

# **Catalyst for Change: Women on Board and Its Effects on Sustainable Financing**

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## **Abstract**

This study investigates the impact of Board Gender Diversity (BGD) on ESG companies' performance in Indonesia. Additionally, this study also explore how industry classification and market capitalization amplify the influence of BGD towards ESG outcomes. Given Indonesia's unique context regarding gender equality and its implication on financial decision-making, this research specifically investigates how Women on Boards (BOD) affect a company's ESG ratings. Employing a quantitative method, this study use purposive sampling in selecting a subset of IDX listed companies, focusing those included in ESG indices. The sample comprises 58 companies drawn from the ESG Leader Index and the IDX Kehati ESG Quality 45 Index. Identifying the sample companies, this study gathers financial report data from the IDX website and retrieve ESG risk ratings from Sustainalytics website. To analyze the data, we conduct regression analysis using SPSS. The regression results show that the proportion of women on the board significantly reduces the company's ESG risk level, which indicates that more women on the board leads to a notable reduction in the company's ESG risk. Further, the industrial sector and the market capitalization of the company also strengthen the impact of board gender diversity on the company's ESG risk level. Consequently, the industrial sector and market capitalization plays crucial role in shaping the company's organizational structure and ESG initiatives. This research adds to the gradually expanding body of knowledge on ESG reporting quality and gender diversity within boards, particularly in emerging economies.

## **Keywords**

Board Gender Diversities, ESG, Women on Board, Sustainability Disclosure, Gender Diversity, Board of Directors

## **1. Introduction**

The escalating global demand for the application of Environmental, Social, and Governance (ESG) principles has reverberated in Indonesia, presenting challenges to the nation's business landscape. The increasing emphasis on incorporating ESG principles into investment analysis, corporate strategy, and decision-making processes confronts Indonesian corporations with the imperative of aligning business activities with environmental conservation, social responsibility, and robust governance principles. Despite this, Indonesia lags in ESG practices, as evidenced by its 36th position out of 47 capital markets in the 2019 ESG Index survey conducted by Corporate Knights on Investor.id. Notably, Indonesia trails behind fellow ASEAN countries like the Philippines, Singapore, Malaysia, and Thailand (Alfaruq, 2021).

ESG, a ubiquitous term in the capital market, plays a pivotal role for investors evaluating a company's value and predicting its future performance. Although not mandatory in financial reporting, there is an increasing number of companies including ESG performances in their annual financial reports or stand-alone sustainability reports. Moreover, ESG-based investment is experiencing significant growth, catalyzing transformative shifts in financial landscapes. PwC's survey reveals a growth in ESG-based investment in Indonesia, attributed not only to global environmental changes but also to the preferences of millennial and gen-Z investors. This demographic seeks to invest in companies actively addressing social, economic, and environmental challenges. Moreover, advancements in data and analytics empower companies to furnish diverse information, facilitating comprehensive ESG data provision.

The introduction of ESG principles in Indonesia was spearheaded by the issuance of Financial Services Authority Regulation (POJK) 51/POJK/2017, outlining the implementation of Sustainable Finance for Financial

Services Institutions, Issuers, and Public Companies. This regulatory framework was complemented by the release of Technical Guidelines for the Implementation of Sustainable Finance for the Banking Sector by OJK in 2018. Article 2 of POJK No 51/POJK/2017 details eight principles governing sustainable finance, encompassing responsible investment, sustainable business strategies, social and environmental risk management, governance, informativeness, inclusive communication, development of priority leading sectors, and coordination and collaboration (Maftuchah, 2018). ESG encompasses three pivotal dimensions in assessing the sustainability and ethical impact of investment decisions for a specific business or company: environmental, social, and governance considerations. Investors commonly employ these criteria when evaluating potential investments. Regarding the environmental aspect, ESG offers indicators that aid investors in assessing a company's commitment to environmentally friendly practices. This includes initiatives to mitigate natural damage, combat climate change, reduce carbon emissions, prevent pollution and water scarcity, and contribute to reforestation efforts. In the social dimension, investors scrutinize how companies manage their relationships with employees, suppliers, customers, and the communities in which they operate. This social aspect encompasses various indicators reflecting care and interdependence within the social sphere, such as consumer satisfaction, data security, gender inclusion and diversity, community relations, and mental health. In the governance aspect, investors evaluate how a company establishes leadership in implementing principles of good governance. Corporate governance manifests in the structure of the board of directors and commissioners, the remuneration system for directors and senior management, the audit system, internal controls, and the protection of the rights of both majority and minority shareholders. This comprehensive evaluation across environmental, social, and governance dimensions enables investors to make informed decisions aligned with sustainable and ethical considerations.



**Figure 1 Aspect of ESG**

The implementation of ESG has a positive impact on the company's performance, which includes improving business performance and increasing the share price of issuers, being able to attract investors, developing markets, enhancing the company's brand, increasing business networks, increasing customer loyalty and opening more complete access to financing sources. Guidelines for the Implementation of Sustainable Finance are intended to support the role of financial reports in improving social and environmental performance in Indonesia towards a sustainable approach in line with international standards and best practices. With the existence of the POJK, companies in Indonesia are expected to consider the effectiveness of social and environmental risk management in the projects they support funding, considering the contribution to greener, climate-friendly and socially impacting businesses.

The Indonesia Stock Exchange (IDX) has demonstrated its commitment to fostering sustainable investment and enhancing ESG practices through strategic initiatives. In April 2019, the IDX joined the United Nations Sustainable Stock Exchange (SSE) Initiative, marking a significant step towards promoting sustainability. This commitment is further underscored by the IDX's involvement in the Sustainable Finance Action Plan outlined by PwC in 2021. In a bid to stimulate ESG practices and encourage sustainable investment in the Indonesian capital market,

the IDX introduced the IDX ESG Leader Index at the close of 2020. This index serves as a measure of stock performance based on favorable assessments in environmental, social, and governance (ESG) components, transaction liquidity levels, and robust financial performance.

To determine index inclusion, IDX collaborates with Sustainalytics, applying criteria such as ESG risk scores from companies originating from the IDX 80 Index, absence of significant controversies, and exclusion of shares with high or severe ESG risk scores. Notably, on December 20, 2021, the IDX introduced the ESG Quality 45 IDX Kehati Index, aligned with ESG and Indonesia's Biodiversity. Comprising 45 stocks meeting ESG performance criteria and demonstrating strong financial quality and liquidity, this index excludes shares from companies engaged in core businesses within nine KEHATI negative screening sectors, including pesticides, nuclear, weaponry, tobacco, alcohol, pornography, gambling, genetically modified organisms, and coal mining.

The Stakeholder theory stands as a key framework in comprehensively addressing the domain of sustainable financial reporting (Wasiuzzaman & Wan Mohammad, 2020). Originating from the work of Edward Freeman in 1984, this theory was conceptualized to bridge the gap in the Shareholder Theory, which posits that corporate managers operate within a broader context, where their actions and business activities can have far-reaching impacts. Stakeholder theory contends that the stakeholders, encompassing suppliers, creditors, consumers, competitors, employees, and the local community, play a crucial role, and their interests should be considered in corporate decision-making processes.

In contrast, the shareholder theory, coined by Milton Friedman in 1970 in his article "The Social Responsibility of Business to Increase Profit," asserts that a business's primary and sole responsibility is to maximize shareholder profits. According to Friedman, businesses essentially belong to shareholders, and managers are entrusted as agents to operate the business in a manner that enhances shareholder value. In this perspective, the principal objective of management is to maximize shareholder value, aligning with the belief that managers have both a moral and legal obligation to serve the best interests of shareholders. These two theories, Stakeholder and Shareholder, represent divergent approaches in understanding the responsibilities and objectives of businesses, guiding their actions in the complex landscape of sustainable financial reporting. In recent times, there has been a heightened focus on Corporate Social Responsibility (CSR) and Environmental, Social, and Governance (ESG) disclosure, along with a growing recognition of the importance of gender-based board diversity. Female directors are often champions of ESG initiatives due to their distinctive characteristics compared to their male counterparts. Firstly, women tend to perceive their leadership roles differently. Secondly, female directors exhibit notable distinctions in educational background, experience, communication style, and personality. Lastly, women are generally more risk-averse and averse to ambiguity in decision-making.

Board diversity encompasses variations in several individual characteristics within a board of directors, including gender, ethnicity, citizenship, education, and abilities (Cucari et al., 2018). Specifically, board gender diversity refers to the inclusion of both genders in the composition of an organization's board of directors. Ben-Amar et al. (2017) conducted research on the impact of gender diversity on financial reporting within Canadian organizations. Conversely, Wasiuzzaman & Wan Mohammad (2020) found that the presence of female directors in Malaysian company boards enhanced the transparency of ESG disclosure. This aligns with Ramon-Llorens et al. (2021) findings, suggesting that female directors with technical skills contribute positively to stakeholders and social issues, supporting CSR disclosure. However, it is noteworthy that women with political and social connections may reduce CSR transparency. Contrasting results emerge from research on sustainability report disclosure in Indonesia by Tarigan & Samuel (2015), which indicates that while the economic dimension of sustainability reports does not significantly impact financial performance, the environmental and social dimensions can adversely affect financial outcomes.

This study seeks to investigate the impact of gender diversity at the board of directors level on enhancing financial reporting transparency, a crucial concern for contemporary investors who place high value on comprehensive insights into both financial and non-financial aspects of companies (Arayssi et al., 2020; Wasiuzzaman & Wan Mohammad, 2020). As the global workforce experiences a growing emphasis on gender equality, an increasing number of women are assuming senior leadership roles, including positions on boards of directors. Within the corporate governance structure, various stakeholders participate in the financial reporting process, including the Chief Executive Officer (CEO), Chief Financial Officer (CFO), board of commissioners, and audit committee. While the CEO and CFO are directly involved in financial reporting by signing and overseeing financial statements, the board of commissioners and audit committee play indirect roles, overseeing and reviewing presented information. A diversified and independent board of directors, along with an environmental committee, can align financial and non-

financial goals, manage resources efficiently, and moderate stakeholder expectations with diverse interests (Liao et al., 2015). Rao & Tilt (2015) emphasizes the need to explore how board diversity influences Corporate Social Responsibility (CSR) decisions qualitatively and quantitatively.

This research is motivated by two key factors. Firstly, gender differences are expected to influence decision-making processes impacting financial reporting quality, efficiency, and timeliness. Previous research in corporate finance, accounting, and governance has identified distinctions in risk aversion, confidence levels, diligence, and supervision preferences between male and female top-level executives and directors (Harjoto et al., 2015). Secondly, the study is prompted by previous research findings highlighting the underrepresentation of women in leadership roles due to social discrimination. This discrimination persists even after attaining leadership positions, contributing to challenges such as blame for declining company performance, wage gaps, glass ceilings, and labor market scarcity. These challenges create social inequalities and external pressures, fostering risk aversion and a desire for certainty in areas like financial reporting reliability and timely audit reporting. Previous studies on gender and financial reporting behavior present varying results, with evidence from Ben-Amar et al., (2017), Ramon-Llorens et al. (2021), and Wasiuzzaman & Wan Mohammad (2020) which suggesting a positive correlation between women's participation on boards and voluntary disclosure regarding Environmental, Social, and Governance (ESG) matters.

The board of directors serves as the nucleus of a company, overseeing its performance and financial reporting activities. Thus, delving into the correlation between the characteristics of the board of directors and the inclination towards financial statement fraud is a crucial area requiring further analysis, given its substantial impact on financial statement users (Kamarudin et al., 2018). Existing research indicates that women often exhibit greater ethical judgment and behavior compared to men, alongside a tendency to be more risk averse. These gender-based differences within a company's top management can significantly influence decision-making and the formulation of company policies, particularly in avoiding violations of financial reporting rules.

### **1.1 Objectives**

Given the unique context of gender equality in Indonesia, the results of prior studies and the evolving landscape make it compelling for researchers to explore the impact of gender-based board diversity on financial reporting rule violations in the country. Within the realm of gender-based board diversity, this study aims to scrutinize gender differences among corporate executives concerning Environmental, Social, and Governance (ESG) performance reporting initiatives. Specifically, the research seeks to discern whether distinctions exist between female and male executives. The investigation focuses on analyzing the effect of board diversity, specifically gender diversity in the board of directors, on the level of ESG performance risk in Indonesia. Companies aspire to showcase optimal financial performance in their statements to captivate stakeholders' interest, prompting management to present ESG performance reports. Ultimately, the study endeavors to scrutinize the impact of gender board diversity on sustainable financial reporting in Indonesia, specifically in the form of reporting on ESG performance. Given the limited exploration of gender equality's effects on ESG financial performance in Indonesia, this study offers a fresh perspective and contributes uniquely to the field.

## **2. Literature Review**

Numerous theories, including agency theory, upper echelon theory and critical mass theory have been used to understand the implication of Board Gender Diversity and Risk Performance towards Company's performance, as follows:

### **The Upper Echelon Theory**

The Upper Echelon Theory proposes that organizational results are shaped by the qualities, values, and experiences of senior executives and decision-makers. This theory highlights how the demographic makeup, backgrounds, skills, and personality traits of top management teams profoundly influence strategic choices and overall organizational performance. By analyzing cognitive and demographic attributes—such as gender diversity—this theory provides valuable insights into how executive team composition impacts decision-making processes and organizational outcomes.

### **Critical Mass Theory**

Critical mass theory, utilized across sociology, economics, and technology, refers to a tipping point within statistical models. When a committed minority reaches this critical mass, it triggers widespread behavior change, fostering acceptance of minority perspectives. This phenomenon explains the adoption of new norms, practices, and innovations. In the context of gender diversity, critical mass theory suggests that a specific threshold is necessary for positive effects. Boards with a substantial number of women may outperform others. Investigating whether a particular proportion of women on boards influences ESG disclosure and financial reporting aligns with this theory.

### **Sustainable Financial Disclosure**

The rising call for corporate social responsibility (CSR) reports in Indonesia and ASEAN countries has garnered significant attention from the public and shareholders. This trend represents a crucial step toward enhancing governance, responsibility, and accountability within the business realm. Across ASEAN nations, deliberate efforts have led to increased disclosure of CSR activities. In Indonesia, the demand for CSR reporting is viewed as both a risk mitigation strategy and a means of value creation. However, it's essential to recognize that embracing environmental, social, and governance (ESG) practices also introduces complexities. Companies must navigate the intricacies of applying CSR principles to social and performance issues while maintaining transparency in financial reporting (Ben-Amar et al., 2017).

Board diversity encompasses variations in the composition of a board of directors concerning various individual characteristics, such as gender, ethnicity, citizenship, education, and abilities. Specifically, board gender diversity focuses on achieving gender inclusivity within the board of directors of an organization. Orazalin (2020) delves into the impact of gender diversity on the board of directors and its influence on organizational financial reporting. This study is motivated by the objective of comprehending the ramifications of gender diversity at the board of directors' level in enhancing financial reporting transparency.

Women directors are inclined to prioritize Environmental, Social, and Governance (ESG) initiatives due to their distinct characteristics compared to men. These differences encompass diverse perceptions of leadership roles, variations in educational backgrounds, experience, communication styles, personalities, and a heightened tendency to be risk-averse and ambiguity-averse in decision-making. The presence of women on the board of directors is anticipated to mitigate ESG risks.

#### **H1: Board gender diversity has a positive influence on sustainability financial reporting**

In the realm of the capital market, the Indonesia Stock Exchange (IDX) categorizes companies into groups based on similar industrial sectors. The variable representing the type of industry employs dummy numbers ranging from 1 to 9, signifying the industry category based on IDX's classification. Companies within industrial sector groups that contribute to environmental preservation tend to exhibit heightened efforts in showcasing Environmental, Social, and Governance (ESG) performance for public and general awareness.

#### **H2: The type of industry further amplifies the impact of board gender diversity on sustainability financial reporting**

Market capitalization, a key indicator of stock performance linked to a company's fundamentals, holds significance for investors as it gauges the company's size. It serves as a measure showcasing the company's exposure to the public, reflecting the magnitude of its initiatives. Larger market capitalization implies a more robust commitment to ESG endeavors. Consequently, the greater the market capitalization, the more pronounced the influence of board gender diversity on the level of ESG risk.

#### **H3: Market capitalization intensifies the impact of board gender diversity on sustainability financial reporting**

### **3. Methods**

This study seeks to examine the impact of gender board diversity on sustainable financial reporting in Indonesia, specifically focusing on reporting related to Environmental, Social, and Governance (ESG) performance. Employing a deductive approach, the research concentrates on formulating hypotheses grounded in established theories. The study's scope lies within the realm of accounting, with a specific emphasis on financial accounting, delving into the company's ESG performance presentation and disclosure levels.

The population under scrutiny comprises companies listed on the Indonesia Stock Exchange (IDX). Employing purposive sampling, the study selectively includes companies recognized for their implementation of ESG

practices and possessing a commendable reputation for ESG performance, as classified by IDX into the IDX ESG Leaders Index and the IDX Kehati Quality 45 ESG Index.

The IDX ESG Leader Index serves as a metric to gauge the stock performance of companies with favorable assessments in the environmental, social, and governance (ESG) components, transaction liquidity levels, and financial performance. The selection criteria for companies in the IDX ESG Leaders Index include shares originating from the IDX 80 Index with an ESG risk score, stocks devoid of significant controversy, and the exclusion of those with high or severe ESG risk scores. Company data included in the index are sourced from the IDX website.

## **Variables and Measurements**

### **a) Independent Variable**

The independent variable studied in this study is gender diversity in the board of directors as measured by analyzing the proportion of female commissioners in the sample companies. The variable proportion of the female board of commissioners will be measured by using the percentage of the number of women on the board of directors, divided by the total number of members on the board of directors. This proxy adopts one of the 3 proxies conducted in the research of Ben-Amar et al., (2017) in measuring board gender diversity.

### **b) Dependent Variable**

The dependent variable studied in this research is the presentation of sustainable financial reporting, as measured by the ESG risk rating. The company's ESG risk rating data is obtained from the Sustainalytics website, which is an independent institution that measures and ranks the ESG risk and performance of companies in the world. Sustainalytics measures ESG risk at the company level by measuring ESG risk that cannot be managed using a set of MEI, thus only considering a number of issues that provide substantial potential for the company's economic value. The company's ESG measurement covers several aspects including: corporate governance, MEI, and idiosyncratic risk. Idiosyncratic risk is unsystematic risk, ie risk that is not correlated with market risk. The ESG risk rating is categorized into 5 risk levels, as follows:



**Figure 2. ESG Risk Rating**

The ESG risk rating is designed to assist investors in identifying and understanding the financial material of ESG risk in the company's portfolio and understanding the effect of these risks on the company's performance. A higher ESG risk implies lower sustainability reporting quality, whereas a lower ESG risk indicates higher sustainability reporting quality.

### **c) Moderating Variables**

There are 2 moderating variables used in this study, namely the type of industry and market capitalization variables. In the capital market, the IDX grouped companies into categories of similar industrial sectors. Meanwhile, the type of industry variable uses dummy numbers 1-9 which shows the category of type of industry based on the grouping used in the IDX. Each company used in the sample already has a particular type of industry, which will then be used in dummy categorization 1-9. There are 9 categories of industrial sectors used which stated in Table 3.2:

**Table 1 Industry Type**

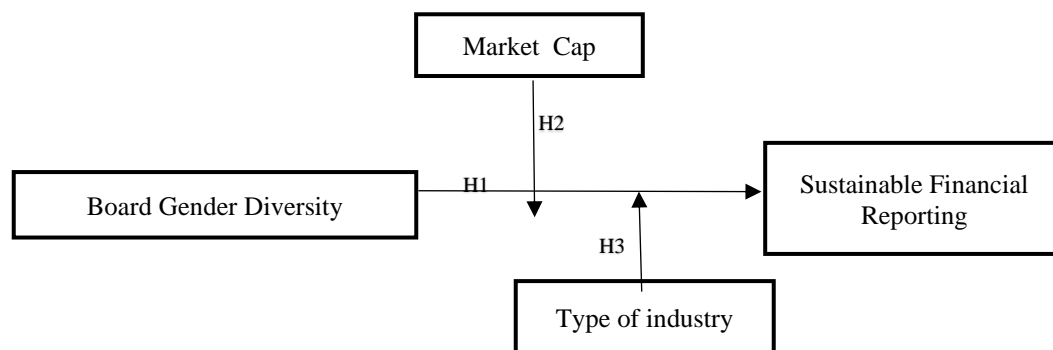
No	Industry
1	Agriculture
2	Mining
3	Basic and chemical industry

4	Various industries
5	Consumer goods industry
6	Property, real estate and building construction
7	Infrastructure, utilities and transportation
8	Financial
9	Trade, services and investment

Market capitalization or market cap is one indicator of the performance of a stock, which is related to the fundamentals of a company. Market capitalization is the aggregate market value of a company. The calculation of market capitalization is based on the total multiplication of the number of outstanding shares of the company traded in the market with the share price of the company. Market cap is used by investors to measure the quality of the company. For investors, market cap is a measure that shows the size of the company. In this study, market cap data is taken from data on the Indonesia Stock Exchange website which is collected at one point in time. Related to data processing, the market cap value will be logged to deal with significant variations in data.

**Table 2 Research Variables**

Variable Type	Variable Name	Variable Structure
Dependent Variable	Sustainability Financial Reporting	ESG risk rating
Independent Variable	Boards Gender Diversity	Proportion of female board of commissioners
Moderating Variable	Market capitalization	Log market cap
	Type of industry	Dummy numbers 1-9 which indicate the type of industry according to the IDX category



**Figure 3 Research Framework**

This research aims to analyze the influence of gender board diversity on financial reporting, specifically the implementation of sustainability reporting in Indonesia. The study's population comprises companies listed on the Indonesia Stock Exchange (IDX). Utilizing purposive sampling, the sample is restricted to companies implementing ESG practices, specifically those included in the IDX ESG Leaders Index and the IDX Kehati Quality 45 ESG Index. The IDX ESG Leader Index is crafted to evaluate stock performance by considering favorable factors such as environmental, social, and governance (ESG) components, transaction liquidity levels, and financial performance. IDX employs specific criteria to select companies for inclusion in the IDX ESG Leaders Index, which includes shares

originating from the IDX 80 Index with an ESG risk score, stocks without significant controversy, and the exclusion of those with high or severe ESG risk scores.

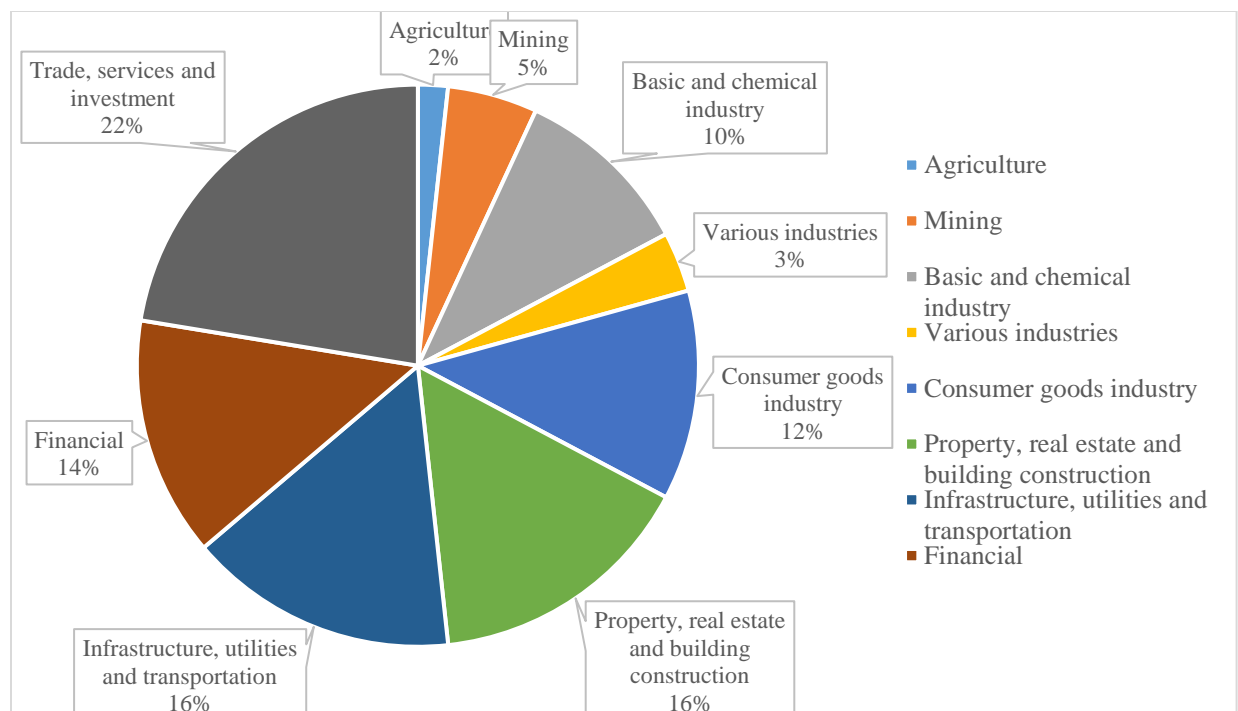
Up to the year 2022, IDX has unveiled a compilation of stocks featured in the IDX ESG Leader Index for the periods of 2020/2021 and 2021/2022. IDX consistently conducts evaluations of the IDX ESG Leaders, with major assessments carried out at the commencement of March and September, and minor assessments in early June and December. The stock selection process is reinforced by Sustainalytics, an independent institution specializing in the assessment of ESG risks for companies globally. With adherence to these criteria, the comprehensive list of listed companies incorporated in the IDX ESG Leaders Index and the IDX Kehati Quality 45 ESG Index spanning from 2020 to 2022 is as follows:

**Table 3 The Criteria of Research Sample**

No	Index	Number of Sample
1	IDX ESG Leaders 2020 on December, 2020	30
2	IDX ESG Leaders 2021 on June-September 2021	30
3	ESG Quality 45 IDX Kehati in IDX on December, 2021 until June, 2022	45
4	Less: Companies that are included in the index more than 1x will be counted as 1 sample	(40)
5	Less: Stocks of companies whose ESG scores are not on the Sustainalytics website	(7)
<b>Total of Sample used in data processing</b>		<b>58</b>

#### 4. Data Collection

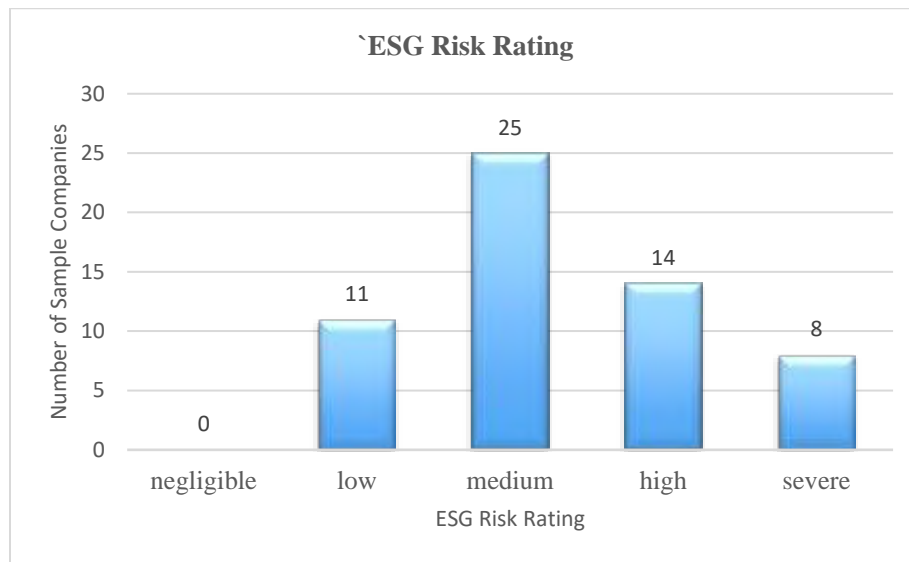
The Descriptive Statistical Test aims to identify patterns within the data and present information about the variables used in this study, including sustainable financial reporting, board gender diversity, market capitalization, and types of industry. The overview in Figure 4.1 illustrates the proportion of the research sample based on the distribution of industry types and the level of ESG risk:





**Figure 4 Distribution of Samples by Industry Category**

Based on the distribution of samples by industry category, the majority of company shares come from the trade, services, and investment sectors, totaling 13 companies. Conversely, the agricultural industry contributes the minimum number of samples, with only 1 company. This distribution indicates that most IDX ESG Leader category companies are involved in trade, services, and investment.



**Figure 5 Distribution of Samples based on ESG Risk Rating**

Examining the distribution of samples by ESG risk rating, the highest number falls within the medium risk level, totaling 25 companies. There are 14 companies at a high ESG risk level, 11 companies at a low ESG risk level, and 8 companies at a severe risk level (very high risk). This distribution highlights that a majority of IDX ESG Leader category companies operate at a medium ESG risk level.

Based on the descriptive statistical analysis of ESG, Women on Corporate Boards (WOCB), and logarithmic market cap level variables, the minimum ESG risk level is 11,30, the maximum is 45,10, with an average of 28,26. The number of WOCBs in companies ranges from 0 to 5, with an average of 1.2. Considering the percentage of Women on Corporate Boards (WOCB), the minimum is 0%, the maximum is 71%, and the average is 17%. The log value of market capitalization ranges from a minimum of 0.08 to a maximum of 2,95, with an average of 1,40.

**Table 4 Descriptive Statistic Analysis**

	Minimum	Maksimum	Mean	Std. Deviasi
ESGRating	11,30	45,10	28,2603	9,08484
WOCB	0,00	5,00	1,2069	1,22487
PWOCB	0,00	0,71	0,1702	0,17268
LogMarketCap	0,08	2,95	1,4084	0,63240

### Classic Assumption Test

Normality test is a test carried out to determine the distribution pattern of the data used in research, so that researchers can determine the appropriate statistical test in testing research hypotheses. To determine the normality of data distribution using Kolmogorov-Smirnov, SPSS refers to the value of Sig. in the Shapiro-Wilk column. The sig value

shows significance or is called the p value or probability value. The test results show a value of 0,200 greater than 0,05, it can be said that the data is typically distributed.

**Table 5 Kolmogorov-Smirnov One-Sample Test Results**

Variabel	n	Asymp. Sig (2 -tailed)
ESG Rating	58	0,200

The regression model is free from multicollinearity problems if the tolerance value is > 0,1 and the VIF value is < 10. The statistical test results show that the research model is free from multicollinearity problems.

**Table 6 Multicollinearity Test Results**

		Sector	PWOCB
Collinearity Statistics	Tolerance	0,955	0,955
	VIF	1,047	1,047

The regression model has a D-W Test of 2.138 which is in the area where there is no autocorrelation. Thus the estimation regression model does not contain problems autocorrelation.

**Table 7 Outocorrelation Test Result**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,514 <sup>a</sup>	0,264	0,237	7,93320	2,138

Sig value of all sector variables = 0.764 and Sig of PWOCB variables = 0.707. Sig value of all independent variables is greater than = 0.05. The test decision is not to reject H0. This means that the estimated regression model does not contain heteroscedasticity problems.

**Table 8 Heteroscedasticity Test Result**

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	71,795	29,060		2,471	0,017
	Sector	-1,329	4,396	-0,042	-0,302	0,764
	PWOCB	-21,898	57,857	-0,052	-0,378	0,707

### Simple Linear Regression Test

To determine the effect of the board gender diversity variable on the ESG level, a linear regression test was carried out using the SPSS statistical tool, and the following output was produced:

**Table 9 Regression Test Results**

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	30,839	1,625		18,977	0,000
	PWOCB	-15,151	6,732	-0,288	-2,250	0,028

Based on the results of simple linear regression testing on the effect of board gender diversity on the ESG risk rating, the following equation is obtained:

$$\text{ESG} = 30,839 - 15,151 \text{ WoCB}$$

Keterangan:

ESG = Risk Rating

WoCB = Women in Corporate Board

The equation suggests that a higher proportion of women on the board is associated with a lower risk rating for the company, indicating higher sustainability reporting quality. Conversely, a lower proportion of women on the board is associated with a higher risk rating for the company, indicating lower sustainability reporting quality.

**Table 10 Multiple Linear Regression Test Results**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,288 <sup>a</sup>	0,083	0,067	8,77728

Based on the test on the impact of the board gender diversity variable measured by the percentage of women on the board of commissioners (PWOCB) on the Sustainable Financial Reporting, it is reveal that the model has an Adjusted R Square value of 0,067. This value signifies that the board gender diversity variable studied in this study can account for 6,7% variation in the company's Sustainable Financial Reporting, while the remaining 93,3% is influenced by other variables not explored in this study.

**Table 11 F Test Result**

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regression	390,185	1	390,185	5,065	0,028 <sup>b</sup>
	Residual	4314,274	56	77,041		
	Total	4704,459	57			

a. Dependent Variable: ESGRating

b. Predictors: (Constant), PWOCB

The results of the F-test on the research model indicate a significance level of 0,028, which is lower than the p-value. Therefore, it can be inferred that the board gender diversity variable examined in this study has the capability to elucidate the variations observed in the dependent variable under consideration, namely sustainable financial reporting.

**Table 12 t-test Result**

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	30,839	1,625		18,977	0,000
	PWOCB	-15,151	6,732	-0,288	-2,250	0,028

a. Dependent Variable: ESGRating

Based on the test results concerning the impact of the sector type variable and the proportion of women on the board of directors, it is evident that board gender diversity positive impact on the level of Sustainability Financial Report. This is evident from the variable coefficient, recorded as -15.151, along with a significance level of 0.028,

signifying a statistically significant and inverse relationship between board gender diversity and the level of ESG risk. Therefore, the conclusion supports Hypothesis 1, stating that board gender diversity has a negative influence on the level of ESG risk, which means produce a higher level of sustainability financial reporting.

The examination of the second hypothesis involves testing the moderating variable, specifically the type of industrial sector variable, in the relationship between board gender diversity and ESG ranking. This test is conducted by comparing the variance in the R-square before and after introducing the moderating variable into the regression equation

**Table 13 T-test Results Before Including The Type of Industry Moderating Variables**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,288 <sup>a</sup>	0,083	0,067	8,77728

a. Predictors: (Constant), PWOCB

**Table 14 T-Test Results After Including Type of Industry as Moderating Variable**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,520 <sup>a</sup>	0,270	0,230	7,97404

a. Predictors: (Constant), PWOCBXSECTOR, Sector, PWOCB

Upon comparing the test results regarding the impact of moderating variables in the form of sector types, there is an observed increase in the R-square value. Initially, the R-square value before the inclusion of a moderating variable stands at 8.3%, and subsequent to introducing the moderating variable, it escalates to 27%. These alterations signify that the type of industry amplifies the influence of board gender diversity on the level of ESG risk. Consequently, it can be deduced that Hypothesis 2 is substantiated.

The assessment of the third hypothesis involves testing the effect of another moderating variable, namely the market capitalization variable, in the relationship between the board gender diversity variable and the ESG ranking. This evaluation is conducted by comparing the discrepancy in the R-square value before and after incorporating the moderating variable into the regression equation.

**Table 15 T-test Results Before Including Market Capitalization as Moderating Variable**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,288 <sup>a</sup>	0,083	0,067	8,77728

a. Predictors: (Constant), PWOCB

**Table 16 T-test Results After Including Market Capitalization as Moderating Variable**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,357 <sup>a</sup>	0,128	0,079	8,71832

a. Predictors: (Constant), LogMarketCap, PWOCB, PWOCBXMarketcap

Upon comparing the test results concerning the impact of the moderating variable in the form of market capitalization level, an increase in the R-square value is observed. Initially, the R-square value before the inclusion of a moderating variable stands at 8.3%, and subsequent to introducing the moderating variable, it rises to 12.8%. These adjustments signify that the level of market capitalization enhances the influence of board gender diversity on the level of ESG risk. Consequently, it can be deduced that Hypothesis 3 is substantiated.

**Table 17 Summary Result of Research Hypotheses Test**

<b>Hipotesis</b>	<b>Indicators</b>	<b>Result</b>
Board gender diversity has a positive influence on sustainability financial reporting	Sig 0,028	H1 supported
The type of industry further amplifies the impact of board gender diversity on sustainability financial reporting	The moderating variable increases R square by 19%	H2 supported
Market capitalization intensifies the impact of board gender diversity on sustainability financial reporting	Moderating variable increases R square by 4.5%	H3 supported

## 5. Results and Discussion

Following the examination of the first hypothesis, it is evident that board gender diversity exerts a negative and significant influence on the level of ESG risk. Statistical testing reveals that a higher percentage of women in the board of directors correlates with a lower ESG risk level. This aligns with the ethical tendencies of women, who are more inclined toward ethical decision-making and demonstrate greater ethical behavior compared to men. Additionally, women tend to be more risk-averse, contributing to the observed negative effect. Gender distinctions within the top management of a company influence decision-making and policy direction. In the context of avoiding financial reporting violations, gender differences among top management can be assumed to impact financial reporting decisions, especially in the presentation of sustainable financial statements.

Considering the findings from testing the second hypothesis, it is revealed that industry type strengthens the impact of board gender diversity on the level of ESG risk. Statistical testing indicates that the type of industry can act as a moderating factor in the relationship between board gender diversity and ESG risk. These results suggest that, within specific industrial sectors, companies consider unique factors when designing their board composition and engaging in sustainable financial reporting within the ESG framework. In sectors with elevated ESG risks, companies are more proactive in adjusting diversity proportions within their organizational structure.

The results from testing the third hypothesis demonstrate that market capitalization enhances the effect of board gender diversity on the level of ESG risk. Statistical tests indicate that market capitalization serves as a moderating factor in the relationship between board gender diversity and ESG risk. These findings suggest that companies with certain levels of market capitalization factor in distinct considerations when shaping their board composition and engaging in sustainable financial reporting within the ESG context. In companies with substantial capitalization and heightened public exposure, there is a stronger intention to initiate adjustments in diversity proportions within the organizational structure to achieve lower ESG risk. This aligns with signal theory, as companies seek to convey positive signals to the public by implementing initiatives that showcase exemplary performance.

## 6. Conclusion

This study aims to analyze factors influencing sustainable financial reporting in Indonesia, particularly focusing on reporting ESG performance. Specifically, the research investigates the impact of board gender diversity on ESG risk within companies listed on the ESG Leader Index and the IDX Kehati ESG Quality 45 Index. The study encompasses the analysis of 58 sample companies, employing regression analysis for testing. The findings derived from data processing are outlined as follows:

1. The representation of women on the board of directors significantly contributes to lowering the company's ESG risk level.
2. The industrial sector plays a pivotal role in enhancing the influence of board gender diversity on the company's ESG risk level. Consequently, the industrial sector contributes to shaping organizational structures and implementing ESG initiatives within companies.
3. The market capitalization level of a company's stock impacts the strengthening effect of board gender diversity on the company's ESG risk level. A higher stock capitalization prompts companies to take more substantial initiatives in increasing the proportion of women on the board of directors to fulfill diversity requirements, thereby reducing the ESG risk level.

This research involves several indicators, including ESG ratings, board gender diversity, types of industrial sectors, and market capitalization. The researcher collected data at one point in time, so there is a possibility of not being able to detect changes in variable data that occur at a specific point in time. Subsequent research may consider conducting more detailed data collection for each period to monitor changes in the data. Future researchers can also involve other variables that may affect the ESG performance of companies.

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## Biography

**Ika Puspita Kristianti, M. Acc., Ak., CA**, is a dedicated accounting professional and researcher based in Yogyakarta, Indonesia. She actively contributes to the academic and professional accounting communities through her extensive research, publications, and participation in conferences. Her research interests are centered around Accounting Behavior, Accounting Ethics, Auditing, and Sustainability Reporting. Her scholarly work aims to deepen the understanding of

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