WATER DISCLOSURE IN INDONESIAN AGRICULTURE: THE ROLES OF OWNERSHIP AND POLITICAL CONNECTIONS

Asya Aulia Wulandari
Department of Accounting, Faculty of Economics and Business, Universitas Riau
Asyaaulia2003@gmail.com

Poppy Nurmayanti M
Department of Accounting, Faculty of Economics and Business, Universitas Riau

Nanda Fito Mela
Department of Accounting, Faculty of Economics and Business, Universitas Riau

Abstract

This study examines the impact of ownership structures, in conjunction with political connections, on corporate water disclosure practices in Indonesian agriculture firms listed on the Indonesian Stock Exchange (IDX) from 2019 to 2023. The sample used in this study derive from Indonesian agricultural firms listed on the Indonesian Stock Exchange (IDX), a purposive sampling method was applied to all of the 16 suitable firms for the study, and panel data multiple regression analysis was conducted to test the proposed hypotheses. The analysis reveals that institutional ownership, managerial ownership, public ownership, and political connections have a significant influence on corporate water disclosure. Additionally, this study employs additional measurements by including control variables namely, firm size, leverage, return on asset and sales growth.

Keywords: Ownership Structure, Institutional Ownership, Managerial Ownership, Public Ownership, Corporate Water Disclosure

INTRODUCTION

Water is known as a crucial resource, which essential for development and survival for every human being, as it is interdependent with the earth (Liu et al., 2021). Therefore, in the current state, water has become a limited resource due to the population growth and the action of failing to rationalize water usage (Aljanadi et al., 2016). At present, the majority of industries use water to operate, indicating that industries are also related to water either directly or indirectly (Liu et al., 2021). Accordingly, as one of the world's most significant producers of natural resources, Indonesia needs assistance from various industries to manage the variety of resources it has, especially water. Thus, in line with the benefits those industries bring, those industries can also create waste. One of the main wastes produced by industries is wastewater (Sutawan & Sisdyani, 2022). The improper management of wastewater, especially when chemicals are involved, can

lead to significant environmental damage (Indrayani & Rahmah, 2018). Recent research highlights a significant increase of the influence of waste in water impact, revealing severe consequences for the water ecosystems, biological sustainability, and human health (Aqilla et al., 2023). The primary cause of high-level environmental damage itself is the explosive growth in industries which produce a lot of pollution (Huq et al., 1996).

However, it was indicated in the press release from the World Water Forum (WWF, 2024), fortunately, the comprehensive agenda proposed by Indonesia was successfully achieved. Furthermore, the number of participants surpassed initial projections. Nevertheless, the Daily Chair of the 10th World Water Forum emphasized that the work is not yet complete and that there are still numerous areas in need of improvement. It is essential to ensure that the various commitments produced are followed up with concrete steps and a strong sense of ownership.

In spite of that, when it comes to compare Indonesia's water disclosure to the global guidelines, namely GRI (Global Reporting Initiative), the level of the disclosure can be said as comparatively low, it is proven by the from Wicaksono et al., (2024) study, which the corporate water disclosure statistic result shows a mean value that is closer to the minimum value, which suggests that the degree of water disclosure among Indonesian companies is comparatively minimal. The comparatively low degree of water disclosure might be resulted from a lack of transparency, possibly due to limited stakeholder demand for information or due to the decrease emphasis by companies on either maintaining or obtaining legitimacy through water reporting (Adhariani, 2021).

In Indonesia, water disclosure is regulated under Financial Services Authority Regulation (Peraturan OJK) Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. According to this regulatory framework, companies are also required by law for the inclusion of water disclosure as a part of their sustainability reports under environmental disclosure. As has been observed, improper water management can affect the human health, ecosystems, and business activities. Thus, to maintain water sustainability while prevent the destruction of water sources, companies are obliged to disclose their water usage. This action also can be seen as the form of companies' concern to the environment as well as representing company's commitment to stakeholders (Hasibuan & Ismail, 2024).

The present study focuses on water disclosure practices within Indonesian agricultural firms, as previously stated, it is important to note that Indonesian firms' water disclosure is included in sustainability reports. Therefore, it is crucial to highlight the sustainability report, as its purpose is to facilitate non-financial data about the disclosure of the company's environmental activities.

Consequently, institutional investors tend to have a strong and consistent interest in firms that actively disclose their sustainability activities. Institutional ownership can influence management to implement and disclose policies related to economic, environmental, and social concerns in a transparent and comprehensive manner (Bimo, 2021). Accordingly, it is also become increasingly important for companies to acknowledge the impact of managerial ownership on the value relevance of sustainability reporting, particularly, as they embark on sustainability initiatives and provide related information to stakeholders (Ihsan et al., 2024). Furthermore, in order to undertake their operational activities, companies require support from the public and other stakeholders. Companies therefore need to disclose environmental information as part of their responsibility to the public and environment. This is how public ownership is established (Situmorang & Hadiprajitno, 2016). Thus, political connections have also become a crucial component of sustainability reporting, as company management structures are not solely composed of business professionals but often include individuals with political affiliations (Asianti et al., 2023).

Therefore, as awareness of Indonesia's water crisis increases and the vital role that firms must play in providing solution, following with lack of prior studies focusing on corporate water disclosure, particularly in the agriculture sector, which is responsible for the largest volume of water withdrawals worldwide, has created a research gap to be addressed by this study.

Therefore, it can be concluded that the formulation of the research problem can be constructed as: "Does the institutional ownership, managerial ownership, public ownership and political connection influence water disclosure of Indonesian agriculture firms from 2019 – 2023?". Consequently, the objective of this study to examine the relationship between institutional ownership, managerial ownership, public ownership, political connection and water disclosure of Indonesian agriculture firms from 2019 – 2023

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

THEORETICAL REVIEW

This study guided by agency theory by Jensen & Meckling, (1976) who explain agency relationship as a contract under which one or more person as principal(s) engage the services of another person (agent) to perform a service on their behalf. Which where in this theory, managers as agents have obligation to manage the company that aligned with the investors' interests as principals. This approach may contribute to the avoidance of financial distress, which will lead to avoidance of company's financial distress (Ardyaningsih & Oktarina, 2022). In accordance, manager as an agent, also need to satisfy the requirements of stakeholders and enhance the organization's legitimacy. In order to have this action, managers tend to disclose a wider range of water-related information. This action was performed to prevent inadequate corporate risk-taking resulting from information asymmetry. As a result, if the organizational legitimacy is relatively high, shareholders more likely assuming that managers should prioritize financial performance, leading to a reduction in interest in investing in water management or disclosing water information (Zhou, 2018).

Another theory that guided this study is stakeholder theory that was proposed by Freeman, (1984) who argues that stakeholder is a term that was originally address to the notion of the stockholder as the exclusive group where is the management required to respond to be generalized. Recently, the interest among stakeholders has rapidly growing in the field of corporate water management and information disclosure. This condition resulted in an obligation that created for companies, where they need to meet the requirements of stakeholders in terms of water resources. Nevertheless, when companies provide environmental information in accordance with the requirements of the specific stakeholders, additional expenses may be incurred. Consequently, companies tend to prioritize the interests of their stakeholders and consider the long-term implications, this action can be done when company prioritize social and environmental responsibility, along with the transparency of water information disclosure (Liu et al., 2021).

HYPOTHESIS DEVELOPMENT

Institutional Ownership and Corporate Water Disclosure

The term “Institutional Ownership” is used to describe the extent to which external institutions hold shares in a company. The amount of institutional ownership is able to influence investor control over management to disclose sustainability reports. This is important as a form of corporate transparency of information which contains actions that have been taken to maintain the condition of the company in terms of economic, environmental and social aspects. Also, the disclosure of sustainability reports can minimize information asymmetry between agents and principals which is aligned with agency theory. Thus, the large proportion of institutional owners is assumed to be able to influence the disclosure of sustainability reports (Roviqoh & Khafid, 2021). Additionally, several studies has investigated the influence of institutional ownership to sustainability report. As for example, study from Prastyawan & Astuti, (2023) argues that the large proportion of institutional investors is able to influence the disclosure of sustainability reports, the results is also the same with the study from Wicaksono et al., (2024) that found institutional ownership has a significant but negative relationship on water disclosure. However, Roviqoh & Khafid, (2021) and Ludianah et al., (2022) study fail to prove the influence of institutional ownership on sustainability report disclosure, which contrasting the study results mentioned before.

Looking at the previously discussed concept and related is studies, in this study provide to argues that institutional ownership has a significant and positive influence to the water disclosure. This is based on the assumption that institutional investors play a role in influencing sustainability reports, which in turn affect water disclosure. Given the preceding explanation, it seems reasonable to proceed with the following hypothesis as:

H1. Institutional Ownership Influences Corporate Water Disclosure

Managerial Ownership and Corporate Water Disclosure

Managerial ownership refers to the number of company shares owned by the management that have influenced company decision-making (Prastyawan & Astuti, 2023). Ihsan et al., (2024) explain that in line with the principles of agency theory, managerial ownership helps align the interests of management and shareholders. Adimulya & Sudarno, (2013) stated that, when a company has a high level of managerial ownership, it is more likely to disclose greater amounts of information to the public in

order to enhance transparency and gain public legitimacy. If the leadership of the management team is a shareholder, it is predicted that they will have sufficient awareness to carry out disclosure of economic, environmental, social and corporate governance information in the sustainability report. Their research also find that managerial ownership has no significant effect on the probability of disclosing sustainability reports. Companies with greater managerial ownership have a smaller probability of disclosing sustainability reports. In contrast, Ihsan et al., (2024) find that a greater proportion of ownership by management is associated with a more effective response to agency problem, followed with a greater degree of accountability in the reporting of accounting and sustainability data.

Therefore, by considering the concept, theory, and prior study given, this study concludes to argues that managerial ownership can influence corporate water disclosure as it can influence sustainability disclosure. In consideration of the previously presented explanations, it seems reasonable to proceed with the following hypothesis:

H2. Managerial Ownership Influences Corporate Water Disclosure

Public Ownership and Corporate Water Disclosure

Public ownership is referring to the general public who owns a portion of shares in a company (Situmorang & Hadiprajitno, 2016). Furthermore, public ownership plays a role in creating pressure and encouragement for management to present reports in a timely and transparent manner. As there are some studies that investigated the influences of public ownership in disclosures like environmental, sustainability, and et cetera. Though, the number of studies that investigate public ownership and water disclosure can be considered as limited. Like, Hunafah et al., (2022) argues that high social disclosure from a company is also influenced by a wider portion of public share ownership, because the company is considered to have a social responsibility to the community. As an addition, Situmorang & Hadiprajitno, (2016) has found that public ownership has a significant influence with a negative direction on the disclosure of sustainability reports.

As the statement previously stated that public ownership can influence environmental disclosures, and the previous study given also support with positive influence given by public ownership to sustainability report, this study provides the

argumentation that public ownership can positively influence corporate water disclosure. Based on the previous explanations, it is proposed that the following hypothesis be considered:

H3. Public Ownership influences Corporate Water Disclosure

Political Connections and Corporate Water Disclosure

Political connections may have a positive effect on environmental disclosure as politically connected firms are subject to stricter government monitoring as well as higher levels of compliance, especially in countries where strong political power and political influence over business activities prevail. Moreover, Companies with political connections may be protected from the consequences of low-quality environmental disclosure (Qian & Chen, 2021 in Nugrahanti & Natasya, 2023). As an addition, it is widely acknowledged that the disclosure of environmental information is regarded as a key instrument for influencing the political and economic positioning of a company (Du et al., 2019 in Wicaksono & Honggowati, 2020). Jurnali & Manurung, (2023) study resulted in positive relationship between political connection and company disclosure, where it is explained in the study that political connection will enhance the role of board on Corporate Social Responsibility (CSR) disclosure. As an addition, Wicaksono & Honggowati, (2020) argues that political connections are used by companies to gain convenience and access to various policies including water disclosure.

As the concept and the prior study is having alignment, where higher level of political connection can affect environmental, CSR, and related reports, this study provided to argue that political connection might have the potential to influences the corporate water disclosure. In accordance with the previously outlined explanations, it is proposed that the following hypothesis be considered as:

H4. Political Connection influences Corporate Water Disclosure

RESEARCH METHOD

This study employed the purposive sampling method for the selection of samples, which is a technique that involves the identification of a specific subset of individuals or units from a larger population based on certain predetermined criteria. Accordingly,

this study establishes a set of inclusion criteria to guide the selection process and ensure that only samples meeting these conditions are included in the analysis. The following criteria will be applied to determine the eligibility of samples for inclusion in this research:

1. Agriculture firms listed in Indonesia Stock Exchange for the period between 2019 and 2023.
2. Agriculture firms who did not delisting from Indonesia Stock Exchange for the period between 2019 and 2023.
3. Agriculture firms that have made their sustainability reports for the 2019 - 2023 period available to the public.
4. Agriculture firms that have not disclose sustainability report to public will be eliminated.
5. Agriculture firms with unavailable financial statement will be eliminated.
6. Agriculture firms who done IPO (Initial Public Offering) between 2019 – 2023 will be eliminated.

Thus, the year 2019 was used as the beginning period of the study it represents the earliest year within which all selected agricultural firms had publicly available sustainability and financial reports. Consequently, 2019 is also considered as a stable benchmark year prior to the occurrence of the global pandemic.

Therefore, this study will utilize secondary data for the data collection process. The data will be sourced from existing company documents, including financial reports, annual reports, and sustainability reports. These reports can be accessed either through the official website of the Indonesia Stock Exchange (IDX) or directly from the respective firms' official websites. The report may be accessed from the IDX website or, alternatively, it can be generated through the company's website. As for the data collection method that was used in this study is documentation study with using archival data. Therefore, this study used the method of data collection through the categorization and classification of written data related to research in the form of books, journals, documents, and et cetera.

For the hypothesis testing itself, this study applies panel data multiple regression analysis, where the T-statistical test is employed to measure the degree to which the independent variable alone can explain the dependent variable (Ghozali & Ratmono

2017). However, before conducting the multiple regression analysis test, it is essential to determine the most appropriate model among the three available options: the Fixed Effects Model (FEM), the Random Effects Model (REM), and the Common Effect Model (CEM). To identify the suitable model, three statistical tests are conducted sequentially: the Chow test, the Hausman test, and the Breusch-Pagan Lagrange Multiplier (LM) test.

Additionally, to complete the multiple regression analysis, each variable needs to be measured appropriately. In this study, Corporate Water Disclosure (CWD) is measured using the Global Reporting Initiative (GRI) Standard 303. The measurement approach follows the method used in a previous study by Wicaksono et al., (2024), in which the score is calculated as the ratio of a company's actual water disclosure to the maximum possible score of 5. This maximum score reflects the five components of GRI 303, namely GRI 303-1 through GRI 303-5.. This maximum score reflects the five components of GRI 303, namely GRI 303-1 through GRI 303-5. Ownership structure is measured by calculating the proportion of each type of shareholding, namely institutional shares, managerial shares, and public shares, divide it to the company's total outstanding shares. In addition, this study measures political connections using a dummy variable. A company is assigned a value of 1 if any member of its board of directors is directly or indirectly affiliated with a political party, and a value of 0 if there is no indication of such a connection.

Based on the previous explanation, the data collection process will follow the formulas used in the variable measurement as below:

Table 1
Variable Measurement

Variable	Abbreviation	Indicator
Dependent Variable		
Corporate Water Disclosure (Y)	CWD	GRI 303
Independent Variables		
- Institutional Ownership (X1)	INS	$INS = \frac{Number\ of\ Institutional\ Shares}{Total\ Outstanding\ Shares} \times 100\%$
- Managerial Ownership (X2)	MAN	$MAN = \frac{Number\ of\ Managerial\ Shares}{Total\ Outstanding\ Shares} \times 100\%$
- Public Ownership (X3)	PUB	$PUB = \frac{Number\ of\ Shares\ Owned\ by\ Public}{Total\ Outstanding\ Shares} \times 100\%$
- Political Connection (X4)	PCON	$Dummy\ variables, 1\ if\ the\ company\ has\ a\ political\ connection, otherwise\ 0$

Control Variables		
- Return on Assets	ROA	$ROA = \frac{Net\ Income_{it}}{Total\ \ Asset_{it}}$
- Leverage	LEV	$LEV = \frac{Total\ Liability_{it}}{Total\ Assets_{it}}$
- Firm Size	FSIZE	$FSIZE = Ln\ (Total\ Asset)$
- Sales Growth	SALESG	$SALESG = \frac{Net\ Sales_{it}\ -\ Net\ Sales_{it-1}}{Net\ Sales_{it-1}}\ x\ 100$

Moreover, the current study will utilize data processing techniques that will be carried out using the EViews statistical software program, which is widely used for econometric and time-series analysis. In addition to data processing, this study will also incorporate several classical assumption tests to ensure the validity and reliability of the regression model. The classical assumption tests that will be employed include the normality test, Multicollinearity test, and heteroscedasticity test.

This study follows the classical assumption tests as outlined by Ghozali (2021). The normality test is conducted for the purpose of determining whether certain variables within a regression model may potentially interfere with or exhibit a fixed distribution (normal). This study used the Kolmogorov-Smirnov (K-S) test to ascertain the normality of the data, where this test provides guidelines for making a decision, specifically whether the value is deemed significant, it is also a widely recognized method for evaluating the distribution of data. Followed with multicollinearity test, whose objective is to determine whether the regression model has identified a high or perfect correlation between the independent variables. The current study objective itself is to determine whether multicollinearity exists within the regression model. Thus, one way to detect multicollinearity is by examining the correlation matrix of the independent variables must be analyzed. In the event of a high correlation between the independent variables (generally above 0,90). While also looking at the VIF value for the variables with high matrix. Lastly, the the heteroscedasticity test, which purpose is to determine whether there are any pronunciation or residual dissimilarities between the variants included in the regression model. Accordingly, this study conducts the White test to determine the level of heteroscedasticity indicated with a significant in 0,05 (or indicated with heteroscedasticity).

RESULTS AND DISCUSSION

The information presented in this study was obtained from the firms' annual reports, financial statements, and sustainability reports, which were provided on both the Indonesia Stock Exchange (IDX) and the selected firms' websites. The firms selected for the study are agricultural firms listed on the Indonesian Stock Exchange (IDX) from 2019 to 2023. The purposive sampling technique was used to collect a total sample of 80, with a total of 16 firms selected each year that met the criteria of this study.

Table 2 presents the results of the descriptive statistical analysis for all variables in this study. This study uses descriptive statistics analysis to provide an overview of the variables. These include corporate water disclosure, ownership structures, political connections, return on assets (ROA), leverage, firm size, and sales growth. As shown in table 2 Panel A it was described the summary statistics for the dummy variables used in this study, these variables take on either a value of 1 or 0, with 1 indicating the presence of the characteristic in a subject and 0 representing the absence of the characteristic in the subject. Table 2 Panel A itself includes the measurement of Corporate Water Disclosure (CWD) where this variable measured using GRI 303. While political connection is included in Panel A shows that the measurement is replaced by using dummy variable.

Meanwhile, table 2 Panel B presents the continuous variables taken in this study, with several numerical values. Table 2 Panel B shows the mean value of Corporate Water Disclosure (CWD) is 0,45000, indicating a 45% probability that firms in the sample will disclose their water usage However, with a median value of 0,20 indicates half of the firms only disclose 20% of their water usage. The standard deviation of 0,40938, which is a close number with the mean, indicates a considerable variation in corporate water disclosure between the firms in the sample. This finding indicates that levels of water disclosure vary significantly among agricultural firms, which may be caused by several things such as regulation, investor pressure or sustainability initiatives.

Table 2
Descriptive Statistic Analysis

Panel A Dummy Variable

	N	Value 1		Value 0	
CWD (Restate)	80	61	76%	19	24%
PCON	80	36	45%	44	55%

Panel B Continous Variable

	N	Mean	Median	Maximum	Minimum	Std. Dev.
CWD (Accrual)	80	0,45000	0,20000	1,00000	0,00000	0,40938
INS	80	0,72900	0,77000	1,00000	0,52000	0,14745
MAN	80	0,01413	0,00000	0,11000	0,00000	0,03474
PUB	80	0,25663	0,22500	0,48000	0,00000	0,14970
FSIZE	80	16,32500	16,00000	20,00000	14,00000	1,43884
LEV	80	0,48588	0,49000	1,37000	0,09000	0,22468
ROA	80	0,05238	0,04500	0,03600	-0,12000	0,06559
SALESG	80	0,14538	0,06000	1,71000	-0,53000	0,33808

Source: Processed Data 2025

Table 3 presents the normality test result using Jarque-Bera test. The test result indicates the data are normally distributed by showing the probability (p-value) of 0,12401 which was larger than 0,05 (5%), means the data was indicated with normal distribution.

Table 3
Normality Test

N	Minimum	Maximum	Mean	Median	Std. Dev.
80	-0,79118	0,67849	0,00000	-0,07055	0,37505

Jarque-Bera	4,17472
Probability	0,12401

Source: Processed Data 2025

Table 4 shows the results of the multicollinearity test, which was conducted to assess the degree of correlation among the independent variables included in the regression model. However, the analysis revelas a high likelihood of multicollinearity occurring between two specific variables: Institutional Ownership (INS) and Public Ownership (PUB). This conclusion is drawn from the correlation coefficient between these two variables, which is recorded at -0.9728. Such a value indicates a strong and nearly perfect negative correlation, suggesting a significant overlap in the information captured by these variables.

Table 4
Multicollinearity Test

	INS	MAN	PUB	PCON	FSIZE	LEV	ROA	SALESG
INS	1							
MAN	-0,0503	1						
PUB	-0,9728	-0,1820	1					
PCON	0,4349	0,0156	-0,4304	1				
FSIZE	0,0177	0,4489	-0,1188	0,2864	1			
LEV	0,1124	-0,0619	-0,0982	-0,0182	-0,1199	1		
ROA	-0,2318	-0,0405	0,2384	0,0634	-0,2605	-0,2964	1	
SALESG	0,0752	-0,0106	-0,0726	0,1785	-0,1751	0,1825	0,4438	1

Source: Processed Data 2025

Following the conclusion of the multicollinearity test results, it was determined that the present study would expand the further tests from a range of software, specifically by using the IBM SPSS software. In this case, multicollinearity is will be detected using the tolerance and VIF (Variance Inflation Factor) values.

However, as it is evident from the previous multicollinearity test results, which show high and almost perfect multicollinearity, this can lead to one solution where the data must be treated accordingly. One potential approach to address this issue is to transform the data (Ghozali, 2021). The present study then applies data transformation in order to address the issue of multicollinearity, thereby improving the reliability of the regression model. Specifically, this study applies a data transformation data with a square root (√) transformation on the relevant independent variables to reduce the effect of extreme values and linearize relationships among predictors. The results of the multicollinearity test on the data transformation can be observed in the following section. Table 5 shows the implementation of data transformation eliminates any

Table 5
Coefficients of Multicollinearity Test After Data Transformation

	Collinearity Statistics	
MODEL	Tolerance	VIF
INS	0,240	4,165
MAN	0,820	1,220
PUB	0,258	3,880
PCON	0,659	1,516
FSIZE	0,552	1,811
ROA	0,743	1,345
SGROW	0,872	1,146

Source: Processed Data 2025

potential issues related to multicollinearity. A comprehensive examination of the data reveals that all tolerance values are greater than 0.1 and all VIF values are less than or equal to 10. This step ensured that the assumptions of multiple linear regression were satisfied and that the estimated coefficients were more stable and interpretable.

This section is the main part of the research article and is usually the longest. The results presented here are the "clean" results. The process of data analysis, such as statistical calculations and hypothesis testing, does not need to be presented. Only the results of the analysis and hypothesis testing should be reported. Tables and figures can be used to clarify the verbal presentation of the results, and they should be commented on or discussed.

Table 6
Heteroscedasticity Test

F-statistic	1,80258	Prob. F (36,39)	0,03678
Obs*R-squared	47,47058	Prob. Chi-Square (36)	0,09562
Scaled explained SS	23,11797	Prob. Chi-Square (36)	0,95242

Source: Processed Data 2025

Table 6 presents the results of the heteroscedasticity test, indicating that there is no sufficient statistical evidence to suggest the presence of heteroscedasticity within the regression model. This result is supported by the value of Obs*R-squared obtained from the White test, which yields a Chi-square probability of 0,09562. Since this probability value is greater than the conventional 0,05 (5%) significance level, it implies that the variance of the residuals is homoscedastic.

Hypothesis Testing Result

The panel data model multiple regression analysis was performed to examine the influence of Ownership Structure (INS, MAN, PUB) and Political Connections (PCON) on Corporate Water Disclosure (CWD) by also including control variables include Firm Size (FSIZE), Leverage (LEV), Return on Asset (ROA), and Sales Growth (SALESG). Thus, the multiple regression analysis in this study will be carried out using the t-statistical test to evaluate the significance of individual independent variables.

As previously mentioned, selecting the appropriate model for multiple regression analysis requires conducting three statistical tests in sequence: the Chow test, the Hausman test, and the Breusch-Pagan Lagrange Multiplier (LM) test. In this study, the Chow test produced a p-value of 0.09543, which exceeds the 0.05 significance

threshold. This result indicates that there is no significant difference between the Common Effect Model (CEM) and the Fixed Effects Model (FEM), thereby justifying the use of the Common Effect Model. As a result, it is not necessary to proceed with the Hausman and Breusch-Pagan LM tests.

Table 7
Multiple Regression Analysis Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Conclusion
(Constant)	36,10258	20,42310	1,76773	0,08140	
INS	-36,33808	20,52532	-1,77040	0,08095*	Significant
MAN	-33,64247	20,67931	-1,62687	0,10820*	Significant
PUB	-35,93471	20,54208	-1,74932	0,08456*	Significant
PCON	0,21187	0,11068	1,91423	0,05962**	Significant
FSIZE	0,02193	0,04079	0,53756	0,59256	Not Significant
LEV	0,18251	0,22813	0,80005	0,42635	Not Significant
ROA	0,44326	0,93540	0,47388	0,63704	Not Significant
SALESG	-0,20903	0,16291	-1,28308	0,20364	Not Significant
F-statistic					1,69934
Adjusted R-squared					0,06614
Number of Observation					80

Source: Processed Data 2025

The results of 80 observations sample shows Pseudo-R-Square value of 0,06614 which means that only 6.61% of the variance in corporate water disclosure is explained by the independent variables, leaving the remaining portion to be explained by unexamined variables. For examples, the Institutional Ownership t-statistic has a value of -1,77040 and a probability value of 0,08095, equivalent to 8%. While it was followed with Managerial Ownership which demonstrate a t-statistic value of -1,62687 accompanied by a probability value of 0,10820 (equivalent to 10%). Consequently, The Public Ownership have a value of -1,74932 for the t-statistic and a value of 0,08456 (equivalent to 8%) for the probability, which. The Political Connections (PCON) variable has a t-statistic of 1.91423 and a p-value of 0.05962, indicating marginal statistical significance at the 5% level.

Discussions

This study uses multiple linear regression analysis specifically using T-Testing to test the effect of ownership structure and political connection on corporate water

disclosure. The multiple regression analysis result shows that institutional ownership, managerial ownership, public ownership have significant influences to corporate water disclosure.

The first hypothesis testing proposes a result that institutional ownership has a statistically significant and negative effect on corporate water disclosure. This was supported by the statistical result, which shows a p-value of 0,08095 and a coefficient of -36,33808, indicating a negative relationship. The p-value is slightly under the 10% significance level, which suggests there is an association. The negative coefficient implies that higher institutional ownership is associated with lower levels of water disclosure. This result indicates that institutional ownership influences water disclosure, particularly in a negative direction, which supports the first hypothesis. However, from the perspective of agency theory which focused on manager and firm relationship, the result of this testing might indicate the possibility where institutional investors are more likely to look for short-term gains rather than long-term returns, which resulted in having influences to try not put pressure on managers to engage in or disclose water stewardship activities that may result in additional costs. Rather than encouraging transparency on environmental issues, institutional owners may be more focused on maximizing the company's profitability. This reduces the incentive for managers to provide extensive water-related information. As an addition, this result is also consistent with the findings of Wicaksono et al. (2024), who reported a negative and significant association between institutional ownership and water disclosure.

The second hypothesis which stated that managerial ownership influences corporate water disclosure. However, the test results shows that the coefficient for managerial ownership is in -33,64247 and the p-value is on 0,10820 which is slightly above the 10% threshold for statistical significance, however, it still suggests a meaningful association in the context of this study. Thus, the results here shows that managerial ownership have a statistically significant effect on corporate water disclosure in this model, followed with negative relationship. Consequently, the hypothesis is supported. Accordingly, from the standpoint of agency theory, it proposes that managers as agents have obligation to manage the company that aligned with the investors' interests as principals. Which means, in this context, manager is expected to have a lead so the water disclosure can be increased in order to build investor's trust and

accountability. Nevertheless, the negative and insignificant result of this study indicate that managerial ownership does not necessarily affect company to have a greater transparency in environmental matters, like water disclosure. This result is at odds with the prior study from Adimulya & Sudarno, (2013) found that managerial ownership has no significant effect on the probability of disclosing sustainability reports. Companies with greater managerial ownership have a smaller probability of disclosing sustainability reports.

The third hypothesis stated that public ownership influences corporate water disclosure. The test results are aligned with the hypothesis, where the results shows that public ownership has a statistically significant and negative effect on corporate water disclosure, this is reflected with the public ownership has coefficient of -35,93471 and the p-value of 0,08456. The p-value itself was fallen under the 10% significance threshold, which suggests there is a meaningful association. However, the negative coefficient from the result might imply that a greater proportion of public ownership is associated with the reduced levels of water disclosure. From the standpoint of agency theory, this result might due to the distribution of ownership in instances of high public ownership, shareholders are often in small numbers and consequently lack the capacity to effectively monitor management. This might resulted in the way that managers may feel less pressure to engage in disclosing non-financial activities, such as water disclosure. This action could lead to lower levels of transparency as individual public shareholders might rely on disclosures with no influence to demand them. This study result is in line with the conclusions of the study by Situmorang & Hadiprajitno, (2016) who has found that public ownership has a significant influence with a negative direction on the disclosure of sustainability reports.

CONCLUSIONS AND SUGGESTIONS

Conclusions

This study purpose is to find the influence of ownership structure and political connection on corporate water disclosure. Which involves the effects from institutional ownership, managerial ownership, public ownership, and political connection that followed with firm size, leverage, return on asset, and sales growth. This study examines in total of 80 samples covering 16 firms which categorized as agricultural sector

company that listed in Indonesian Stock Exchange (IDX) from 2019 to 2023.

Overall, this study finds that ownership structure covering institutional ownership, managerial ownership, public ownership have significant and negative influence toward corporate water disclosure. While political connections have significant and positive influence toward corporate water disclosure. In terms of control variables, including: firm size, leverage and return on assets, have statistically insignificant but positive effects on corporate water disclosure. Finally, the sales growth has been shown to have a negative and also statistically insignificant effect on corporate water disclosure, with all of the control variable probability value resulted on higher than 10%. Lastly, this study result highlights the nuanced influence of ownership structure and political connections on sustainability reporting, particularly water disclosure. The result suggests some type of ownership and political connections may impact the company action of disclosing information.

Limitations and Suggestions

One limitation of the present study is its dependence on GRI-303 as the sole measurement tool for the dependent variable. While GRI-303 provides a widely recognized and standardized framework for assessing corporate water-related practices, it may not fully capture the broader scope and nuances of water disclosure practices across different firms or industries. This limitation may result in the exclusion of other relevant water-related disclosures that fall outside the scope of GRI-303 but are still significant in evaluating a company's transparency and sustainability performance.

In considering the results and limitations of this study, the suggestion for future research is to increase the sample size in order to improve the statistical power and the generalizability of the findings. In order to achieve this objective, it is suggested that the focus be directed towards a more specific scope, such as water-sensitive firms, where environmental disclosure, particularly water-related issues, may also be relevant.

REFERENCES

Adhariani, D. (2021). *The Shape of Water: Analysis of Corporate Water Disclosure in Indonesia*.

Adimulya, N., & Sudarno. (2013). Pengaruh Kepemilikan. *Diponegoro Journal of Accounting*, *2*, 1–14.

Aljanadi, Y., Nahg, A., & Majid, A. (2016). Quality Reporting of Environmental Information by Saudi Agricultural Companies: Water Information Disclosure. In *Saudi Arabia International Journal of Applied Chemistry* (Vol. 12, Issue 1). http://www.ripublication.comhttp//www.ripublication.com

Aqilla, A. R., Razak, A. R., Barlian, E., Syah, N., & Diliarosta, S. (2023). Pengaruh Sampah Plastik Dalam Pencemaran Air. *Desember*, 275–280. https://doi.org/10.59435/gjmi.v1i6.203

Ardyaningsih, N., & Oktarina, D. (2022). Pengaruh Kinerja Lingkungan, Kepemilikan Publik dan Ukuran Perusahaan terhadap Environmental disclosure. *Jurnal Akuntansi AKUNESA*, *11*(1), 49–59.

Asianti, R. I. L., Sulistiyowati, L. N., Setyahety, R. A., & Jarwa, T. (2023). Kinerja Keuangan: Sales Growth, Sustainability Report, Dan Political Connection Dalam Perusahaan Pertambangan. *CAPITAL: Jurnal Ekonomi Dan Manajemen*, *7*(1), 155. https://doi.org/10.25273/capital.v7i1.17441

Dwinanto Bimo, I. (2021). Accounting Analysis Journal Institutional Ownership and Disclosure of Sustainability Report with Environmental Uncertainty as Moderation Variables ARTICLE INFO ABSTRACT. *Accounting Analysis Journal*, *10*(2), 143–149. https://doi.org/10.15294/aaj.v10i2.45731

Hasibuan, N., & Ismail, M. (2024). Pengaruh Firm Size, Political Connection, Gender Diversity, Profitability, dan Leverage Terhadap Water Disclosure pada Perusahaan Sektor Pertambangan yang Terdaftar di Bursa Efek Indonesia Periode 2021-2022. *Ekonomis: Journal of Economics and Business*, *8*(1), 685. https://doi.org/10.33087/ekonomis.v8i1.1648

Hunafah, D. R., Zahwa, S. F., & Hasnawati. (2022). Pengaruh Ukuran Perusahaan, Pertumbuhan Perusahaan, Kepemilikan Saham Publik Dan Profitabilitas Terhadap Pengungkapan Csr Selama Masa Pandemi Covid-19. *Jurnal Ekonomi Trisakti*, *2*(2), 1615–1628. https://doi.org/10.25105/jet.v2i2.14999

Huq, M., Wheeler, D., & Zhang, C. (1996). *Water Pollution Abatement By Chinese Industry: Cost Estimates And Policy Implications*.

Ihsan, M., Rexipal, D., & Firmansyah, A. (2024). DOES MANAGERIAL OWNERSHIP MODERATE THE VALUE RELEVANCE OF EARNINGS AND EQUITY OF SUSTAINABILITY REPORTING ? *AFEBI Management and Business Review (AMBR)*, 1–12.

Indrayani, L., & Rahmah, N. (2018). Nilai Parameter Kadar Pencemar Sebagai Penentu Tingkat Efektivitas Tahapan Pengolahan Limbah Cair Industri Batik. *Jurnal Rekayasa Proses*, *12*(1), 41. https://doi.org/10.22146/jrekpros.35754

Jensen, M., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership structure. *Journal of Financial Economics 3 (1976) 305-360*. https://doi.org/10.1177/0018726718812602

Jurnali, T., & Manurung, N. S. (2023). Ukuran Dewan, Keberagaman Dewan Dan Pengungkapan Tanggung Jawab Sosial Perusahaan: Peran Koneksi Politik. *Jurnal Bisnis Dan Akuntansi*, *25*(1), 45–64. https://doi.org/10.34208/jba.v25i1.1722

Liu, C., Su, K., & Zhang, M. (2021). Water disclosure and financial reporting quality for social changes: Empirical evidence from China. *Technological Forecasting and Social Change*, *166*. https://doi.org/10.1016/j.techfore.2021.120571

Ludianah, S., Abbas, D. S., Hidayat, I., & Aulia, T. Z. (2022). Pengaruh Profitabilitas, Kepemilikan Institusional, Dewan Komisaris Independen, dan Dewan Direksi terhadap Sustainability Report Disclosure. *JUMBIWIRA : Jurnal Manajemen Bisnis Kewirausahaan*, *1*(3), 41–48. https://doi.org/10.56910/jumbiwira.v1i3.259

Prastyawan, R., & Astuti, C. D. (2023). Pengaruh Inovasi Teknologi, Struktur Modal dan Struktur Kepemilikan terhadap Pengungkapan Laporan Keberlanjutan. *Jurnal Informatika Ekonomi Bisnis*, 475–481. https://doi.org/10.37034/infeb.v5i2.203

Roviqoh, D. I., & Khafid, M. (2021). Profitabilitas dalam Memediasi Pengaruh Kepemilikan Institusional, Komite Audit, dan Ukuran Perusahaan terhadap Pengungkapan Sustainability Report. *Business and Economic Analysis Journal*, *1*(1), 14–26. https://doi.org/10.15294/beaj.v1i1.30142

Situmorang, R., & Hadiprajitno, B. (2016). Pengaruh Karakteristik Dewan Dan Struktur Kepemilikan Terhadap Luas Pengungkapan Sustainability Reporting. *Diponegoro Journal of Accounting*, *8*(3), 1–14. http://ejournal-s1.undip.ac.id/index.php/accounting

Sutawan, M. D., & Sisdyani, A. E. (2022). Koneksi Politik, Kepemilikan Pemerintah dan Pengungkapan Sustainability Reporting. *Sustainability Reporting. E-Jurnal Akuntansi, 32(8), 2047-2057*. https://doi.org/10.24843/EJA.2022.v

Wicaksono, A. P., Setiawan, D., Anni Aryani, Y., & Hartoko, S. (2024). The effect of ownership structure on water disclosure in Indonesian companies. *Journal of Open Innovation: Technology, Market, and Complexity*, *10*(1). https://doi.org/10.1016/j.joitmc.2023.100185

Wicaksono, B., & Honggowati, S. (2020). *Pengungkapan air dalam perspektif*. *11*(3), 600–612.

Proceeding

Ghozali, (2021). Aplikasi Analisis Multivariate dengan Program IBM SPSS 26 (10th ed.). Badan Penerbit Universitas Diponegoro.

Ghozali, & Ratmono, (2017). Analisis Multivariat Dan Ekonometrika: Teori, Konsep Dan Aplikasi Dengan EViews 10. 2nd ed., Badan Penerbit Universitas Diponegoro, Dec. 2017.

Web Page

Publication | 10th World Water Forum 2024. (2024). Registration of the 10th World Water Forum. Retrieved September 1, 2024, from https://worldwaterforum.org/publication

Law, Regulation, Act

Republik Indonesia. Peraturan OJK Nomor 51/POJK.03/2017 tentang Penerapan Keuangan Berkelanjutan bagi Lembaga Jasa Keuangan, Emiten, dan Perusahaan Publik.