

The Effect of Profitability, Capital Structure, and Good Corporate Governance on Financial Performance of Property and Real Estate Companies Listed on The Indonesia Stock Exchange (IDX) in 2020–2023

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ABSTRACT

This research seeks to examine and evaluate the influence of Profitability (measured by Return on Assets/ROA), Capital Structure (measured by Debt to Equity Ratio/DER), and Good Corporate Governance (measured by the Board of Directors) on the Price to Earnings Ratio (PER) among property and real estate firms listed on the Indonesia Stock Exchange (IDX). Employing a quantitative research approach, the study focused on companies listed between 2020 and 2023, totaling 94 firms. After applying specific selection criteria, a sample of 44 companies was obtained for analysis. Panel data regression using EViews software was utilized to process the data. The findings reveal that profitability, as indicated by ROA, has a positive and statistically significant impact on financial performance, represented by PER. Conversely, DER was found to have no significant influence, while the Board of Directors demonstrated a negative and significant effect on PER. These results are specific to the property and real estate sector listed on the IDX.

Keywords: Return on Asset, Debt to Equity Ratio, Board of Directors, Price to Earning Ratio

INTRODUCTION

The capital market holds a crucial role in supporting Indonesia's economic development. According to recent studies, it serves not only as a financing source for businesses but also as an investment platform for the public, enabling a flow of funds from surplus units to deficit units (Puteri & Wahyuni, 2023). As such, the capital market is increasingly recognized by both the public and the government as a vital component of financial infrastructure in Indonesia.

Investment instruments in the capital market vary and include stocks, mutual funds, bonds, exchange-traded funds (ETFs), and derivatives. Among these, stocks remain the most dominant due to their liquidity and potential for high returns. Stock market performance in Indonesia, managed by the Indonesia Stock Exchange (IDX), often reflects investor sentiment towards the country's macroeconomic outlook (Saputri

& Bahri, 2021). IDX itself categorizes stocks as one of the most attractive instruments for both institutional and retail investors. Issuing shares is a key option for companies seeking external funding, while investors are drawn to stocks due to the possibility of capital gains and dividends (Uz-zaky et al., 2024).

However, investing in stocks requires careful analysis. Despite their potential for substantial returns, stocks also carry a relatively high level of risk. Prospective investors are encouraged to evaluate the financial health of a company prior to investing (Puteri & Wahyuni, 2023). To avoid misjudgment in decision-making, transparency from companies becomes imperative. One form of such transparency is the publication of financial statements, which are accessible via IDX or the company's official website.

Financial statements represent a company's financial performance and can be used by investors to conduct comparative analysis. Through the information presented, investors can calculate various financial ratios to assess company valuation. One such indicator is the Price to Earnings Ratio (PER), which is calculated by dividing the market price per share by earnings per share (EPS). A high PER indicates that the market has high expectations for the company's future performance and is willing to pay a premium (Wiratno & Yustrianthe, 2022).

Each account in financial statements is interrelated. Hence, reviewing a company's performance involves examining assets, liabilities, and equity. Ratios such as Return on Assets (ROA) and Debt to Equity Ratio (DER) serve as important benchmarks. ROA is calculated by dividing net income after tax by total assets and reflects how efficiently a company utilizes its assets to generate profit. A higher ROA typically signifies better performance from an investor's perspective (Sinaga et al., 2023). Meanwhile, DER indicates a company's financial leverage and is computed by comparing total debt to shareholders' equity. It provides insight into how much of the company is financed by debt.

Financial statements not only guide investors but also highlight the importance of good corporate governance. Management integrity and independence are fundamental in aligning corporate goals and enhancing long-term shareholder value (RAAR, 2025). Among the governing bodies, the board of directors plays a strategic role in steering company operations and maintaining transparency. An active and accountable board can positively impact financial outcomes and increase investor confidence (IEOM, 2022).

Numerous studies have explored the relationship between financial performance and variables such as profitability, capital structure, and corporate governance, yet results remain inconsistent. For instance, Puteri and Wahyuni (2023) found that DER positively and significantly affects stock prices, while ROE has a negative significant impact. In contrast, Uz-zaky et al. (2024) reported that DER had no significant effect, whereas profitability influenced firm value positively. Additionally, RAAR (2025) concluded that the board of directors positively affects financial performance, although

findings from Al-Matani Journal (2022) indicated no significant relationship between board of directors and performance.

Considering these research gaps, this study aims to examine the effect of profitability—measured by ROA—on financial performance as proxied by PER. It also investigates the influence of capital structure—represented by DER—and good corporate governance—measured by the board of directors—on PER. Furthermore, this study seeks to analyze the simultaneous impact of ROA, DER, and the board of directors on company financial performance.

The outcomes of this research are expected to contribute as a reference for future studies and to serve as insights for companies to enhance their financial strategies. This study also offers guidance on how key internal financial and governance variables shape investment appeal in the capital market.

RESEARCH METHOD

The research method employed in this study is quantitative, with the research type classified as causal associative. As noted by Yusra and Asnur (2022), associative research aims to explore causal relationships between two or more variables, with the objective of understanding how one variable influences others. In this study, the independent variables consist of Profitability, proxied by Return on Assets (ROA); Capital Structure, represented by Debt to Equity Ratio (DER); and Good Corporate Governance, proxied by the Board of Directors. The dependent variable under investigation is Financial Performance, which is also proxied by the Price to Earnings Ratio (PER).

Quantitative research typically begins with the selection of research subjects. These subjects, also referred to as participants or data sources, form the sample, which is drawn from a broader group known as the population. According to Nur (2024), sampling techniques include methods such as random sampling, convenience sampling, and stratified sampling. These techniques are generally categorized into probability sampling—commonly used in quantitative studies—and non-probability sampling, which is more prevalent in qualitative research (Regina & Rasyid, 2022).

The population in this study comprises property and real estate companies listed on the Indonesia Stock Exchange (IDX), totaling 94 firms. The sampling technique applied is purposive sampling, with the following criteria guiding sample selection:

1. Companies must have been listed on the IDX during the 2020–2023 period.
2. Companies must have published complete annual reports for the years 2020 to 2023.
3. Companies must fulfill all data requirements related to the research variables.

Based on the population and selection criteria, a total of 44 companies were included as the final research sample.

RESULT AND DISCUSSION

Estimation Model Selection

This research applies a multiple regression model by first determining the most appropriate estimation method to be utilized in the analysis. Several estimation models are tested to identify the best fit for the dataset used in this study, including:

Chow Test

This test was carried out to determine the most appropriate regression model between the Common Effect Model (CEM) and the Fixed Effect Model (FEM). Based on the data analysis conducted in this study, the results of the Chow test are presented as follows:

Table 1. Chow Test

Redundant Fixed Effects Tests			
Pool: DPANEL			
Test cross-section fixed effects			
Effects Test	Statistic	D.F.	Prob.
Cross-section F	2.184133	(43,129)	0.0004
Cross-section Chi-square	96.270303	43	0.0000

Source : data processing results using Eviews

Referring to the Chow test results presented in the table above, the probability value for the cross-section Chi-square is 0.0000, which is lower than the significance level of 0.05. Therefore, it can be concluded that the most appropriate estimation model to be used in this study is the Fixed Effect Model (FEM).

Hausman Test

This test was carried out to determine the most suitable regression model between the Fixed Effect Model (FEM) and the Random Effect Model (REM). Based on the data analysis conducted in this study, the results of the Hausman test are presented as follows:

Table 2. Hausman Test

Correlated Random Effects - Hausman Test			
Pool: DPANEL			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	16.154929	3	0.0011

Source : data processing results using Eviews

Based on the results of the Hausman test shown in the table above, the probability value for the random cross-section is 0.0011. Since this value is less than the significance level of 0.05, it can be concluded that the appropriate estimation model to be used is the Fixed Effect Model (FEM).

Lagrange test

This test was performed to compare the suitability of the Common Effect Model (CEM) and the Random Effect Model (REM) in order to determine which regression model provides a better fit. Based on the data analysis conducted in this study, the results of the test are presented as follows:

Table 3. Lagrange Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.356625	Prob. F(2,170)	0.2603
Obs*R-squared	2.764884	Prob. Chi-Square(2)	0.2510

Source: EViews Software Processing Results

Based on the results of the Lagrange Multiplier (LM) test shown in the table above, the Chi-square probability value obtained is 0.2510, which is greater than the significance level of 0.05. Therefore, it can be concluded that the appropriate estimation model to be used is the Common Effect Model (CEM).

Classic Assumption Test

To ensure the reliability of the regression results in the panel data analysis, this study employed four diagnostic tests. These included the normality test, autocorrelation test, multicollinearity test, and heteroscedasticity test.

Normality Test

The normality test is used to determine whether the residuals in a regression model are normally distributed. This assumption is essential for ensuring the validity of statistical inferences made from the model. One of the common statistical approaches employed is the Jarque-Bera (JB) test, which evaluates the distribution of residuals based on skewness and kurtosis. If the probability value from the JB test is equal to or greater than 0.05, it indicates that the residuals are normally distributed and meet the assumption of normality. Conversely, a probability value below 0.05 suggests that the residuals are not normally distributed, and the assumption is violated. Recent studies in financial and economic modeling continue to use this method to validate normality in regression analysis (Nur'aeni & Kudus, 2023; IEOM, 2022).

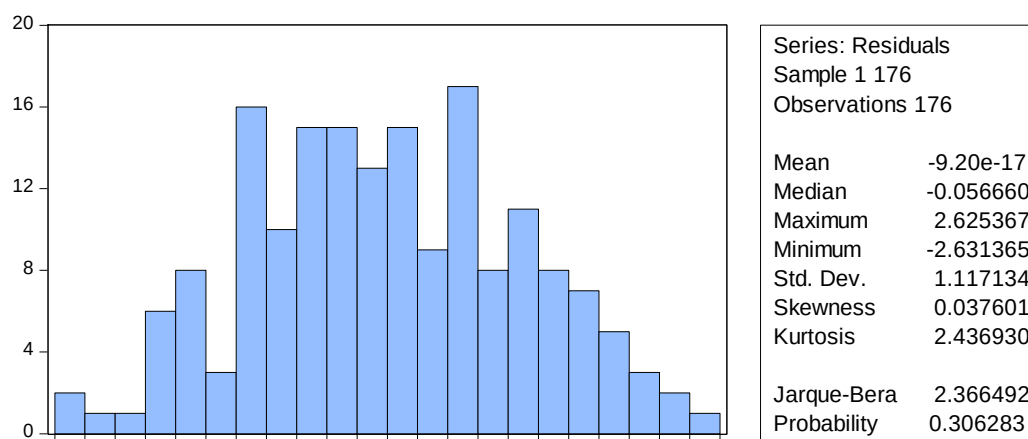


Figure 1. Normality Test with Jarque-Bera

Referring to the figure above, the Jarque-Bera (JB) statistic is reported at 2.366492. Given this result, it can be concluded that the residuals in this study follow a normal distribution.

Autocorrelation Test

The autocorrelation test in this study was conducted using the Durbin-Watson (DW) test. The Durbin-Watson statistic has a value range between 0 and 4.

Table 4. Autocorrelation Test with Durbin-Watson Test

Log likelihood	-268.7266	Hannan-Quinn criter.	3.128392
F-statistic	10.94882	Durbin-Watson stat	1.846386

Source: EViews Software Processing Results

Based on the table above, the Durbin-Watson statistic is 1.846386. Since this value falls within the range of 1 to 3 ($1 < 1.846386 < 3$), it indicates that the assumption of no autocorrelation is satisfied. Thus, it can be concluded that there is no significant autocorrelation present in the residuals.

Multicollinearity Test

The multicollinearity test is used to evaluate whether significant intercorrelations exist among independent variables, which may distort the reliability of the regression model. Recent literature emphasizes the importance of detecting multicollinearity to ensure valid interpretation of coefficient estimates. A common approach involves the use of the Variance Inflation Factor (VIF), where a VIF value above 10 is typically considered indicative of multicollinearity issues (Efeizomor, 2023; Aljandali & Tatahi, 2020). In this study, multicollinearity was tested using VIF as a diagnostic measure, aligning with established thresholds from current econometric practice.

Table 5. Multicollinearity Test with VIF

Independent Variables	BRIGHT
Profitability (X1)	1,030572
Capital Structure (X2)	1,02316
Good Corporate Governance (X3)	1,018932

Source: EViews Software Processing Results

As shown in the table above, the VIF values for each independent variable are as follows: X1 is 1.030572, X2 is 1.02316, and X3 is 1.018932. Since all VIF values are below the threshold of 10, it can be concluded that there are no indications of multicollinearity among the independent variables.

Heteroscedasticity Test

The heteroscedasticity test was conducted to examine whether there is variance in the residuals across the observed variables. This test was performed using the Breusch-Pagan method.

Table 6. Heteroscedasticity Test with Breusch-Pagan Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.506549	Prob. F(3,172)	0.6783
Obs*R-squared	1.541371	Prob. Chi-Square(3)	0.6728

Source: EViews Software Processing Results

Based on the test results presented in the table above, the Chi-square probability value is 0.6728, which exceeds the significance threshold of 0.05. Therefore, it can be concluded that the model does not exhibit symptoms of heteroscedasticity.

Hypothesis Testing

Coefficient of Determination (R²)

The analysis of the coefficient of determination was conducted to assess the extent to which the model can explain the variation in the dependent variable based on the independent variables, and vice versa. The coefficient of determination (R²) has a value that ranges between 0 and 1.

Table 7. Coefficient of Determination

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1?	6.530052	1.469343	4.444198	0.0000
X2?	-0.022447	0.020073	-1.118296	0.2655
X3?	-0.474935	0.166859	-2.846327	0.0051
C	1.930783	0.673712	2.865886	0.0049
R-squared	0.514102	Mean dependent var		0.119860
Adjusted R-squared	0.340836	S.D. dependent var		1.219144
S.E. of regression	0.989810	Akaike info criterion		3.040812
Sum squared resid	126.3844	Schwarz criterion		3.887475

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Log likelihood	-220.5915	Hannan-Quinn criter.		3.384214
F-statistic	2.967126	Durbin-Watson stat		2.984880
Prob(F-statistic)	0.000001			

Source: EViews Software Processing Results

Based on the data processing results shown in the table above, the R-squared value obtained is 0.514102. This indicates that the variables Profitability (X1), Capital Structure (X2), and Good Corporate Governance (X3) collectively explain 51.41% of the variation in Financial Performance (Y), while the remaining 48.59% is influenced by other factors not included in this study.

Simultaneous Test (F)

The F-test was carried out to examine the simultaneous effect of the independent variables on the dependent variable in this study. As shown in Table 4.8, the probability value of the F-statistic is 0.000001, which is less than the significance level of 0.05. This result indicates that the independent variables—Profitability (X1), Capital Structure (X2), and Good Corporate Governance (X3)—jointly have a significant impact on Financial Performance (Y).

T test

The t-test was conducted to evaluate the individual influence of each independent variable on the dependent variable using the Fixed Effect Model, with a significance level of 0.05. Based on the results in Table 4.8, Profitability (X1) has a probability value of 0.0000, indicating a significant effect on Financial Performance. Capital Structure (X2) shows a probability value of 0.2655, suggesting no significant effect. Meanwhile, Good Corporate Governance (X3) has a probability value of 0.0051, indicating a significant impact on Financial Performance.

Multiple Regression Analysis

Multiple regression analysis is used to assess the extent to which independent variables influence the dependent variable. In this study, the Fixed Effect Model was employed as the estimation approach, and the results are presented as follows:

Table 8. Multiple Regression Analysis Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1?	6.530052	1.469343	4.444198	0.0000
X2?	-0.022447	0.020073	-1.118296	0.2655
X3?	-0.474935	0.166859	-2.846327	0.0051
C	1.930783	0.673712	2.865886	0.0049

Source: EViews Software Processing Results

Based on the regression equation $Y = 1.930783 + 6.530052X_1 - 0.022447X_2 - 0.474935X_3$, it can be interpreted that the constant value of 1.930783 indicates the estimated value of Financial Performance when all independent variables are zero. The coefficient of ROA (X_1) is 6.530052, suggesting that an increase of one unit in ROA, while other variables are held constant, will increase Financial Performance by 6.530052. The DER (X_2) coefficient is -0.022447, meaning a one-unit increase in DER will reduce Financial Performance by 0.022447. Lastly, the Board of Directors (X_3) has a coefficient of -0.474935, indicating that a one-unit increase in this variable will decrease Financial Performance by 0.474935, assuming other variables remain constant.

The Effect of Return on Assets on Price to Earning Ratio

The findings of this study show that Return on Assets (ROA) exerts a positive and significant influence on the Price to Earnings Ratio (PER) among property and real estate companies listed on the Indonesia Stock Exchange (IDX). This relationship suggests that greater profitability, as reflected in higher ROA, enhances investor confidence and interest, which in turn raises stock prices and PER. This is consistent with the argument that strong financial performance signals efficient asset utilization, which investors interpret as an indicator of sustainable earnings (Pratiwi et al., 2024; Sinaga et al., 2023). Moreover, companies with high ROA are more likely to offer higher returns through dividends or capital gains, thereby attracting more market attention.

The Effect of Debt to Equity Ratio on Price to Earning Ratio

The results of this study indicate that the Debt to Equity Ratio (DER) does not significantly influence the Price to Earnings Ratio (PER) in property and real estate firms listed on the IDX. A high DER implies that a company's operations are heavily financed through debt, which can elevate interest expenses and reduce net earnings, ultimately diminishing the firm's attractiveness to investors. This reflects the financial risk associated with excessive leverage, where the company faces increased obligations to repay creditors. These findings are consistent with the research conducted by Uz-zaky et al. (2024) and Saputri & Bahri (2021), both of which reported that DER has a negative but statistically insignificant impact on firm value and performance indicators such as PER.

The Influence of the Board of Directors on the Price to Earning Ratio

The findings from research on property and real estate companies listed on the Indonesia Stock Exchange (IDX) reveal that the board of directors has a negative and significant influence on the Price to Earnings Ratio (PER). While the board is integral to overseeing and improving company performance (Jao et al., 2022), an increase in the number of directors does not inherently enhance financial performance. Without

adequate competence, a larger board may lead to higher operational costs—particularly in salary expenses—which in turn can reduce the company’s profitability and negatively affect investor perception. This emphasizes that the effectiveness of the board lies more in its quality than its quantity. Similar conclusions were drawn by Sutisna (2020), who observed that poor governance practices, including inefficient board discussions and decision-making, can adversely affect a firm’s financial outcomes. These findings are further supported by RAAR (2025) and Al-Matani Journal (2022), which highlight the importance of professional competence and strategic focus in board composition as determinants of financial performance.

The Effect of Return on Asset, Debt to Equity Ratio and Board of Directors Simultaneously on Price to Earning Ratio

The results of the simultaneous test indicate that Return on Assets, Debt to Equity Ratio, and the Board of Directors collectively have a significant influence on the Price to Earnings Ratio. Furthermore, the coefficient of determination reveals that these independent variables explain 51.41% of the variation in the dependent variable, while the remaining 48.59% is influenced by other factors not included in this study.

CONCLUSION

Based on the results and analysis conducted, the following conclusions can be drawn: (1) Profitability, as measured by Return on Assets (X1), has a significant positive effect on Financial Performance, represented by the Price to Earnings Ratio (Y); (2) Capital Structure, proxied by Debt to Equity Ratio (X2), does not have a significant effect on Financial Performance (Y); (3) Good Corporate Governance, indicated by the Board of Directors (X3), has a significant negative effect on Financial Performance (Y); and (4) simultaneously, ROA (X1), DER (X2), and the Board of Directors (X3) significantly influence Financial Performance as measured by the Price to Earnings Ratio (Y).

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