

## Sustainability Performance: Quadruple Bottom Line Approach and Good Corporate Governance

Melly Agustiningrum, Alwan Sri Kustono, and Muhammad Miqdad

Accounting Dept., Faculty of Economic and Business, Jember University, East Java – Indonesia

---

**Abstract:** The research explores the relationship between good corporate governance (Gender, Age, and Experience of the Board of Directors) and sustainability performance using the Quadruple Bottom Line approach. Good Corporate governance practices are crucial in influencing the long-term sustainability performance of organizations. The Quadruple Bottom Line framework expands the traditional Triple Bottom Line concept by incorporating a fourth dimension related to governance and culture. The study highlights the interconnectedness of economic, social, environmental, and cultural aspects in promoting sustainable development. Through multiple regression analysis, the research concludes that the experience of the board of directors can influence economic sustainability performance and environmental sustainability performance. The age of the board of directors affects environmental sustainability performance.

**Keywords:** Good Corporate Governance, Sustainability Performance, Quadruple Bottom Line

---

Date of Submission: 10-05-2025

Date of acceptance: 20-05-2025

---

### I. Introduction

The relationship between corporate governance and sustainability performance is crucial in the context of global business competition. Corporate Governance is defined as a system and a set of regulations governing the relationships among stakeholders, particularly shareholders, board of commissioners, and board of directors, to achieve the long-term sustainability goals of the organization. Characteristics in corporate governance that influence the decisions of board members and commissioners to contribute to achieving a goal include age, gender, education, length of service, and total compensation. Research has shown varying impacts of board characteristics on sustainability performance, such as the negative effect of commissioners' education on economic and environmental sustainability performance.

In the realm of sustainability theory, companies are urged to respond to societal priorities encompassing social welfare, environmental conservation, and economic prosperity to meet the needs of current and future generations. Sustainability performance is becoming increasingly relevant in addressing complex environmental, social, and economic challenges. Sustainability reporting has emerged as a significant trend with substantial impacts on social, cultural, economic, and political aspects.

To understand the link between corporate governance and sustainability performance, the Quadruple Bottom Line approach is a primary focus of this research. The Quadruple Bottom Line expands on the traditional Triple Bottom Line concept by incorporating a fourth dimension related to governance and ethics. This approach aims to uncover how responsible governance practices can enhance sustainability performance and create long-term value for companies and stakeholders. The Quadruple Bottom Line framework emphasizes the importance of integrating governance considerations into sustainability strategies to improve overall performance and create value for all stakeholders.

In conclusion, the integration of good corporate governance practices with sustainability performance is essential for organizations to thrive in the global business landscape and achieve long-term sustainability goals. The Quadruple Bottom Line approach provides a comprehensive framework for assessing and enhancing the impact of governance practices on sustainability performance, ultimately creating value for companies and stakeholders alike. The research aims to develop the study by Tjahjadi et al. (2021) titled "Good corporate governance and corporate sustainability performance in Indonesia: A triple bottom line approach." The objective of the original article was to investigate the influence of good corporate governance (GCG) on corporate sustainability performance (CSP) using the Triple Bottom Line (TBL) approach. GCG was measured based on the size and educational background of the board of commissioners and top management team, while CSP comprised economic, social, and environmental sustainability performance indicators.

The study highlights the Triple Bottom Line concept, which traditionally considers economic, social, and environmental aspects. By expanding this concept into the Quadruple Bottom Line, incorporating a fourth dimension related to culture, researchers can consider additional factors that may affect a company's long-term sustainability performance for both the company and stakeholders. With this background, the researchers are

interested in further exploring the relationship between corporate governance and sustainability performance using the Quadruple Bottom Line approach.

The research problem includes investigating the impact of board diversity indicators (gender, age, and overall experience) on economic, social, environmental, and cultural sustainability performance. The study focuses on data from financial sector companies listed on the Indonesia Stock Exchange (BEI) from 2019 to 2022, totaling 105 registered companies. The financial sector is considered vulnerable to financial risks, necessitating strong corporate governance practices to manage risks effectively. By concentrating on corporate governance and sustainability reporting, the financial sector can positively contribute to sustainable economic growth.

By analyzing data from 2019 to 2022, the research aims to observe developments and changes in corporate governance and sustainability performance compared to previous studies. This evaluation can help assess the impacts of policies or changes implemented during that period.

## **II. Literature Review**

### **1. STAKEHOLDER THEORY**

Stakeholder Theory was first introduced by R. Edward Freeman in his book "Strategic Management: A Stakeholder Approach" in 1984. Freeman proposed the concept that companies have responsibilities not only to shareholders but also to various stakeholders with interests in the company's activities. By emphasizing the importance of meeting the needs, expectations, and interests of all stakeholders in decision-making, Stakeholder Theory has become a crucial foundation for the development of sustainable corporate governance practices. According to Lindawati & Puspita (2015), Stakeholder Theory is an approach that highlights the importance of considering the interests and expectations of various involved parties, including shareholders, employees, consumers, suppliers, local communities, government, and other stakeholders who can influence or be influenced by company decisions.

By applying the principles of Stakeholder Theory, companies can optimize sustainability performance by balancing economic, social, environmental, and cultural aspects. Implementing Stakeholder Theory principles in Corporate Governance practices can assist companies in managing relationships with various stakeholders effectively. By considering stakeholder interests, companies can enhance transparency, accountability, and fairness in decision-making, which are key principles in Corporate Governance practices. Moreover, by considering stakeholder interests in decision-making, companies can also enhance their sustainability performance.

### **2. SUSTAINABILITY THEORY**

Sustainability theory was not created by a single individual or at a specific time. The concept of sustainability has evolved with the awareness of the importance of maintaining a balance between economic, social, environmental, and cultural aspects in business activities and development. In 1987, the United Nations Environment Programme (UNEP) led by Prime Minister of Norway, Gro Harlem Brundtland, published a report titled "Our Common Future," introducing the concept of sustainable development. This report has been a crucial foundation for understanding and developing the concept of sustainability. Therefore, sustainability theory underpins the importance of the role of the Board of Directors in implementing corporate governance that can balance economic, social, environmental, and cultural activities to achieve sustainability performance.

### **3. GOOD CORPORATE GOVERNANCE**

Good Corporate governance, according to the Minister of State-Owned Enterprises Decision Number: KEP - 117/M - MBU /2002, is a process or structure used by State-Owned Enterprises (SOEs) to enhance business success and corporate accountability to realize shareholder value in the long term while considering the interests of other stakeholders, based on regulations and ethical values. Corporate Governance, as described by Sari (2018), explains the relationship between various participants in the company that determines the direction and performance of the company. Issues applied in companies are significantly considered in Corporate Governance practices. Research by Shank et al. (2013) also reveals that good corporate governance practices will provide sustainable financial success for a company. Therefore, corporate governance plays a crucial role in ensuring the long-term growth, sustainability, and value of the company. The implementation of good governance will benefit the company and all stakeholders involved.

### **4. BOARD OF DIRECTORS CHARACTERISTICS**

Law number 40 of 2007 concerning Limited Liability Companies states that the Board of Directors is part of the organizational structure fully responsible for the company's interests in accordance with the company's articles of association (OJK, 2007).

The characteristics of the Board of Directors are proxied by the Gender Diversity of the board, Age Diversity, and overall board experience. Research by Peni & Vähämaa (2010) reveals that women and men have different actions when facing the same conditions, such as leadership style, communication, risk avoidance, and decision-making, indicating that gender differences in Top Management can influence decision-making (Anizar et al., 2023).

## **5. SUSTAINABILITY PERFORMANCE**

Sustainability performance is assessed as the unity of social, economic, and environmental goals of a company's activities that can enhance the company's value (Naciti, 2019). A company will strive to achieve long-term benefits by engaging in sustainable activities considered as a corporate strategy. As one of the company's strategies to enhance performance, sustainability performance has attracted researchers' attention for the past two decades (Rahadian, 2016). A study in formulating strategies conducted by a company is crucial. If sustainability performance experiences positive growth, it will also have a positive impact on the company's performance (Chaudhuri & Jayaram, 2019).

## **6. QUADRUPLE BOTTOM LINE**

Quadruple Bottom Line (QBL) is an approach that expands on the Triple Bottom Line (TBL) concept in sustainability. TBL consists of three main pillars: economic, social, and environmental. However, with the addition of the fourth pillar, culture, the QBL approach broadens the evaluation framework to include additional aspects in sustainability measurement. Thus, QBL integrates considerations of economic, social, environmental, and cultural factors in decision-making to achieve a more holistic sustainability goal (Pizzirani et al., 2018). With the cultural pillar in QBL, decision-makers can consider aspects such as transparency, accountability, and efficiency in resource management. Therefore, QBL integrates considerations of economic, social, environmental, and cultural factors in the decision-making process to achieve a more holistic and sustainable sustainability goal.

### **The influence of Board of Directors' Gender on Sustainability Performance**

Gender diversity in the board of directors positively impacts the sustainability performance of an organization. The presence of both men and women in the board of directors can bring diverse perspectives to decision-making, which can broaden discussions, enhance innovation, and consider economic, social, environmental, and cultural aspects in the company's strategy (Robby, 2023). In this context, sustainability performance is proxied into four dimensions: Economic Sustainability Performance, Environmental Sustainability Performance, Social Sustainability Performance, and Cultural Sustainability Performance. According to Stakeholder theory, the application of principles in Good Corporate Governance (GCG) practices can help companies manage relationships with stakeholders.

By managing good relationships with stakeholders in decision-making, companies can enhance their sustainability performance. In a study by (Tanujaya & Anggreany, 2021), it is stated that according to stakeholder theory, gender diversity can put greater pressure on companies in environmental practices that are socially responsible. Therefore, female directors should be able to enhance long-term environmental, social, and economic sustainability performance. Regarding the influence of sustainability performance on corporate culture, a study by (Fitroni & Feliana, 2022) suggests that the presence of female directors on the board influences earnings management practices, which in turn impacts cultural sustainability performance in a company. Therefore, the hypotheses formulated in this study are:

H1: Board of Directors' Gender influences Economic Sustainability Performance

H2: Board of Directors' Gender influences Environmental Sustainability Performance

H3: Board of Directors' Gender influences Social Sustainability Performance

H4: Board of Directors' Gender influences Cultural Sustainability Performance

### **The influence of Board of Directors' Age on Sustainability Performance**

Research by (Ivone et al., 2024) reveals that the presence of board members with diverse age ranges indicates variations in experience, knowledge, and understanding possessed by each member. In this research, it is concluded that the age diversity of the board of directors with different generations influences diverse perspectives and approaches to economic, social, environmental, and cultural issues. Board members from various age groups can bring different work experiences, diverse knowledge, and different understandings of business developments and challenges faced by the company. Therefore, the hypotheses to be proposed are:

H5: Board of Directors' Age influences Economic Sustainability Performance

H6: Board of Directors' Age influences Environmental Sustainability Performance

H7: Board of Directors' Age influences Social Sustainability Performance

H8: Board of Directors' Age influences Cultural Sustainability Performance

### **The influence of Board of Directors' Experience on Sustainability Performance**

The presence of board members with diverse experiences, including various professional backgrounds, industries, and management functions, can provide deep insights into managing the economic, social, environmental, and cultural aspects of a company. The overall experience of board members can encompass a comprehensive understanding of various business aspects and challenges faced by the company (Jao et al., 2021). With broad insights, the board of directors can make better and strategic decisions to enhance the sustainability performance of the company.

Diverse experiences within the board of directors can enhance the company's ability to adapt to external environmental changes, address complex challenges, and identify new growth opportunities. Therefore, the overall experience of board members can help the company develop sustainably (Hamid et al., 2023). Based on previous research, the hypotheses in this study are:

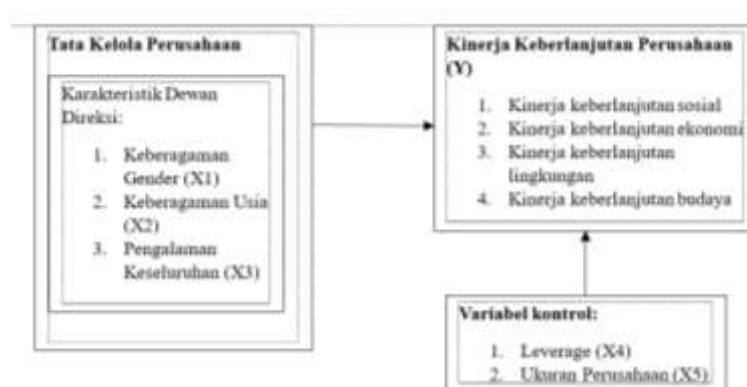
H9: Board of Directors' Experience influences Economic Sustainability Performance

H10: Board of Directors' Experience influences Environmental Sustainability Performance

H11: Board of Directors' Experience influences Social Sustainability Performance

H12: Board of Directors' Experience influences Cultural Sustainability Performance

The framework of this research, based on literature review and hypothesis development, illustrates how corporate governance is linked to the characteristics of the board of directors in terms of gender diversity, age diversity, and overall experience, which will affect the four dimensions of company sustainability performance (economic, environmental, social, and cultural) with control variables such as leverage and company size as depicted in Figure 1.



**Figure 1 Research Framework**

Source: Data processed (2024)

### **III. Research Methodology**

The research methodology employed in this study is a quantitative method using secondary data collected from annual reports and sustainability reports of financial companies listed on the Indonesia Stock Exchange (BEI) and official websites of related companies. The sustainability performance measurement is adopted from the GRI-G4 guidelines accessed through the official GRI website, [www.globalreporting.org](http://www.globalreporting.org) specifically.

The population in this study comprises all financial sector companies listed on the Indonesia Stock Exchange during the period 2019-2022. The sampling technique used is purposive sampling with specific criteria: 1) financial companies listed on the BEI from 2019 to 2022, 2) financial companies included in the main listing board of the BEI, 3) financial companies with complete and consistent annual reports from 2019 to 2022, 4) financial companies reporting sustainability reports separately from annual reports. Based on these criteria, 64 samples from 16 companies were obtained over a 4-year observation period.

The variables and measurement methods used in the study are listed in Table 1. The study utilizes independent variables such as Gender, age, and experience. The dependent variables are economic, environmental, social, and cultural sustainability performance. Additionally, control variables include leverage and company size. Leverage, or the level of company debt, can be a crucial control variable as it can impact the sustainability performance of the company. Using leverage as a control variable can help understand the specific impact of Board of Directors' characteristics (Zahroh et al., 2023). On the other hand, company size is often a

significant factor influencing sustainability performance. Company size variables can be used as controls to understand the influence of Board of Directors' characteristics on company sustainability performance in more detail (Widianto & Pratiwi, 2011).

**Table 1 Variable Measurement**

VARIABEL	PENGUKURAN VARIABEL
Keberagaman Gender Dewan Direksi	jumlah direksi wanita/total keseluruhan direksi
Keberagaman Usia Dewan Direksi	rata-rata usia direksi dalam suatu perusahaan
Pengalaman Keseluruhan Dewan Direksi	pengalaman kerja dewan direksi/total dewan direksi selama th berjalan
Kinerja Keberlanjutan Ekonomi	SRDI = jumlah item yang diungkapkan/jumlah item yang diharapkan
Kinerja Keberlanjutan Sosial	
Kinerja Keberlanjutan Lingkungan	
Kinerja Keberlanjutan Budaya	
Leverage (DER)	total hutang/total ekuitas
Ukuran Perusahaan	log (total aset)

Source: Data processed (2024)

The data analysis used in this study is the multiple linear regression model, where the dependent variable depends on two or more independent variables. The equation for the regression model is as follows:

$$Y1 = \alpha + \beta X1 + \beta X2 + \beta X3 + \beta VC1 + \beta VC2 + e$$

$$Y2 = \alpha + \beta X1 + \beta X2 + \beta X3 + \beta VC1 + \beta VC2 + e$$

$$Y3 = \alpha + \beta X1 + \beta X2 + \beta X3 + \beta VC1 + \beta VC2 + e$$

$$Y4 = \alpha + \beta X1 + \beta X2 + \beta X3 + \beta VC1 + \beta VC2 + e$$

Where:

Y1: Economic Sustainability Performance

Y2: Environmental Sustainability Performance

Y3: Social Sustainability Performance

Y4: Cultural Sustainability Performance

$\alpha$ : Constant (intercept)

$\beta$ : Regression Coefficient

X1: Board of Directors' Gender

X2: Board of Directors' Age

X3: Board of Directors' Experience

VC1: Leverage (Control Variable 1)

VC2: Company Size (Control Variable 2)

e: Error

## IV. Results and Discussion

### 1. DESCRIPTIVE STATISTICS

Based on the descriptive test results above, the data distribution obtained by the researcher consists of 64 samples (N) for each variable under study. For the Board of Directors' Gender variable (X1), the minimum value is 0.18, the maximum value is 0.50, the mean is 0.3275, and the standard deviation is 0.7880. For the Board of Directors' Age variable (X2), the minimum value is 39.00, the maximum value is 64.00, the mean is 53.0781, and the standard deviation is 5.28641.

For the Board of Directors' Experience variable, the minimum value is 0.38, the maximum value is 0.90, the mean is 0.6432, and the standard deviation is 0.15681. Regarding the control variable Leverage, the minimum value is 0.30, the maximum value is 16.08, the mean is 5.7902, and the standard deviation is 3.141. The second control variable, Company Size, has a minimum value of 13.18, a maximum value of 15.29, a mean of 14.345, and a standard deviation of 0.56739.

As for the dependent variables Economic Sustainability Performance (KKE), Environmental Sustainability Performance (KKL), Social Sustainability Performance (KKS), and Cultural Sustainability Performance (KKB), the lowest minimum value is found in the KKL variable, the highest maximum value is in the KKS variable, the highest mean is in the KKE variable, and the lowest standard deviation occurs in the KKL



variable.

**Tabel 2 STATISTICAL TEST RESULT**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
GENDER DEWAN DIREKSI	64	,18	,50	,3275	,07880
USIA DEWAN DIREKSI	64	39,00	64,00	53,0781	5,28641
PENGALAMAN DEWAN DIREKSI	64	,38	,90	,6342	,15681
LEVERAGE	64	,30	16,08	5,7902	3,14142
UKURAN PERUSAHAAN	64	13,18	15,29	14,3450	,56379
KINERJA KEBERLANJUTAN EKONOMI	64	,11	,44	,3369	,10532
KINERJA KEBERLANJUTAN LINGKUNGAN	64	,06	,21	,1411	,02655
KINERJA KEBERLANJUTAN SOSIAL	64	,18	,64	,3125	,13081
KINERJA KEBERLANJUTAN BUDAYA	64	,13	,25	,1844	,02557
Valid N (listwise)	64				

## 2. PEARSON CORRELATION

The Pearson correlation test aims to determine the level of relationship between variables, expressed by the correlation coefficient (r).

**Table 3 Pearson Correlation Test Results**

Correlations										
		KINERJA KEBERLANJUTAN EKONOMI	KINERJA KEBERLANJUTAN LINGKUNGAN	KINERJA KEBERLANJUTAN SOSIAL	KINERJA KEBERLANJUTAN BUDAYA	GENDER DEWAN DIREKSI	USIA DEWAN DIREKSI	PENGALAMAN DEWAN DIREKSI	LEVERAGE	UKURAN PERUSAHAAN
KINERJA KEBERLANJUTAN EKONOMI	Pearson Correlation Sig. (2-tailed) N	1 64 64	,416 <sup>**</sup> ,001 64	-,139 ,272 64	,175 ,178 64	-,083 ,820 64	-,070 ,320 64	,381 ,220 64	,082 ,520 64	,328 ,828 64
KINERJA KEBERLANJUTAN LINGKUNGAN	Pearson Correlation Sig. (2-tailed) N	,416 <sup>**</sup> ,001 64	1 64	-,175 ,271 64	-,083 ,178 64	-,070 ,820 64	-,320 ,320 64	,220 ,220 64	,520 ,520 64	,828 ,828 64
KINERJA KEBERLANJUTAN SOSIAL	Pearson Correlation Sig. (2-tailed) N	-,139 ,272 64	-,175 ,271 64	1 64	,347 ,212 64	,348 ,848 64	,105 ,410 64	,379 ,214 64	,088 ,491 64	,138 ,384 64
KINERJA KEBERLANJUTAN BUDAYA	Pearson Correlation Sig. (2-tailed) N	,175 ,178 64	-,083 ,270 64	,175 ,272 64	1 64	,083 ,781 64	-,124 ,331 64	-,041 ,745 64	,001 ,982 64	,310 ,838 64
GENDER DEWAN DIREKSI	Pearson Correlation Sig. (2-tailed) N	-,083 ,820 64	-,070 ,820 64	,347 ,848 64	,348 ,848 64	1 64	-,287 ,449 64	,393 ,244 64	-,082 ,507 64	,147 ,380 64
USIA DEWAN DIREKSI	Pearson Correlation Sig. (2-tailed) N	-,070 ,820 64	-,320 ,320 64	-,105 ,410 64	-,124 ,331 64	-,287 ,449 64	1 64	-,379 ,214 64	-,371 ,268 64	,828 ,828 64
PENGALAMAN DEWAN DIREKSI	Pearson Correlation Sig. (2-tailed) N	,381 ,220 64	,220 ,220 64	,379 ,214 64	,347 ,848 64	,393 ,244 64	-,379 ,214 64	1 64	,147 ,380 64	-,001 ,982 64
LEVERAGE	Pearson Correlation Sig. (2-tailed) N	,082 ,520 64	-,082 ,520 64	,088 ,491 64	,001 ,982 64	-,082 ,507 64	-,371 ,268 64	,147 ,380 64	1 64	,148 ,148 64
UKURAN PERUSAHAAN	Pearson Correlation Sig. (2-tailed) N	,328 ,828 64	,828 ,828 64	,138 ,384 64	,310 ,838 64	,147 ,380 64	,828 ,828 64	-,001 ,982 64	-,148 ,148 64	1 64

\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Based on the Pearson correlation table, it shows a positive correlation between the four dimensions of sustainability performance (Economic Sustainability Performance (KKE) and Environmental Sustainability Performance (KKL) with a percentage of 0.416, KKE and Social Sustainability Performance (KKS) at -0.139, KKE and Cultural Sustainability Performance (KKB) at 0.170, KKB and KKS at 0.47, and KKB and KKL at -0.33. It can be concluded that most of the correlation relationships are moderate and move in a positive direction/move in the same direction.

## 3. LINEAR REGRESSION ANALYSIS

The results of the regression analysis are shown in tables 4, 5, 6, and 7. There are four regression models in this study, namely:

### 1. Economic Sustainability Performance Regression Model

**Table 4 Regression Test Results Model 1**

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,211	,354		,596	,554
	Gender	-,221	,175	-,165	-1,264	,211
	Usia	-,002	,003	-,095	-,743	,460
	Pengalaman	,225	,088	,336	2,572	,013
	Leverage	,000	,004	-,006	-,042	,966
	Ukuran Perusahaan	,011	,024	,059	,456	,650

a. Dependent Variable: Kinerja Keberlanjutan Ekonomi

$$Y1 = 0.211 - 0.221 \text{ Gender} - 0.002 \text{ Age} + 0.225 \text{ Experience} + 0.000 \text{ Leverage} + 0.011 \text{ Company Size} + e$$

### 2. Environment Sustainability Performance Regression Model

**Table 5 Regression Test Results Model 2**

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,018	,084		,219	,827
	Gender	-,005	,041	-,015	-,122	,903
	Usia	,001	,001	,157	1,705	,197
	Pengalaman	,075	,021	,441	3,603	,001
	Leverage	-,001	,001	-,070	-,567	,573
	Ukuran Perusahaan	,003	,006	,057	,474	,638

a. Dependent Variable: Kinerja Keberlanjutan Lingkungan

$$Y2 = 0.18 - 0.005 \text{ Gender} + 0.001 \text{ Age} + 0.075 \text{ Experience} - 0.001 \text{ Leverage} + 0.003 \text{ Company Size} + e$$

### 3. Social Sustainability Performance Regression Model

**Table 6 Regression Test Results Model 3**

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,273	,458		-,596	,553
	Gender	,049	,226	,029	,216	,830
	Usia	,003	,003	,118	,882	,382
	Pengalaman	,047	,113	,056	,411	,683
	Leverage	,003	,006	,083	,602	,550
	Ukuran Perusahaan	,025	,031	,110	,821	,415

a. Dependent Variable: Kinerja Keberlanjutan Sosial

$$Y3 = -0.273 + 0.049 \text{ Gender} + 0.003 \text{ Age} + 0.047 \text{ Experience} + 0.003 \text{ Leverage} + 0.025 \text{ Company Size} + e$$

### 4. Cultural Sustainability Performance Regression Model

**Table 7 Regression Test Results Model 4**

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,208	,091		2,300	,025
	Gender	,011	,045	,033	,243	,809
	Usia	-,001	,001	-,125	-,925	,359
	Pengalaman	-,007	,022	-,044	-,321	,750
	Leverage	,000	,001	-,020	-,147	,883
	Ukuran Perusahaan	,001	,006	,016	,115	,909

a. Dependent Variable: Kinerja Keberlanjutan Budaya

$$Y4 = 0.208 + 0.011 \text{ Gender} - 0.001 \text{ Age} - 0.007 \text{ Experience} + 0.000 \text{ Leverage} + 0.001 \text{ Company Size} +$$

## 5. F Test

ANOVA<sup>a</sup>

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	,081	5	,016	2,617	,009 <sup>b</sup>
	Residual	,618	58	,011		
	Total	,699	63			

- A. Dependent Variable: Kinerja Keberlanjutan Ekonomi  
 B. Predictors: (Constant), Ukuran Perusahaan, Pengalaman Dewan Direksi, Usia Dewan Direksi, Leverage, Gender Dewan Direksi

Based on the results above, there is a calculated F value of 2.617 while the tabulated F value is 2.53 with a significance level of  $\alpha$  5% dfl (k-1) = (5-1=4), and df2 (n-k) = (64-5=59). Since the calculated F value is greater than the tabulated F value,  $2.61 > 2.53$ , and the significance value is  $0.009 < 0.05$ , the conclusion is that all independent variables in this study, namely Gender of the board of directors, Age of the board of directors, Experience of the board of directors, Leverage, and Company Size, collectively influence the dependent variable Y1, which is Economic Sustainability Performance.

ANOVA<sup>a</sup>

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	,009	5	,002	3,074	,016 <sup>b</sup>
	Residual	,035	58	,001		
	Total	,044	63			

Based on the results above, the calculated F value is 3.074, while the tabulated F value is 2.53 with a significance level of  $\alpha$  5% dfl (k-1) = (5-1=4), and df2 (n-k) = (64-5=59). Since the calculated F value is greater than the tabulated F value,  $3.07 > 2.53$ , and the significance value is  $0.01 < 0.05$  the conclusion is that all independent variables in this study, namely Gender of the board of directors, Age of the board of directors, Experience of the board of directors, Leverage, and Company Size, collectively influence the dependent variable Y3, which is Environment Sustainability Performance.

ANOVA<sup>a</sup>

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,198	5	,040	2,618	,033 <sup>b</sup>
	Residual	,880	58	,015		
	Total	1,078	63			

Based on the results above, the calculated F value is 2.618, while the tabulated F value is 2.53 with significance level of  $\alpha$  5% dfl (k-1) = (5-1=4), and df2 (n-k) = (64-5=59). Since the calculated F value is greater than the tabulated F value,  $2.61 > 2.53$ , and the significance value is  $0.03 < 0.05$  the conclusion is that all independent variables in this study, namely Gender of the board of directors, Age of the board of directors, Experience of the board of directors, Leverage, and Company Size, collectively influence the dependent variable Y3, which is Social Sustainability Performance.

ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	,048	5	,010	1,207	,317
	Residual	,457	58	,008		
	Total	,504	63			

Based on the results above, the calculated F value is 1.207, while the tabulated F value is 2.53 with a significance level of  $\alpha$  5% dfl (k-1) = (5-1=4), and df2 (n-k) = (64-5=59). Since the calculated F value is less



than the tabulated F value,  $1,207 < 2,53$ , and the significance value is  $0,01 < 0,05$  the conclusion is that all independent variables in this study, namely Gender of the board of directors, Age of the board of directors, Experience of the board of directors, Leverage, and Company Size, collectively don't collectively influence the dependent variable Y4, which is Cultural Sustainability Performance.

## 6. Testing R-squared (Coefficient of Determination)

Model	R	R Square	Adjusted R Square	Std. Error Of The Estimate
1	,458a	,209	,141	,02461

A. Predictors: (Constant), Ukuran Perusahaan, Pengalaman Dewan Direksi, Usia Dewan Direksi, Leverage, Gender Dewan Direksi

Based on the table above, the Adjusted R Square value is 0.141. This indicates that the independent variables (Company Size, Board of Directors' Experience, Board of Directors' Age, Leverage, and Board of Directors' Gender) collectively explain 14.1% of the variation in the dependent variable Economic Sustainability Performance, while the remaining 85.9% is influenced by other variables outside the scope of this study.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error Of The Estimate
1	,458a	,229	,171	,03461

A. Predictors: (Constant), Ukuran Perusahaan, Pengalaman Dewan Direksi, Usia Dewan Direksi, Leverage, Gender Dewan Direksi

Based on the table above, the Adjusted R Square value is 0.171, indicating that the Independent Variables (Company Size, Board of Directors' Experience, Board of Directors' Age, Leverage, and Gender of the Board of Directors) collectively explain 17.1% of the variance in Environmental Sustainability Performance, while the remaining 82.9% is influenced by other variables outside the scope of this study.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,429a	,184	,114	,12314

A. Predictors: (Constant), Ukuran Perusahaan, Pengalaman Dewan Direksi, Usia Dewan Direksi, Leverage, Gender Dewan Direksi

Based on the table above, the Adjusted R Square value is 0.114, indicating that the Independent Variables (Company Size, Board of Directors' Experience, Board of Directors' Age, Leverage, and Gender of the Board of Directors) collectively explain 11.4% of the variance in Social Sustainability Performance, while the remaining 88,6% is influenced by other variables outside the scope of this study.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error Of The Estimate
1	,307a	,094	,016	,08873

A. Predictors: (Constant), Ukuran Perusahaan, Pengalaman Dewan Direksi, Usia Dewan Direksi, Leverage, Gender Dewan Direksi

Based on the table above, the Adjusted R Square value is 0.016, indicating that the Independent Variables (Company Size, Board of Directors' Experience, Board of Directors' Age, Leverage, and Gender of the Board of Directors) collectively explain 1,6 % of the variance in Social Sustainability Performance, while the remaining 98,4% is influenced by other variables outside the scope of this study.

## **7. Hypothesis Test:**

To see whether the hypothesis in this research can be accepted or rejected, in tables 4 to 7 the results of the linear regression analysis test are obtained, the test results can be seen from the significance value and the calculated T value. Following are the results of the hypothesis test:

### **The influence of Board of Directors' Gender on Sustainability Performance**

The first model hypothesis in this research shows the results of data processing using SPSS 23 with table 4, namely the t-count result is -1.264 and the t-table is 1.617, which means  $t\text{-count} < t\text{-table}$ , concluding that the Gender of the Board of Directors has no effect on Sustainability Performance Economy. So the first hypothesis (H1) is rejected. Likewise with the results of table 5 which shows a t-count of -0.122 and a t-table of 1.617, meaning  $t\text{-count} < t\text{-table}$ , which concludes that the Gender of the Board of Directors has no effect on Environmental Sustainability Performance. So the second hypothesis (H2) is rejected.

In table 6 the t-count results are 0.216 and the t-table is 1.617, which means  $t\text{-count} < t\text{-table}$ , concluding that the Gender of the Board of Directors has no effect on Social Sustainability Performance. So the third hypothesis (H3) is rejected. In table 7, the t-count results are 0.243 and the t-table is 1.617, which means  $t\text{-count} < t\text{-table}$ , concluding that the Gender of the Board of Directors has no effect on Cultural Sustainability Performance. So the fourth hypothesis (H4) is rejected.

This research suspects that the gender of the board of directors has no effect on sustainability performance because the number of female board directors is a minority in the company sample. This is in line with research conducted by (Tanujaya & Anggreany, 2021) which states that the potential for gender diversity of the board of directors in a company is assessed. less able to encourage companies to get involved in economic, social and environmental activities. This hypothesis is also supported by research (Oktariyani & Rachmawati, 2021) which states that the presence of women in the board of directors structure has no effect on environmental performance because this also depends on the culture within the company.

### **The influence of Board of Directors' Age on Sustainability Performance**

The second model hypothesis in this research shows the results of data processing using SPSS 23 with table 4, namely the t-count result of -0.743 and the t-table of 1.617, which means  $t\text{-count} < t\text{-table}$ , concluding that the age of the Board of Directors has no effect on Sustainability Performance Economy. So the fifth hypothesis (H5) is rejected. The results of table 5 show a t-count of 1.705 and a t-table of 1.617, meaning  $t\text{-count} > t\text{-table}$  with a significance level of 0.1, which concludes that the age of the Board of Directors has no significant effect on Environmental Sustainability Performance. So the sixth hypothesis (H6) is accepted.

Meanwhile, table 6 shows the t-count results of 0.882 and the t-table of 1.617, which means  $t\text{-count} < t\text{-table}$ , concluding that the age of the Board of Directors has no effect on Social Sustainability Performance. So the seventh hypothesis (H7) is rejected. Table 7 shows the t-count results of -0.925 and the t-table of 1.617, which means  $t\text{-count} < t\text{-table}$ , concluding that the age of the Board of Directors has no effect on Cultural Sustainability Performance. So the eighth hypothesis (H8) is rejected.

Hypothesis H6 is in line with research conducted by (Chams & Garcia-Blandon, 2019) which states that there is a significant positive relationship regarding the influence of the age of the board of directors on the environmental sustainability of a company. Meanwhile, hypotheses H5, H7, and H8 are in line with research (Nugraha, 2024) which reveals that the age of the board of directors has no influence on the disclosure of economic or social sustainability performance because the character of the older board of directors has varied experience in assessing sustainability issues, however Young people are often seen as more sensitive to sustainability issues, so it is not necessarily the case that a company only consists of an older board of directors, there must be a balance between expertise and experience regardless of age.

In this study, the average age of the board of directors was in the age range of 50-60. So it is suspected that the lack of variation in younger ages makes it possible for the results of this research to have no effect in terms of economic, social and cultural sustainability performance.

### **The influence of Board of Directors' Experience on Sustainability Performance**

The third model hypothesis in this research shows the results of data processing using SPSS 23 with table 4, namely the t-count result of 2.572 and the t-table of 1.617, which means  $t\text{-count} > t\text{-table}$ , concluding that the Board of Directors' experience influences Economic Sustainability Performance. So the ninth hypothesis (H9) is accepted. Table 5 shows the results of the t-count of 0.411 and the t-table of 1.617, which means  $t\text{-count} < t\text{-table}$ , concluding that the experience of the Board of Directors influences Environmental Sustainability Performance. So the tenth hypothesis (H10) is rejected. Meanwhile, in table 6, the t-count result is 0.411 and the t-table is 1.617, which means  $t\text{-count} < t\text{-table}$ , concluding that the Board of Directors' experience has no effect on Social Sustainability Performance. So the eleventh hypothesis (H11) is rejected. Table 7 shows the t-count

results of -0.321 and the t-table of 1.617, which means  $t\text{-count} < t\text{-table}$ , concluding that the Board of Directors' experience has no effect on Cultural Sustainability Performance. So the twelfth hypothesis (H12) is rejected.

Hypotheses nine (H9) and (H10) are in line with research conducted by (Umaroe & Hamidah, n.d.) which states that the work experience of the board of directors in developed countries has a positive effect on a company's sustainability disclosure, especially in Indonesia. The research states that if the board of directors has extensive knowledge about sustainability performance, it can help the company overcome sustainability problems. However, this is not in line with the results (H11, H12) which reveal that the experience of the board of directors has no effect on environmental, social and cultural sustainability performance. This finding is supported by previous research conducted by (Wijaya, 2020) and (Budiharta & Kacaribu, 2020) that the board of directors has no effect on the disclosure of carbon emissions which are included in environmental sustainability performance indicators because the knowledge and experience of members of the board of directors regarding sustainability reports is quite varied.

In this research, the author suspects that the experience of the board of directors does not influence environmental, social and cultural sustainability performance because the board of directors may lack sufficient awareness, knowledge and experience regarding the importance of sustainability performance in environmental, social and cultural terms. It is suspected that perhaps the board of directors is more focused on fulfilling the expectations of stakeholders who tend to prioritize economic sustainability performance. It is also suspected that there may be a lack of corporate culture in terms of encouraging transparency, accountability and innovation in terms of environmental, social and cultural sustainability. Because an organizational culture that does not support innovation in terms of environmental, social and cultural sustainability can hinder the board of directors' ability to lead the necessary changes.

## V. Conclusion

This research was conducted with the aim of determining the influence of corporate governance in terms of indicators (Gender of the board of directors, Age of the board of directors, and Experience of the board of directors) on sustainability performance using the Quadruple Bottom Line approach. Based on sample data financial companies listed in the financial sector listed on the BEI (Indonesian Stock Exchange) for the 2019-2022 period using the SPSS version 23 analysis tool. This research concludes that 1) not all hypotheses are supported. This requires further research, 2) The control variables Leverage and Company Size were also found to have no effect on sustainability performance, 3) the findings in this research are useful for several policy recommendations. So companies in this research must consider the importance of the board of directors in improving sustainability performance.

This research has limitations, namely limiting the size to only financial companies that have been selected according to the criteria, making it possible for future researchers to investigate financial sector companies that have not been studied. This research also limits the research period to 2019-2022, so future researchers need to consider a longer research period. This research, in relation to corporate governance, only uses the indicators Gender of the Board of Directors, Age of the Board of Directors and Experience of the Board of Directors. Future researchers might consider other indicators that can influence a company's sustainability performance.

## References

- [1]. Anizar, S., Anastasia, M., Rahman, A., & Yanti, J. B. (2023). Pengaruh Gender Terhadap Kualitas Laporan Keuangan Pada Perusahaan Manufaktur Terdaftar Di Bursa Efek Indonesia. *Owner: Riset Dan Jurnal Akuntansi*, 7(1), 156–163.
- [2]. Budiharta, P., & Kacaribu, H. E. P. B. (2020). The influence of board of directors, managerial ownership, and audit committee on carbon emission disclosure: a study of non-financial companies listed on BEI. *Review of Integrative Business and Economics Research*, 9, 75–87.
- [3]. Chams, N., & Garcia-Blandon, J. (2019). Sustainable or not sustainable? The role of the board of directors. *Journal of Cleaner Production*, 226. <https://doi.org/10.1016/j.jclepro.2019.04.118>
- [4]. Chaudhuri, A., & Jayaram, J. (2019). A socio-technical view of performance impact of integrated quality and sustainability strategies. *International Journal of Production Research*, 57(5), 1478–1496.
- [5]. Fitroni, N. A., & Feliana, Y. K. (2022). Pengaruh keragaman gender pada dewan komisaris, dewan direksi, dan komite audit terhadap manajemen laba. *Akuntansi Dan Teknologi Informasi*, 15(1), 8–21.
- [6]. Hajar, S., & Wirman, W. (2023). Implementasi Manajemen Risiko Dalam Dunia Perbankan Syariah. *Jurnal Ilmiah Wahana Pendidikan*, 9(5), 500–513.
- [7]. Hamid, R. S., Utami, B., Wijayanti, T. C., Herawati, B. C., Permana, D., Siswanto, A., Manaf, P. A., Iswahyudi, M. S., Susiang, M. I. N., & Hidayat, A. C. (2023). *MANAJEMEN STRATEGIS: Konsep dan Aplikasi dalam Bisnis*. PT. Sonpedia Publishing Indonesia.
- [8]. Handayani, S. (2023). Hexagon Sustainability: Dekonstruksi Pentuple Bottom Line. *Jurnal Reviu Akuntansi Dan Keuangan*, 13(3), 715–731.
- [9]. Ivone, I., Anisa, A. P. N., & Tanujaya, K. (2024). Dinamika Kinerja Perusahaan: Peran kritis Diversitas Gender Sebagai Variabel Moderasi. *Jurnal Media Wahana Ekonomika*, 21(1), 15–32.
- [10]. Jao, R., Randa, F., Holly, A., & Gohari, L. (2021). Pengaruh Karakteristik Dewan Direksi Terhadap Kinerja Keuangan Perusahaan Non Keuangan Yang Terdaftar di Bursa Efek Indonesia. *AkMen Jurnal Ilmiah*, 18(2), 123–134.

- [11]. Johari, J., & Komathy, M. (2019). Sustainability reporting and firm performance: Evidence in Malaysia. *International Journal of Accounting, Finance and Business*, 4(17), 32–45.
- [12]. Lindawati, A. S. L., & Puspita, M. E. (2015). Corporate Social Responsibility: Implikasi Stakeholder dan Legitimacy Gap dalam Peningkatan Kinerja Perusahaan. *Jurnal Akuntansi Multiparadigma*, 6(1), 157–174.
- [13]. Malau, M. (2020). Norma Subjektif Manajer, Kepercayaan Normatif, Kepercayaan Kendali Perilaku, dan Pendidikan Manajer terhadap Laporan Keberlanjutan Perusahaan. *Jurnal IKRAITH-EKONOMIKA*, 3(3), 45–54.
- [14]. Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, 237, 117727.
- [15]. Ngoyo, M. F. (2015). Mengawal sustainable development goals (SDGs); meluruskan orientasi pembangunan yang berkeadilan. *Sosioreligius: Jurnal Ilmiah Sosiologi Agama*, 1(1).
- [16]. Nugraha, A. R. (2024). Pengaruh Karakteristik Dewan Direksi Terhadap Sustainability Reporting. *Reviu Akuntansi Dan Bisnis Indonesia*, 8(1).
- [17]. Oktariyani, A., & Rachmawati, Y. (2021). Analisis pengaruh profitabilitas, leverage, kinerja lingkungan dan diversifikasi gender terhadap kualitas pengungkapan lingkungan pada perusahaan pertambangan di Indonesia. *Akuntansi Dan Manajemen*, 16(1), 1–20.
- [18]. Padang, N. N. (2023). Peran Audit Internal Dalam Meningkatkan Tata Kelola Perusahaan. *Jurnal Riset Akuntansi & Keuangan*, 130–135.
- [19]. Peni, E., & Vähämaa, S. (2010). Female executives and earnings management. *Managerial Finance*, 36(7), 629–645.
- [20]. Pizzirani, S., McLaren, S. J., Forster, M. E., Pohatu, P., Porou, T. T. W., & Warmenhoven, T. A. (2018). The distinctive recognition of culture within LCSA: Realising the quadruple bottom line. *The International Journal of Life Cycle Assessment*, 23, 663–682.
- [21]. Rahadian, A. H. (2016). Strategi pembangunan berkelanjutan. *Prosiding Seminar STIAMI*, 3(1), 46–56.
- [22]. Robby, A. (2023). PENGARUH DIVERSITAS DEWAN KOMISARIS TERHADAP PENGUNGKAPAN MANAJEMEN RISIKO PERUSAHAAN (Studi Empiris Perusahaan BUMN yang Terdaftar Pada Bursa Efek Indonesia Tahun 2018–2021).
- [23]. Sari, M. (2018). Penerapan Good Corporate Governance Dalam Meningkatkan Kinerja Keuangan.
- [24]. Shabecoff, P. (2000). Sebuah nama baru untuk perdamaian: environmentalisme internasional, pembangunan berkelanjutan, dan demokrasi. *Yayasan Obor Indonesia*.
- [25]. Shank, T., Paul Hill, R., & Stang, J. (2013). Do investors benefit from good corporate governance? *Corporate Governance: The International Journal of Business in Society*, 13(4), 384–396.
- [26]. Soesanto, S. (2022). Akuntansi Lingkungan Menuju Ekonomi Hijau Perspektif Relasi Natural Sustainability dengan Keberlanjutan Bisnis. *Account: Jurnal Akuntansi, Keuangan Dan Perbankan*, 9(1).
- [27]. Sofa, F. N., & Respati, N. W. (2020). Pengaruh Dewan Direksi, Dewan Komisaris Independen, Komite Audit, Profitabilitas, Dan Ukuran Perusahaan Terhadap Pengungkapan Sustainability Report (Studi Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2017) Pengaruh Dewan Direksi. *Dinamika Ekonomi: Jurnal Ekonomi Dan Bisnis*, 13(1), 32–49.
- [28]. Tanujaya, K., & Anggreany, E. (2021). Hubungan dewan direksi, keberagaman gender dan kinerja berkelanjutan terhadap penghindaran pajak. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, 4(5), 1648–1666.
- [29]. Tjahjadi, B., Soewarno, N., & Mustikaningtyas, F. (2021). Good corporate governance and corporate sustainability performance in Indonesia: A triple bottom line approach. *Heliyon*, 7(3).
- [30]. Umaroe, I. K., & Hamidah, H. (n.d.). Pendidikan dan Pengalaman Kerja Dewan Direksi di Negara Maju terhadap Pengungkapan Keberlanjutan.
- [31]. Widianto, H. S., & PRASTIWI, A. (2011). Pengaruh Profitabilitas, Likuiditas, Leverage, Aktivitas, Ukuran Perusahaan, Dan Corporate Governance Terhadap Praktik Pengungkapan Sustainability Report (Studi Pada Perusahaan–Perusahaan Yang Listed (Go-Public) Di Bursa Efek Indonesia (Bei) Periode 2007–). *Universitas Diponegoro*.
- [32]. Wijaya, T. (2020). Pengaruh dewan direksi, dewan komisaris independen dan komite lingkungan terhadap pengungkapan emisi karbon pada perusahaan carbon intensive industry yang terdaftar di BEI Tahun 2016–2019. *Universitas Atma Jaya Yogyakarta*.
- [33]. Wulandari, R., & US, K. A. (2021). Sejarah perkembangan manajemen strategi dukungan stakeholder. *TRANSEKONOMIKA: AKUNTANSI, BISNIS DAN KEUANGAN*, 1(4), 336–348.
- [34]. Zahroh, H., Hartono, H., Ainayah, N., & Nugroho, T. R. (2023). Pengaruh Kepemilikan Institusional, Leverage Dan Ukuran Dewan Komisaris Terhadap Pengungkapan Corporate Social Responsibility (Csr) Dengan Ukuran Perusahaan Sebagai Variabel Pemoderasi. *Jurnal Mutiara Ilmu Akuntansi*, 1(4), 96–109.