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Corporate Environmental Disclosure: Exploring Real Earning Management, Governance, and Moderating Role of Audit Committees

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Abstract

In Indonesia, environmental disclosure remains limited due to the absence of clear guidelines for reporting corporate environmental performance. This study aims to examine the role of audit committees in reinforcing key factors influencing environmental disclosure. Using secondary data and a quantitative approach, the research focuses on 104 companies in the agricultural, basic industry, and chemical sectors listed on the Indonesia Stock Exchange (IDX). Through purposive sampling, 12 companies from the 2019-2023 period were selected, yielding a dataset of 60 observations. The study employs multiple linear regression for data analysis. Findings indicate that the board of commissioners' size has a positive impact on environmental disclosure, whereas company size and real earnings management (REM) do not exhibit significant effects. Additionally, the audit committee does not moderate the relationship between these factors and environmental disclosure, except for the size of the board commissioner. These results suggest that corporate governance, particularly the structure of the board of commissioners with the audit committee, plays a crucial role in enhancing environmental reporting. However, the audit committee's lack of moderation highlights the need for stronger regulatory frameworks and clearer responsibilities in corporate sustainability oversight. Policymakers and stakeholders may consider developing comprehensive guidelines to improve environmental disclosure practices across industries. This study contributes to the existing body of knowledge by shedding light on the specific governance structures that influence environmental disclosure in Indonesia, with a focus on the moderating role of audit committees in shaping disclosure practices.

Keywords: Company size, environmental disclosure, Governance, REM.

Introduction

In realizing its main goal of gaining profit, the company must also be responsible for paying attention to the welfare of the surrounding area and contributing to preserving the environment. Ignoring environmental welfare responsibilities can cause environmental problems that cause various disasters (Kurniawan, 2019). The case of the level of environmental disclosure is still low, namely in 2019 Joko Widodo explained that there were 11 companies causing losses to the state with a total loss of IDR 18.3 trillion. The eleven companies carried out forest burning and forest damage. In addition, the government has still not been able to overcome environmental damage that still occurs from forest fires (Dewi et al., 2019).

Environmental problems attract attention from various parties, such as the community, creditors, environmentalists, shareholders and the government. The government plays a very important role in regulating industrial governance so that environmental pollution does not occur and causes environmental damage (Sari et al., 2018). Industrial companies cause public unrest that demands that companies be transparent in disclosing activities that affect the environment as a form of corporate responsibility. Corporate responsibility can be seen from its corporate governance mechanism. Suppose the corporate governance mechanism is well organized and provides information on company activities that have an impact on environmental sustainability and society. In that case, corporate responsibility has been carried out properly (Maulia & Yanto, 2020).

Environmental disclosure is a report that explains the impact of a company's activities on the environment. Company activities on the environment include recycling, waste management, carbon management, emissions and pollution. The increasing need for sustainability disclosure information has become a main pillar of the company along with the increasing awareness of stakeholders in environmental disclosure (Wahyuningrum et al., 2020). Environmental disclosure plays a very important role in government environmental management programs, including PROPER (Company Performance Rating Assessment Program), AMDAL (Environmental Impact Analysis), and environmental management systems (Kurniawan, 2019). One of the factors in environmental disclosure is the board of commissioners, the board of commissioners has an obligation to provide advice to the board of directors and carry out decisions and is responsible as a supervisor. The board of commissioners has good supervision of management by minimizing fraud in financial reports carried out by managers (Mutmainah & Indrasari, 2017). Research conducted by Trisnawati et al. (2022), Suryarahman & Trihatmoko (2021), and Mutmainah & Indrasari (2017) shows that the size of the board of commissioners has an effect on environmental disclosure, while research conducted by Suprapti, et al. (2019) and Hidayat et al. (2023) shows that the size of the board of commissioners has no effect on environmental disclosure.

Another factor is that company size has a relationship with environmental disclosure, if large companies have higher social responsibility and show more concern for the environment in order to get a good image for stakeholders. Research conducted by Trisnawati et al. (2022), Suryarahman & Trihatmoko (2021), and Dewi & Yasa (2017) shows that company size has an effect on environmental disclosure. Meanwhile, research conducted by Fashikhah, et al. (2018) and Oktariyani & Meutia (2016) shows that company size does not have an effect on environmental disclosure. The interests of management and owners in optimizing all company activities to gain greater profits, this forces managers to take personal or self-interest actions by using deception on income reporting policies so that the company's income report looks better than it actually is, such as real earnings management. Management that carries out real earnings management uses company environmental disclosure as an effort to gain support from stakeholders and provide a good corporate image to the public (Pratiwi & Kurniawan, 2020). Research conducted by Pratiwi & Kurniawan (2020) shows that real earnings management has no effect on environmental disclosure.

The audit committee can provide professional and independent opinions on corporate reports, such as social and environmental responsibility reports. Research conducted by Supatminingsih & Wicaksono (2016) shows that audit committee meetings have an effect on environmental disclosure. Research conducted by Yusuf, et al. (2020) shows that audit committee meetings moderate profitability on corporate environmental disclosure, but audit committee meetings cannot moderate leverage and company size on corporate environmental disclosure. Research conducted by Machmuddah, et al. (2017) shows that audit committee meetings cannot moderate earnings management on corporate environmental disclosure.

Environmental disclosure is an essential component of corporate transparency, playing a key role in sustainability reporting and stakeholder communication. However, in Indonesia, the practice remains relatively low due to the absence of standardized guidelines for reporting environmental performance. Given the growing global emphasis on corporate accountability and sustainable business practices, understanding the factors that shape environmental disclosure is increasingly important. While previous studies have explored the corporate governance mechanisms that influence sustainability reporting, the moderating role of audit committees remains an under-examined area.

This research aims to bridge the gap by examining how audit committees interact with key factors influencing environmental disclosure, drawing on three theoretical frameworks: agency theory, stakeholder theory, and legitimacy theory. Focusing on companies in the agricultural and basic industry & chemical sectors listed on the Indonesia Stock Exchange (IDX), this study applies a quantitative approach to provide empirical insights into corporate governance and environmental reporting issues. By addressing structural and regulatory challenges, this research contributes to the broader discourse on corporate sustainability, providing valuable insights for policymakers, corporate leaders, and stakeholders seeking to enhance transparency and reporting standards.

Literature Review

Agency Theory

Agency theory examines the relationship between shareholders and management, focusing on the separation of ownership and control within the company, decision-making processes, the allocation of risk, and the distribution of control over functions. Management is responsible for carrying out the company's operational activities and is authorized to make decisions related to these activities (Dewi, 2019). Agency theory involves an agreement relationship between shareholders and managers, resulting in contractual agreements.

Shareholders want to know information and details about management activities related to their investment in the company, as well as the company's accountability for the manager's performance. Managers are morally responsible for optimizing shareholder profits, and they want to receive compensation in accordance with the contract (Mutmainah & Indrasari, 2017).

Agency theory posits that, in the presence of information asymmetry, managers opt for policies that maximize shareholder interests in both the long and short term. Managers also have an interest in maximizing their welfare. This leads managers to act arbitrarily without regard for the interests of shareholders (Solikhah & Winarsih, 2016). Following agency theory, shareholders want accurate reporting to ensure the security of their funds. However, according to management, this is an additional burden and must concentrate on optimizing its financial performance. Management must also ensure that the company has no environmental impact, as the level of sustainability report disclosure remains relatively low (Maulia & Yanto, 2020).

Stakeholder Theory

Stakeholder theory states that a company can meet stakeholder expectations and respond to stakeholder concerns through strategic disclosure. Stakeholder theory explains the understanding of the motivational factors of managerial behavior in the company's social and environmental disclosure. Stakeholders have the right to obtain information on company activities, which can be used in decision-making. Stakeholders have the freedom to choose to use the information or not (Oktariyani & Meutia, 2016). Stakeholder theory is a policy made by a company for the benefit of individuals or groups. Stakeholder theory reveals how shareholders and managers create value. The reciprocal relationship between stakeholders and the company is that stakeholders provide the resources sought by the company, while the company is obliged to meet the needs of its stakeholders. Stakeholder theory can be applied to environmental disclosure because strong stakeholder support can lead to increased social disclosure (Oktaviani & Suryaningrum, 2018).

Legitimacy Theory

Legitimacy theory states that every company has a relationship with society, resulting in companies having to comply with the norms that apply in society. A company that carries out its operational activities in accordance with applicable norms will make the company more legitimate because the company indirectly fulfills the expectations of society towards the company and society will not sue the company (Suhartini & Megasyara, 2018). Legitimacy theory aims to help companies reduce the gap in business activities in society that have damaged the environment responsibly by restoring, organizing, and improving the ecosystem and environmental quality so that they can function as before (Pratiwi & Kurniawan, 2020). Legitimacy theory states that legitimacy is an important factor in companies to develop the company. Activities that can increase legitimacy are activities that have an impact on the company's environment such as attention, business ethics, and employee performance development. Corporate concern for the environment through environmental disclosure can have a positive impact in the long term and increase legitimacy (Fashikhah et al., 2018).

Hypothesis Development

Board of Commissioners Size and Environmental Disclosure

Law No. 40 of 2007, Article 108 concerning Limited Liability Companies states that the board of commissioners has the task of overseeing the management policy in running the company and providing advice to the board of directors. In addition, Law No. 40 of 2007, Article 114 paragraph 2 concerning Limited Liability Companies states that the board of commissioners must act in good faith, be responsible, and be careful in carrying out the company's supervisory duties. The board of commissioners as the peak organ of internal management in the company has a role in supervisory activities. The greater the number of board of commissioners, the easier it is to control the supervision carried out and the more effective it will be. The existence of a board of commissioners will further increase the effectiveness of supervision (Mutmainah & Indrasari, 2017).

Agency theory identifies the relationship between shareholders and management based on differences in decisions (Dewi, 2019; Sumar & Ratmono, 2024) to bridge mediated by the board of commissioners as an internal controller tasked with providing strong supervision of management performance in carrying out obligations such as implementing environmental disclosures as a form of transparency to stakeholders (Maulia & Yanto, 2020). The greater the number of board of commissioners, the greater the environmental disclosure by management because with good and strict supervision it shows that the company's image is increasingly viewed by stakeholders (Suprapti et al., 2019). This is in line with research conducted by Hidayat et al. (2023), Suryarahman & Trihatmoko (2021), and Mutmainah & Indrasari (2017) showing that the size of the board of commissioners affects environmental disclosure.

H1: The size of the board of commissioners affects environmental disclosure

Company Size and Environmental Disclosure

The size of a company is measured by the value of the total value of the company's assets, the company's value, and the equity value. The larger the size, the larger the size of the company (Nurhayati & Kurniati, 2019). Law No. 20 of 2008 concerning Micro, Small, and Medium Enterprises, Article 1 explains that a large business is a productive economic activity carried out by a company that has net assets greater than a medium-sized business. The size of the company illustrates that a large company will be increasingly visible to policy makers, regulators, the media, and the public so that it can make the company face regulations and pressure from external parties to the company (Dewi & Yasa, 2017). The size of the company illustrates the size of a company so that it is thought to be able to influence the company's financial decisions. In general, company size is proxied by total assets, average total sales, number of sales, and average total assets. The total amount of assets is very large compared to other variables, so the asset variable is smoothed to Log (total assets) to reduce the possibility of heteroscedasticity (Kurnia & Arafat, 2015).

Stakeholder theory states that stakeholders have the right to obtain information on company activities and can be used in decision-making (Oktariyani & Meutia, 2016) to bridge the gap with company size. The larger the company, the more information is published regarding transparent environmental disclosures, making it more attractive to investors (Maulia & Yanto, 2020). Large companies have many stakeholders to support the sustainability of the company, so the larger the company, the wider and more transparent the environmental disclosure information provided to stakeholders will be (Maulia & Yanto, 2020). Large companies are under greater pressure to disclose business activities because they have an impact on the surrounding environment (Nurhayati & Kurniati, 2019). This finding aligns with research conducted by Hidayat et al. (2023), Suryarahman & Trihatmoko (2021), and Dewi & Yasa (2017), which demonstrates that company size influences environmental disclosure.

H2: Company size affects environmental disclosure

Real Earnings Management and Environmental Disclosure

Earnings management is a manager's policy in maximizing the utility of the company's market value. Earnings management is grouped into two, namely real and accrual activities. Earnings management through real activities refers to the game of profit numbers that are carried out through activities originating from operational activities (Purwanti & Utama, 2018). Real earnings management is an action that has the intention of violating business practices in the external financial reporting process with the intention of achieving the expected profit, real earnings management efforts are carried out with the aim of improving short-term performance but sacrificing long-term company value, namely the trade-off in manipulating real activity profits (Pratiwi & Kurniawan, 2020).

Agency theory identifies the relationship between shareholders and management based on differences in decisions (Dewi, 2019) to bridge mediated by real earnings management. With differences in information and decisions, management can influence the accounting figures presented in the financial statements by carrying out earnings management, while shareholders will find it difficult to monitor management actions effectively (Ningsih, 2015). Real earnings management is an action that has the intention of violating business practices in the financial reporting process with the intention of achieving the expected profit. Management that carries out real earnings management then uses the company's environmental disclosure as an effort to gain support from stakeholders and provide a good corporate image to the public (Pratiwi & Kurniawan, 2020).

H3: Real earnings management has an effect on environmental disclosure

The Moderating Role of the Audit Committee

The audit committee is a committee that has the function of providing a view on environmental disclosure. The audit committee ensures that the financial statements submitted by the company are fair and in accordance with accounting principles. The audit committee can provide professional and independent opinions on the company's reports (Yusuf et al., 2020). The audit committee has the task of assisting the board of commissioners in presenting financial statements fairly in accordance with applicable accounting principles, ensuring that the company's internal control structure is running well, ensuring that internal and external audits are carried out in accordance with applicable audit standards, and ensuring that follow-up to audit findings is carried out by management (Supatminingsih & Wicaksono, 2016). The audit committee meeting is a coordination between its members so that they can carry out their duties properly in overseeing financial statements, internal control, and disclosing environmental disclosures (Machmuddah et al., 2017). Based on the Decree of the Chairman of Bapepam and LK Number Kep-643/BL/2012 in Regulation Number IX.I.5 concerning the Establishment and Guidelines for the Implementation of the Audit Committee, it is stated that the audit committee holds regular meetings at least once every three months (Ministry of Finance of the Republic of Indonesia, 2012).

Agency theory identifies the relationship between shareholders and management based on differences in decisions (Dewi, 2019) to bridge mediated by the audit committee as a supervisor of the company's management performance. The more often the audit committee holds meetings, the better it will be in supervising management and can improve environmental information disclosure (Machmuddah et al., 2017). The board of commissioners as an internal controller tasked with providing strong supervision of management performance in carrying out obligations (Maulia & Yanto, 2020). The audit committee can assist the board of commissioners in supervising management performance in carrying out obligations such as implementing environmental disclosures.

H4a: The audit committee strengthens the influence of the size of the board of commissioners on environmental disclosure

Agency theory identifies the relationship between shareholders and management based on differences in decisions (Dewi, 2019) to bridge mediated by the audit committee as a supervisor of the performance of the company's management. The audit committee ensures that financial reports are fairly the same as applicable accounting principles (Yusuf et al., 2020). The size of the company is measured by the amount of the company's total asset value. The larger the size, the larger the size of the company (Nurhayati & Kurniati, 2019). With the existence of an audit committee, it will always monitor the company's total asset value and environmental disclosure in maintaining the stability and success of the company.

H4b: The audit committee strengthens the influence of company size on environmental disclosure

Agency theory identifies the relationship between shareholders and management based on differences in decisions (Dewi, 2019) to bridge mediated by the audit committee as a supervisor of the company's management performance. The audit committee oversees fair financial reports in accordance with applicable accounting principles (Yusuf et al., 2020). Real earnings management is an action that has the intention of violating business practices in the financial reporting process with the intention of achieving the company's expected profit (Pratiwi & Kurniawan, 2020). Based on legitimacy theory, with the existence of an audit committee, the audit committee will oversee management actions in achieving the company's profits and oversee the company's environmental disclosures in order to gain legitimacy and create a positive image from the public.

H4c: The audit committee strengthens the influence of real earnings management on environmental disclosures

The relationships between variables are depicted in Figure 1.

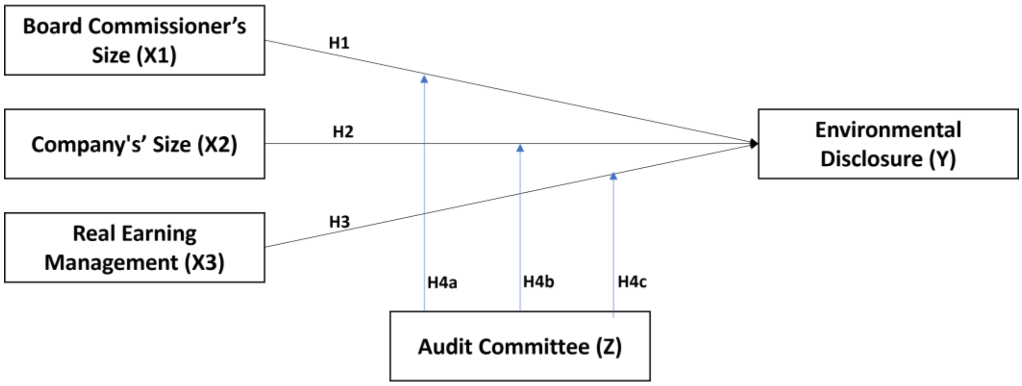

Figure 1. Research Framework

Figure 1 illustrates that this study involves three variables. First, the independent variables include the board commissioner's size (X1), the company's size (X2), and real earning management (X3). Second, the moderating variable of the audit committee (Z), and lastly, the dependent variable of environmental disclosure (Y).

Research Method

This study uses quantitative methods. The type of data used in this study is secondary data. The data source for this study is the annual report of agricultural sector companies and basic & chemical industry sectors listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period. The sampling technique employed was purposive sampling, which resulted in the selection of 12 companies over a 5-year period, yielding 60 data points. The criteria used in Table 1.

Table 1. Purposive Sampling.

No	Criteria	Yes	No
1	Companies in the agricultural sector and basic industry & chemical sector are listed on the Indonesia Stock Exchange (IDX).	104	
2	Companies that report annual reports and sustainability reports and provide environmental disclosure information for the period 2019-2023.	51	53
3	Companies in the agricultural sector and the basic and chemical industry sectors that have positive profitability (profit)	33	18
4	Companies that publish annual reports in rupiah (Rp)	12	6
	Total Data = 12 x 5 years =	60	

There are three independent variables, namely the size of the board of commissioners, company size, and real earnings management. The dependent variable in this study is environmental disclosure, and the moderating variable is the presence of an audit committee. The operational definitions and measurements of variables are presented in Table 2.

Table 2. Operational Definition and Measurement

Variables	Operational Definition	Measurement
Independent		
Board Commissioner's Size (BCS) – X1	the number of members of the board of commissioners in a company	BCS = Number of Members of the Board of Commissioners (Djamilah & Surenggono, 2017).
Company Size (SIZE) – X2	the amount of total asset value	SIZE = Ln (Total Assets) (Gerged et al., 2023).
Real Earning Management (REM) – X3	management actions that deviate from normal business practices carried out to achieve the expected profit	REM = Abnormal operating cash flow*(-1) + Abnormal production activity costs*(-1) + Abnormal discretionary costs (Ningsih, 2015; Pratiwi & Kurniawan, 2020)
Dependent		
Environmental Disclosure (ED) – Y	disclosure of environmental information in the company's annual report	GRI-G4 total 34 environmental disclosure items using dummy variables. Score 1 = Disclosing environmental items Score 0 = Not disclosing environmental items ED = Number of items disclosed by the company / Number of GRI environmental disclosure items (Pratiwi & Kurniawan, 2020)
Moderating		
Audit Committee (ACOM) – Z	The audit committee coordinates with other members to carry out its duties effectively.	ACOM = Number of Audit Committee Meetings (Machmuddah et al., 2017)

Source: Stated in the table.

The data analysis techniques employed in this study include descriptive statistical analysis, normality tests, multicollinearity tests, autocorrelation tests, heteroscedasticity tests, multiple linear regression analysis, and hypothesis testing. This study uses SPSS 26 to analyze data. The first model equation in this study is as follows:

$$ED = \beta_0 + \beta_1 BCS + \beta_2 SIZE + \beta_3 REM + e \quad (1)$$

The second regression equation in this study utilizes the interaction test, also known as Moderated Regression Analysis (MRA), which involves multiplying independent variables. So, the second research model is as follows:

$$ED = \beta_0 + \beta_1 BCS + \beta_2 SIZE + \beta_3 REM + \beta_4(BCS*ACOM) + \beta 5(SIZE*ACOM) + \beta 6(REM*ACOM) + e \quad (2)$$

Result

Descriptive Statistical Analysis

The results of the descriptive statistical analysis in this study aim to describe the research data based on the minimum value, maximum value, mean, and standard deviation. Table 3. is the result of the descriptive statistical analysis test of environmental disclosure, board of commissioner size, company size, real earnings management, and audit committee.

Table 3. Descriptive Statistical Analysis

Variables	Minimum	Maximum	Mean	Std. Deviation
Environmental Disclosure	0.029	0.469	0.1748	0,12043
Board Commissioner's Size	3	7	4.58	1,124
Company Size	6.06	7.48	6.8777	0,45818
Real Earning Management	0.10	1.67	0.5857	0.42087
Audit Committee	4	38	10.07	8.236

Source: SPSS 26 data processed

Based on Table 3, the average level of environmental disclosure in agricultural sector companies and basic industry and chemical sector companies for the period 2019-2023 remains relatively low, at below 50%. The highest ranking in agricultural sector companies was held by DSNG in 2021, at 0.21 or 21%, and the highest ranking in basic industry and chemical sector companies was achieved by JPFA in 2021, at 0.47 or 47%. This is because the GRI guidelines are still voluntary; therefore, many companies continue to report environmental disclosures according to their respective company policies and utilize different environmental disclosure guidelines, although some have adopted the GRI guidelines.

The Goodness of Fit Model and Coefficient Determination Test Results

Before testing the hypothesis with multiple linear regression, a classical assumption test must be carried out to demonstrate the accuracy, consistency, and unbiasedness of the regression equation. The test results indicate that the data is normally distributed, with no signs of multicollinearity, autocorrelation, or heteroscedasticity.

Table 4. The Goodness of Fit Model and Coefficient Determination Test Results – First Equation

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	16.825	3	5.608	14.121	0.000
	Residual	22.242	56	0.397		
	Total	39.067	59			
R			.656			
R Square			.431			
Adjusted R Square			.400			
Std. error of estimates			.63022			

Source: SPSS 26 data processed

Based on Table 4, the results of the model suitability test (F test) indicate that the significant value of F is 0.000, which is less than 0.05. Therefore, H0 is rejected, and H1 is accepted, meaning that all independent variables significantly affect the dependent variable. The results of the determination coefficient test (R^2 test) show that the value of the determination coefficient (R^2) is 0.400. This indicates that environmental disclosure can be explained by 40% of the independent variables. In comparison, the remaining 60% is attributed to other factors not included in this research model, such as the size of the audit committee, leverage, the proportion of independent commissioners, board of commissioner meetings, and financial performance.

Table 5. The Goodness of Fit Model and Coefficient Determination Test Results – Second Equation (MRA)

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	17.713	6	2.952	7.327	0.000
	Residual	21.354	53	0.403		
	Total	39.067	59			
R			.673			
R Square			.453			
Adjusted R Square			.392			
Std. error of estimates			.63474			

Source: SPSS 26 data processed

Based on Table 5, the results of the model suitability test (F test) using the moderation variable show that the significant value of F is 0.000 <0.05, so H0 is rejected, and H1 is accepted; this means that all independent variables and moderation variables significantly affect the dependent variable. The results of the determination coefficient test (R-squared test) using the moderation variable indicate that the value of the determination coefficient (R-squared) is 0.392. This shows that environmental disclosure can be explained by 39.2% of the independent variables with the audit committee as the moderation variable, while the remaining 60.8% is explained by other factors not included in this research model, such as using the moderation variables of the proportion of independent commissioners, the number of board of commissioner meetings, the number of audit committee members, and the number of audit committee meetings.

Hypothesis Testing Results

Testing partial regression coefficients in multiple linear regression is crucial for understanding the unique contribution of each independent variable to the dependent variable. Partial tests help determine whether each predictor variable significantly contributes to the model after accounting for the effects of other variables (Piedmont, 2014).

Table 6. The t-test Results – First Equation

Variables	Coefficients	$t_{\text{-count}}$	Sig.	Decision
Constanta	-1.026	-0,410	0,682	
Board Commissioner's Size	2,420	5,317	0,000	H1 Accepted
Company Size	-2,434	-1,557	0,102	H2 Rejected
Real Earning Management	0.013	0,028	0,977	H3 Rejected

Source: SPSS 26 data processed

Based on Table 6, the multiple linear regression equation is formulated as follows:

ED = - 1.026 + 2.420 BCS – 2.434 SIZE + 0.013 REM ………………………………………. (3)

Table 7. The t-test Results – Second Equation (MRA)

Variables	Coefficients	t_{count}	Sig.	Decision
Constanta	-1.017	-0,411	0,683	
Board Commissioner's Size	2,321	5,328	0,000	H1 Accepted
Company Size	-2,345	-1,658	0,103	H2 Rejected
Real Earning Management	0.004	0,028	0,977	H3 Rejected
BCS*ACOM	1,007	2,511	0,011	H4a Accepted
SIZE*ACOM	-0,029	-0,335	0,731	H4b Rejected
REM*ACOM	-0,018	-1,026	0,310	H4c Rejected

Source: SPSS 26 data processed

Based on Table 7. the multiple linear regression equation with moderation is formulated as follows:

ED = – 1.017 + 2.321 BCS – 2.345 SIZE + 0.004 REM + 1.007 (BCS*ACOM) – 0.029 (SIZE*ACOM) – 0.018 (REM*ACOM) ……………………………………………………………….. (4)

Discussion

The Effect of Board of Commissioners Size on Environmental Disclosure

The first hypothesis (H1) is accepted because the study's results indicate that the size of the board of commissioners has a positive impact on environmental disclosure. Table 6 presents a significant t-value of 0.000 (<0.05) and a coefficient of 2.321, indicating a positive relationship between the variable size of the board of commissioners and environmental disclosure. The results align with agency theory, suggesting that a large number of boards of commissioners can lead to high internal control within the company, which is tasked with providing strong and effective supervision of management performance to carry out more specific responsibilities related to environmental disclosure. The results of this study are supported by research by Hidayat et al. (2023), Suryarahman & Trihatmoko (2021), and Mutmainah & Indrasari (2017), which show that the size of the board of commissioners has a positive effect on environmental disclosure.

From an agency theory perspective, the size of the board of commissioners has a significant influence on a company's environmental disclosure. The board of commissioners serves as a monitoring mechanism, ensuring that management acts in the best interests of shareholders and other stakeholders. The larger the board of commissioners, the more diverse the backgrounds and expertise of its members, so that decisions taken tend to be more holistic and consider environmental aspects in more depth. Additionally, the presence of more members can also enhance the effectiveness of monitoring company policies, particularly in terms of transparency and the disclosure of environmental information (Sumar & Ratmono, 2024). Companies with larger boards of commissioners are often more responsive to external pressure from stakeholders, such as investors, government, and the community, who demand greater responsibility for environmental impacts. However, on the other hand, a board that is too large can face challenges in coordination and decision-making, which has the potential to hinder the effectiveness of environmental policy implementation. Therefore, the balance in the number of board of commissioners is an essential factor in ensuring that the monitoring mechanism runs optimally in supporting the company's transparency and accountability for environmental issues.

The Effect of Company Size on Environmental Disclosure

The second hypothesis (H2) is rejected because the study's results indicate that company size does not affect environmental disclosure. Table 6 shows a significant t of 0.103> 0.05; this indicates that the company size variable has no relationship to environmental disclosure. From the results of this study, company size cannot bridge the stakeholder theory (Oktariyani & Meutia, 2016), which states that stakeholders have the right to obtain information on company activities and can be used in decision making because the larger the company size does not increase the amount of information published regarding environmental disclosure that is transparent to stakeholders. Both small and large companies face complex challenges in implementing environmental responsibility. Therefore, companies in environmental disclosure, regardless of their size, must still disclose their environmental responsibility. The results of this study align with the research of Fashikhah et al. (2018) and Oktariyani & Meutia (2016), which indicate that company size does not significantly impact environmental disclosure.

From a stakeholder theory perspective, the lack of effect of firm size on environmental disclosure can be explained by differences in the level of pressure and expectations that firms receive from stakeholders. This theory emphasizes that firms are accountable to a variety of groups, including investors, customers, governments, and the public, who have an interest in the firm’s environmental practices. However, firm size is not always the primary factor in determining the extent to which a firm discloses environmental information. Larger firms may have more resources to make environmental disclosures, but they may also face greater pressure to prioritize financial aspects over environmental transparency. Conversely, smaller firms may be more flexible in responding to specific stakeholder demands; however, resource constraints may limit broader disclosure. Research suggests that other factors, such as regulation, pressure from key stakeholders, and corporate culture, play a greater role in determining the level of environmental disclosure than firm size alone. Therefore, in the context of stakeholder theory, environmental disclosure is more influenced by the dynamics of the relationship between the firm and its stakeholders than by the scale of the firm’s operations.

The Effect of Real Earnings Management on Environmental Disclosure

The third hypothesis (H3) is rejected because the study's results indicate that real earnings management does not affect environmental disclosure. Table 6 shows a significant t-value of 0.977, which is greater than 0.05, indicating that the real earnings management variable has no relationship with environmental disclosure. According to the results of this study, it appears that real earnings management cannot bridge the agency theory gap (Dewi, 2019), which identifies the relationship between shareholders and management based on differences in decision-making processes. This is because management cannot influence the accounting figures presented in financial statements, and shareholders can easily monitor management actions. Environmental disclosure is not intended to conceal self-beneficial actions, such as real earnings management, carried out by the company but rather to demonstrate the company's environmental responsibility stemming from its business activities. The results of this study align with those of Pratiwi and Kurniawan (2020), which indicate that real earnings management does not affect environmental disclosure.

From the perspective of legitimacy theory, the absence of influence between real earnings management and environmental disclosure can be explained by how companies try to maintain their image and social legitimacy. Legitimacy theory posits that companies must adapt to societal norms and expectations to maintain acceptance within their business environment. Environmental disclosure is often used as a tool to build legitimacy, but it is not always directly related to real earnings management practices (Amarna et al., 2024). Companies that engage in real earnings management tend to focus more on financial strategies to meet profit targets and maintain investor confidence. At the same time, environmental disclosure is more oriented towards the interests of broader stakeholders, such as the community and regulators. Because these two aspects have different goals, companies may not see the need to link earnings management practices with environmental transparency. In addition, several studies have shown that companies that engage in earnings management tend to use environmental disclosure as a legitimate tool without actually changing their operational practices, rendering the relationship between the two variables insignificant. Therefore, in the context of legitimacy theory, environmental disclosure functions more as a communication strategy than as a reflection of the company's financial practices.

The Effect of Board of Commissioners Size, Company Size, and Real Earning Management on Environmental Disclosure Moderated by the Audit Committee

Table 7 presents a significant t-value of 0.011 (<0.05), indicating that the fourth hypothesis (H4a) is accepted. The research results suggest that the size of the board of commissioners, with the audit committee as a moderating variable, affects environmental disclosure. These results align with Maulia & Yanto (2020). The board of commissioners serves as an internal supervisory body responsible for ensuring rigorous oversight of management's performance in fulfilling its obligations. In this role, the audit committee can support the board by monitoring and evaluating management's compliance with responsibilities, including the implementation of environmental disclosures.

The average meeting held by the audit committee is adjusted to the company's urgent needs, including discussions on environmental disclosure. The existence of the audit committee as a moderating variable strengthens the relationship between the size of the board of commissioners and environmental disclosure. This indicates that the size of the board of commissioners, with the audit committee as a moderating variable, is considered by the company in its environmental disclosure as outlined in the annual report. The audit committee can bridge the agency theory gap, which suggests that there are still differences in decisions between shareholders and management. As a management party, the audit committee should maximize its efforts in improving supervision by assisting the board of commissioners and enhancing the oversight of environmental disclosure. The audit committee and board of commissioners have a detailed understanding of environmental disclosure, informed by guidelines from the Global Reporting Initiative (GRI).

Table 7 presents a significant result, with a t-value of 0.731 > 0.05. Therefore, the H4b hypothesis is rejected, as the study's results indicate that company size, with an audit committee as a moderating variable, does not affect environmental disclosure. The average meeting held by the audit committee still tends to be small because the company adjusts its meetings to address its urgent needs, and the discussion of environmental disclosure is also relatively brief. The relationship between company size and environmental disclosure, which initially had no effect, remains unchanged in the presence of an audit committee as a moderating variable and thus does not influence the relationship between company size and environmental disclosure. This shows that company size with an audit committee as a moderating variable in the annual report is not necessarily used as a consideration by the company in environmental disclosure, so the audit committee cannot bridge the agency theory that there are still differences in decisions between shareholders and management, caused by the audit committee as a management party not maximizing its efforts in increasing the company's total assets and not maximizing in supervising environmental disclosure. The results of this study align with those of Yusuf et al. (2020), which indicate that company size, with an audit committee as a moderating variable, does not affect environmental disclosure.

Table 7 shows a significant result of t of 0.310>0.05, so the H4c hypothesis is rejected because the results of the study state that real earnings management with the audit committee as a moderating variable does not affect environmental disclosure. The average meeting held by the audit committee still tends to be small because the company in holding meetings adjusts to the company's urgent needs and the discussion of environmental disclosure is also relatively small. The relationship between real earnings management and environmental disclosure which initially had no effect, with the presence of the audit committee as a moderating variable still does not make the relationship between company size and environmental disclosure influential. This shows that real earnings management with the audit committee as a moderating variable in the annual report is not necessarily used as a consideration by the company in environmental disclosure, so that the audit committee cannot bridge the agency theory that there are still differences in decisions between shareholders and management, caused by the audit committee as the management party not maximizing in supervising earnings management and not maximizing in supervising environmental disclosure.

Conclusion

Based on the discussion of direct influence, it can be concluded that the board of commissioners' size positively affects environmental disclosure. The size of the company and real earnings management (REM) have no relation to environmental disclosure. Based on the discussion of the moderating effect, it can be concluded that the audit committee can moderate the size of the board of commissioners but cannot moderate company size or real earnings management concerning environmental disclosure. Companies are expected to enhance their environmental disclosure by utilizing the GRI guidelines as a means of demonstrating corporate responsibility towards the environment surrounding the company, thereby increasing transparency to stakeholders and the community, which can contribute to the sustainability of the company and foster a positive long-term image.

Suggestions for further researchers are to make certain improvements to this study so that the research results obtained can be improved. Further researchers are expected to use factors that have a greater influence on environmental disclosure beyond those used in this study, such as leverage factors, the proportion of independent board of commissioners, board of commissioner meetings, financial performance, and the number of audit committee members. And use research samples from companies whose operational activities are more closely aligned with natural processes, allowing them to demonstrate a higher level of environmental concern. Based on the research results, the implications of this study suggest that low environmental disclosure is often caused by inadequate attention from the company. To address this issue, the company must make concerted efforts to enhance environmental disclosure by improving the size of the board of commissioners in agricultural sector companies and the basic and chemical industry sectors. By improving these factors, it is expected that environmental disclosure will increase.

This study highlights the significance of internal governance mechanisms in enhancing transparency, particularly in the implementation of environmental disclosures. The findings indicate that the board of commissioners, supported by the audit committee, plays a crucial role in overseeing management's adherence to disclosure obligations. However, certain limitations must be acknowledged, including the potential variability of governance effectiveness across different organizational contexts and the limited scope of factors influencing environmental reporting. The study contributes to theoretical discourse by reinforcing agency theory's perspective on the necessity of internal control for corporate transparency. Practically, it offers insights for businesses to strengthen governance structures in ensuring responsible environmental disclosures. From a policy standpoint, the research highlights the importance of regulatory frameworks that mandate robust oversight mechanisms, encouraging companies to adopt greater accountability and sustainability in their reporting practices. Future studies could further explore external pressures, such as stakeholder demands or institutional policies, that might shape corporate environmental transparency beyond internal governance structures.

Declaration of conflicting interest

The authors declare that there is no conflict of interest in this work.

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