

## Directors tenure diversity and corporate sustainability performance: The non-linear evidence from Indonesia public listed companies

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### ABSTRACT

The primary objective of this study is to thoroughly investigate the association between director tenure diversity and corporate sustainability performance. This study utilizes a sample comprising 578 firm-year observations from non-financial companies listed on the Indonesia Stock Exchange. To test the hypothesis, the study employs the Ordinary Least Squares method, complemented by a series of endogeneity tests. This study reveals that the sustainability performance of corporations in Indonesia falls significantly short of satisfactory levels. Furthermore, the study indicates that there is a negative association between tenure diversity and sustainability performance, demonstrating a U-shaped curve pattern. To ensure the robustness of our findings, we performed additional analysis using coarsened exact matching and Heckman (1979) two-stage least square methodologies, confirming that the results remained consistent with those of the initial test. Intriguingly, our supplementary analyses also revealed an inverse association between tenure diversity in the boardroom and sustainability performance within companies. This study makes a significant contribution to the corporate governance literature by elucidating the inverse association between director tenure diversity and sustainability performance. In doing so, it enhances the originality and novelty of existing studies, particularly within the context of developing countries, such as Indonesia. This study exhibits novelty by embracing a quantitative approach to measure sustainability performance, revealing an intriguing inverse association between sustainability performance and ESG initiatives within the companies.

### Introduction

Recent studies exploring boardroom diversity and its impact on companies have yielded varied results (Nosratabadi et al., 2019; Said et al., 2009; Yang et al., 2021). Some scholars have discovered that a diverse board motivates management to prioritize high organizational outcomes and fosters increased concern for them, although there remains an implicit meaning for diversity within the boardroom (Bui et al., 2020; Zanten & Tulder, 2018; Harymawan et al., 2021). Conversely, other studies have indicated that boardroom diversity can lead to subpar organizational outcomes (Harjoto et al., 2015). These researchers argue that as boards become increasingly diverse, the challenge of aligning their perspectives on various corporate issues intensifies, potentially resulting in conflicts and disagreements that hinder effective decision-making and overall company performance. Consequently, companies must thoroughly assess the potential benefits and drawbacks of boardroom diversity before implementing such strategies. Thus, the ongoing debate surrounding the intensification of diversity in the boardroom remains a notable limitation in existing studies (Nosratabadi et al., 2019; Said et al., 2009; Yang et al., 2021). Numerous conducted studies have yielded intriguing evidence. For instance, in Jordan, Ben-Amar and colleagues discovered a positive correlation between boardroom diversity and the extent of CSR disclosure (Ben-Amar et al., 2017). Conversely, Hafsi and Turgut sought to expand upon the findings from Ben-Amar and colleagues in Bahrain and observed a negative association with CSR quality but a positive relationship with sub-environmental and social performance (Hafsi & Turgut, 2013; Cahyono et al., 2024).

Substantial evidence suggests that the presence of diverse members on a company's board significantly influences corporate governance, thereby affecting practices related to Corporate Social Responsibility (CSR) disclosure (Gulluscio et al., 2020; Frias-Aceituno et al., 2013; Majeed et al., 2015; Harymawan et al., 2021). Among the extensively studied aspects of boardroom diversity are age, gender, experience, and education, with varying findings on their impact on factors such as CSR, company performance, and investment efficiency (Harjoto et al.,

2015; Katmon et al., 2019). Curiously, one area that has received comparatively less attention is the influence of tenure diversity within the boardroom on CSR disclosure.

Tenure diversity, as a diversity index based on directors' varying tenure backgrounds, has been investigated by scholars (Ferrero-Ferrero et al., 2015; Chang et al., 2017; Katmon et al., 2019; Harjoto et al., 2015). The tenure of directors is indicative of their experience and decision-making expertise, making it likely that differences in tenure could significantly impact a company's organizational outcomes, particularly with regard to CSR disclosure. Research has suggested that directors with longer tenures tend to make more informed decisions, given their extended experience with the company (Fallah & Mojarrad, 2019). However, it has also been found that an excessive disparity in tenure among directors could negatively affect a company's performance, especially when there are significant differences in tenure between certain directors.

In the context of developing countries, many research studies are bridging a crucial gap in the existing body of knowledge. Indonesia was selected as the site of this study for several compelling reasons. Firstly, Indonesia is widely acknowledged for its remarkable diversity, offering a unique opportunity to generate relevance evidence on the association between boardroom diversity, represented by directors' tenure, and corporate social responsibility (CSR) disclosure. Secondly, there are no prior studies have explored the link between board diversity and CSR disclosure concerning tenure representation. In fact, this study has made a significant contribution to the literature on diversity factors and their influence on company outcomes, often overlooked in previous studies. Thirdly, Indonesia has ratified a workplace policy that emphasizes the importance of diverse directors in the boardroom, steering away from promoting uniformity, which has limited impact on organizational outcomes. To fill this gap of the study relating to the board of director tenure and CSR disclosure, this study was conducted to investigate the relationship between the nexus.

This study utilizes a sample of Indonesian public companies during the period 2016-2019, excluding financial institutions, resulting in a total of 226 firm-year observations. The findings reveal a significant correlation between the diversity of directors in the boardroom, as measured by their tenure, and CSR disclosure, exhibiting a U-shaped relationship. Specifically, as the diversity of directors' tenure increases and they serve in the company for longer periods, there is a tendency for decreased emphasis on CSR, leading to a gradual decline in CSR disclosure. On the other hand, when there is more homogeneity among directors in terms of shorter tenure and less diversity, the focus on CSR is heightened, resulting in an increase in the impact of CSR disclosure. These results are consistent with Harjoto et al.'s (2015) study, which suggests that the diversity of directors in the boardroom, taking into account their experience, education, and tenure, may lead to reduced CSR disclosures, especially when directors have longer tenures.

This study presents a substantial contribution to the literature concerning boardroom director diversity, specifically focusing on directors' tenure and its impact on CSR disclosure. While previous research has primarily explored the direct effect of CEO tenure on CSR disclosure, our investigation encompasses a wider scope by considering board tenure more comprehensively. Additionally, we introduce board diversity as a new variable in the discussion of CSR disclosure. By adopting this comprehensive approach, we have gained valuable insights into the U-shaped relationship between tenure diversity and sustainability performance, which we believe will help elucidate the inconsistent findings reported in earlier studies. Moreover, our research expands the existing body of work on diversity in corporate governance. While prior studies have mainly concentrated on the direct effects of diversity on corporate governance and CSR disclosure, we have demonstrated that indirect effects, such as differences in tenure across boards that depend on the level of diversity, also merit consideration.

This paper is structured as follows: Section 2 presents a comprehensive literature review and elaborates on the development of hypotheses. In Section 3, the research methodology and data. Subsequently, Section 4 will delve into the empirical findings and offer a thorough discussion. Section 5 will encompass the conclusion, limitations, and recommendations for future research.

## Literature Review

### Tenure Diversity and CSR Disclosure: The Study of Upper Echelons Theory

CSR is strictly defined as corporate activities that go beyond compliance, involving "actions that advance social good beyond the interests of the company and can even give rise to legal liability" if the company does not carry out these obligations (Harjoto et al., 2015). Although CSR represents a strategic choice among various options that is important for firm value (Ji et al., 2021). However, these financial benefits often exceed the scope as usually explored in the recent studies within the scope of companies, where most companies will maximize the potential of their resources through CSR investment activities in the long term (Chang et al., 2017).

The issue of financial benefits from CSR is still debated; several independent and attributive studies report that companies that actively carry out CSR activities can improve their performance continuously in the long term (Chen et al., 2019), meanwhile, other studies reveal that there are negative consequences if companies disclose CSR (Nguyen et al., 2021). Those who express a negative view of this disclosure suspect that the company is trying

to cover up unfair activities in the decision-making process, for example carrying out earnings management and so on. On the other hand, many corporate strategic decisions related to CSR disclosure result in short-term profits that cannot be calculated as a form of maximum investment, such as cost cutting and funding for new products that only impact a small portion of the company's value (Zhu et al., 2016). In contrast, other studies show that the benefits of CSR actually operate through mechanisms that are less clear, difficult to identify, making it difficult for managers to estimate the benefits of CSR because these benefits may only be realized at a later date. Ultimately, it sparked public questions regarding the extent to which CSR research encourages companies to engage in these activities at a meaningful level.

Nowadays, many experts state that external and internal pressures play an important role in encouraging companies to engage in Corporate Social Responsibility (CSR) activities. The board of directors takes an important position as part of top management and is responsible for the actions and performance of the organization (Ibrahim & Hanefah, 2016). Therefore, the board of directors has a significant influence on CSR activities. Upper Echelon Theory posits that a company's decision-making process is reflected in the company's executive board (Graf-Vlachy et al., 1984), which is influenced by factors such as educational background, age, work experience, and personal values (Chen et al., 2019). These interplaying characteristics impact how top managers view information and approach decision making. In addition, Upper Echelon Theory explains that a company's strategic choices at the corporate level are shaped by the attributes and values of its top managers (Majeed et al., 2015). Several studies have effectively demonstrated the importance of upper echelon theory (C. Wang et al., 2021), exploring the impact of CEO characteristics on various strategic decisions, such as R&D expenditure (Z. Wang et al., 2018), investment efficiency (Nguyen et al., 2018). al., 2021), and viable acquisition options (Nguyen et al., 2021). It is clear that CEO attributes and experience provide valuable insight into the level of Corporate Social Responsibility (CSR) activities undertaken by the company.

However, the influence on strategic decisions is not limited to the CEO alone; On the contrary, it is the board of directors itself that has great power in shaping the company's success. Many existing studies support this argument by considering the effective of corporate decision. Nguyen et al. (2021) outline that diversity on boards, particularly in terms of effective tenure, results in stronger monitoring processes and better policy formulation compared to boards that do not have diversity. Diversity on the board also has a real impact on CSR activities (Harjoto et al., 2015). Furthermore, some experts argue that top management involvement in CSR activities is driven by the desire to uphold reputation, status, or leave a lasting legacy (Chen et al., 2019). Thus, it is important for companies to consider the composition of their board of directors, not only in terms of expertise and experience, but also in terms of diversity, as this can contribute significantly to the achievement of the company's strategic objectives and its social responsibilities.

Tenure diversity, as explored through the lens of upper echelons theory and resource-based view theory (Nguyen et al., 2021; Chen et al., 2019a; C. Wang et al., 2021), has significant implications for corporate boards of directors. Given the effectiveness of RBV theory, diversity at the board level is a key indicator of a board's capacity to achieve competitive advantage and unlock the board's potential. Tenure in the boardroom becomes a situational and personal preference that develops based on the demands and pressures experienced during a board member's tenure (Ji et al., 2021). Tenure diversity on the board of directors can improve the quality of decision making and innovation, because board members with different tenure backgrounds bring unique perspectives and experiences. This allows the board to be more responsive to changes in the business environment and more adaptive in facing strategic challenges. Apart from that, tenure diversity also plays a role in increasing legitimacy and trust from stakeholders, which in turn can support the achievement of the company's long-term goals.

Scholars have conducted intensive research on how tenure influences CEO behavior and corporate activities (Jeong et al., 2021). Additionally, in-depth research has been conducted to understand how tenure diversity at the board level results in better decision making for corporate strategy and activities. A number of experimental studies have successfully explored various interconnected themes, including social performance (Berzkalne & Zelgalve, 2014), research and development expenditure (Ji et al., 2021), investment efficiency (Zhang et al., 2013), new product discovery (Ali et al., 2014), financial performance, risk taking, market expansion, and environmental information disclosure, as well as CEO cognitive complexity (Jeong et al., 2021). The results of this research show that tenure and tenure diversity can influence not only overall company performance but also various specific aspects that determine a company's competitiveness and sustainability in a dynamic global market. For example, CEOs with longer tenure tend to have a deeper understanding of their companies, which can lead to wiser decision making and more effective long-term strategies. On the other hand, boards with high tenure diversity are often better able to adapt to market changes and integrate different perspectives in their decision-making processes, which can ultimately improve innovation and organizational performance.

CSR disclosure in several previous studies shows that the characteristics of top management play a role in shaping managerial decisions that have the potential to influence such disclosure. Various terms of office indicate the level of ability and capacity of a board in determining the extent of CSR disclosure. Based on the upper echelons theory (Hambrick, 1981), it is explained that board tenure is an important part that can be considered as a component

or factor that can influence decisions in the company, especially those related to CSR disclosure. For example, someone who has been involved for a relatively deeper time in the corporate world and is directly related to CSR activities, is allegedly able to identify the right decisions regarding CSR disclosure. Apart from that, Ardianto et al. (2024) found in their study that CEOs with relatively long terms of office have a higher ability to decide strategic issues in the company compared to colleagues who have relatively shorter terms of office. Therefore, this study considers relatively more diverse CEO tenures to capture differences in decisions related to CSR disclosure and how effective these decisions are on the disclosure issue.

### Hypothesis Development

Many of recent studies examine the relationship between tenure and CSR disclosure have revealed that excessively long tenures can lead to a decline in management performance, particularly concerning social and environmental issues (Jeong et al., 2021). Furthermore, the research on tenure-CSR disclosure has suggested potential implications for optimizing resources to enhance CSR quality (Harjoto et al., 2015). This motivation may stem from an agency relationship between the CEO and stakeholders, seeking positive legitimacy for the CEO's authority. In addition, it often involves signal mechanisms demonstrating the CEO's commitment to long-term strategies aimed at achieving future performance benefits (Chen et al., 2019). Meanwhile, it is noteworthy that certain CSR activities can be advantageous for CEOs. Consequently, we posit that the circumstances during a CEO's tenure lifecycle can influence their motivation and ability to customize CSR activities within the organization throughout their tenure period.

CSR disclosure is a company's practice of communicating actions, policies and results related to their social and environmental responsibilities to the public. These disclosures cover various aspects such as sustainability, fair work practices, community engagement, and ethical transparency (Ningsih et al., 2023; Cahyono et al., 2023; Ratri et al., 2021). According to UET, the characteristics and experiences of members of the board of directors collectively influence the strategic decisions taken by the company, including CSR disclosure policies and practices. Boards of directors with tenure diversity tend to have a rich combination of perspectives. Directors with longer tenure may be more conservative and focus on stability, while more recently joined directors may encourage innovation and new practices that are more proactive in CSR. This combination can produce a more comprehensive and balanced CSR policy. In addition, the existence of directors with varying terms of office allows companies to balance stability and innovation. Existing directors can ensure continuity and consistency in CSR practices, while new directors can drive the changes needed to improve the company's CSR performance. In the perspective of organizational responsiveness, directors with varying tenure may have different networks and relationships with diverse stakeholders. This allows companies to be more responsive and accommodating to various stakeholder needs and expectations, which ultimately improves the quality and relevance of CSR disclosures.

Several studies explain that CSR practices are strongly influenced by the characteristics of top management. Wu et al. (2018) show that CEO tenure can reduce a company's CSR disclosure. This is possible because CEOs with long terms of office tend to make decisions that are not beneficial to the company. Because, they will prioritize short-term profits. Harjoto et al. (2015) revealed that a CEO must replace their leadership, because with an extension of the term of office and not accompanied by a change in leadership structure, the company's strategic decisions will tend to have long-term impacts, for example CSR is often misused for the purpose of acquiring positions. Additionally, Katmon et al. (2019) in their study regarding various aspects of board diversity, such as gender, age, tenure and nationality, have a significant impact on the quality of CSR reporting. In particular, the study argues that the diversity of the board of directors, represented by the CEO's tenure, will significantly influence the quality of CSR reporting. In line with the findings of Jeong et al. (2021) which provides empirical evidence that CEO tenure tends to follow irregular behavior which causes CSR disclosures to tend to be lower or higher.

By raising the perspective of the upper echelons theory, this study seeks to reveal a broader and more comprehensive view by prioritizing the tenure of the board of directors which tends to influence the perspective of decision making regarding CSR in the long term. The board of directors has various duties and functions that can influence decisions regarding CSR disclosure (Cahyono et al., 2023; Ratri et al., 2021). In addition, the characteristics of top management represented by the board of directors align with the meaning from the perspective of upper echelons theory which states that management characteristics are not enough to be seen as one of the various top management. Therefore, by taking a step from the perspective of the board of directors, this study seeks to highlight how the tenure of the board of directors can influence management decisions related to CSR disclosure. Thus, our hypothesis is stated as follows.

*H<sub>1</sub>: Ceteris paribus, there is a relationship between tenure diversity and CSR disclosure will be U-shaped.*

### Research Method

The current study applies quantitative approach to answer the research question. We follow Ghozali (2016) and Cahyono (2023) to identify the research objectives and design regarding the issues of this study. In particular, we incorporate descriptive study to explain the implication of the study and develop the avenue of research

recommendation. This study collected a sample of 226 non-financial firm-years from the Indonesia Stock Exchange database for the period 2016-2019. The CSR information was obtained through sustainability reporting from each company. Table 1 illustrates the distribution of the sample based on industry types. SIC 1, 2, and 6 represent industries with the highest number of sustainability reports, while SIC 0, 5, and 7 have relatively fewer reports. Additionally, the sample distribution is analyzed based on tenure diversity, with SIC 0, 1, and 2 showing higher levels of tenure diversity compared to SIC 5, 7, and 8.

Table 1. Sample selection and sample distribution by industry SIC code digit

## Panel A: Sample selection for firm-years observations

	Total
The initial sample selection available from 2016-2022	697
Disqualified:	
Missing data of the disclosure of CSR	(158)
Missing data of board of director's tenure	(126)
Missing data of control variable	(187)
Final sample	226

## Panel B: Sample distribution by industry SIC code digit

Industry	2016		2017		2018		2019	
	N	%	N	%	N	%	N	%
(SIC 0) Agriculture, Forestry, and Fisheries	5	8.77	4	7.84	4	7.41	5	7.81
(SIC 1) Mining	17	29.82	15	29.41	16	29.63	19	29.69
(SIC 2) Construction	12	21.05	11	21.57	9	16.67	13	20.31
(SIC 3) Manufacturing	6	10.53	7	13.73	8	14.81	9	14.06
(SIC 4) Transportation, Communication, and Utilities	5	8.77	6	11.76	7	12.96	8	12.50
(SIC 5) Wholesale and Retail Trade	3	5.26	3	5.88	2	3.70	3	4.69
(SIC 6) Finance, Insurance, and Real Estate	6	10.53	3	5.88	5	9.26	4	6.25
(SIC 7) Services	1	1.75	1	1.96	1	1.85	1	1.56
(SIC 8) Health, Legal, and Educational Services and Consulting	2	3.51	1	1.96	2	3.70	2	3.13
Total	57	100.00	51	100.00	54	100.00	64	100.00

## Panel C: Sample distribution by the level of diversity

Industry	More Diversity		Less Diversity		Total	
	N	%	N	%	N	%
(SIC 0) Agriculture, Forestry, and Fisheries	10	8.00	8	7.92	18	7.96
(SIC 1) Mining	33	26.40	34	33.66	67	29.65
(SIC 2) Construction	28	22.40	17	16.83	45	19.91
(SIC 3) Manufacturing	17	13.60	13	12.87	30	13.27
(SIC 4) Transportation, Communication, and Utilities	13	10.40	13	12.87	26	11.50
(SIC 5) Wholesale and Retail Trade	7	5.60	4	3.96	11	4.87
(SIC 6) Finance, Insurance, and Real Estate	14	11.20	4	3.96	18	7.96
(SIC 7) Services	1	0.80	3	2.97	4	1.77
(SIC 8) Health, Legal, and Educational Services and Consulting	2	1.60	5	4.95	7	3.10
Total	125	100.00	101	100.00	226	100.00

## Variable Definitions and Measurement

The primary focus of this study lies in examining Corporate Social Responsibility (CSR) disclosure (CSR D), which serves as the dependent variable. CSR disclosure is quantified by the proportion of item disclosures made by companies in relation to the total number of items that ought to have been reported in their sustainability reports, following the Global Reporting Initiative (GRI) guidelines. The formulation of the CSR D equation is as follows:

$$CSR D_{i,t} = \frac{\sum X_{i,t}}{N_{i,t}} \quad (1)$$

$CSR D_{i,t}$  represents the Corporate Social Responsibility (CSR) proportion of firm  $i$  in year  $t$ .  $X_{i,t}$  denotes the extent of item disclosure by companies in firm  $i$  during year  $t$ , and  $N_{i,t}$  signifies the total item disclosure by companies in firm  $i$  for the same year. The total number of disclosed items can be found in the sustainability report's conclusion. Simultaneously, the independent variable under consideration is the diversity of board tenure (BODTENURE),

calculated using the Blau Index. The Blau Index (BI) relies on information from the annual report regarding the tenure of the board of directors serving the company. The board of directors' tenure is measured from their first year of service until the year of the research's execution. Consequently, the cumulative tenure of each board of directors in the company is determined. Subsequently, the board of directors' tenures are categorized into time spans of 0-3, 4-6, 7-9, 10-12, and > 13 years, following the methodology of prior studies (Harjoto et al., 2015). The Blau Index equation is formulated as follows:

$$B_i = 1 - \sum_{i=1}^k P_i^2 \quad (2)$$

As formulated,  $B_i$  represents the value of the diversity index, where  $k$  denotes the number of diverse classes and  $i$  corresponds to the first class of diversity. Additionally,  $P_i$  denotes the values of each class of diversity. Furthermore, our analysis incorporates various control variables: FIRM SIZE, MTB, ROA, CASHTA, INDCOMSIZE, FIRMAGE, BIG4, INTANGIBLES, LEVERAGE, LOSS, INDCOM, RMC, and GROWTH.

Table 2. Variable Definitions and Measurements

Variable	Measurement	Source
Dependent Variable		
<i>CSR D</i>	Proportion of items disclosed by the company with items that should be disclosed	<i>Sustainability Report</i>
Independent Variable		
<i>BODTENURE</i>	Proportions of Blau Index	<i>Annual Report</i>
Control Variable		
<i>FIRM SIZE</i>	Natural logarithm of total assets	OSIRIS
<i>MTB</i>	Ratio market to book value by given years	OSIRIS
<i>ROA</i>	Ratio of return on total assets	OSIRIS
<i>CASHTA</i>	Ratio total cash to total assets	OSIRIS
<i>INDCOMSIZE</i>	Total of independent commissioner on the board of committee	OSIRIS
<i>FIRMAGE</i>	Natural logarithm age of the firm	OSIRIS
<i>BIG4</i>	Dummy variable if the company is audited by BIG4 accounting firm	OSIRIS
<i>INTANGIBLES</i>	Natural logarithm of the company's total intangible assets	OSIRIS
<i>LEVERAGE</i>	Ratio total debt to assets	OSIRIS
<i>LOSS</i>	Dummy variable, 1 if the company in the previous year had a negative pretax profit and 0 vice versa	OSIRIS
<i>FEMALE</i>	Dummy variable, 1 if the company has at least one of female director on the board of director, and 0 vice versa	OSIRIS
<i>RMC</i>	Dummy variable, 1 if the company has at least one risk management committee, and 0 vice versa	OSIRIS
<i>GROWTH</i>	Prosentase growth of sales compared with previous sales by given years	OSIRIS
Instrument Variable		
<i>AVE BODTENURE</i>	Average of tenure diversity by industry-years	<i>Annual Report</i>
Additional Variable		
<i>ENVIRONMENT</i>	Proportion of items environmental disclosed by the company with items that should be disclosed	<i>Sustainability Report</i>
<i>ECONOMIC</i>	Proportion of items economic disclosed by the company with items that should be disclosed	<i>Sustainability Report</i>
<i>SOCIAL</i>	Proportion of items social disclosed by the company with items that should be disclosed	<i>Sustainability Report</i>

#### Empirical model specification

This study employs an Ordinary Least Squares (OLS) model combined with a fixed-effect model to investigate the non-linear relationship between tenure diversity and CSR (Corporate Social Responsibility) disclosure. The regression model, represented by Equation 1, is utilized to test our hypothesis:

$$CSR D_{i,t} = \beta_0 + \beta_1 BODTENURE_{i,t} + \beta_2 BODTENURE^2_{i,t} + \beta_3 FIRM SIZE_{i,t} + \beta_4 MTB_{i,t} + \beta_5 ROA_{i,t} + \beta_6 CASHTA_{i,t} + \beta_7 INDCOMSIZE_{i,t} + \beta_8 FIRMAGE_{i,t} + \beta_9 BIG4_{i,t} + \beta_{10} INTANGIBLES_{i,t} + \beta_{11} LEVERAGE_{i,t} + \beta_{12} LOSS_{i,t} + \beta_{13} FEMALE_{i,t} + \beta_{14} RMC_{i,t} + \beta_{15} GROWTH_{i,t} + \varepsilon \quad (3)$$

Let  $CSR D_{i,t}$  represent the dependent variable for company  $i$  in year  $t$ .  $BODTENURE_{i,t}$  signifies the diversity of board tenure, and the term  $BODTENURE^2_{i,t}$  is included to account for potential nonlinear effects of CSR. We also consider various control variables. To account for pooled data characteristics, we correct errors by grouping standard errors according to each company. Additionally, we control for year effects, industry effects, and GRI (Global Reporting Initiative) effects. To mitigate the impact of outliers, all variables are winsorized at the 1% and 99% levels.

## Result and Discussion

### Univariate analyses: statistic descriptive

Table 3 presents the descriptive statistical findings of the conducted study. The results reveal that, on average, companies disclosed Corporate Social Responsibility (CSR) at a rate of 63.3% in accordance with the Global Reporting Initiative (GRI) guidelines. Additionally, the average proportion of companies with tenure diversity levels is 46.6%, and an overwhelming majority of 88.2% of the companies demonstrate gender diversity. Regarding auditing practices, an average of 90.2% of companies undergo audits by a significant 4, while only 2.9% of the companies experienced losses in the previous year. The average company size accounts for 63.8%, and the typical company age is 3,674. Furthermore, the data shows that 86.7% of companies have remuneration committees, and approximately 42.9% of the total companies have risk management committees.

Table 3. Statistics Descriptive

	Mean	Median	Min	Max	SD	P25	P75
CSR	0.685	0.700	0.227	0.989	0.179	0.605	0.796
BODTENURE	0.396	0.367	0.200	0.552	0.100	0.307	0.552
FIRMSIZE	30.744	30.818	25.934	34.887	1.723	29.593	31.992
MTB	3.259	1.303	-1.055	82.444	8.268	0.809	2.358
ROA	0.046	0.030	-0.549	0.921	0.100	0.010	0.069
LOSS	0.116	0.000	0.000	1.000	0.320	0.000	0.000
CASHTA	0.121	0.109	0.001	0.546	0.091	0.050	0.172
LEVERAGE	1.284	0.958	-45.959	13.543	3.454	0.562	1.851
FIRMAGE	0.336	0.000	0.000	1.000	0.473	0.000	1.000
INDCOMSIZE	0.399	0.400	0.000	3.000	0.192	0.333	0.500
INTANGIBLES	3.030	2.000	1.000	22.000	3.444	1.000	3.000
BIG4	0.600	1.000	0.000	1.000	0.491	0.000	1.000
FEMALE	2.190	2.000	0.000	6.000	1.058	1.000	3.000
RMC	0.409	0.000	0.000	1.000	0.492	0.000	1.000
GROWTH	5.542	5.000	2.000	12.000	2.028	4.000	7.000

### Bivariate analyses: correlation matrix

Table 4 presents the findings of the Pearson correlation analysis examining the relationship between board ownership diversity and CSR disclosure. The results indicate that there is a positive and statistically significant correlation between BODTENURE, BODTENURE2, and CSRD at the 5% level of significance. This implies that board tenure diversity is associated with relatively substantial CSR disclosures and exhibits nonlinear relationships. Moreover, the correlation between GENDER and CSRD is negative and significant at the 5% level, suggesting that a more diverse gender representation on the board is associated with increased CSR disclosure. Additionally, our study demonstrates that multicollinearity issues have been effectively addressed, as indicated by an average variation inflation factor (VIF) below 10.

Table 4. Pearson Correlation

	VIF	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
[1] CSR		1.000															
[2] BODTENURE	11.38	0.005 (0.932)	1.000														
[3] BODTENURE <sup>2</sup>	11.32	-0.005 (0.920)	0.955*** (0.000)	1.000													
[4] FIRMSIZE	10.82	-0.039 (0.472)	0.399*** (0.000)	0.393*** (0.000)	1.000												
[5] MTB	8.81	0.031 (0.572)	0.004 (0.941)	0.006 (0.909)	-0.173*** (0.001)	1.000											
[6] ROA	4.97	-0.032 (0.551)	0.020 (0.707)	0.020 (0.713)	-0.174*** (0.001)	0.477*** (0.000)	1.000										
[7] LOSS	2.50	0.061 (0.254)	-0.097* (0.069)	-0.096* (0.071)	-0.155*** (0.004)	-0.001 (0.989)	-0.415*** (0.000)	1.000									
[8] CASHTA	1.83	0.025 (0.678)	0.015 (0.807)	0.031 (0.605)	0.032 (0.601)	-0.144** (0.019)	0.157*** (0.009)	-0.198*** (0.001)	1.000								
[9] LEVERAGE	1.79	-0.014 (0.815)	-0.033 (0.586)	-0.019 (0.752)	0.065 (0.282)	0.086 (0.164)	0.112* (0.063)	-0.150** (0.013)	0.008 (0.897)	1.000							
[10] FIRMAGE	1.69	0.055 (0.305)	0.006 (0.915)	0.014 (0.787)	0.017 (0.749)	-0.033 (0.552)	-0.059 (0.276)	-0.052 (0.329)	-0.012 (0.845)	0.086 (0.156)	1.000						
[11] INDCOMSIZE	1.36	-0.004 (0.947)	0.059 (0.310)	0.079 (0.174)	0.119** (0.042)	-0.119** (0.042)	-0.073 (0.214)	-0.041 (0.486)	-0.017 (0.790)	0.125* (0.053)	0.040 (0.491)	1.000					
[12] INTANGIBLES	1.29	-0.043 (0.460)	-0.084 (0.145)	-0.108* (0.059)	0.012 (0.835)	-0.076 (0.188)	-0.084 (0.146)	0.058 (0.312)	-0.065 (0.309)	-0.046 (0.472)	0.297*** (0.000)	0.007 (0.912)	1.000				
[13] BIG4	1.28	0.032 (0.570)	-0.139** (0.012)	-0.123** (0.027)	0.222*** (0.000)	0.010 (0.864)	0.188*** (0.001)	-0.096* (0.085)	0.101 (0.112)	-0.001 (0.993)	-0.110* (0.048)	-0.067 (0.255)	0.040 (0.496)	1.000			
[14] FEMALE	1.24	-0.062 (0.285)	0.243*** (0.000)	0.292*** (0.000)	0.536*** (0.000)	-0.162*** (0.005)	-0.044 (0.458)	-0.087 (0.138)	-0.048 (0.453)	0.111* (0.086)	0.016 (0.780)	0.534*** (0.000)	-0.066 (0.278)	0.118** (0.045)	1.000		
[15] RMC	1.23	-0.047 (0.381)	0.230*** (0.000)	0.237*** (0.000)	0.382*** (0.000)	-0.054 (0.324)	-0.202*** (0.000)	0.140*** (0.009)	-0.008 (0.891)	0.069 (0.263)	-0.130** (0.015)	-0.037 (0.521)	-0.189*** (0.001)	0.223*** (0.000)	0.157*** (0.007)	1.000	
[16] GROWTH	1.12	-0.061 (0.295)	0.195*** (0.001)	0.224*** (0.000)	0.530*** (0.000)	-0.092 (0.117)	0.031 (0.598)	-0.069 (0.236)	-0.008 (0.903)	0.027 (0.677)	-0.040 (0.498)	-0.059 (0.310)	-0.027 (0.655)	0.195*** (0.001)	0.741*** (0.000)	0.165*** (0.005)	1.000

p-values in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## Main result: tenure diversity and CSR disclosure

Table 5 presents the OLS regression results examining the relationship between the diversity of directors' tenure and corporate CSR disclosures. The variables *BODTENURE* and *BODTENURE*<sup>2</sup> reveal a statistically significant negative association with CSR disclosure. Specifically, the coefficient for *BODTENURE* is found to be 4.967 ( $t = 4.65$ ), and for *BODTENURE*<sup>2</sup>, it is -6.116 ( $t = -4.63$ ), both significant at the 1% level. These results suggest that CSR disclosure is influenced by directors' tenure in a non-linear manner. These findings align with a prior empirical study conducted by Jeong et al. (2021), which also demonstrated a curvilinear relationship between CEO tenure and CSR disclosure. However, it is essential to note that we diverge from Jeong and their collaborators in our interpretation. According to our study, tenure diversity is associated with a decrease in CSR disclosure among Indonesian public companies.

Table 5. Ordinary Least Square (OLS)

	(1) CSR	(2) CSR
<i>Intercept</i>	0.401*** (3.28)	-0.482*** (-4.53)
<i>BODTENURE</i>	0.024** (2.13)	4.967*** (4.65)
<i>BODTENURE</i> <sup>2</sup>		-6.116*** (-4.63)
<i>FIRMSIZE</i>	0.009*** (3.76)	0.007*** (3.59)
<i>MTB</i>	-0.001** (-2.40)	-0.001*** (-2.78)
<i>ROA</i>	0.004** (2.02)	-0.095*** (-2.59)
<i>LOSS</i>	0.075* (1.95)	0.057 (1.51)
<i>CASHTA</i>	0.082 (0.59)	0.121 (0.86)
<i>LEVERAGE</i>	0.001*** (3.20)	0.006*** (3.03)
<i>FIRMAGE</i>	-0.010*** (-3.39)	-0.011*** (-3.41)
<i>INDCOMSIZE</i>	0.201** (2.35)	0.206** (2.55)
<i>INTANGIBLES</i>	-0.005*** (-4.95)	-0.006*** (-3.42)
<i>BIG4</i>	0.018*** (4.68)	0.009*** (4.34)
<i>FEMALE</i>	-0.092** (-2.41)	-0.094** (-2.59)
<i>RMC</i>	-0.049 (-1.61)	-0.034 (-1.16)
<i>GROWTH</i>	0.024*** (3.56)	0.023*** (3.57)
<i>GRI Fixed Effect</i>	<i>Included</i>	<i>Included</i>
<i>Industry Fixed Effect</i>	<i>Included</i>	<i>Included</i>
<i>Year Fixed Effect</i>	<i>Included</i>	<i>Included</i>
<i>R-Squared</i>	0.458	0.517
<i>N</i>	226	226

This table reports the baseline regression analysis between *BODTENURE* and CSR disclosure on 226 firm-year observations. Model (1) is an ordinary least square test without quadratic model that indicate non-linear testing, meanwhile, model (2) is an ordinary least square test using quadratic model to indicate non-linear model. The analysis using winsorized data at 1 and 99 percent level,  $t$  statistic is parentheses \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

## Robustness Test

## Coarsened exact matching analysis

In Tables 6 and 7, the outcomes of the CEM (Coarsened Exact Matching) analysis are presented to address the issue of endogeneity and ensure the consistency of the model constructed in this study. This test entails dividing the control variables into three and five strata, classifying them based on the characteristics of the independent variables. Table 6 contains two panels: Panel A and Panel B, which display the results of the CEM summary. In Panel A, the characteristics of the independent variables are categorized into three strata. Among the 210



observations, 117 belong to companies exhibiting high tenure diversity, whereas 91 observations indicate the opposite scenario. Meanwhile, Panel B represents the grouping of observations into five strata. Out of 110 observations, 52 correspond to companies with high tenure diversity, while the remaining 45 out of 148 show the converse pattern. These findings affirm the effectiveness of the CEM analysis in addressing endogeneity and maintaining model consistency in the study.

Table 6. CEM Matching Summary

Panel A: Strata 3		
	BODTENURE = 1	BODTENURE = 0
<i>All</i>	210	148
<i>Matched</i>	117	91
<i>Unmatched</i>	93	57
Panel B: Strata 5		
<i>All</i>	210	148
<i>Matched</i>	52	45
<i>Unmatched</i>	158	103

Table 7 presents the outcomes of the OLS regression based on the division of three and five strata, and the findings remain robust, further confirming the results obtained from the primary analysis. These findings indicate a negative, non-linear relationship between tenure diversity and CSR disclosure.

Table 7. Coarsened Exact Matching Regression

	Panel A: STRATA 3		Panel B: STRATA 5	
	(1) <i>CSR</i>	(2) <i>CSR</i>	(3) <i>CSR</i>	(4) <i>CSR</i>
<i>Intercept</i>	0.394*** (3.88)	-0.557*** (-4.23)	-1.695*** (-2.64)	-2.380*** (-4.16)
<i>BODTENURE</i>	0.177 (0.68)	4.676*** (4.31)	-0.454 (-1.48)	3.843*** (3.04)
<i>BODTENURE^2</i>		-5.679*** (-3.93)		-5.546*** (-3.35)
<i>FIRMSIZE</i>	0.012 (0.81)	0.013 (0.89)	0.082*** (3.72)	0.076*** (3.51)
<i>MTB</i>	-0.004** (-2.18)	-0.004** (-2.49)	0.020*** (2.66)	0.018*** (2.71)
<i>ROA</i>	0.045 (0.21)	-0.046 (-0.22)	0.589 (1.36)	0.389 (0.87)
<i>LOSS</i>	0.081*** (2.68)	0.058*** (3.21)	0.219*** (3.38)	0.184*** (2.64)
<i>CASHTA</i>	0.034 (0.19)	0.135 (0.75)	0.115 (0.56)	0.254 (1.25)
<i>LEVERAGE</i>	0.006*** (3.00)	0.011** (2.01)	-0.019*** (-2.86)	-0.016*** (-3.70)
<i>FIRMAGE</i>	-0.017 (-0.55)	-0.023 (-0.76)	-0.049 (-1.07)	-0.055 (-1.27)
<i>INDCOMSIZE</i>	-0.275** (-2.44)	-0.007*** (-3.01)	0.531*** (2.76)	0.965** (2.31)
<i>INTANGIBLES</i>	-0.005 (-1.08)	-0.007 (-1.60)	-0.008 (-0.95)	-0.014 (-1.48)
<i>BIG4</i>	0.019*** (3.64)	0.017*** (4.61)	0.013*** (4.28)	-0.005** (-2.10)
<i>FEMALE</i>	-0.021 (-0.25)	-0.072 (-0.85)	-0.226 (-1.59)	-0.295* (-1.98)
<i>RMC</i>	-0.006 (-0.21)	0.003 (0.10)	-0.067 (-1.48)	-0.044 (-0.99)
<i>GROWTH</i>	0.005 (0.17)	0.016 (0.51)	0.048 (0.89)	0.059 (1.02)
<i>GRI Fixed Effect</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>
<i>Industry Fixed Effect</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>
<i>Year Fixed Effect</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>
<i>R-Squared</i>	0.097	0.160	0.394	0.454
<i>N</i>	153	153	79	79

This table reports CEM regression analysis on 153 firm-year observations on models (1) and (2), 79 firms-year observations on models (3) and (4). Shrinkage of sample size due to the limitation on matching firm characteristics on both sample group, treatment, and control group. This analysis uses winsorized data at 1 and 99 percent levels. t statistics in parentheses \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

## Heckman two-stage least square analysis

Previously, we posited the existence of potential unobservable variables that could impact the relationship between tenure diversity and CSR (Corporate Social Responsibility) disclosure. Unobservable variables refer to those not explicitly included in the main regression model but may have a connection with the dependent variable. As a result, we hypothesize that a high diversity of tenure among board members in the average public company in Indonesia might influence other companies to enhance their board of directors' diversity (AVE\_BODTENURE). We firmly believe that the tenure diversity of a public company's board of directors plays a crucial role in the organization's long-term interests and aligns with its overall organizational outcomes. To assess this relationship, we utilize the Heckman Two-Stage Model, as presented in Table 8. Panel A depicts the first stage, while Panel B represents the second stage of the model.

Table 8. Heckman (1979) Two-Stage Least Square

FIRST STAGE	
	(1) <i>BODTENURE</i>
<i>Intercept</i>	-7.563*** (-3.03)
<i>AVE_BODTENURE</i>	3.239** (2.13)
<i>FIRMSIZE</i>	0.248*** (2.88)
<i>MTB</i>	-0.015 (-1.33)
<i>ROA</i>	2.691** (2.05)
<i>LOSS</i>	-0.152 (-0.51)
<i>CASHTA</i>	0.091 (0.09)
<i>LEVERAGE</i>	-0.061 (-1.26)
<i>FIRMAGE</i>	0.040 (0.19)
<i>INDCOMSIZE</i>	-1.256 (-1.48)
<i>INTANGIBLES</i>	0.010 (0.38)
<i>BIG4</i>	-0.979*** (-4.70)
<i>FEMALE</i>	0.596** (2.01)
<i>RMC</i>	0.552*** (2.68)
<i>GROWTH</i>	-0.245** (-2.00)
<i>GRI Fixed Effect</i>	<i>Included</i>
<i>Industry Fixed Effect</i>	<i>Included</i>
<i>Year Fixed Effect</i>	<i>Included</i>
<i>Pseudo R<sup>2</sup></i>	0.141
<i>N</i>	226

Our Heckman two-stage least square analysis model revealed a significant positive relationship at the 5% level between AVE\_BODTENURE and organizational tenure diversity (coef. = 3.239, t = 2.13). This suggests that average firms in the industry, utilizing BODTENURE, tend to consider tenure diversity as an integral part of their organizational structure. In the second stage, we obtained consistent results with the main analysis. The coefficients of BODTENURE and BODTENURE<sup>2</sup> were statistically positive and negative, respectively, with BODTENURE (Coeff. = 5.480, t = 4.39) and BODTENURE<sup>2</sup> (Coeff. = -6.415, t = -4.63). Regarding MILLS, the results were not statistically significant on CSRD (coefficients = 0.014 and 0.170, t = 0.06 and 0.81). These outcomes support the robustness of our model in the main analysis, indicating a limited impact of endogeneity problems, particularly concerning unobservable variables. However, it is worth noting that the MILL variable in the CSR model exhibited non-statistically significant results.

	SECOND STAGE	
	(1)	(2)
	<i>CSR</i>	<i>CSR</i>
<i>Intercept</i>	0.329 (0.26)	-1.404 (-1.18)
<i>BODTENURE</i>	0.046 (0.11)	5.480*** (4.39)
<i>BODTENURE</i> <sup>2</sup>		-6.415*** (-4.63)
<i>FIRMSIZE</i>	0.011 (0.30)	0.031 (0.95)
<i>MTB</i>	-0.001 (-0.28)	-0.003 (-1.08)
<i>ROA</i>	0.026 (0.06)	0.170 (0.45)
<i>LOSS</i>	0.074* (1.75)	0.044 (1.08)
<i>CASHTA</i>	0.083 (0.58)	0.135 (0.93)
<i>LEVERAGE</i>	0.001 (0.07)	0.000 (0.01)
<i>FIRMAGE</i>	-0.010 (-0.37)	-0.008 (-0.30)
<i>INDCOMSIZE</i>	0.192 (1.03)	0.091 (0.54)
<i>INTANGIBLES</i>	-0.005* (-1.66)	-0.005* (-1.80)
<i>BIG4</i>	0.011 (0.08)	-0.085 (-0.69)
<i>FEMALE</i>	-0.087 (-0.99)	-0.038 (-0.47)
<i>RMC</i>	-0.045 (-0.56)	0.018 (0.25)
<i>GROWTH</i>	0.022 (0.61)	0.000 (0.00)
<i>MILLS</i>	0.014 (0.06)	0.170 (0.81)
<i>GRI Fixed Effect</i>	<i>Included</i>	<i>Included</i>
<i>Industry Fixed Effect</i>	<i>Included</i>	<i>Included</i>
<i>Year Fixed Effect</i>	<i>Included</i>	<i>Included</i>
<i>R-Squared</i>	0.058	0.120
<i>N</i>	226	226

This table reports Heckman Two-Stage Least Square (Heckman 2-SLS) analysis on 226 firm-year observations. Shrinkage of sample size due to the limitation on matching firm characteristics on both sample group, treatment, and control group. This analysis uses winsorized data at 1 and 99 percent levels. t statistics in parentheses \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

#### Additional Analysis

##### Splitting tenure diversity

Our primary supplementary investigation aims to explore the impact of tenure diversity on CSR disclosure, examining the relationship through a non-linear lens. Specifically, we focus on two distinct divisions: 30% and 60%. The former represents a condition with a relatively low degree of variability, while the latter stands for the opposite scenario with a higher level of diversity. Table 9 reveals that the non-linear pattern manifests itself when firms exhibit a significant level of diversity, as evidenced by the 60% division. Surprisingly, we also uncover compelling evidence of a non-linear relationship at the 30% level, which serves as an initial indication of the findings derived from the main analysis.

Table 9. Tenure Diversity and CSR Disclosure on specification for BOD Tenure

	(1) CSR	(2) CSR
<i>Intercept</i>	0.526*** (3.63)	-0.128*** (-3.39)
<i>BODTENURE</i>	-0.605 (-1.47)	3.054*** (3.92)
<i>BODTENURE^2</i>		-4.225*** (-4.07)
<i>BODTENURE30%</i>	-0.130** (-2.13)	-0.088 (-1.43)
<i>BODTENURE 60%</i>	0.098*** (3.22)	0.064** (2.07)
<i>Control</i>	<i>Included</i>	<i>Included</i>
<i>GRI Fixed Effect</i>	<i>Included</i>	<i>Included</i>
<i>Industry Fixed Effect</i>	<i>Included</i>	<i>Included</i>
<i>Year Fixed Effect</i>	<i>Included</i>	<i>Included</i>
<i>R-Squared</i>	0.113	0.135
<i>N</i>	226	226

The table above shows an analysis of tenure diversity broken down by the level of diversity, where 30% indicates that the level of tenure diversity is in the bottom 30 of 100% of tenure diversity. On the other hand, 60% indicates that the level of tenure diversity is in the top 6 of 100% of diversity tenure. The analysis results show that tenure diversity is statistically significant at the lowest 30% level in the linear test, but in the non-linear test, it is not statistically significant. In contrast to the top 60% level, it shows that tenure diversity is not only a linear test but also linearly shows statistically significant results. The analysis uses winsorized data at the level of 1 and 99 percent. t statistic in brackets \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

## Conclusion

This study investigates the intricate relationship between director tenure diversity on the boardroom and CSR disclosure, adopting a non-linear approach. The findings reveal a negative, non-linear correlation between tenure diversity and CSR disclosure. These results remain consistent even after conducting tests to address endogeneity concerns and performing supplementary analyses. Notably, having diverse tenure on the board of directors leads to reduced CSR disclosure. This suggests that greater diversity in tenure widens the gap in decision-making effectiveness, particularly concerning the management of the company's internal resources, including CSR disclosure. This discovery aligns with previous research, demonstrating that a CEO's lengthy tenure positively influences a company's CSR activities (Choi et al., 2020). However, it contrasts with other studies indicating that longer board tenure negatively impacts the quality of CSR initiatives (Harjoto et al., 2015).

In addition, this study answers research questions related to whether the term of office of the board of directors will influence CSR disclosure in a U-shaped form. Based on the findings presented previously, the tenure of the board of directors is proven to form a U curve pattern. The tenure of the board of directors has a significant influence on CSR disclosure, which can be depicted in the form of a U curve. At the beginning of the term, CSR disclosure tends to be low because the board New companies need time to understand company dynamics and implement effective strategies. They may also face internal resistance or information limitations that hinder their ability to make significant changes in CSR disclosures. As time passes, board directors reach the midpoint of their tenure, where they have accumulated sufficient experience and understanding of the company. At this stage, CSR disclosure tends to increase as the board is able to overcome initial obstacles and implement more proactive and innovative policies. However, if the term of office is too long, CSR disclosure may decrease again. This happens because board members who serve too long may become less innovative, less responsive to external changes, or too comfortable with the status quo. Therefore, CSR disclosure follows a U-shaped pattern, where the level of disclosure is low at the beginning, increases in the middle term of office, and decreases again at the end of the term of office.

The implications of the finding that board of directors' tenure influences CSR disclosure in the form of a U curve are very important for corporate policy and governance practices. First, it shows the need for a balanced strategy for appointing and replacing board members. Companies need to ensure that board members' terms of office are long enough to allow them to understand and influence company strategy, but not so long that they become unresponsive to change and new innovations. This could mean imposing term limits to avoid stagnation and ensure there is a continuous flow of fresh ideas at board level. Second, the findings also indicate that ongoing training and development for board members is essential. By providing regular training and updates on CSR trends and best practices, companies can ensure that board members remain up-to-date and motivated to continually improve CSR disclosures. Additionally, rotation of board members could be considered to bring new perspectives that can drive innovation and better responses to emerging CSR challenges and opportunities. Implementation of

this policy will help companies maintain optimal levels of CSR disclosure throughout the term of office of the board of directors.

The current study has made significant contributions to the field of corporate governance, particularly regarding the impact of board of directors' tenure on the quality of CSR disclosure. Furthermore, it has raised public interest in the evaluation of director tenure within companies, given its relation to the directors' performance in driving CSR initiatives. Nevertheless, it is essential to take into account various regulations pertaining to the term limits for board members, especially with regard to strategic decision-making and efforts to promote board rotation. This consideration will ensure a balanced approach to corporate governance and facilitate effective CSR activities conducted by the company.

Moreover, we acknowledge that our study is subject to several limitations that warrant consideration. Firstly, the selection of research samples was confined to a four-year period spanning from 2016 to 2019. This limited time frame might not provide a comprehensive representation of the broader trends and developments over time. Additionally, our study's sample did not encompass all available GRI G3 and GRI G4 indexes from previous years, potentially overlooking important data and insights. Furthermore, it is essential to note that the adoption of the GRI index by companies in Indonesia is not yet widespread, despite existing regulations that prescribe the implementation guidelines for corporate sustainability reports. As a result, the applicability of our findings may be constrained by the limited availability and coverage of GRI-based data in the region. To advance the field, future research should explore the incorporation of alternative Corporate Social Responsibility (CSR) measures. By considering various metrics, a more comprehensive and multi-dimensional perspective can be attained, enriching the existing body of research in this domain.

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