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## **Analyzing the Economic Impact of Public Share Ownership, Capital Structure, and Environmental Costs on Financial Performance with Good Corporate Governance as a Moderating Variable**

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Gusti Ayu Putu Agung Mahadewi<sup>1</sup>, Desak Nyoman Sri Werastuti<sup>2</sup>,  
I Gusti Ayu Purnamawati<sup>3</sup>

### ***Abstract:***

*This study aims to analyze and find out public share ownership has a positive effect on financial performance, to analyze and find out capital structure has a positive effect on financial performance, to analyze and find out environmental costs have a positive effect on financial performance, to analyze and find out GCG is able to moderate the effect of public share ownership on financial performance, to analyze and find out GCG is able to moderate the effect of capital structure on financial performance, to analyze and find out GCG is able to moderate the effect of environmental costs on financial performance. This research is quantitative research. This study shows that Public Share Ownership, Capital Structure, and Environmental Costs have a positive and significant effect on the financial performance of property and real estate sector companies on the IDX in 2020-2022. In addition, Good Corporate Governance (GCG) is proven to moderate the relationship between these three variables and financial performance, thereby strengthening their positive influence. These findings support stakeholder, agency, and legitimacy theories.*

**Keywords:** *Economic, Public Share Ownership, Capital Structure, Environmental Costs, Financial Performance, Good Corporate Governance (GCG)*

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## **1. Introduction**

Financial performance is a measuring tool used to determine the quality of a company. Good financial performance will provide a positive assessment of the company, whereas poor financial performance will negatively impact the company's quality. Effective company management also plays an important role in achieving quality financial performance. Increased competition in the business world is one of the

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<sup>1</sup>Universitas Pendidikan Ganesha, Indonesia. [gungayu1304@gmail.com](mailto:gungayu1304@gmail.com)

<sup>2</sup>Universitas Pendidikan Ganesha, Indonesia. [sri.werastuti@undiksha.ac.id](mailto:sri.werastuti@undiksha.ac.id)

<sup>3</sup>Universitas Pendidikan Ganesha, Indonesia. [ayu.purnamawati@undiksha.ac.id](mailto:ayu.purnamawati@undiksha.ac.id)

factors that requires companies to be well managed and developed in order to survive and outperform competitors in both performance and image.

The good or bad performance of a company can also be seen from its financial performance in generating profits (Wulandari & Sari, 2022). Investors often use financial performance as a measure when making investment decisions; therefore, the company's financial performance must continually improve. The implementation of sound performance practices positively affects the company and results in a good reputation in the eyes of the public or investors (Abdillah, Regytha Aura Gunawan, Suprapti, & Suprayitno, 2023).

In recent years, there has been a phenomenon of decreasing net income in the property and real estate sector in 2022. Several large companies, such as PT Bumi Serpong Damai Tbk (BSDE), experienced a 1.33% decrease in net profit. Similarly, PT Intiland Development Tbk (DILD) saw a 0.41% decrease in net profit. This decline was caused by several factors, including the Russia-Ukraine war, which disrupted global commodity supply, leading to increased prices and inflation. Additionally, the rise in fuel prices raised operational costs in the property sector, and the termination of the Government Borne Value Added Tax (PPN DTP) incentive in September 2022, which previously supported demand in the sector, further exacerbated the situation ([www.cnbcindonesia.com](http://www.cnbcindonesia.com)).

A decrease in financial performance is not only marked by a drop in profit but can also be seen through an increase in debt or a decline in market value. In the context of this study, the decline in financial performance is assessed by the ROA (Return on Assets) value, which has decreased. This ratio measures the company's ability to generate profit from its total operations (Wijaya, 2019). The decline in ROA is attributed to an increase in total assets not matched by an increase in net profit, indicating weakened financial performance (Permana, Saleh, Nelly, Sari, & Sutandi, 2021).

Based on the Annual Reports of Property and Real Estate Sector Companies listed on BEI, the ROA of several companies in 2020–2022 showed that out of 92 total companies, 33 (approximately 35.86%) experienced a decline. This data indicates that the financial performance of several property and real estate sector companies listed on the IDX during that period was suboptimal due to annual declines and fluctuations, necessitating investigation into the causes of this decline.

Several factors affect a company's financial performance. One such factor is public share ownership, which relates to the number of shares held by investors. Shareholders are the primary stakeholders, and companies must consider their interests and conduct operations to fulfill shareholder obligations (Shakil, Nihal, Tasnia, & Munim, 2019). However, investment in the property and real estate sector significantly declined from 2020 to 2022. The onset of the COVID-19 pandemic led to a sharp drop in the property

market due to economic restrictions and weakened purchasing power. Changes in consumer behavior and social restriction policies further delayed property transactions (Kontan.co.id). In Q2 of 2023, the real estate sector recorded a 12.3% year-on-year decline, despite rising demand for luxury homes and rental commercial properties. Overall, although some recovery signs are emerging, the investment climate remains unstable as investors cautiously respond to market and regulatory changes (Ekon.go.id). Enhancing investor confidence must be supported by optimal company performance. The greater the public share ownership, the more information is disclosed in annual reports. Investors seek extensive information for decision-making and to monitor management activities, prompting companies to maintain their performance (Pandiangan, Oktafani, Panjaitan, Shifa, & Jefri, 2022).

Another factor affecting financial performance is capital structure, defined by the ratio between debt and equity. Companies with an optimal capital structure can generate optimal profits, benefiting both the company and shareholders (Rahman, 2020). A sound financial structure is necessary for optimal performance. Referencing (BBC.com) and (Kompas.com), the Chinese property giant Evergrande Group faced a financial crisis in 2021, becoming the world's most indebted company with nearly USD 330 billion in debt (about IDR 5.2 trillion). Although the Chinese property crisis did not directly impact Indonesia's property market, it affected market sentiment and foreign investor caution in Asia. Redsun Property Group also defaulted on foreign bonds in mid-2022, with The Bank of New York Mellon (London branch) filing a petition over unpaid debts of about USD 228.5 million (IDR 3.54 trillion) (Detik.com). Heavy reliance on debt increases shareholder risk and expected return rates, and can reduce liquidity (Suryani & Fajaryani, 2018). Capital structure significantly impacts capital availability and costs, thus influencing company performance. Conversely, a suboptimal capital structure elevates performance risk and business failure potential (Ningsih & Utami, 2020).

Environmental costs also affect financial performance. It is vital for companies to be environmentally conscious, especially as environmental issues draw increasing attention from governments, investors, and consumers (Evita & Syafruddin, 2019). Some housing projects have negatively impacted the environment, such as the Mandalika Residence Cimahi development in a water catchment area, leading to landslides (Jabarekspres.com). Bali is also experiencing overdevelopment, with around 2,000 hectares of rice fields converted into buildings, and the subak system in Denpasar disappearing. Overdevelopment stresses water resources, necessitating environmental recovery efforts and regulatory reinforcement (Kumparan.com). The public is increasingly aware of the risks from corporate environmental exploitation, such as pollution, deforestation, and waste, which ultimately affect human life (Saputra, 2020). Disclosing environmental performance shows transparency and credibility, which supports informed decision-making. Non-disclosure can suggest higher environmental risk and future regulatory costs (Wulaningrum & Kusrihandayani, 2020). Corporate social responsibility through environmental

performance disclosure can positively influence financial performance, as companies with good environmental track records are also viewed favorably socially (Setiadi, 2021).

Management also plays a crucial role in achieving optimal financial performance. Companies are increasingly aware of the importance of implementing Good Corporate Governance (GCG) as a strategic approach to improving financial performance. GCG remains a weakness in many Indonesian companies. One of the causes of the late 1990s economic crisis was poor governance—such as poor investment quality, broad diversification, short-term unhedged loans, weak oversight, lack of transparency, and poor law enforcement (Ekon.go.id). Financial performance is strongly linked to governance practices. Maximizing stakeholder wealth reinforces the importance of GCG globally (Ahmed, 2019). GCG mitigates conflicts between owners and management. According to Agency Theory, management may pursue self-interest over company goals, so strong governance is essential. GCG reflects how well management handles assets and capital to attract investors, which is reflected in financial performance (Mau & Kadarusman, 2022). Research by Usman & Yakubu (2019) also shows that financial performance improves with effective GCG practices. In this study, GCG is a moderating variable to assess whether it strengthens or weakens the effect of public share ownership, capital structure, and environmental costs on financial performance.

This study is based on Agency Theory and Legitimacy Theory. Agency Theory explains how companies improve performance to minimize losses from conflicts between management and shareholders. It underpins the public share ownership factor (Sintyawati & Dewi, 2018) and also relates to capital structure, where managerial decisions on financial structure may cause conflict (Suryaningrum & Ratnawati, 2024). Legitimacy Theory is relevant to CSR, especially regarding social and environmental aspects that build public and investor legitimacy, thereby improving financial performance. This links closely with environmental cost disclosures as a demonstration of corporate responsibility (Tambunan, Aristi, & Azmi, 2023).

Previous studies on financial performance have shown inconsistent results. For instance, Cahyani & Puspitasari (2023) and Titani & Susilowati (2022) found that public share ownership positively affects financial performance. Conversely, Rahmadhani, Suhartini, & ... (2021) and Suryaningrum & Ratnawati (2024) found no effect.

Ayuningtya & Mawardi (2022) and Jessica & Triyani (2022) found that capital structure affects financial performance. However, Pratama & Devi (2021) reported no such effect.

Putri (2023) and Nirwani & Kartini (2022) concluded that environmental costs influence financial performance, while Rahayudi & Apriwandi (2023) and Evita & Syafruddin (2019) found no effect.

This study focuses on property and real estate sector companies listed on the IDX from 2020 to 2022, unlike previous studies conducted on different sectors and timeframes. For example, Ramadhani, Saputra, & Wahyuni (2022) focused on Basic Industry and Chemical companies from 2017–2021; Ayuningtya & Mawardi (2022) on Primary Consumer Goods from 2016–2020; and Saputra (2020) on Mining companies from 2014–2018. The choice of the property sector is due to the significant performance decline in this sector compared to others. This study also introduces the GCG variable as a moderator, which was not included in studies like Suryaningrum & Ratnawati (2024). Another novelty lies in measuring GCG using a two-tier system from Werastuti (2022), as opposed to the GCPI index used in studies by Fitra et al. (2021) and Ramadhani et al. (2022). Additionally, this research uses STATA software for data processing, whereas previous studies mostly used SPSS (e.g., Ayuningtya & Mawardi, 2022; Wardianda & Wiyono, 2023; Cahyani & Puspitasari, 2023).

## **2. Theoretical Background**

### **Public Share Ownership (X1)**

Public share ownership refers to the proportion of a company's shares held by the general public. It plays an important role in corporate governance, as public shareholders can serve as external monitors of management performance (Ali, 2019). Public share ownership is measured using a ratio scale with the following formula:

$$\text{Public Share Ownership (\%)} = \left( \frac{\text{Number of Publicly Owned Shares}}{\text{Total Outstanding Shares}} \right) \times 100\%$$

### **Capital Structure (X2)**

Capital structure is a key financial concept that refers to the mix of debt and equity used by a company to finance its operations and achieve its strategic goals (Hossain, 2021). The **Debt to Equity Ratio (DER)** is commonly used to represent a company's capital structure, as it indicates the proportion between total debt and equity. The formula is:

$$\text{DER (\%)} = \left( \frac{\text{Total Liabilities}}{\text{Total Equity}} \right) \times 100\%$$

### **Environmental Cost (X3)**

Environmental cost refers to the expenses incurred by a company in fulfilling its environmental responsibilities and mitigating the negative impacts of its operations (Rahim & Mus, 2020). This variable is measured using the following formula:

Environmental Cost Ratio =  $\frac{\text{Total Environmental Management Costs}}{\text{Net Profit After Tax}}$   
Environmental Cost Ratio =  $\frac{\text{Net Profit After Tax}}{\text{Total Environmental Management Costs}}$

$$\text{Environmental Cost Ratio} = \frac{\text{Total Environmental Management Costs}}{\text{Net Profit After Tax}}$$

### **Financial Performance (Y)**

Financial performance refers to the assessment of how effectively a company implements financial practices to meet its strategic goals, mission, and vision (Dawu & Manane, 2020). In this study, financial performance is proxied by **Return on Assets (ROA)**. ROA is chosen because it reflects the company's ability to generate profits from its total assets, offering a comprehensive measure of operational efficiency. The formula used is:

$$\text{ROA (\%)} = \left( \frac{\text{Net Profit}}{\text{Total Assets}} \right) \times 100\%$$

### **Good Corporate Governance (GCG) (Z)**

Good Corporate Governance (GCG) in this study is measured using a two-tier system, as adopted from Werastuti (2022). This system separates the supervisory role of the Board of Commissioners from the executive role of the Board of Directors. The measurement focuses on the size of each board. A larger Board of Commissioners is considered to enhance supervision and provide better input to the Board of Directors, which positively impacts financial performance (Saragih & Sihombing, 2021). Similarly, a larger Board of Directors is associated with improved financial decision-making and performance (Septiana & Aris, 2023). The formulas are as follows:

- **Board of Directors Size** = Number of Board of Directors Members
- **Board of Commissioners Size** = Number of Board of Commissioners Members

## **3. Methodology**

This study uses a quantitative approach with a type of causality research to examine the effect of Public Share Ownership, Capital Structure, and Environmental Costs on Financial Performance, with Good Corporate Governance as a moderating variable. The research population is property and real estate sector companies listed on the IDX in 2020-2022, with a sample of 32 companies selected through purposive sampling method based on certain criteria. The type of data used is secondary data obtained from the company's financial and annual reports. The data analysis technique uses Moderated Regression Analysis (MRA) with the help of STATA software, which includes descriptive statistical analysis, estimation model selection test (CEM, FEM, REM), classical assumption test (normality, multicollinearity, heteroscedasticity), and hypothesis testing through t test, F test, coefficient of determination ( $R^2$ ), and moderation variable analysis.

#### 4. Empirical Findings/Results

##### Determination of Panel Regression Model Common Effect Model

Table 1. Common Effect Model

Variable	Coef.	Std. Err	t-Statistic	Prob.
Cons	-3,629582	0,1878678	-19,32	0,000
KSP	0,9616941	0,0451169	21,32	0,000
DER	0,0577963	0,0258736	2,23	0,025
BL	0,0518949	0,0229854	2,26	0,024
GCG	1,6607710	0,0303886	18,37	0,000
KSP.GCG	0,4353951	0,0179560	24,25	0,000
DER.GCG	0,0265791	0,0103366	2,57	0,010
BL.GCG	0,0296523	0,0102423	2,90	0,004

Source: Data processed 2025

Description:

ROA = Financial Performance  
KSP = Public Share Ownership  
DER = Capital Structure  
BL = Environmental Cost  
GCG = Good Corporate Governance

Table 1 indicates that all variables, including the interaction terms, have a statistically significant effect on Return on Assets (ROA), with p-values less than 0.05. Public share ownership (KSP) shows a strong positive relationship with ROA, where a 1% increase in KSP results in a 0.9617% rise in ROA. Capital structure (DER) also has a positive, albeit modest, effect on ROA with a coefficient of 0.0578. Similarly, environmental cost (BL) positively influences financial performance with a coefficient of 0.0519. Good Corporate Governance (GCG) demonstrates a strong direct impact on ROA with a coefficient of 1.6608. Additionally, the interaction terms—KSP.GCG, DER.GCG, and BL.GCG—are all significant, suggesting that GCG strengthens the influence of public share ownership, capital structure, and environmental cost on financial performance.

##### Fixed Effect Model

Table 2. Fixed Effect Model

Variable	Coef.	Std. Err	t-Statistic	Prob.
Cons	-3,399482	0,2619792	-12,98	0,000
KSP	0,8931938	0,0622003	14,36	0,000
DER	0,0471397	0,0322721	1,46	0,150
BL	0,0837478	0,0333342	2,51	0,015
GCG	1,5370470	0,1310633	1,73	0,000
KSP.GCG	0,3944729	0,0284735	13,85	0,000
DER.GCG	0,0223849	0,0132884	1,68	0,098
BL.GCG	0,0452572	0,0141484	3,20	0,002

Source: Data processed 2025

Description:

ROA = Financial Performance  
KSP = Public Share Ownership  
DER = Capital Structure  
BL = Environmental Cost  
GCG = Good Corporate Governance

Table 2 presents the results of the Fixed Effect Model, which controls for firm-specific characteristics. The findings show that public share ownership (KSP) and environmental cost (BL) continue to have a significant positive effect on ROA. However, capital structure (DER) is no longer statistically significant ( $p = 0.150$ ), suggesting that after accounting for firm-level effects, its influence on financial performance diminishes. The interaction terms KSP.GCG and BL.GCG remain significant, indicating that Good Corporate Governance (GCG) enhances the impact of public share ownership and environmental cost on ROA. Meanwhile, the interaction term DER.GCG is not significant at the 5% level ( $p = 0.098$ ), although it is marginally close to significance.

### Random Effect Model

**Table 3. Random Effect Model**

Variable	Coef.	Std. Err	t-Statistic	Prob.
Cons	-3,6295820	0,1878678	-19,32	0,000
KSP	0,9616941	0,0451169	21,32	0,000
DER	0,0577963	0,0258736	2,23	0,025
BL	0,0518949	0,0229854	2,26	0,024
GCG	1,6607710	0,0903886	18,37	0,000
KSP.GCG	0,4353951	0,0179560	24,25	0,000
DER.GCG	0,0265791	0,0103366	2,57	0,010
BL.GCG	0,0296523	0,0102423	2,90	0,004

Source: Data processed 2025

Description:

ROA = Financial Performance  
KSP = Public Share Ownership  
DER = Capital Structure  
BL = Environmental Cost  
GCG = Good Corporate Governance

Table 3 treats firm-specific differences as random. The results are nearly identical to CEM, which indicates that firm-specific characteristics may not significantly influence the relationship between the independent variables and ROA.

### Model Feasibility Testing

There are three estimation models in panel data regression, namely *common effect*, *fixed effect*, and *random effect* models which will be selected using the chow test and hausman test with the following explanation:



## Chow Test

**Table 4. Chow Test Results**

Effects Test	Prob.
F Test (31.57)	0,8500
Probability F	0,6825

Source: Data Processed,

The chow test results in Table 4 show that the Probability F value of 0.6825 is more than the alpha value (0.05), so  $H_0$  is accepted. So the appropriate method in the study and the best technique for conducting regression tests is to use the *common effects model*.

## Hausman Test

**Table 5. Hausman Test Results**

Effects Test	Prob.
Chi Square	4,99
Chi Square Probability	0,6608

Source: Data Processed, 2025

The Hausman Test results in Table 5 show that the Prob. Chi Square value of 0.6608 is greater than the alpha value (0.05) so that  $H_1$  is rejected and  $H_0$  is accepted. Then the right model for panel data regression is the *random effect model*.

## Lagrange Multiplier Test

**Table 6. Langrange multiplier test results**

Effects Test	Prob.
Chibar Square	0,000
Chi Square Probability	1,000

Source: Data processed, 2025

The *Langrange multiplier* test results obtained a probability value of 1.000 which is greater than the alpha value (0.05) so that  $H_1$  is rejected and  $H_0$  is accepted. Then the right model for panel data regression is the *common effect model*. Based on the results of the *chow* test, *Hausman* test and *Langrange multiplier* test, it shows that the best model used in this study is the *common effect model*. The model selection results can be seen in Table 7 below:

**Table 7. Panel Data Test Results**

Testing	Hypothesis	Final Decision
Chow Test	Common Effect vs Fixed Effect	Common Effect
Hausman Test	Random Effect vs Fixed Effect	Random Effect
<i>Langrange multiplier</i> test	Random Effect vs Common Effect	Common Effect

Source: Data processed, 2025

From the model selection results between the *fixed effect model* (FEM), *Random Effect Model* (REM) and *Common Effect Model* (CEM), the *Common Effect Model* (CEM) was selected. So, the CEM model in this study is the best model to answer the research objectives in the regression model.

## Classical Assumption Testing

### Normality Test

**Table 8. Normality Test Results**

Variable	Obs	W	V	Z	Prob>z
Roa	96	0,97508	1,989	1,522	0,06402

Source: *Data processed*,

Based on table 8, it can be seen that the normality test results show that the probability value in the *Shapiro Wilk* test is 0.06402, which has a value greater than 0.05, so it can be concluded that the data is normally distributed.

### Multicollinearity Test

**Table 9. Multicollinearity Test Results**

Variables	VIF	Correlation	Description
Public Share Ownership (X1)	1,95	0,7190	Multicollinearity free
Capital structure (DER) (X2)	1,79	0,2889	Multicollinearity free
Environmental Cost (BL) (X3)	1,15	0,3747	Multicollinearity free
<i>Good Corporate Governance</i> (Z)	1,10	0,6326	Multicollinearity free

Source: *Data processed*,

Based on table 9, it can be seen that the multicollinearity test results show that all independent variables have a VIF value of less than 10 and a *correlation* value of less than 0.8, so it can be concluded that the regression model in this study does not occur multicollinearity and the regression model is feasible to use. Therefore, based on the *correlation* and VIF values in the analysis model, there are no symptoms of multicollinearity, which means that there is no correlation or relationship between each variable.

### Heteroscedasticity Test

**Table 10. Heteroscedasticity Test Results**

<i>Chi2(1)</i>	<i>Probability</i>	Description
0,15	0,6998	Passed Heteroscedasticity

Source: *Data processed*,

Based on table 10, it shows that the *probability* value of the research variables has a value greater than 0.05, so it can be concluded that there is no heteroscedasticity in the panel data tested.

## Research Hypothesis Test

### Multiple Linear Regression Analysis with Panel Data

**Table 11. Regression Analysis Results**

Variable	<i>Coef.</i>	<i>Std. Err</i>	<i>t-Statistic</i>	<i>Prob.</i>
Cons	-3,629582	0,1878678	-19,32	0,000
KSP	0,9616941	0,0451169	21,32	0,000
DER	0,0577963	0,0258736	2,23	0,028
BL	0,0518949	0,0229854	2,26	0,026
GCG	1,6607710	0,0303886	18,37	0,000

Source: Data processed 2025

Based on table 11, the regression equation model that can be made is as follows:

$$Y = -3.629582 + 0.9616941 X_1 + 0.0577963 X_2 + 0.0518949 X_3 + e$$

The regression equation above can be explained as follows:

1. The constant of -3.629582 states that if the independent variables Public Share Ownership (KSP), Capital Structure (DER), Environmental Costs (BL), *Good Corporate Governance* (GCG) and their interaction variables are considered constant, then the average financial performance (ROA) is -3.629582.
2. The coefficient value  $\beta_1 = 0.9616941$  indicates that there is a positive direction between the public share ownership variable (KSP) on financial performance (ROA) (Y) of 0.9616941. This means that if the public share ownership variable (KSP) increases by one unit, the financial performance (ROA) will increase by 0.9616941, provided that other variables remain constant.
3. The coefficient value  $\beta_2 = 0.0577963$  indicates that there is a positive direction between the variable Capital structure (DER) ( $X_2$ ) on financial performance (ROA) (Y) of 0.0577963. This means that if the variable Capital structure (DER) ( $X_2$ ) increases by one unit, the financial performance (ROA) (Y) will increase by 0.0577963, provided that other variables remain constant.
4. The coefficient value  $\beta_3 = 0.0518949$  indicates that there is a positive direction between the variable Environmental Cost (BL) ( $X_3$ ) on financial performance (ROA) (Y) of 0.0518949. This means that if the variable Environmental Cost (BL) ( $X_3$ ) increases by one unit, the financial performance (ROA) (Y) will increase by 0.0518949, provided that other variables remain constant.
5. The coefficient value  $\beta_4 = 1.660771$  indicates that there is a positive direction between the *Good Corporate Governance* (GCG) variable and financial performance (ROA) (Y) of 0.0518949. This means that if the *Good Corporate Governance* (GCG) variable increases by one unit, the financial performance (ROA) (Y) will increase by 1.660771, provided that other variables remain constant.
6. The coefficient value  $\beta_5 = 0.4353951$  indicates that there is a positive direction between the interaction variables of public share ownership (KSP) and *Good Corporate Governance* (GCG) on financial performance (ROA) (Y) of 0.4353951. This means that if the public share ownership variable (KSP) increases by one unit, financial performance (ROA) will increase by 0.4353951, provided that other variables remain constant.
7. The coefficient value  $\beta_6 = 0.0265791$  indicates that there is a positive direction between the interaction variable of Capital structure (DER) with *Good Corporate Governance* (GCG) on financial performance (ROA) (Y) of 0.0265791. This means that if the capital structure (DER) variable ( $X_2$ ) increases by one unit, the financial performance (ROA) (Y) will increase by 0.0265791, provided that other variables remain constant.
8. The coefficient value  $\beta_7 = 0.0296523$  indicates that there is a positive direction between the interaction variables of Environmental Costs (BL) and *Good Corporate Governance* (GCG) on financial performance (ROA) (Y) of 0.0296523. This means that if the Environmental Cost (BL) variable ( $X_3$ )

increases by one unit, the financial performance (ROA) (Y) will increase by 0.0296523, provided that other variables remain constant.

9. Standard error e indicates the confounding error rate

### Goodness of Fit Model Assessment

#### Test Coefficient of Determination ( $R^2$ )

**Table 12. Test Results of the Coefficient of Determination ( $R^2$ )**

R Squared	Adjusted R Square
0,9710	0,6986

Source: Data processed,

The test results in Table 12 provide results where the Adjusted  $R^2$  value (coefficient of determination) is 0.6986. The results of the calculation of the determination analysis of this study are as follows:

$Kd = r^2 \times 100\%$

$Kd = 0.6986 \times 100\% = 69.86\%$

These results mean that variations in Public Share Ownership (KSP), Capital Structure (DER), Environmental Costs (BL), *Good Corporate Governance* (GCG) and their interaction variables affect financial performance by 69.86 percent, while the remaining 30.14 percent is explained by other factors not explained in the research model.

#### Simultaneous Test (F Test)

**Table 13. F Test Results**

<i>F statistic (7.88)</i>	Probability F
420,21	0,000

Source: Data processed, 2025 (Appendix 12)

The results of the F test (*Ftest*) show that the significance value of the P value is 0.000 which is smaller than  $\alpha = 0.05$ , this means that the model used in this study is feasible. These results mean that all independent variables are able to predict or explain the phenomenon of financial performance. In other words, Public Share Ownership (KSP), Capital Structure (DER), Environmental Costs (BL), *Good Corporate Governance* (GCG) and their interaction variables simultaneously have a positive and significant effect on financial performance. This means that the model can be used for further analysis or in other words Public Share Ownership (KSP), Capital Structure (DER), Environmental Costs (BL), *Good Corporate Governance* (GCG) and their interaction variables are able to improve financial performance.

#### Moderated Regression Analysis Test

**Table 14. Hypothesis Test Results**

Variables	Coefficient	Z	Probability Z	Summary
Public Share Ownership ( $X_1$ )	0,9616941	21,32	0,000	Positively Significant
Capital structure ( $X_2$ )	0,0577963	2,23	0,028	Positively Significant

Variables	Coefficient	Z	Probability Z	Summary
Environmental Cost (X <sub>3</sub> )	0,0518949	2,26	0,026	Positively Significant
Good Corporate Governance (Z)	1,6607710	18,37	0,000	Positively Significant
Interaction X <sub>(1)</sub> .Z	0,4353951	24,25	0,000	Positively Significant
Interaction X <sub>(2)</sub> .Z	0,0265791	2,57	0,012	Positively Significant
Interaction X <sub>(3)</sub> .Z	0,0296523	2,90	0,005	Positively Significant

Source: Data processed, 2025 (Appendix 11)

Based on the t test results in Table 14, the relationship between variables can be explained as follows:

1. The Effect of Public Share Ownership on Financial Performance  
The results of the t test calculation in Table 4.15 show that the regression coefficient value of X<sub>1</sub> or Public Share Ownership is 0.9616941 with a Prob. Z value of 0.000 less than 0.05. This shows that Public Share Ownership has a positive and significant effect on financial performance, so it can be concluded that **H<sub>1</sub> is accepted**.
2. Effect of Capital Structure on Performance  
The results of the t test calculation in Table 4.15 show that the regression coefficient value of X<sub>2</sub> or Capital structure is 0.0577963 which is positive with a Prob value. Z value of 0.028 less than 0.05. This shows that the capital structure has a positive and significant effect on financial performance. so it can be concluded that **H<sub>2</sub> is accepted**.
3. The effect of environmental costs on performance  
The results of the t test calculation in Table 4.15 show that the regression coefficient value of X<sub>3</sub> or environmental costs is 0.0518949, which is positive with a Prob value. Z value of 0.026 less than 0.05. This shows that environmental costs have a positive and significant effect on financial performance so that it can be concluded that **H<sub>3</sub> is accepted**.
4. The effect of *Good Corporate Governance* in moderating the effect of Public Share Ownership on Financial Performance  
The results of the moderation regression analysis show that the Prob. Z interaction variable of Public Share Ownership with *Good Corporate Governance* is 0.000 less than 0.05, this means that *Good Corporate Governance* can moderate or strengthen the effect of Public Share Ownership on financial performance, so it can be concluded that **H<sub>4</sub> is accepted**.
5. The role of Good Corporate Governance in moderating the effect of Capital structure (DER) on financial performance  
The results of the moderation regression analysis show that the Prob. Z interaction variable of Capital Structure with *Good Corporate Governance* is 0.012 less than 0.05, this means that *Good Corporate Governance* can moderate

or strengthen the effect of Capital Structure on Financial Performance, so it can be concluded that **H<sub>5</sub> is accepted**.

6. The role of Good Corporate Governance in moderating the effect of environmental costs on financial performance

The results of the moderation regression analysis show that the Prob. Z interaction variable of Environmental Costs with *Good Corporate Governance* is 0.005 less than 0.05, this means that *Good Corporate Governance* can moderate or strengthen the effect of Environmental Costs on Financial Performance, so it can be concluded that **H<sub>6</sub> is accepted**.

## 5. Discussion

### The Effect of Public Share Ownership on Financial Performance

The first hypothesis of this study is that Public Share Ownership (PSO) positively affects Financial Performance. Regression results show PSO has a positive and significant effect on financial performance of property and real estate companies listed on the IDX from 2020 to 2022, supporting H1. This is shown by a p-value of 0.000 (< 0.05) and a positive coefficient of 0.961, indicating that higher public share ownership significantly improves financial performance.

Public Share Ownership refers to the shares held by the public. A larger public ownership suggests better company reputation and performance. Cahyani & Puspitasari (2023) explain that high public ownership reduces conflicts between management and shareholders, encouraging company growth and improved financial results. Rahmadhani et al. (2021) also state that greater public ownership signals better company reputation, positively influencing financial performance. Thus, higher public share ownership leads to better financial performance.

Agency theory states that separation of ownership and management causes agency problems due to conflicting interests, generating agency costs that hurt performance. Reducing these costs can be done by increasing public ownership and supervision (Sintyawati & Dewi, 2018). Public ownership encourages better management oversight, reducing agency costs (Hastuti, 2016). More stakeholder involvement leads to better decisions, trust, and sustainable value. These findings support agency theory, showing public share ownership reduces conflicts and improves financial performance.

In this study, PSO is measured as the ratio of shares owned by the public to total shares. Descriptive statistics show the lowest PSO was 10.21% (CITY, 2020) and highest was 94.88% (ELTY, 2020). Despite the COVID-19 pandemic in 2020, which caused a sector downturn, the property and real estate sector contributed significantly to the economy with IDR 324.3 trillion. While national GDP fell -2.1%, the sector grew by 2.3% (Kumparan.com). Lower property prices attracted investors, reflected

by ELTY's high PSO of 94.88% during the pandemic, indicating ongoing investor confidence.

This study supports research by Titani & Susilowati (2022), Cahyani & Puspitasari (2023), and Rahmadhani et al. (2021) showing PSO's positive effect on financial performance, but contradicts Suryaningrum & Ratnawati (2024) and Mariani (2017), which found no effect.

### **The Effect of Capital Structure on Financial Performance**

The second hypothesis states Capital Structure positively affects Financial Performance. Regression shows Capital Structure, measured by Debt-to-Equity Ratio (DER), positively and significantly affects financial performance of IDX-listed property companies from 2020 to 2022, supporting H2. The p-value is 0.028 ( $< 0.05$ ) with a positive coefficient of 0.577.

DER reflects the company's ability to pay debts with equity. High DER indicates more debt use (Setiawati, Mariati, & Dewi, 2023). Proper use of debt can increase profitability by adding funds for operations (Ifada & Inayah, 2017; Ningsih & Utami, 2020). Putri & Rafflis (2024) find that high debt can boost financial performance if managed well. However, higher profitability comes with increased risk, so careful management is required. Ayuningtya & Mawardi (2022) note that profitable companies tend to use more debt.

Setiawati et al. (2023) state companies with high DER attract investors by signaling growth potential, increasing share prices and financial performance. Therefore, capital structure effects depend on debt management and risk control. Capital structure decisions affect company value. Excessive debt raises financial risk due to fixed interest, especially if cash flow is unstable, possibly reducing investor confidence. Thus, management must optimize capital structure.

Agency theory suggests optimal capital structure minimizes agency costs and maximizes firm value. Debt disciplines management to align with shareholder interests, while equity provides flexibility. Debt reduces conflicts by pressuring management through creditor oversight.

COVID-19 impacted capital structures; some property companies increased debt and suffered financial losses. For example, PT Alam Sutera Realty Tbk (ASRI) posted a 2020 net loss partly due to large interest expenses (Kumparan.com). Excessive debt without good management raises risk, so managerial decisions on capital structure are crucial.

This study supports agency theory that capital structure reduces conflicts and improves management efficiency. Management must wisely balance capital structure based on company conditions and strategy. Results align with Yuliani (2021) and

Ningsih & Utami (2020) showing positive effects of capital structure on financial performance, but contradict Cahyani & Puspitasari (2023) and Budiasih et al. (2023), which found no effect.

### **The Effect of Environmental Costs on Financial Performance**

The third hypothesis of this study is that Environmental Costs have a positive effect on Financial Performance. Based on the results of the direct influence regression, environmental costs have a positive impact on the financial performance of property and real estate sector companies listed on the IDX during 2020-2022; therefore, H3 is accepted. This is indicated by a p-value of 0.026, which is less than 0.05 (5%), and an X3 coefficient value of 0.518, which is positive. This means that Environmental Costs have a significant positive effect on financial performance.

Environmental costs are not merely operational expenses but strategic investments that can enhance a company's financial performance. Social information disclosure is important in improving the company's image, even though it requires resource sacrifices (Purnamawati et al., 2017). These environmental costs are largely dominated by expenditures related to internal and external failure activities, where the amount of failure costs causes a decline in financial performance. Allocating environmental costs effectively to reduce internal and external failure costs—ideally with a greater focus on prevention and detection costs—can improve financial performance (Tambunan et al., 2023). If costs are too high without clear benefits, they may burden the company. Therefore, what matters more is not just the amount but how efficiently and strategically the costs are used for environmental purposes. Research by Widjaya & Nursiam (2024) emphasizes the importance of transparency in environmental cost reporting to build stakeholder trust. Thus, based on statistical results, it can be concluded that higher environmental costs, when managed with the right strategy, provide greater opportunities for companies to improve financial performance through increased profits.

These environmental expenditures include investments in green technologies, compliance with environmental regulations, waste management, and other sustainability efforts. Consumers and investors increasingly prefer companies committed to sustainability. With transparency in environmental cost disclosure, companies can reinforce a positive image and increase customer loyalty. A strong reputation also attracts investors, which in turn contributes to higher share prices and better access to funding. Furthermore, companies offering environmentally friendly products and services can attract a wider market segment, thereby increasing revenue and improving financial performance.

Environmental issues are a major concern for property and real estate companies, such as PT Lippo Karawaci (LPKR). LPKR implements ESG initiatives, including clean water management and a wastewater management center that reuses water and separates rainwater channels from wastewater pipes. LPKR has also developed a city



master plan to address flooding, clean water supply issues, and wastewater management as potential sources of pollution. This includes building artificial lakes, pipelines, wastewater management facilities, and establishing a Water Treatment Plant (WTP) (Tribunnews.com). Based on data collection, LPKR's environmental costs were 7.5 billion IDR in 2020, 33 billion IDR in 2021, and 17 billion IDR in 2022.

These findings support legitimacy theory, which states that companies operate within a social environment and must obtain legitimacy from society to survive. Legitimacy means that the company is recognized as a responsible entity operating in accordance with social expectations, ethics, and regulations. Loss of legitimacy may lead to boycotts, loss of investor confidence, or legal sanctions. In the context of environmental costs and financial performance, legitimacy theory explains that companies investing in environmental sustainability can enhance their image and reputation, ultimately improving financial performance. Companies under pressure from stakeholders (e.g., government, investors, society) often increase spending on environmental programs, such as carbon emission reduction, waste management, or renewable energy use, to maintain or enhance social legitimacy. Companies with strong sustainability strategies tend to have more stable and better long-term financial performance. Thus, legitimacy theory supports the idea that environmental costs are not merely expenses but strategic investments to maintain legitimacy and improve financial performance over time.

The results of this study support previous research by Rahmawati (2023), which found that environmental costs have a positive and significant effect on financial performance. At the same time, they contradict the findings of Saputra (2020) and Ermaya & Mashuri (2020), who reported that environmental costs have no effect on financial performance.

#### **Good Corporate Governance (GCG) Moderates the Effect of Public Share Ownership on Financial Performance**

The coefficient for the interaction between Public Share Ownership and Good Corporate Governance (GCG) is 0.435, with a p-value of 0.000 (less than 0.05). Therefore, H4—that GCG strengthens the effect of Public Share Ownership on the Financial Performance of Property and Real Estate Companies from 2020-2022—is accepted.

Public ownership reflects the level of public trust to invest in the company, indirectly signaling good company value. By implementing GCG, involved parties contribute to creating good financial performance (Bianca & Hwihanus, 2024). Companies with good governance tend to increase public confidence, leading to more investments and encouraging better financial performance through tighter supervision, greater transparency, and improved managerial decisions.

According to agency theory, managers (agents) tend to make decisions that benefit themselves rather than shareholders (principals). Public shareholders have limited ability to directly monitor management, often resulting in conflicts of interest. GCG plays a key role in reducing these conflicts. With strong GCG practices such as transparency, accountability, and independent supervision by the board of commissioners and directors, public shareholders gain confidence that management acts in their best interests. Agency theory supports this finding, as GCG reduces conflicts between shareholders and management. Consequently, public share ownership can more effectively improve company financial performance.

This study's results align with Bianca & Hwihanus (2024), who found that public ownership structure affects financial performance when moderated by good corporate governance.

### **Good Corporate Governance Moderates the Effect of Capital Structure on Financial Performance**

The coefficient for the interaction between Capital Structure and Good Corporate Governance (GCG) is 0.026, with a p-value of 0.012 (less than 0.05). Thus, H5—that GCG strengthens the effect of Capital Structure on the Financial Performance of Property and Real Estate Companies from 2020-2022—is accepted.

Good corporate governance creates a system regulating relationships between shareholders, management, creditors, government, employees, and other stakeholders, aiming to create added value for all stakeholders (Ayuningtya & Mawardi, 2022). Capital structure significantly affects company financial performance. An optimal capital structure increases profitability, but poor management may increase financial risk. GCG acts as a supervisory mechanism ensuring that the capital structure is well-managed to positively impact financial performance (Putri & Rafliis, 2024).

Companies with optimal capital structures can maximize profits and improve financial performance. However, high debt levels may cause financial risk if not managed properly. Therefore, GCG ensures that debt-related decisions are made cautiously considering risks. Companies with good governance tend to have better risk management, so high debt does not necessarily lead to financial failure.

This supports agency theory, which states that conflicts of interest between managers and shareholders regarding capital structure management often arise. GCG helps reduce these conflicts by ensuring decisions on debt and equity are transparent and aligned with shareholders' interests, not just management's. GCG also prevents misaligned decisions through board supervision. With strict oversight, transparency, and rational decision-making, GCG ensures that capital structure optimizes financial performance.

These findings support previous research by Ayuningtya & Mawardi (2022) and Putri & Raflis (2024), but contradict Noviani et al. (2019), who found that GCG does not strengthen the capital structure effect on financial performance.

### **Good Corporate Governance Moderates the Effect of Environmental Costs on Financial Performance**

The coefficient for the interaction between Environmental Costs and Good Corporate Governance (GCG) is 0.029, with a p-value of 0.005 (less than 0.05). Therefore, H6—that GCG strengthens the effect of Environmental Costs on the Financial Performance of Property and Real Estate Companies from 2020-2022—is accepted.

Environmental costs include expenditures to reduce negative environmental impacts, such as prevention costs through environmentally friendly technology investments and pollution mitigation costs. GCG ensures companies focus not only on short-term profits but also on long-term sustainability. Increasingly, environmental costs reflect a company's commitment to sustainability. GCG ensures that these costs are not just formalities but are strategically managed to increase company value. GCG also controls and prevents arbitrary management behavior in cost management (Kristiani & Werastuti, 2020).

This supports agency theory, which states that GCG plays a crucial role in aligning management and shareholder interests. With strong oversight, transparency, and performance-based incentives, GCG ensures environmental investments are efficient and contribute to long-term financial performance improvement (Tampubolon & Rohman, 2024). Through GCG implementation, companies can manage environmental costs efficiently, avoiding overruns that negatively affect financial performance. While increased environmental costs may reduce short-term profits, they improve efficiency, reduce legal risks, enhance reputation, and ultimately improve long-term financial performance. Thus, a strong board and management are essential to ensure environmental costs are effectively used to improve long-term performance. In conclusion, based on agency theory, good governance reduces conflicts between managers and shareholders, shifting the perception of environmental costs from a burden to a value-adding investment.

These findings support Wardianda & Wiyono (2023), who showed corporate governance can strengthen green accounting's influence, but contradict Ulfa & Citradewi (2023), who found GCG unable to moderate green accounting's effect on financial performance.

## **6. Conclusions**

Based on the results of this study examining the effects of Public Share Ownership, Capital Structure, and Environmental Costs on Financial Performance, with Good Corporate Governance (GCG) as a moderating variable, on property and real estate companies listed on the Indonesia Stock Exchange (IDX) during 2020-2022, several

conclusions can be drawn. Public Share Ownership has a positive and significant impact on financial performance, indicating that a higher proportion of shares owned by the public encourages better financial outcomes. This finding supports stakeholder theory, which suggests that greater stakeholder involvement motivates management to improve company performance. Capital Structure also positively and significantly affects financial performance, showing that higher Debt to Equity Ratios (DER) can enhance financial outcomes, consistent with agency theory where optimal capital structure reduces conflicts of interest and improves management efficiency. Additionally, Environmental Costs positively and significantly influence financial performance, implying that well-managed environmental expenditures are strategic investments that enhance long-term legitimacy and profitability, in line with legitimacy theory. Furthermore, Good Corporate Governance strengthens the relationships between Public Share Ownership, Capital Structure, and Environmental Costs with financial performance. This suggests that effective GCG practices—such as transparency, accountability, and independent oversight—boost shareholder confidence and ensure capital and environmental resources are utilized optimally to maximize financial results, reaffirming the role of GCG as emphasized in agency theory.

Future studies are encouraged to expand the scope beyond the property and real estate sectors to other industries to validate the generalizability of these findings. Incorporating additional variables such as technological innovation, digital transformation, and market risk could provide a more comprehensive understanding of factors influencing financial performance. Researchers may also consider using longer or higher-frequency data sets to explore short-term and long-term dynamics. Further investigation into the quality of Good Corporate Governance implementation could include aspects such as business ethics, corporate social responsibility (CSR), and financial disclosure transparency. Lastly, employing qualitative or mixed-method approaches could offer deeper insights into how GCG moderates the relationships between financial variables and company performance.

## References:

- Abdillah, P., Gunawan, S. R. A., Suprpti, S., & Suprayitno, A. (2023). Corporate social responsibility disclosure (CSRD) dan financial slack terhadap kinerja keuangan. *AKSY Jurnal Ilmu Akuntansi dan Bisnis Syariah*, 5(2), 52–65. <https://doi.org/10.15575/aksy.v5i2.29210>
- Ahmed, I. A. (2019). Capital structure, ownership structure and corporate governance of SMEs in Ghana. *JABM Journal of Accounting - Business & Management*, 26(01), 45. <https://doi.org/10.31966/jabminternational.v26i01.397>
- Ayuningtya, A. H., & Mawardi, W. (2022). Analisis pengaruh struktur modal, ukuran perusahaan, tangibilitas, dan pertumbuhan penjualan terhadap kinerja keuangan perusahaan dengan good corporate governance sebagai variabel moderasi. *Diponegoro Journal of Management*, 11(6), 1–13.

- Bianca, S. L., & Hwihanus, H. (2024). Pengaruh fundamental makro, struktur modal, struktur kepemilikan, kinerja keuangan, karakteristik perusahaan dengan GCG sebagai variabel moderasi terhadap nilai perusahaan pada perusahaan subsektor pertambangan yang terdaftar di BEI. *Sullicyanna Luna*, 3(1).
- Budiasih, Y., Tannady, H., Arum, R. A., Laratmase, P., & Kurniawan, U. (2023). Analisis faktor determinan kinerja keuangan dengan komisaris independen sebagai variabel moderasi. *Journal of Economic, Business and Accounting (COSTING)*, 6(2), 1366–1377. <https://doi.org/10.31539/costing.v6i2.5264>
- Cahyani, R. S. A., & Puspitasari, W. (2023). Pengaruh kinerja lingkungan, biaya lingkungan, kepemilikan saham publik, green accounting, dan struktur modal terhadap kinerja keuangan. *Jurnal Akuntansi Trisakti*, 10(2), 189–208. <https://doi.org/10.25105/jat.v10i2.17846>
- Dawu, L. M. T., & Manane, D. R. (2020). Analisis kinerja keuangan pada perusahaan daerah air minum (PDAM) Tirta Lontar Kabupaten Kupang. *Jurnal Inspirasi Ekonomi*, 2(3), 2503–3123.
- Ermaya, H. N. L., & Mashuri, A. A. S. (2020). The influence of environmental performance, environmental cost and ISO 14001 on financial performance in non-financial companies listed on the Indonesia Stock Exchange. *Neraca: Jurnal Akuntansi Terapan*, 1(2), 74–83. <https://doi.org/10.31334/neraca.v1i2.857>
- Evita, M., & Syafruddin, S. (2019). Pengaruh biaya lingkungan, kinerja lingkungan, dan ISO 14001 terhadap kinerja keuangan perusahaan pertambangan: Studi kasus pada Bursa Efek Indonesia tahun 2014-2017. *Measurement: Jurnal Akuntansi*, 13(1), 27. <https://doi.org/10.33373/mja.v13i1.1829>
- Fitra, J., Asmeri, R., Begawati, N., Akuntansi, J., & Ekonomi, F. (2021). Pengaruh tata kelola perusahaan (corporate governance) dan kinerja lingkungan terhadap kinerja keuangan perusahaan: Studi kasus perusahaan-perusahaan CGPI di Indonesia periode 2013-2018. *Pareso Jurnal*, 3(4), 721–738.
- Hastuti, S. (2016). Kebijakan hutang, kepemilikan saham manajerial, dan penguasaan saham investor institusi dalam perspektif teori agency. *Jurnal Ilmiah*, 24(1), 17–28.
- Hossain, M. S. (2021). A revisit of capital structure puzzle: Global evidence and analysis. *International Review of Economics and Finance*, 75, 657–678. <https://doi.org/10.1016/j.iref.2021.05.001>
- Ifada, L. M., & Inayah, N. (2017). Analisis pengaruh tingkat leverage terhadap kinerja perusahaan (studi pada perusahaan food and beverage yang terdaftar di BEI tahun 2011-2013). *Fokus Ekonomi: Jurnal Ilmiah Ekonomi*, 12(1), 19–36.
- Jessica, J., & Triyani, Y. (2022). Pengaruh struktur modal, likuiditas, ukuran perusahaan dan umur perusahaan terhadap kinerja keuangan. *Jurnal Akuntansi*, 11(2), 138–148. <https://doi.org/10.46806/ja.v11i2.891>
- Kristiani, L. A., & Werastuti, D. N. S. (2020). Pengaruh kinerja lingkungan dan kinerja sosial terhadap kinerja keuangan dengan good corporate governance sebagai variabel pemoderasi. *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi)*, 11(3), 487–498.

- Mariani, D. (2017). Pengaruh penerapan green accounting, kepemilikan saham publik, publikasi CSR terhadap pengungkapan CSR dengan kinerja keuangan sebagai variabel intervening (studi empiris pada perusahaan property dan real estate yang terletak di Bursa Efek Indonesia). *Jurnal Akuntansi dan Keuangan*, 6(2), 141–160.
- Mau, M. S. T., & Kadarusman, K. (2022). Kinerja keuangan sebagai pemoderasi good corporate governance, corporate social responsibility dengan nilai perusahaan. *Jurnal Manajemen dan Keuangan*, 11(1), 1–19. <https://doi.org/10.33059/jmk.v11i1.3942>
- Ningsih, S., & Utami, W. B. (2020). Pengaruh operating leverage dan struktur modal terhadap kinerja keuangan pada perusahaan go publik sektor property dan real estate. *Jurnal Akuntansi dan Pajak*, 20(2). <https://doi.org/10.29040/jap.v20i2.754>
- Nirwani, S. M. S., & Kartini, Y. R. (2022). Pengaruh kinerja lingkungan, biaya lingkungan dan ukuran perusahaan terhadap kinerja keuangan yang terdaftar pada BEI. *Ekonomi dan Bisnis*, 11(4), 313–318.
- Noviani, A. V., Atahau, A. D. R., & Robiyanto, R. (2019). Struktur modal, profitabilitas, dan nilai perusahaan: Efek moderasi good corporate governance. *Jurnal Ekonomi dan Bisnis*, 22(2), 391–415. <https://doi.org/10.24914/jeb.v22i2.2601>
- Pandiangan, S. M. T., Oktafani, F., Panjaitan, S. R., Shifa, M., & Jefri, R. (2022). Analysis of public ownership and management ownership on the implementation of the triple bottom line in the plantation sector listed on the Indonesia Stock Exchange. *Budapest International Research and Critics Institute-Journal*, 5(1), 3489–3497.
- Paskha Rossi Maria Mesraniz Tampubolon, & Rohman, A. (2024). Pengaruh tata kelola perusahaan terhadap kinerja keuangan perusahaan (studi empiris pada perusahaan manufaktur yang terdaftar di BEI pada tahun 2020-2022). *Accounting Analysis Journal*, 13(4), 39.
- Permana, K. W. A., Saleh, R., Nelly, Sari, L., & Sutandi, S. (2021). Analisis return on assets (ROA), return on equity (ROE), net profit margin (NPM) dan gross profit margin untuk mengukur kinerja keuangan pada PT Raje Baginda Jurai di Palembang. *Jurnal Kajian Ekonomi dan Bisnis*, 5(1), 60.
- Pratama, P. B., & Devi, S. (2021). Pengaruh struktur modal, pertumbuhan penjualan dan manajemen laba terhadap kinerja keuangan pada perusahaan. *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi)*, 12, 394–402.
- Putri, D. A., & Rafli, R. (2024). Pengaruh struktur modal terhadap nilai perusahaan dengan good corporate governance sebagai variabel moderasi (studi kasus pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2016-2020). *JPDSH Jurnal Pendidikan Dasar dan Sosial Humaniora*, 1(8), 700–713.
- Putri, L. G. (2023). Pengaruh biaya lingkungan terhadap kinerja keuangan perusahaan (Studi kasus pada perusahaan manufaktur yang terdaftar di BEI periode tahun

- 2017–2021). *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi dan Bisnis*, 11(1), 831–838. <https://doi.org/10.37676/ekombis.v11i1.3482>
- Rahayudi, A. M. P., & Apriwandi. (2023). Kinerja lingkungan, biaya lingkungan dan kinerja keuangan (Studi empiris pada perusahaan yang terdaftar di Bursa Efek Indonesia sektor manufaktur periode 2019–2021). *Owner: Riset & Jurnal Akuntansi*, 7(1), 774–786.
- Rahim, S., & Mus, S. F. (2020). Aktualisasi ajaran Islam dalam praktik akuntansi lingkungan. *Jurnal Akuntansi Multiparadigma*, 11(3), 683–700. <https://doi.org/10.21776/ub.jamal.2020.11.3.39>
- Rahmadhani, I. W., Suhartini, D., & [Author Missing]. (2021). Pengaruh green accounting dan kepemilikan saham publik terhadap kinerja keuangan dengan pengungkapan CSR sebagai variabel intervening pada... ..*dan Keuangan*, 4(1), 132–146.
- Rahman, M. A. (2020). Pengaruh struktur modal dan pertumbuhan aset terhadap kinerja keuangan perusahaan yang terdaftar dalam Jakarta Islamic Index (JII). *Akurasi: Jurnal Studi Akuntansi dan Keuangan*, 3(1), 55–68. <https://doi.org/10.29303/akurasi.v3i1.25>
- Rahmawati, I. (2023). Pengaruh intellectual capital, biaya lingkungan terhadap kinerja keuangan. *Progress: Jurnal Pendidikan, Akuntansi dan Keuangan*, 6(2), 159–167. <https://doi.org/10.47080/progress.v6i2.2824>
- Ramadhani, K., Saputra, M. S., & Wahyuni, L. (2022). Pengaruh penerapan green accounting dan kinerja lingkungan terhadap kinerja keuangan dengan tata kelola perusahaan sebagai variabel moderasi. *Jurnal Akuntansi Trisakti*, 9(2), 229–244. <https://doi.org/10.25105/jat.v9i2.14559>
- Saputra, M. F. M. (2020). Pengaruh kinerja lingkungan dan biaya lingkungan terhadap kinerja keuangan dengan pengungkapan lingkungan sebagai variabel intervening (Studi empiris pada perusahaan pertambangan yang terdaftar di BEI tahun 2014–2018). *Jurnal Riset Akuntansi Tirtayasa*, 5(2), 123–138. <https://doi.org/10.48181/jratirtayasa.v5i2.8956>
- Saragih, A. E., & Sihombing, U. T. (2021). Pengaruh intellectual capital, good corporate governance, dan ukuran perusahaan terhadap kinerja keuangan perusahaan perbankan yang terdaftar di Bursa Efek Indonesia. *Jurnal Riset Akuntansi & Keuangan*, 7(1), 1–17. <https://doi.org/10.54367/jrak.v7i1.1133>
- Septiana, N., & Aris, M. A. (2023). Analisis proporsi dewan komisaris independen, ukuran dewan direksi, komite audit, blockholder ownership terhadap kinerja keuangan. *Jurnal Akuntansi, Keuangan, dan Manajemen*, 4(2), 101–114. <https://doi.org/10.35912/jakman.v4i2.1051>
- Setiadi, I. (2021). Pengaruh kinerja lingkungan, biaya lingkungan dan ukuran perusahaan terhadap kinerja keuangan. *Inovasi*, 17(4), 669–679. <https://doi.org/10.30872/jinv.v17i4.10054>
- Setiawati, L. P. E., Mariati, N. P. A. M., & Dewi, K. I. K. (2023). Pengaruh kinerja keuangan dan ukuran terhadap nilai perusahaan. *Remik*, 7(1), 222–228. <https://doi.org/10.33395/remik.v7i1.12024>

- Shakil, M. H., Nihal, M., Tasnia, M., & Munim, Z. H. (2019). Do environmental, social and governance performance affect the financial performance of banks? A cross-country study of emerging market banks. *Management of Environmental Quality: An International Journal*, 30(6), 1331–1344. <https://doi.org/10.1108/MEQ-08-2018-0155>
- Sintyawati, N. L. A., & Dewi, M. R. (2018). Pengaruh kepemilikan manajerial, kepemilikan institusional dan leverage terhadap biaya keagenan pada perusahaan manufaktur. *E-Jurnal Manajemen Universitas Udayana*, 7(2), 933–1019.
- Suryani, E., & Sri Fajaryani, N. L. G. (2018). Struktur modal, likuiditas, dan ukuran perusahaan terhadap kinerja keuangan perusahaan. *Jurnal Riset Akuntansi Kontemporer*, 10(2), 74–79.
- Suryaningrum, R., & Ratnawati, J. (2024). Pengaruh kinerja lingkungan, biaya lingkungan, kepemilikan saham publik, green accounting dan struktur modal terhadap kinerja keuangan. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, dan Akuntansi)*, 6(1), 595.
- Tambunan, A. L., Aristi, M. D., & Azmi, Z. (2023). Pengaruh biaya lingkungan dan corporate social responsibility terhadap kinerja keuangan. *Jurnal Wira Ekonomi Mikroskil*, 13(1), 1–9. <https://doi.org/10.55601/jwem.v13i1.936>
- Titani, A. M., & Susilowati, E. (2022). Kepemilikan saham publik dan corporate social responsibility terhadap kinerja keuangan. *Journal of Management and Business (JOMB)*, 4(2), 948–963. <https://doi.org/10.31539/jomb.v4i2.4451>
- Ulfa, M., & Citradewi, A. (2023). Peran good corporate governance dalam memoderasi faktor-faktor yang mempengaruhi kinerja keuangan. *Jurnal Riset Akuntansi*, 13(2), 237–256.
- Usman, O., & Yakubu, U. A. (2019). An investigation of the post-privatization firms' financial performance in Nigeria: The role of corporate governance practices. *Corporate Governance (Bingley)*, 19(3), 404–418. <https://doi.org/10.1108/CG-05-2018-0190>
- Wardianda, A. B. W., & Wiyono, S. (2023). Pengaruh green accounting terhadap kinerja keuangan dengan moderasi corporate governance terhadap perusahaan properti dan real estate yang terdaftar pada Bursa Efek Indonesia (BEI) tahun 2018–2021. *Jurnal Ekonomi Trisakti*, 3(2), 3183–3190. <https://doi.org/10.25105/jet.v3i2.17411>
- Werastuti, D. N. (2022). Apakah good corporate governance berperan dalam meningkatkan kinerja keberlanjutan? *Jurnal Akuntansi Multiparadigma*, 13(1), 153–163. <https://doi.org/10.21776/ub.jamal.2021.13.1.12>
- Widjaya, W., & Nursiam. (2024). The influence of environmental costs, green accounting, and corporate social responsibility on company profitability (Empirical study of manufacturing companies listed on the Indonesian Stock Exchange in 2020–2022). *Management Studies and Entrepreneurship Journal*, 5(2), 6593–6602.



- Wijaya, R. (2019). Analisis perkembangan return on assets (ROA) dan return on equity (ROE) untuk mengukur kinerja keuangan. *Jurnal Ilmu Manajemen*, 9(1), 40–51.
- Wulandari, W., & Sari, B. (2022). Struktur modal, likuiditas dan ukuran perusahaan penentu kinerja keuangan sektor properti dan real estate. *Ikraith-Ekonomika*, 6(2), 245–254. <https://doi.org/10.37817/ikraith-ekonomika.v6i2.2357>
- Wulaningrum, R., & Kusrihandayani, D. (2020). Pengaruh pengungkapan lingkungan, biaya lingkungan dan profitabilitas terhadap nilai perusahaan. *Seminar Nasional Penelitian & Pengabdian kepada Masyarakat*, 97–103.
- Yuliani, E. (2021). Pengaruh struktur modal, likuiditas dan pertumbuhan penjualan terhadap kinerja keuangan. *Jurnal Ilmu Manajemen*, 10(2), 111. <https://doi.org/10.32502/jimn.v10i2.3108>