



The impact of board of the commissioners characteristics on governance, environment, and ethics disclosures

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Abstract

This study aims to analyze and describe the effect of Board of Commissioners Size, Board of Commissioners Independence, Gender Diversity, and Frequency of Board of Commissioners Meetings on Governance, Environment, and Ethics Disclosure in Manufacturing Companies listed on the Indonesia Stock Exchange for the period 2020-2022. This study uses agency theory to generate tested hypotheses. This study uses purposive sampling technique with certain criteria in sampling. In accordance with the established criteria, 129 research samples were obtained for 3 consecutive years and using logistic regression analysis. The results of this study indicate that: (1) The size of the board of commissioners has no significant effect on disclosure of governance, environment, and ethics; (2) The independence of the board of commissioners has a significant positive effect on disclosure of governance, environment, and ethics; (3) Gender diversity has no significant effect on disclosure of governance, environment, and ethics; (4) The frequency of board of commissioners meetings has no significant effect on disclosure of governance, environment, and ethics; The results obtained from testing the coefficient of determination analysis R Square is 44.1%. It can be concluded that there are 45.9% other independent variables that affect the disclosure of governance, environment, and ethics, outside the independent variables that have been tested in the study.

Keywords: Board of commissioners size, board of commissioners independence, gender diversity, board of commissioners meeting frequency, governance disclosure, environment, and ethics

Introduction

In the era of globalization, businesses are not only required to seek profits but must also take care to implement good governance, environmental concerns, and adherence to business ethics. (Wijonarko & Woro Astuti, 2022). The growth of social awareness has encouraged companies to look beyond financial numbers, recognizing that their long-term success is inextricably tied to the way they manage relationships with the environment and society. Almashhadani and Almashhadani (2023) ^[4] emphasize that governance, environmental, and ethical disclosures are not just additional elements, but are key pillars that determine the sustainability and reputation of companies in highly competitive markets.

Companies that can maintain environmental ethics and communicate them well will gain many benefits. Improving the company's reputation in the community is one of the benefits. Trust is important in a manufacturing company, and this can increase public confidence in the company. In POJK 51/POJK.03/ 2017, OJK emphasizes the importance of environmental disclosure, encouraging public companies. This shows the Indonesian legislators' awareness of the importance of maintaining environmental sustainability and paying attention to the social impact of business activities, especially in sectors that use natural resources directly (Scientific & Education, 2022) ^[7].

The evaluation results of the ASEAN CSR Networks (2021) show that, in relation to sustainability, Indonesia has the lowest environmental disclosure among others. The analysis emphasizes that, in addition to being the lowest among others, environmental disclosure in Indonesia is also a serious problem. It should be kept in mind that Indonesia has more serious environmental problems than other ASEAN countries, especially related to exploitative

business activities. The problem of environmental disclosure in Indonesia must be fixed immediately. Compared to its neighbors in the ASEAN region and at the global level, Indonesia is quite behind in terms of environmental protection. In Indonesia, environmental damage could become even more massive if companies and regulators do not catch up. This is due to the fact that Indonesia's environmental quality is also poor. Indonesia's business regulators are also very concerned about this issue.

When it comes to business ethics, integrity and respect for moral principles and values are of paramount importance. This includes, among other things, respect for human rights, honest operations and fair treatment of employees, customers and business partners. Strong ethical disclosure helps build a positive reputation (Pham & Tran, 2020) ^[14] which in turn strengthens relationships with customers and increases their loyalty. In the era of social media and high transparency, ethical violations can quickly damage a company's reputation (Mahaputra & Saputra, 2020). (Mahaputra & Saputra, 2021) ^[10], demonstrating the importance of maintaining high ethical standards.

The characteristics of the Board of Commissioners are important. The proportion of independent commissioners ensures that board decisions are not unduly influenced by management. (Nilmawati *et al.*, 2021) The proportion of independent commissioners helps in maintaining integrity and objectivity in governance-related decisions. Board members' expertise and experience in governance, environmental and ethical aspects are also crucial. Boards with in-depth knowledge of these issues are better able to identify potential risks and opportunities, and develop responsible and sustainable strategies. Share ownership by board members can add to their motivation to ensure the long-term success of the company, in line with governance,

environmental and ethical principles. Some board characteristics that have a very important impact on governance, environmental and ethical disclosure include the number of commissioners, board independence, gender diversity, and frequency of board meetings. (Khairiddine *et al.*, 2020) ^[9].

Manufacturing companies were sampled because the increasing number of manufacturers in Indonesia has led to an increase in environmental damage due to waste generated by manufacturing operations. In addition, manufacturing companies are also located near residential areas and their waste has a direct impact on the community. This is due to the fact that manufacturing companies in Indonesia do not really realize the importance of disclosing environmental information. This makes the public believe that the government should oversee it. Environmental disclosure is the disclosure of explanations about a company's concern for the environment that improves its corporate image, as businesses have a significant impact both directly and indirectly on the environment. In addition to environmental disclosure, this research also examines the impact of corporate governance and ethics disclosure.

Theoretical framework and literature review

This section explains the theory used in the research, a framework that describes the relationship between research variables, and the development of research hypotheses.

Agency theory

Jensen and Meckling (1976) state that agency theory is the most commonly used theory to explain *corporate governance* disclosure. This theory focuses on the problems that occur between managers and shareholders when shareholders give managers the authority to make decisions. Therefore, from an agency theory perspective, corporate disclosure is useful in matching the needs of managers with shareholders. Ultimately, agency theory states that *corporate governance* best practices reduce management opportunism and make companies more accountable to shareholders and other stakeholders. As a result, the company can minimize agency costs (Khairiddine *et al.*, 2020) ^[9].

According to agency theory, company management functions as an agent for stakeholders and shareholders and acts as a principal. Information about the company's condition must be provided to the principal by the company's management as an agent. Company management discloses social responsibility to obtain a positive assessment from the principal about the company's social and environmental performance (Joshua, 2017) ^[8]. (Joshua, 2017) ^[8]. Company management acts as principal and agent for shareholders and stakeholders according to agency theory. Company management must act as an agent to provide information about the company's condition to the *principal*. To get a positive assessment from the principal about the company's social and environmental performance, company management makes social responsibility disclosures (Lara, 2022). (Lara, 2022).

Conceptual model

The framework describes the relationship between research variables in schematic form. This study uses dependent variables, independent variables, and control variables.

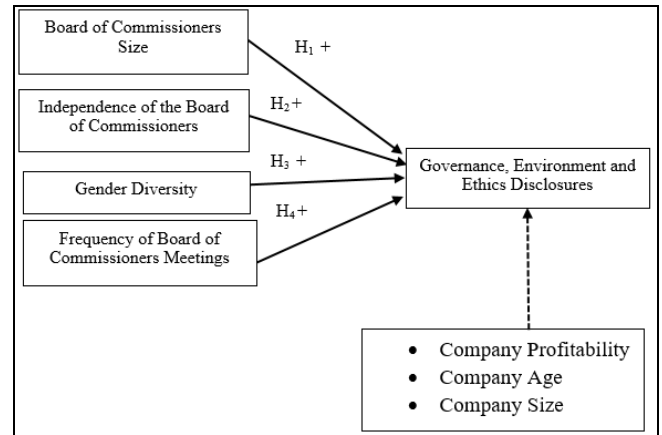


Fig 1: Conceptual model of the study

Hypothesis development

Effect of board of commissioners size on governance, environment, and ethics disclosure

In agency theory, the size of the board of commissioners affects company performance because one of the management systems is the board of commissioners, which allows members of the board of directors to maximize their role in managing the company. The task of the board of commissioners is to ensure management performance to ensure that the business is running well and protect the interests of the shares. The board of commissioners manages the company and is responsible for setting the strategic outline, operational policies, and the health level of the company's management. So, the more members of the board of commissioners, the clearer the tasks assigned to each member, which will benefit the company. In addition, the more members of the board of commissioners, the more relationships with parties outside the company, which in turn will increase the company's financial performance. A study conducted by Purnomo 2021 found that the frequency of the board of commissioners has a positive impact on financial performance due to the number of their relationships and is responsible for setting strategic outlines, operational policies, and the level of health of the company's management. (Haryani & Susilawati, 2023) ^[6]. Thus, the greater the proportion of Independent Commissioners owned by the company, it is hoped that the performance of the board of commissioners will be able to act more objectively and be able to protect the interests of the company in this case encouraging increased disclosure of governance, environment and ethics. These considerations can be used as the basis for the initial hypothesis that can be made as follows:

H1: Board size has a positive effect on governance, environmental and ethical disclosures.

The effect of board of commissioners independence on disclosure of governance, environment, and ethics

Independent members of the board of commissioners are the key to successful management of the company. Independent members of the board of commissioners are not affiliated with the controlling shareholders, not affiliated with other commissioners or directors, not working as directors for other companies, and not involved in capital market supporting institutions or professions whose services are used by the company. To be independent, members of the board of commissioners must have a mind that is free from

influence, not affected by others, and not dependent on others. In addition, independence can be defined as someone who is honest by considering facts objectively and impartially when making decisions. With an independent board of commissioners, it is expected that they will manage the company professionally, each of them has a specific area of expertise. (Samin & Wijaya, 2019) ^[16]. The second hypothesis is formulated as follows based on this:

H2: The independence of the board of commissioners has a positive effect on disclosure of governance, environment and ethics.

The effect of gender diversity on disclosure of governance, environment, and ethics

Previous studies have shown that women are perceived to be more socially and ethically sensitive than men, and this gender balance can have an impact on CSR (Corporate Social Responsibility) disclosure levels. The majority of studies have shown that there is a positive correlation between board gender diversity and CSR disclosure levels. In the study, Isa and Muhammad (2014) found that female boards have more capabilities, experience, and achievements compared to male boards. Therefore, female boards have the ability to support companies to be better corporate citizens and provide more information about CSR. According to research conducted by Liao *et al.* (2018), board diversity affects strategic decisions on CSR assurance. In other words, more board diversification will affect how management interprets CSR operations, and more get comparative benefits from CSR assurance, which develops the understanding and trust of the owner's needs. In addition, Khan and Senturk (2019) found that consistent disclosure of CSR practices is more likely with diverse resources. According to stakeholder and resource theory, research shows that gender diversity encourages companies to take part in various socially responsible environmental practices. Therefore, environmental, social and economic sustainable performance should be achieved by female directors over a long period of time. According to legitimacy and neo-institutional theories, placing female directors on the board enhances the company's image as they become more accountable and committed to society and the environment. (Tanujaya & Anggreany, 2021) ^[17]. Thus, the third hypothesis is formulated as follows based on this:

H3: Gender diversity has a positive effect on governance, environmental and ethical disclosures.

Effect of frequency of board meetings on disclosure of governance, environment, and ethics

The purpose of frequent board meetings is to increase control and validate the CEO's decisions to ensure that he is managing according to standards. (Universitatis *et al.*, 2016) showed a favorable relationship between the number of board meetings and the level of CG disclosure. Yusoff *et al.* (2016) suggest that a board of directors that meets more frequently will be more involved in the company's CSR disclosure and disclosure. The number of board meetings

held annually by a company's board of commissioners is referred to as the frequency of board meetings. According to Brick and Chidambaran (2007) in Suhardjanto *et al.* (2012), more frequent board meetings improve company performance. According to PBI Number 8/14/PBI/2006, the board of commissioners must hold regular meetings at least four times a year. A study conducted by Vafeas *et al.* (2003) and Suhardjanto *et al.* (2012) shows that the frequency of board of commissioners meetings is positively correlated with the level of company performance. So, the company's success will encourage more disclosure in its annual report. (Dewi, 2018) ^[5]. The fourth hypothesis is formulated as follows based on this:

H4: Frequency of board meetings has a positive effect on disclosure of governance, environment, and ethics.

Research methodology

This section describes the research population and sample, the variables used and their measurements, and the research model.

Population and sample

In terms of population size and characteristics, the sample is considered a component of the population. The population also consists of subjects or subjects that have been predetermined by the researcher. According to research by Camelia Radu, Nadia Smaili, and Adela (2022) ^[15], aspects that affect the environmental and social performance of companies include board independence, size, gender, and frequency of board meetings. The population studied was manufacturing companies listed on the IDX from 2020 to 2022. Purposive sampling was utilized as a sample selection technique. A sampling strategy considering specific criteria is called purposive sampling. The following are the sample criteria in this study:

1. The manufacturing sector listed on the Indonesia Stock Exchange (IDX) for the period 2020-2022.
2. Manufacturing sector companies that provide data on independent and control variables for at least 2 years out of the 3 years used in the research on governance, environment, and ethics.
3. Companies that delisted during the observation year and those listed after 2020
4. Manufacturing sector companies that publish complete annual reports and sustainability reports required in measuring test variables during the 2020-2022 period.

Variables and measurement

The dependent variables in this study are corporate governance disclosure index, corporate environment disclosure index, and voluntary ethics disclosure measured by dummy method. The characteristics of the board of commissioners are seen through four aspects as independent variables, and also company profitability, company age and company size as control variables.

Here are some indicators of CGDI measurement according to Al-Bassam *et al* (2018) ^[1], namely:

Table 1: CGDI Measurement Indicators

SCGI theme	SCGI indicator items
Board of Directors	Board of Directors and its Composition
	1. Are the roles of chairman and CEO/MD separated
	2. Whether the chairman is an independent non-executive director
	3. Whether the board of directors consists of a majority of non-executive directors

The following are the measurement indicator items in ENVDI according to (Odoemelam & Okafor, 2018) [11] are:

Table 2: ENVDI Measurement Indicators

Product and process related environmental issues
Sewage pollution emissions
Waste
Packaging
Recycling
Products and product development
Material utilization efficiency
Product energy efficiency
Product safety
Rehabilitation

In this study, to measure ETHDI using several ETHDI measurement indicators according to (Othman *et al.*, 2014) [13] namely:

Table 3: ETHDI Measurement Indicator

No.	Ethics disclosure type indicator
1	Have a written code of ethics
2	Have a board of directors committee that oversees ethics
3	Have a corporate ethics/compliance officer
4	Using ethics in hiring directors/executives
5	Linking executive compensation to ethics
6	Ethics training/ethics recognition
7	Field of ethics:

The following are the variables used in this study and their measurements:

Table 4: Variable & measurement

Variables	Symbol	Measurement
Dependent Variable Corporate Governance Disclosure Index (CGDI) Corporate Environment Disclosure Index (ENVDI) Voluntary Ethics Disclosure (ETHDI)	Y	$CGDI = \sum_{i=1}^n \text{quantity } i / \text{max quantity}$ $ENVDI = \sum_{i=1}^n \text{quantity } i / \text{max quantity}$ $ETHDI = \sum_{i=1}^n \text{quantity } i / \text{max quantity}$ quantityi 1 if item i is disclosed; 0 if item i is not disclosed MAX quantity= the maximum applicable disclosure quantity score; and n=number of items disclosed
Independent Variable		
Board of Commissioners Size	BSize	Natural log of the number of Board of Commissioners
Independence of the Board of Commissioners	BInd	Percentage of the number of independent commissioners to the total number of members of the board of commissioners
Gender Diversity	BGender	Percentage of female directors to total board members
Frequency of Board of Commissioners Meetings	BMeetings	Number of board of commissioners meetings in one year
Control Variables		
Company Profitability	FProfitability	Net profit after tax divided by total assets
Company Age	Fage	IPO date of each company
Company Size	FSize	Natural logarithm of the company's total assets

Research model

The relationship between the three variables will be analyzed using multiple regression analysis. In this study, the regression model formed is as follows:

$$Y = \beta + \beta_0 \cdot BSize + \beta_2 \cdot BInd + \beta_3 \cdot BGender + \beta_4 \cdot BMeetings + \beta^5 \cdot FProfitability + \beta^6 \cdot FAge + \beta^5 \cdot FSize + \epsilon$$

Research results and discussion

The research results and discussion section contains an explanation of sample selection and findings which include descriptive statistical analysis, classical assumption tests, and hypothesis testing.

Description of research sample

Based on the criteria previously described, 129 companies were obtained from a total of 452 companies which will be explained again using the table below:

Table 5: Sample Selection

No.	Criteria	Total
1	Manufacturing company sector listed on the Indonesia Stock Exchange (IDX) in 2020-2022	452
2	The company does not contain data on independent and control variables for at least 2 years out of the 3 years used in the study.	(401)
3	Companies that delisted during the observation year and those listed after 2020	(5)
4	Companies that publish incomplete annual reports and sustainability reports	(3)
	Number of samples per year	43
	Total observation	129

Descriptive statistics

Table 6 shows the descriptive statistics of several variables relevant to the financial and corporate governance context. These variables include Profitability, Company Age (in years), Company Size, Board of Commissioners Size, Board of Commissioners Independence, Gender Diversity, Board of Commissioners Meeting Frequency, and Governance, Environment, and Ethics Disclosure.

Profitability, which is measured in a range from -.70 to .35, has an average of .0460 with a standard deviation of 0.11196. Company age varies from 6 to 42 years, with an average age of 25.9535 years and a standard deviation of 9.51929 years. Based on the IPO date, the longest established company is PT Unilever Ind Tbk (January 11, 1982) and the company whose IPO Date year is close to the research year is PT MNC Digital Entertainment Tbk (June 8, 2018).

Company Size, in the range of 27 to 33, has an average of 30.6434 with a standard deviation of 1.20415. Furthermore, the Board of Commissioners Size varies between 0 to 10, with an average of 4.8992 and a standard deviation of 2.12075.

The Independent Variable in this study is the Independence of the Board of Commissioners, which is measured in percentage, has an average of 0.3500 and a standard deviation of 0.20734. Gender Diversity, which ranges from 0 to 3, has an average of 0.4651 with a standard deviation of 0.70762. Board of Commissioners Meeting Frequency ranges from 0 to 21, with an average of 7.6124 and a standard deviation of 3.61920. Finally, Governance, Environment and Ethics Disclosure, measured in the range of 0.40 to 1.00, has an average of 0.8627 and a standard deviation of 0.12107. For the lowest company there is PT Global Mediacom Tbk and for the maximum value of 1.00 there are several companies such as, PT Aneka Tambang Tbk, PT Sumber Alfaria Tbk, and others. From the data, it can be seen that large variations occur in each variable, which indicates a large diversity in the characteristics of the observed companies. For example, the wide range of values in the variable Frequency of board meetings from 0 to 21 indicates the differences in board meeting practices among the observed companies. In addition, the relatively high standard deviations in some variables indicate a significant degree of variability or dispersion in the data.

Table 6: Descriptive statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Profitability	129	-.70	.35	.0460	.11196
Firm Age (Years)	43	6.00	42.00	25.9535	9.51929
Firm Size	129	27.00	33.00	30.6434	1.20415
Board of Commissioners Size	129	.00	10.00	4.8992	2.12075
Independence of the Board of Commissioners	129	.00	1.00	.3500	.20734
Gender Diversity	129	.00	3.00	.4651	.70762
Frequency of Board of Commissioners Meetings	129	.00	21.00	7.6124	3.61920
Governance, Environment and Ethics Disclosures	129	.40	1.00	.8627	.12107
Valid N (listwise)	129				

Source: Secondary data processing, 2024

Classical assumption test

The classical assumption test is used to assess the reliability of using the regression model, which includes several tests, namely normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. Table 7 presents the results

of the normality test using the Kolmogorov-Smirnov test. It is concluded that the data is normally distributed. This conclusion can be seen from the amount of asymp.sig (2-tailed) obtained is 0.178 (Sig>0.05).

Table 7: Kolmogorov-smirnov normality test results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
	N	129
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.02731212
Most Extreme Differences	Absolute	.115
	Positive	.064
	Negative	-.115
	Test Statistic	.115
	Asymp. Sig. (2-tailed)	.178 ^c

Source: Secondary data processing, 2024

Table 8 shows that in the regression model of this study there is no multicollinearity event. This result is viewed from the tolerance and VIF values with each variable, the

amount of both exceeds 0.1 for *tolerance* and less than 10.00 for VIF.

Table 8: Multicollinearity test results

Model		Coefficients ^a					Collinearity Statistics	
		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.	Tolerance	VIF
1	(Constant)	.432	.145		2.982	.005		
	Profitability	.005	.055	.013	.095	.925	.824	1.214
	Firm Age (Years)	.001	.000	.379	2.900	.006	.936	1.068
	Firm Size	.006	.004	.187	1.355	.184	.835	1.197
	Board of Commissioners Size	.017	.006	.882	2.789	.008	.159	6.271
	Independence of the Board of Commissioners	.159	.060	.830	2.650	.012	.163	6.153
	Gender Diversity	-.008	.006	-.181	-1.283	.208	.807	1.240
	Frequency of Board of Commissioners Meetings	-.002	.001	-.221	-1.680	.102	.925	1.082

Source: Secondary data processing, 2024

Figure 2 shows that there is no heteroscedasticity in this regression model. This can be seen from the fact that no

clear pattern appears, and the average data points spread above and below the numbers on the Y-axis.

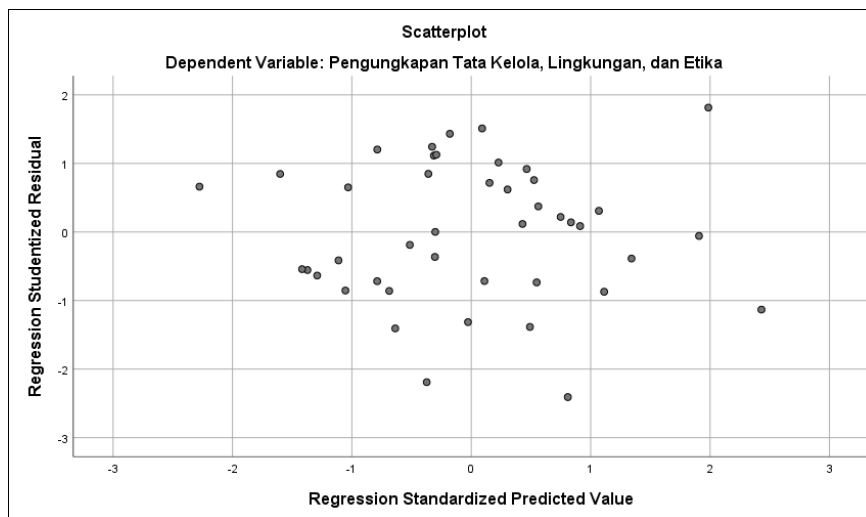


Fig 2: Heteroscedasticity test results (Scatter plot)

Table 9 concluded that the DW coefficient obtained in this study is between the dL and 4-dL values (1.5999<1.962<2.4001) which indicates that this regression model does not occur autocorrelation.

Table 9: Autocorrelation test results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.664 ^a	.441	.330	.02862	1.962

Source: Secondary data processing, 2024

Hypothesis test coefficient of determination

Table 10 shows that the recorded R value is 0.664, which indicates that the independent variable and the dependent variable are interconnected. The resulting R Square is 0.441, indicating that the independent variables can influence the dependent variable by about 44.1%, while the remaining 55.9% is influenced by other factors. The lower Adjusted R Square, of 0.330, indicates that after adjustment for the number of predictors in the model, only 33% of the variance can be explained by the model.

Table 10: Determination coefficient test

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.664 ^a	.441	.330	.02862

Source: Secondary data processing, 2024

Table 11 shows that the regression model as a whole does not show a significant effect on the dependent variable, with an Fcount value of 3.949 and when viewed from df₁ (k-1 = 7), and df₂ (n-k-1 = 120), the Ftable is 2.0868 (Fcount>Ftable) and a p-value of 0.003.

Table 11: F statistical test results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.023	7	.003	3.949	.003 ^b
	Residuals	.029	35	.001		
	Total	.051	42			

Source: Secondary data processing, 2024

Table 12 shows the results of the partial effect test (t test) of the regression model in the table above shows the relative impact of each independent variable on the dependent variable, namely Governance, Environment, and Ethics

Disclosure. The following is the interpretation for each variable. When viewed from the t test *cut off*, in this study, the t table is 1.98 which is obtained from df (n-k = 121; 5%).

Table 12: T statistical test results

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.432	.145		2.982	.005
	Profitability	.005	.055	.013	.095	.925
	Firm Age (Years)	.001	.000	.379	2.900	.006
	Firm Size	.006	.004	.187	1.355	.184
	Board of Commissioners Size	.017	.006	.882	2.789	.008
	Independence of the Board of Commissioners	.159	.060	.830	2.650	.012
	Gender Diversity	-.008	.006	-.181	-1.283	.208
	Frequency of Board of Commissioners Meetings	-.002	.001	-.221	-1.680	.102

Source: Secondary data processing, 2024

Profitability: the regression coefficient obtained is 0.095 which indicates that every 1% increase in profitability can increase the disclosure of governance, environment, and ethics by 0.095. The t-test results show that the profitability variable does not have a significant influence on disclosure of governance, environment, and ethics (t = 0.095, p = 0.925).

Company Age (Years): The regression coefficient obtained is 2.9 which indicates that every 1% increase in company age can increase disclosure of governance, environment, and ethics by 2.9. The t-test shows that company age has a significant influence on disclosure (t = 2.9, p = 0.006).

Firm Size: this variable shows a regression coefficient of 1.355 which indicates that every 1% increase in *firm size* can increase disclosure of governance, environment, and ethics by 1.355. No significant effect was detected from firm size on disclosure (t = 1.355, p = 0.184).

Board of Commissioners Size: The regression coefficient obtained is 2.789 which indicates that every 1% increase in the size of the board of commissioners can increase the disclosure of governance, environment, and ethics by 2.789. When viewed from the results of t count and significance, the variable size of the board of commissioners has a significant partial positive effect on disclosure of governance, environment, and ethics (t = 2.789, p = 0.008), then H1 is accepted. These results are in line with previous research by Khaireddine *et al.* (2020) ^[9] and Radu *et al.* (2022) ^[15] Khaireddine *et al.* (2020) ^[9] and Radu *et al.* (2022) ^[15] explain that when viewed from the theory of resource dependence, it can be seen that the size of the board of commissioners increases company performance. Then, the number of company directors, both inside and outside, is referred to as the board. A larger board usually has more experience, financial expertise, and ability to solve problems, which can improve the company's reputation and image. As a result, the board is more effective in supervising and discovering managers' opportunistic behavior.

Independence of the Board of Commissioners: The regression coefficient obtained is 2.650 which indicates that every 1% increase in the independence of the board of commissioners can increase the disclosure of governance,

environment, and ethics by 2.650 and when viewed from the t test, shows that there is a positive significant effect between the independence of the board of commissioners on the disclosure of governance, environment, and ethics (t = 2.650, p = 0.012), then H2 is accepted. The results of this test are similar to Nindiasari (2021) and Olayinka Erin (2022) who concluded that board independence is positively associated with better corporate governance practices and higher levels of disclosure. These findings reinforce the argument that board independence is not just a formal aspect of corporate structure, but also has substantial implications in enhancing corporate transparency and responsibility to shareholders and other stakeholders.

Gender Diversity: the results show that the regression coefficient of gender diversity is -1.283 which indicates that every 1% increase in gender can reduce the disclosure of governance, environment, and ethics by -1.283. No significant effect was detected from gender diversity on governance, environmental, and ethical disclosures (t = -1.283, p = 0.208). Based on the research results, although there is an indication that gender diversity on the board of commissioners can potentially influence the level of corporate governance, environmental and ethical disclosures, the statistical test results show that this relationship is not significant. This proves that in the context of this study, gender diversity does not significantly affect the level of disclosure made by companies. This result indicates that the gender diversity factor on the board of commissioners does not significantly affect the level of corporate governance, environmental, and ethical disclosures in this study then H3 is rejected.

Frequency of Board of Commissioners Meetings: the regression coefficient is -1.680 which shows that every 1% increase in the frequency of board of commissioners meetings, it can reduce the disclosure of governance, environment, and ethics by -1.680. The t-test shows that the frequency of board of commissioners meetings has no significant impact on disclosure of governance, environment, and ethics (t = -1.680, p = 0.102). From the data analysis conducted, the statistical test results show that the relationship between the frequency of board meetings and corporate governance, environmental and ethical disclosures is not significant. On the other hand, agency

theory highlights the importance of good oversight of business management, which can be improved through the frequency of board meetings. However, the results of this study contradict previous research, such as the study by Ismiyanto & Putranti (2023) highlighting the importance of the frequency of board of commissioners meetings in creating an inclusive work environment that is responsive to governance, environmental and ethical issues, H4 is rejected.

Conclusions and limitations

This section contains research conclusions, research limitations, and suggestions for future research.

Conclusion

Profitability variables have no impact on disclosure of governance, environment, and ethics. This means that the level of profitability, which is usually measured by financial indicators such as *Return on Assets* (ROA), does not always correlate directly with the level of disclosure of governance, environment, and ethics.

The variable company age has a positive influence on disclosure of governance, environment and ethics. The research shows that the age of the business, or the length of time it has been operating, has a positive impact on the level of disclosure of information on governance, environment and ethics.

The firm size variable has no impact on disclosure of governance, environment, and ethics. The research shows that company size, which is often measured through indicators such as total assets, is not always directly related to the level of governance, environmental and ethical disclosures.

The board size variable has no adverse effect on governance, environmental and ethical disclosures. This means that neither large nor small boards of commissioners significantly reduce the quality or quantity of governance, environmental and ethical disclosures. In other words, board size, which is calculated based on the number of board members, has a positive impact on the level of governance, environmental and ethical disclosures.

The independence variable of the board of commissioners has a positive effect on disclosure of governance, environment and ethics. This means that the higher the level of independence of the board of commissioners, the more likely the company is to disclose information related to governance, environment and ethics.

The gender diversity variable has no effect on disclosure of governance, environment, and ethics. This suggests that gender differences in the board of commissioners or management, as measured by the proportion of women in these positions, do not necessarily correlate directly with the level of governance, environmental and ethical disclosures.

The variable frequency of board meetings has no influence on disclosure of governance, environment, and ethics. This shows that the level of disclosure of governance, environment, and ethics is not always related to the frequency of board meetings, which is calculated based on the number of board meetings during a certain period.

Limitations

The limitations contained in this study include:

1. The available data only covers 3 years, 2020-2022, so it cannot provide a long-term picture.

2. During this time period, only a few companies published annual reports and sustainability reports in 2022, so only 129 companies could be taken as the final sample.
3. The companies used in this study focus on manufacturing sector companies only.

Advice

Suggestions on this research are as follows:

1. Later studies can conduct research over a period of more than three years, so the findings can shed light on circumstances over various times.
2. The results of further research can be broader by including other companies besides manufacturing listed on the Indonesia Stock Exchange. In this way, the results can be seen more broadly.
3. Suggestions for researchers for future research are to involve a wider range of variables in analyzing the effect of board size on disclosure of governance, environment, and ethics.

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