., 2023)
<b>INDEPENDENT VARIABLE</b>		
<b>BOARD GENDER DIVERSITY</b>	Number of women on the board (number of female directors divided by the total number of board members).	(Menicucci & Paolucci, 2022)
<b>BOARD INDEPENDENCE</b>	The percentage of independent board members divided by the total number of board members.	(Birindelli et al., 2018)
<b>BOARD SIZE</b>	Total number of board directors members.	(Miranda et al., 2023)

### REGRESSION MODEL

This study employs panel data analysis to control for bias from omitted or unobserved variables (Birindelli et al., 2018) and uses the ordinary least squares (OLS) method. This analytical approach has the advantage of examining data over a longer period and assessing ESG activities in the literature. Since the social security data at the country level is constant across all years analyzed, the fixed effects model is inefficient, leading us to use random effects panel regression. The following model is used to estimate the relationship between ESG performance and the independent variables:

$$\text{Performance\_ESG}_{i,t+1} = \alpha_{i,t} + \beta_1 t (\text{Women}_{i,t}) + \beta_2 t (\text{Independence}_{i,t}) + \beta_3 t (\text{Size}_{i,t}) + \mu_i$$

### RESULT

#### Descriptive Statistics

**Tabel 2. Descriptive Statistics Data Table**

Variable	Obs	Mean	Standard Deviation	Minimum	Maximum
GRI	145	0,366	0,306	0	0,915
GD	145	0,171	0,084	0,048	0,428
BI	145	0,212	0,095	0,077	0,5
BS	145	5,407	2,050	2	12

Source: STATA v.17 output, researcher's data processing (2024).

Based on the data results in Table 2, the mean (average value) of the ESG variable is 0.366, with a standard deviation of 0.306. The comparison between the mean and standard deviation (0.366 greater than 0.306), where the mean is greater than the standard deviation, indicates that ESG exposure has a large spread and variability. The maximum value obtained for the ESG disclosure variable is 0.915 or 91.5%, meaning that out of 145 companies, there is a company-level ratio of up to 91.5% using ESG disclosure. Meanwhile, the minimum value for the ESG variable is 0, indicating that some companies have not yet adopted ESG disclosure for their sustainability. On average, 36.6% of companies have implemented ESG disclosure.

The mean (average value) of the gender diversity variable is 0.171, with a standard deviation of 0.084. The comparison between the mean and standard deviation (0.171 greater than 0.084), where the average value is greater than the standard deviation, indicates that gender diversity has a large spread and variability. The maximum value of this variable is 0.428 or 42.8%, meaning that out of 145 companies, there is a company-level ratio of female directors up to 42.8%. The minimum value of this variable is 0.048 or 4.8%, indicating that while every company has female representation, some have very few women, with a minimum value of 4.8%. On average, the composition of women on the board of directors in a company is 17%.

The board independence variable has a mean of 0.212 and a standard deviation of 0.095. The comparison between the mean and standard deviation (0.212 greater than 0.095), where the mean is greater than the standard deviation, indicates a large spread and variability in board independence. The maximum value is 0.5 or 50%, meaning that out of 145 companies, some have reached a company-level ratio of board independence up to 50%. The minimum value is 0.07 or 7%, indicating that while every company has some level of board independence, some have a ratio as low as 7%. On average, the composition of board independence in a company is 21.2%.

The board size variable has a mean of 5.407 and a standard deviation of 2.050. The comparison between the mean and standard deviation (5.407 greater than 2.050), where the mean is greater than the standard deviation, indicates that board size has a large spread and variability. The maximum value is 12, meaning that out of 145 companies, some have boards as large as 12 members. Meanwhile, the minimum value is 2, indicating that the smallest board size among the companies is 2 members. On average, the total number of directors across the 145 companies is around 5-6 board members.

**PANEL DATA REGRESSION**

To determine the appropriate model for analysis, it is necessary to conduct model testing. There are three available models: Common Effect, Random Effect, and Fixed Effect. The steps for panel data regression to select the appropriate model were performed on the data tabulated and processed by the researcher using STATA, with the following explanations:

**Chow Test**

**Table 3. Chow Test Statistics Results**

Probability restricted	0,000
$\alpha$	0,05

Source : STATA v.17 output, researcher’s data processing (2024).

The Chow test is used to compare the common effect model and the fixed effect model. Based on the data analysis results shown above, the p-value is less than the alpha level, indicating that the fixed effect model is the preferred model according to the Chow test. When the fixed effect model is chosen as the best model, the next step is to perform the Hausman test.

**Hausman Test**

**Table 4. Hausman Test Statistics Results**

Probability restricted	0,1428
$\alpha$	0,05

Source : STATA v.17 output, researcher’s data processing (2024).

In the Hausman test, the data from the table show that the p-value is greater than the alpha level, indicating that the random effect model is the preferred model. When the random effect model is determined to be the best model, the next step is to conduct the LM (Lagrange Multiplier) test.

**LM ( Lagrange Multiplier ) Test**

**Table 5. Lagrange Multiplier Test Statistics Results**

Probability restricted	0,000
$\alpha$	0,05

Source : STATA v.17 output, researcher’s data processing (2024).

The final test is the Lagrange Multiplier (LM) test, which determines the best model between the Common Effect and Random Effect models. Based on the data analysis results, the p-value is less

than the significance level (alpha), indicating that the Random Effect model is the most suitable model to use.

**HYPOTHESIS TEST**

The testing conducted to analyze the relationship between the dependent variables and independent variables is carried out using multiple linear regression analysis. The following is the multiple linear regression equation:

**Tabel 6. Hypothesis Test**

Variabel	Regression Model	
	Random Effect Model	
	Coefficients	Prob.
Cons.	0.5354008	0.003
GD	0.002784	0.995
BI	-0.7844307	0.044
BS	-0.0006018	0.975

Source: STATA v.17 output, researcher’s data processing (2024).

The equation obtained from the random effect model testing is as follows:

$$ESG = 0.5354008 + 0.002784 GD - 0.07844307 BI - 0.0006018 BS + e$$

Based on the table above, the results of the testing are as follows:

**Testing Hypothesis 1 (H1)**, which states that gender diversity has a positive effect on ESG performance. Gender diversity yields a coefficient value of 0.002784 with a probability value of 0.995 ( $p > 0.05$ ), indicating that gender diversity is not significant to ESG performance. This shows that H1 is rejected because there is no effect between gender diversity and ESG performance. This finding is consistent with research (Kanter, 1977) and (KONRAD et al., 2008) which states that if the number of women on the board is less than two, then women do not influence decision-making. According to Manita et al. (2018), having a small number of women does not positively impact ESG disclosure because empirical evidence shows that the presence of two or more women on the board provides an active minority impact, where they can voice different perspectives and experiences that can drive changes in the company's rules, procedures, and practices related to ESG. This aligns with other research (Husted & Sousa-Filho, 2019) ; ((Harjoto et al., 2015), which states that the presence of women only negatively impacts ESG disclosure.

**Testing Hypothesis 2 (H2)**, which states that board independence has a negative effect on ESG performance. The research shows a negative and significant relationship where board independence yields a coefficient value of -0.07844307 with a probability value of 0.044 ( $p < 0.05$ ), indicating that this hypothesis is accepted. According to Birindelli et al. (2018), an excessive number of independent board members can be detrimental internally because it may lead to a reduction in expertise, experience, and reputation obtained by internal parties, which are important components in improving ESG performance. This study is consistent with other research (Lu & Wang, 2021); (Baselga-Pascual et al., 2018) which states that board independence has a negative effect on ESG.

**Testing Hypothesis 3 (H3)**, which states that board size has a positive effect on ESG performance. Board size yields a coefficient value of -0.0006018 with a probability value of 0.975 ( $p > 0.05$ ), indicating that board size is not significant to ESG performance. According to Bătae et al. (2021), as board size increases, there is more diversity in skills and perspectives among board members, which can slow down decision-making processes. On the other hand, smaller boards are more efficient and effective in monitoring and controlling executives, committing to a higher level of accountability, and have more power to reduce the likelihood of opportunistic behavior by managers (Birindelli et al., 2018) Such boards can more easily reach consensus with stakeholders, thereby protecting their interests (Tapver, 2019). However, when they are entrusted

with a larger workload and more responsibilities, they may not have the necessary skills to oversee all these tasks, which can negatively affect the quality of oversight.

## DISCUSSION

This study aims to examine the influence of gender diversity in the board of directors, board independence, and board size on the Environmental, Social, and Governance (ESG) performance of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2018–2022 period. The significance of this research lies in several key aspects:

1. **Focus on the Manufacturing Industry**

Most previous studies have explored the relationship between corporate governance and ESG in the banking sector. This research provides new insights by focusing on the manufacturing industry, which faces greater environmental challenges due to intensive resource utilization.

2. **Implications for Stakeholders**

A deeper understanding of the relationship between board characteristics and ESG performance can offer valuable insights for regulators, shareholders, and corporate management in designing more effective governance policies to enhance corporate sustainability.

3. **Regulatory Context in Indonesia**

ESG has increasingly become a key aspect of global business strategies. However, in Indonesia, its implementation is still limited to regulations issued by the Financial Services Authority (OJK). Therefore, this study seeks to analyze how corporate governance practices can contribute to improving compliance and transparency in relation to sustainability standards.

This study is based on two key theories that explain the relationship between corporate governance and ESG performance: Stakeholder Theory and Legitimacy Theory.

### Stakeholder Theory

This theory suggests that a company is not only accountable to its shareholders but also to other stakeholders, including employees, society, and the environment (Nicolò et al., 2022). In the ESG context, companies with more independent and diverse boards are believed to be more inclined to make decisions that align with the interests of various stakeholders, particularly in social and environmental aspects. However, the findings of this study indicate that gender diversity does not have a significant impact on ESG performance. This can be explained by Critical Mass Theory (Kanter, 1977), which posits that the presence of women on the board in small numbers is insufficient to drive meaningful change.

### Legitimacy Theory

This theory emphasizes that companies strive to gain social legitimacy by ensuring that their business activities align with societal norms and values (Fianica et al., 2021). Companies with a higher proportion of independent directors are generally expected to enhance ESG disclosures, thereby improving their reputation and legitimacy among the public and investors. However, this study finds that board independence negatively impacts ESG performance. This may be due to an excessive number of independent directors, which can weaken the board's ability to oversee and effectively implement ESG-related initiatives (Birindelli et al., 2018). Regarding board size, the study supports the view that larger boards tend to slow down strategic decision-making processes related to ESG (Bătae et al., 2021).

The research findings indicate that gender diversity does not have a significant effect on ESG performance. The coefficient for gender diversity is 0.002784 with a probability value of 0.995, suggesting that gender diversity does not significantly contribute to ESG performance in the context of the manufacturing companies studied. This finding aligns with previous research indicating that the presence of women on the board, especially in small numbers, does not always produce a positive impact on ESG performance (Kanter, 1977; KONRAD et al., 2008; Husted &

Sousa-Filho, 2019). Manita et al. (2018) also noted that a very small number of women may not be sufficient to influence strategic decisions related to ESG. This could be due to the fact that women on the board, if fewer than two, may lack the power or influence needed to drive substantial changes in the company's sustainability policies.

The study shows that board independence has a significant negative impact on ESG performance. The coefficient for board independence is -0.7844307 with a probability value of 0.044. The decrease in ESG performance associated with board independence may be due to the excess number of independent members, which can reduce the expertise and experience beneficial for improving ESG performance (Birindelli et al., 2018; (Lu & Wang, 2021). Independent board members are often more focused on formal compliance and oversight, which can overlook critical strategic aspects related to sustainability. This finding suggests that while independent board members are necessary for good oversight, having too many of them might reduce the board's overall effectiveness in driving sustainable ESG policies.

The board size in this study does not show a significant effect on ESG performance, with a coefficient of -0.0006018 and a probability value of 0.975. This study indicates that a larger board size does not automatically improve ESG performance. This finding is consistent with research (Bătae et al., 2021) which shows that a larger board size can lead to slower decision-making processes and may not necessarily result in improved ESG performance. This could be because a large board size does not ensure that all board members have the necessary skills and perspectives to advance ESG policies. Conversely, a smaller board size may be more efficient and focused on implementing concrete ESG strategies.

## CONCLUSION

This study investigates the impact of board gender diversity, board independence, and board size on ESG performance in manufacturing companies listed on the IDX from 2018 to 2022. The main findings of the study are as follows gender diversity does not significantly affect ESG performance. A small presence of women on the board may not be sufficient to drive strong ESG policies. Companies should consider increasing the number of women on their boards.

Although the current results are not significant, gender diversity remains crucial for fostering diverse perspectives and supporting future sustainability. Board size does not have a significant impact on ESG performance. A larger board size does not ensure improved ESG performance and may lead to slower decision-making processes. Board size should be tailored to the company's needs. Smaller boards can offer greater speed and efficiency in decision-making but should still include diverse skills and perspectives to support effective ESG strategies. Board independence has a significant negative effect on ESG performance. An excessive number of independent board members can diminish the quality and effectiveness of the company's ESG policies. Companies should ensure that the number of independent members is balanced. A proper mix of independent and non-independent members can enhance oversight quality and improve strategic decisions related to ESG.

## Implications

This study provides important insights for theory, business practices, and policies related to corporate governance and Environmental, Social, and Governance (ESG) performance.

### Theoretical Implications

This research expands knowledge in the field of corporate governance and ESG, particularly in the manufacturing sector.

- **Contribution to Stakeholder Theory:** The findings indicate that gender diversity in the board of directors does not significantly impact ESG performance. This challenges the assumption that increasing the number of women on the board automatically improves a company's ESG performance. Further research is needed to explore other factors that could strengthen the role of women in enhancing ESG outcomes.
- **Contribution to Legitimacy Theory:** This theory suggests that a more independent board should improve transparency and ESG disclosure. However, this study finds that

excessive board independence can reduce the effectiveness of ESG oversight. This offers a new perspective, highlighting that the balance of board composition is more critical than merely increasing the number of independent directors.

### **Implications for Companies**

The findings of this study can help company management develop better governance strategies to enhance ESG performance:

- **Strengthening the Role of Women on the Board**  
Companies should not only increase the number of female board members but also ensure that they hold influential positions in strategic decision-making. This would enable their presence to have a meaningful impact on ESG policies.
- **Balancing the Number of Independent Directors**  
While independent directors are essential for transparency and oversight, having too many of them might reduce their engagement in company operations. Therefore, companies should ensure that independent board members have adequate experience and understanding of ESG.
- **Optimizing Board Size**  
A board that is too large may slow down decision-making, while a board that is too small might lack diverse perspectives needed to manage ESG effectively. Companies should find the right balance when determining the size of their board.

### **Implications for Policy and Regulation**

The findings of this study can also serve as a reference for regulators and policymakers in developing governance and ESG-related policies:

- **Regulations on Gender Diversity**  
The Financial Services Authority (OJK) and government could consider policies that encourage an increase in female board representation. However, numbers alone are not enough—there should also be regulations ensuring that women actively participate in corporate decision-making.
- **Policies on Board Independence**  
Regulators might need to reassess the requirements for independent board members. If the number is too high, it could negatively affect ESG performance. A more flexible policy may be needed to accommodate different corporate structures.
- **Training Programs for Board Members**  
The government and business associations could develop ESG-focused training programs for board members. Such training would help them understand sustainability issues better and integrate ESG into corporate strategies.

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