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The Effect of Debt to Asset Ratio (DAR), Debt to Equity Ratio (DER), and Current Ratio (CR) on Return on Assets (ROA) in Property Companies Listed on the Indonesia Stock Exchange in 2022-2023

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Keyword:
Debt to Asset Ratio (DAR), Debt to Equity Ratio (DER), Current Ratio (CR), Return on Assets (ROA), Property Companies

Abstract: *This study aims to determine the effect of Debt to Asset Ratio (DAR), Debt to Equity Ratio (DER), and Current Ratio (CR) on Return on Assets (ROA) in Property Companies Listed on the Indonesia Stock Exchange in 2022-2023. This study uses a quantitative approach with secondary data obtained from the company's annual report. The population in this study were all property companies listed on the IDX. Data analysis was performed using multiple linear regression. The results of this study indicate that DER has a significant negative effect on ROA, DAR has a significant positive effect on ROA, the CR variable has no significant effect on ROA.*

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Introduction

The real estate sector plays a significant part in the Indonesian economy. According to data from the Central Bureau of Statistics (BPS, 2023) companies operating in this sector are projected to contribute around 2% to the Indonesian economy in 2023 through infrastructure development, housing, and diverse commercial ventures. This sector is susceptible to numerous economic and financial hazards, including variations in interest rates, inflation rates, and governmental regulations that affect the company's financial performance (Widagdo et al., 2020).

The financial performance of enterprises in the real estate sector is intricate and necessitates scrutiny, particularly regarding profitability. Jannah et al (2023), assert that, in general, organizations exhibiting strong profitability prefer to maintain lower debt ratios, as they depend more on internal financing than on debt. Profitability levels will influence investor decisions; substantial earnings will entice investment, whereas poor profitability may prompt investors to divest.

Return on Assets (ROA) is a crucial metric for assessing a company's efficiency in creating profits through the utilization of its assets. In practice, the company's profitability is determined not just by asset management but also by its finance structure and liquidity. The Debt to Asset Ratio (DAR), Debt to Equity Ratio (DER), and Current Ratio (CR) are three financial metrics commonly employed to assess these impacts. The primary issue that frequently emerges is how the integration of an appropriate capital structure and optimal liquidity can enhance the company's profitability (Alfiani & Hasanuh, 2024).

DAR indicates the proportion of a company's debt relative to its assets, reflecting the degree of financial risk. DER quantifies the degree of leverage, indicating the ratio of equity to debt utilized by a corporation to facilitate its operations. Concurrently, CR denotes the organization's capacity to fulfill its immediate liabilities. The interrelationship among these three measures affects ROA variably, contingent upon the company's internal financial circumstances and external factors, including macroeconomic conditions (Sinamo et al., 2024).

Numerous prior studies have examined the correlation among DAR, DER, CR, and ROA Research by Sari et al (2022) indicates that DAR adversely and significantly impacts ROA, while DER and CR positively and significantly affect ROA. Additionally, Satria (2022) asserts that DER positively and significantly influences ROA. DER exerts a considerable negative impact on ROA, but the CR does not significantly affect ROA. In their research, Alfiani & Hasanuh (2024) asserted that DER does not significantly impact ROA, however DAR has a considerable favorable influence on ROA. The findings of these studies continue to exhibit contradictions, and the majority of prior research did not directly target the property sector in Indonesia, particularly during the 2022-2023 timeframe, which was affected by the post-pandemic dynamics of COVID-19.

This research is expected to provide an analysis in understanding how the three financial ratios, namely DAR, DER and CR affect ROA in the property sector in Indonesia under changing economic conditions in the 2022-2023 time period.

METHODOLOGY

This research employs a quantitative methodology to examine the impact of the DAR, DER, and CR on ROA of property firms listed on the Indonesia Stock Exchange (IDX) for the year 2022-2023. The utilized data is secondary data sourced from the company's annual report. The study population consisted of 92 property businesses listed on the IDX during the study period, employing a purposive sampling technique. Sample requirements encompass organizations that are regularly listed on the IDX, possess comprehensive data pertaining to study variables, and remain undelisted throughout the specified period, resulting in a total research sample of 14 companies or 28 samples. The enumeration of companies is as follows:

Table 1 Property Company

No.	Company Name
1	Ciputra Development Tbk
2	PT Puradelta Lestari Tbk.
3	Duta Pertiwi Tbk
4	Perdana Gapura Prima Tbk
5	Jaya Real Property Tbk
6	Jababeka Industrial Estate Tbk

7	Metropolitan Kentjana Tbk
8	Metropolitan Land Tbk
9	Pakuwon Jati Tbk
10	Roda Vivatex Tbk
11	PT Repower Asia Indonesia Tbk.
12	Suryamas Dutamakmur Tbk
13	PT Summarecon Agung Tbk
14	PT Urban Jakarta Propertindo Tbk.

Source: data processed, 2024

The research variables include independent variables: DAR, DER, and CR, with the dependent variable ROA. ROA is determined by dividing net income by total assets, indicating the company's efficiency in utilizing its assets to produce profits. The DAR quantifies the fraction of a company's assets that are financed through debt, determined by dividing total debt by total assets. DER delineates the company's funding composition of debt and equity, computed by dividing total debt by total equity. CR is a liquidity metric that indicates a company's capacity to fulfill its short-term liabilities using its current assets, determined by dividing total current assets by current liabilities. Data analysis was conducted via multiple linear regression with SPSS version 25 software.

RESULTS AND DISCUSSION

Descriptive Statistics Test

The results of the descriptive statistical test in this research are as follows:

Table 2 Descriptive Statistical Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	28	.00	.19	.0629	.04744
DER	28	.37	1.24	.6819	.25362
CR	28	.94	2.44	1.6598	.44221
DAR	28	.22	.88	.7016	.16065
Valid N (listwise)	28				

Source: data processed, 2024

The descriptive statistical analysis reveals an average DER of 0.6819 with a standard deviation of 0.25362, indicating that 68.19% of the company's equity is financed by debt. The CR has an average of 1.6598 and a standard deviation of 0.44221, reflecting that current assets are 1.66 times higher than current liabilities. The average DAR is 0.7016 with a standard deviation of 0.16065, showing that 70.16% of the company's assets are financed through debt. Meanwhile, the ROA averages 0.0629 with a standard deviation of 0.04744, meaning the company generates a net profit of 6.29% relative to its total assets. The data shows minimal variability among companies, ensuring stability and suitability for further research.

Multiple Linear Regression Analysis

The results of multiple linear regression analysis tests in this study are as follows:

Table 3 Multiple Linear Regression Analysis Test Results

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.061	.049		1.237	.228
	DER	-.160	.047	-.854	-3.413	.002
	DAR	.164	.069	.555	2.385	.025
	CR	-.003	.019	-.025	-.136	.893

Source: data processed, 2024

The results of the multiple linear regression analysis presented in the table above indicate that the DER variable (B = -0.854, Sig. = 0.002) exerts a significant negative influence on the dependent variable, whereas DAR (B = 0.555, Sig. = 0.025) demonstrates a significant positive influence, and CR (B = -0.025, Sig. = 0.893) does not exhibit a significant impact on the dependent variable.

Correlation and Determination Coefficient Test

This analysis aims to evaluate the relationship between each independent variable and the dependent variable collectively. The R value ranges from 0 to 1, with values closer to 1 indicating a stronger relationship and values nearer to 0 signifying a weaker one. Below is a table presenting the correlation between the variables:

Table 4 Correlation Coefficient Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.603[a]	.364	.284	.04014	1.408

Source: data processed, 2024

Based on the table above, the R value of 0.603 falls within the coefficient range of 0.60–0.799, indicating a strong relationship between the DER and DAR variables and ROA. This suggests that the model is appropriate for further analysis.

Referring to the table above, the strength of the variable influence is indicated by Adjusted R^2 = 0.284. This means the coefficient of determination (KD) is calculated as R^2 x 100%, resulting in 0.284 x 100% = 28.4%. Therefore, it can be concluded that the combined influence of the DER and DAR variables accounts for 28.4% of the variation in ROA, while the remaining 71.6% is attributed to other factors not included in this study.

CONCLUSION

The research findings indicate that DER has a considerable negative impact on ROA, suggesting that an increase in DER often diminishes the company's efficiency in profit generation. Conversely, DAR variable exerts a large positive influence on ROA, suggesting that leveraging debt to finance assets can enhance corporate profitability. CR variable does not significantly influence ROA, indicating that liquidity levels do not directly impact the company's efficiency in profit generation. Moreover, the interplay between DER and DAR variables accounts for 28.4% of the variance in ROA, with the remaining 71.6% attributable to external variables not examined in this study.

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