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The Impact Of Profitability And Liquidity On The Capital Structure

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Abstract: *The real estate sector, as one of the most capital-intensive industries in Indonesia, experienced substantial financial fluctuation during the 2020–2024 period due to the economic impacts of the COVID-19 pandemic and subsequent monetary adjustments. These conditions raised important questions regarding the determinants of firms' capital structure decisions, particularly profitability and liquidity. This study aims to examine the effect of profitability measured by return on assets (ROA) and liquidity measured by the current ratio (CR) on the capital structure of real estate companies listed on the Indonesia Stock Exchange. Using a quantitative associative design, the research analyzed 70 observations from 14 purposively selected companies with complete and consistent financial disclosures. Multiple linear regression was applied to assess both partial and simultaneous influences of the independent variables on the debt-to-equity ratio (DER). The results indicate that profitability has no significant effect on capital structure, suggesting that ROA does not play a central role in firms' financing choices within this sector. In contrast, liquidity shows a negative and significant influence on DER, demonstrating that firms with stronger short-term financial capacity tend to reduce their reliance on debt financing. Simultaneously, ROA and CR significantly affect capital structure, with an R^2 value of 14.5%, while the remaining variation is explained by other factors not included in this study. These findings support the trade-off theory, which posits that firms balance the benefits of debt with potential financial risks to achieve an optimal structure. The study highlights the critical role of liquidity management in capital structure decisions and recommends its prioritization for firms in the real estate industry.*
Keywords: *Profitabiliy, Liquidity, Capital Structure, Trade-Off Theory.*

INTRODUCTION

The real estate sector serves as a fundamental pillar of economic development, especially in emerging economies such as Indonesia, where rapid urbanization fuels the increasing demand for housing and commercial infrastructure (Brealey et al., 2020). As a capital-intensive industry, real estate firms rely heavily on long-term financing to support land acquisition and project development, making capital structure decisions crucial for maintaining financial stability and competitiveness (Brigham & Houston, 2019). Capital structure defined as the mix of debt and equity—has long been examined through theories such as trade-off theory, pecking order theory,

and agency theory, yet empirical findings remain inconsistent across industries and country contexts (Harris & Raviv, 1991; Myers, 1984; Jensen & Meckling, 1976).

The period from 2020 to 2024 posed substantial challenges for Indonesian real estate firms, as the COVID-19 pandemic disrupted economic activity, delayed construction projects, and reduced consumer purchasing power (Fahmi, 2020). Global monetary tightening that followed further increased borrowing costs, affecting firms that depend on external financing (Graham & Harvey, 2001). These conditions amplified the importance of internal financial indicators specifically profitability and liquidity in determining firms' leverage decisions, as highlighted in capital structure literature (Frank & Goyal, 2009; Gill et al., 2011).

Profitability, often measured using return on assets (ROA), reflects a firm's efficiency in generating earnings from its resources (Ross et al., 2019). According to the pecking order theory, more profitable firms prefer internal financing, thus exhibiting lower leverage (Myers & Majluf, 1984). However, the trade-off theory argues the opposite: profitable firms may increase debt to benefit from tax shields (Modigliani & Miller, 1958). These theoretical contradictions have resulted in mixed empirical findings, with some studies reporting negative effects of profitability on leverage (Chen, 2004), while others find no relationship or even a positive association (Serrasqueiro & Caetano, 2015). Such inconsistencies demonstrate that profitability's effect on capital structure is highly dependent on industry characteristics and macroeconomic conditions.

Liquidity, measured using indicators such as the current ratio (CR), represents a firm's ability to meet short-term obligations (Kasmir, 2019). Liquidity is particularly important for real estate firms due to slow capital turnover and high upfront investment costs (Gujarati & Porter, 2017). Consistent with the pecking order theory, firms with strong liquidity tend to reduce their dependence on external debt (Fahmi, 2020). Empirical evidence also generally supports a negative association between liquidity and leverage (Ghazouani, 2013; Titman & Wessels, 1988). Nevertheless, some studies highlight that certain firms strategically use debt even when liquidity is high, particularly to exploit investment opportunities or maintain cash reserves (Jensen, 1986). These differing results show that liquidity's relationship with capital structure is context-dependent and influenced by managerial strategy, market volatility, and industry-specific risks.

The Indonesian real estate sector provides a unique context for examining these relationships due to its sensitivity to economic shocks, reliance on bank financing, and long development cycles

(Ghozali, 2021). Previous research found that financial decision-making in emerging markets often diverges from classical theories due to institutional differences, market imperfections, and regulatory environments (Chen, 2004; Frank & Goyal, 2009). Despite its relevance, research specifically focusing on Indonesian real estate firms—particularly during and after the pandemic—remains scarce.

This study examines the influence of profitability (ROA) and liquidity (CR) on capital structure (DER) among real estate firms listed on the Indonesia Stock Exchange from 2020 to 2024. This period is marked by financial instability and shifting market dynamics, offering an important context for understanding how firms adapt their financing strategies (Fahmi, 2020; Graham & Harvey, 2001). By employing a quantitative research approach, the study seeks to contribute to theoretical debates on capital structure determinants while providing practical insights for corporate managers, investors, and policymakers. A deeper understanding of how profitability and liquidity affect leverage can assist firms in designing more resilient financial strategies—critical for sustaining growth in Indonesia's real estate industry (Brealey et al., 2020).

METHOD

This study employs a quantitative associative research design to examine the influence of profitability and liquidity on the capital structure of real estate companies listed on the Indonesia Stock Exchange (IDX). A quantitative approach was selected because it allows for objective measurement of financial indicators and enables statistical testing of relationships between variables. The associative design is used to identify both partial and simultaneous effects of the independent variables—profitability and liquidity—on the dependent variable, capital structure.

The population of the study includes 92 real estate companies listed on the IDX during the 2020–2024 period. Using purposive sampling, 14 companies were selected based on two primary criteria: (1) availability and completeness of annual financial statements for the five-year period, and (2) consistency of reporting formats, particularly for the variables required in this study. The dataset comprises 70 firm-year observations.

Profitability is operationalized using return on assets (ROA), which reflects a company’s ability to generate earnings from its total assets. Liquidity is measured using the current ratio (CR), which assesses a firm’s ability to meet short-term obligations. Capital structure is measured using

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the debt-to-equity ratio (DER), which captures the proportion of debt financing relative to shareholders' equity.

Secondary data were obtained from audited annual reports available on the official IDX website. Data were analyzed using multiple linear regression with SPSS software. Prior to hypothesis testing, classical assumption tests were conducted, including normality, multicollinearity, heteroscedasticity, and autocorrelation. Further analysis included the t-test for partial effects, the F-test for simultaneous effects, and the coefficient of determination (R^2) to evaluate the explanatory power of the model.

RESULT AND DISCUSSION

Descriptive Test

This study uses secondary data from 14 real estate companies listed on the Indonesian Stock Exchange (IDX) for the period 2020–2024, comprising a total of 70 observations. Data processing and analysis were performed using SPSS software to obtain accurate results and achieve the study objectives.

	north	minimum	Maximum	Remembe r	Standard deviation
ROA	70	-,05	,20	,0393	,04747
CR	70	,66	10.53	3.0793	2.40951
THE	70	,14	8.63	,9711	1.11307
Valid N (according to list)	70				

Table 1. *Analysis Descriptive Statistics*

The results of the descriptive statistical test show that variable X1 has a mean of 0.0393, a minimum of -0.05, and a maximum of 0.20, indicating relatively low profitability of real estate companies during the period 2020–2024. Variable X2 has a mean of 3.0793 and exhibits relatively high variability between companies, indicating significant differences in their liquidity. Conversely, variable Y has a mean of 0.9711 and exhibits relatively large variability, reflecting differences in capital structure, with some companies tending to use more debt than equity.

Multicollinearity Test

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To determine whether there is a high degree of correlation between the independent variables in the regression model, a multicollinearity test was performed. This test was performed using the SPSS package with an analysis of tolerance values and the variance inflation factor (VIF).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,561	,223		7,000	,000		
	ROA	-1,718	2,659	-,073	-,646	,520	,993	1,007
	CR	-,170	,052	-,367	-3,238	,002	,993	1,007

a. Dependent Variable: DER

Table 2 . *Multicollinearity Test Result*

Based on the results of the multicollinearity test in the table above, the tolerance value for variables X1 and X2 is 0.993 each, and the VIF value for both is 1.007. These values meet the criteria for the absence of multicollinearity because the tolerance value is greater than 0.10 and the VIF value is less than 10. This indicates the absence of a strong relationship between the independent variables in the regression model. Consequently, variables X1 (profitability) and X2 (liquidity) can individually explain changes in the dependent variable Y (capital structure) without excessive interactions between them. Consequently, this regression model is declared free of multicollinearity symptoms and is suitable for use in further regression analyses.

Heteroscedasticity Test

A heteroscedasticity test can be used to determine whether the residuals in a regression model are unevenly distributed across the observations. This test is performed using the SPSS package and the Glaeser method.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,645	,193		3,331	,001
	ROA	,208	2,307	,011	,090	,929
	CR	-,052	,045	-,139	-1,142	,257

a. Dependent Variable: ABS_REG

Table 3. *Heteroscedasticity Test Results*

Based on the results of the heteroscedasticity test presented in the table above, the significance level for variables X1 and X2 is 0.929 and 0.257, respectively, which is above the

significance level of α = 0.05. This indicates that there is no evidence of heteroscedasticity in the regression model used. Consequently, the regression model meets the assumption of homoscedasticity and is suitable for use in the next step of multiple regression analysis, with Y serving as the dependent variable.

t - Test

To determine the partial influence of each independent variable on the dependent variable, a t-test was used. The test was performed using SPSS software with a significance level of 0.05.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,561	,223		7,000	,000
	ROA	-1,718	2,659	-,073	-,646	,520
	CR	-,170	,052	-,367	-3,238	,002

a. Dependent Variable: DER

Table 4 . *Persian Test Results*

Based on the t-test results in the table above, the variable X1 (ROA) has a significance value of 0.520, which is greater than 0.05. This indicates that X1 has no significant effect on the dependent variable Y (DER). Meanwhile, the variable X2 (CR) has a significance value of 0.002, which is less than 0.05, with a negative regression coefficient of -0.170. This means that X2 has a negative and significant effect on Y, indicating that an increase in liquidity (X2) will lead to a decrease in the capital structure level (Y) in real estate and property companies during the period 2020-2024. Thus, only the variable X2 has a significant effect on capital structure, while X1 has no significant effect.

F Test

To determine whether all independent variables simultaneously have a significant influence on the dependent variable, an F-test was performed using SPSS software with a significance level of 0.05.

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ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12,362	2	6,181	5,663	,005[a]
	Residual	73,124	67	1,091		
	Total	85,486	69			

a. Predictors: (Constant), CR, ROA
b. Dependent Variable: DER

Table 5. *Simultaneous Test Results*

Based on the F-test results presented in the table above, the calculated F-value is 5.663 at a significance level of 0.005. Since the significance value (0.005) is less than α = 0.05, it can be concluded that variables X1 (ROA) and X2 (CR) simultaneously have a significant influence on variable Y (DER). This indicates that profitability and liquidity together have a significant influence on the capital structure of real estate companies listed on the Indonesian Stock Exchange (IDX) from 2020 to 2024.

R^2 Test

To determine the strength of the relationship or correlation between all independent variables and the dependent variable in the research model, the R^2 test was conducted. This test was performed using SPSS software with a significance level of 0.05 to determine the strength of the relationship between these variables.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,380[a]	,145	,119	1,04470	1,195

a. Predictors: (Constant), CR, ROA
b. Dependent Variable: DER

Table 6. *Test R^2*

Based on the results of the coefficient of determination (R^2) test in the table above, the R-value is 0.380, which indicates a fairly strong relationship between the independent variables X1 (ROA) and X2 (CR) with the dependent variable Y (DER). The R-squared value of 0.145 means that 14.5% of the variation in changes in capital structure (DER) can be explained by profitability (ROA) and liquidity (CR), while the remaining 85.5% is explained by other factors not considered in this research model. The adjusted R-squared value of 0.119 indicates a slight adjustment in the number of independent variables used. The Durbin-Watson value of 1.195 indicates the absence

of significant autocorrelation in the regression model, making the model suitable for further analysis.

Discussion

The findings of this study provide an important contribution to the ongoing debate on the determinants of capital structure in emerging markets, particularly within the real estate sector, which is characterized by high capital intensity, long project cycles, and heightened exposure to macroeconomic volatility (Brealey et al., 2020). The results indicate that profitability, measured by return on assets (ROA), does not significantly influence the debt-to-equity ratio (DER). This aligns with previous studies conducted in developing economies, suggesting that the relationship between profitability and leverage is highly inconsistent across different industries (Chen, 2004; Serrasqueiro & Caetano, 2015). The absence of a significant effect supports the view that profitability is not the primary determinant of financing decisions for firms operating under conditions of financial instability, regulatory constraints, and limited external financing options (Frank & Goyal, 2009).

From a theoretical perspective, the insignificant relationship between profitability and leverage challenges the traditional assumptions of the pecking order theory, which posits that firms with higher profitability rely more on internal financing and therefore reduce their use of debt (Myers & Majluf, 1984). Instead, the findings appear more consistent with the trade-off theory, which states that firms balance the tax benefits of debt with the costs of financial distress (Modigliani & Miller, 1958). The Indonesian real estate sector during the 2020–2024 period faced severe economic shock due to the COVID-19 pandemic, high interest rate fluctuations, and unstable market conditions (Fahmi, 2020; Graham & Harvey, 2001). Under such circumstances, firms may prioritize ensuring liquidity and operational continuity over maximizing profitability, resulting in profitability becoming a secondary consideration in financing decisions.

In contrast, liquidity—measured using the current ratio—demonstrated a negative and significant influence on capital structure. This finding is strongly aligned with both theoretical and empirical literature. The pecking order theory suggests that firms with high liquidity prefer internal financing sources to meet operational needs instead of relying on external debt (Myers, 1984; Gill et al., 2011). The results also corroborate studies by Ghazouani (2013) and Titman and Wessels

(1988), which report that companies with strong liquidity positions tend to reduce their debt levels because they have sufficient internal resources to meet short-term obligations. Liquidity remains highly relevant in the real estate sector due to large upfront investments, slow capital turnover, and delays in project completion, especially during periods of economic uncertainty (Gujarati & Porter, 2017; Ghozali, 2021).

The negative association between liquidity and leverage also reflects managerial strategies aimed at reducing financial risk. Managers in real estate firms may be reluctant to increase debt levels when liquidity is already strong, as excessive leverage would increase vulnerability to market fluctuations and interest rate changes (Jensen, 1986). This is particularly important in Indonesia, where real estate firms often depend on bank loans with variable interest rates, making them more susceptible to financial distress during economic downturns (Kasmir, 2019). The significant role of liquidity in this study reinforces the argument that financial stability is a key determinant of capital structure in capital-intensive industries (Brigham & Houston, 2019).

Furthermore, the simultaneous significance of profitability and liquidity—as shown through the F-test—indicates that both variables collectively influence capital structure decisions, even if profitability does not exert a significant individual effect. The R^2 value of 14.5%, although relatively modest, is common in empirical studies on capital structure, where many external and internal factors interact to shape financing decisions (Harris & Raviv, 1991). The remaining unexplained variance suggests the influence of other determinants such as firm size, asset structure, growth opportunities, business risk, and macroeconomic conditions, which have been widely discussed in previous studies (Brealey et al., 2020; Ross et al., 2019; Frank & Goyal, 2009).

The Indonesian real estate sector's unique context also adds depth to the interpretation of these results. The pandemic significantly reduced demand for property, delayed project timelines, and tightened credit access, placing firms under considerable financial pressure (Fahmi, 2020). Under such circumstances, liquidity management becomes a critical survival tool, while profitability becomes less stable and therefore less relevant as a basis for long-term financing decisions (Graham & Harvey, 2001). This helps explain why liquidity, rather than profitability, emerged as the dominant factor influencing capital structure.

These findings carry important implications for managers, investors, and policymakers. First, corporate managers in the real estate sector should prioritize strong liquidity management to

optimize capital structure and mitigate financial risks. Second, investors can use liquidity indicators as reliable signals of financial stability and leverage tendencies in real estate companies. Third, policymakers should consider designing financial regulations that support liquidity stability, such as flexible credit schemes and incentives for maintaining adequate cash reserves during economic downturns.

This study strengthens the empirical evidence that liquidity plays a more critical role than profitability in determining the capital structure of real estate firms in emerging markets. It also highlights the need for future research to incorporate additional variables—such as firm size, macroeconomic shocks, asset tangibility, and cash flow volatility—to develop a more comprehensive understanding of capital structure dynamics in Indonesia's post-pandemic economic environment.

CONCLUSION

This study investigated the influence of profitability and liquidity on the capital structure of real estate companies listed on the Indonesia Stock Exchange during the 2020–2024 period—a time marked by economic volatility, pandemic-related disruptions, and monetary tightening. The empirical findings demonstrate that profitability, measured through return on assets (ROA), does not have a significant effect on the debt-to-equity ratio (DER). This suggests that Indonesian real estate firms do not base their financing strategies primarily on internal earnings, which contrasts with the predictions of the pecking order theory. In contrast, liquidity, as measured by the current ratio (CR), has a negative and statistically significant effect on DER. This indicates that firms with stronger short-term financial capacity tend to reduce their reliance on debt, reflecting a preference for minimizing financial risk amid uncertain economic conditions. The simultaneous effect of ROA and CR on capital structure is significant, but the model's explanatory power of 14.5 percent indicates that most variations in leverage are influenced by other internal and external factors, such as firm size, sales growth, asset structure, and market conditions.

These conclusions carry important theoretical and practical implications. The results reinforce the relevance of trade-off theory in the Indonesian real estate industry, where firms appear

to weigh the benefits of debt financing against potential financial distress costs. Managers should therefore prioritize liquidity management as a strategic tool to maintain financial flexibility and avoid excessive leverage, particularly during periods of market uncertainty. Profitability, while essential for overall corporate performance, may not serve as a primary determinant of financing decisions within this capital-intensive sector. Policymakers and investors may also draw insights from these findings, especially regarding the financial resilience of real estate firms. Future research is recommended to broaden the analytical framework by incorporating additional variables—such as macroeconomic indicators, corporate governance mechanisms, and cash flow stability—to develop a more comprehensive understanding of the determinants shaping capital structure decisions in emerging markets.

REFERENCE

Brealey, R. A., Myers, S. C., & Allen, F. (2020). *Principles of corporate finance* (13th ed.). McGraw-Hill.

Brigham, E. F., & Houston, J. F. (2019). *Essentials of financial management* (15th ed.). Cengage Learning.

Brigham, E. F., & Houston, J. F. (2019). *Essentials of financial management* (15th ed.). Cengage Learning.

Chen, J. J. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research, 57*(12), 1341–1351. https://doi.org/10.1016/S0148-2963(03)00070-5

Fahmi, I. (2020). *Manajemen keuangan perusahaan dan pasar modal*. Salemba Empat.

Frank, M. Z., & Goyal, V. K. (2009). Capital structure decisions: Which factors are reliably important? *Financial Management, 38*(1), 1–37. https://doi.org/10.1111/j.1755-053X.2009.01026.x

Ghazouani, S. (2013). The capital structure through the trade-off theory. *International Journal of Economics and Financial Issues, 3*(3), 625–636.

Ghozali, I. (2021). *Aplikasi analisis multivariate dengan program IBM SPSS 26*. Badan Penerbit Universitas Diponegoro.

Gill, A., Biger, N., & Mathur, N. (2011). The effect of capital structure on profitability: Evidence from the United States. *International Journal of Management, 28*(4), 3–15.

Graham, J. R., & Harvey, C. R. (2001). The theory and practice of corporate finance: Evidence from the field. *Journal of Financial Economics, 60*(2–3), 187–243. https://doi.org/10.1016/S0304-405X(01)00044-7

Gujarati, D. N., & Porter, D. C. (2017). *Basic econometrics* (6th ed.). McGraw-Hill Education.

Harris, M., & Raviv, A. (1991). The theory of capital structure. *Journal of Finance, 46*(1), 297–355. https://doi.org/10.1111/j.1540-6261.1991.tb03753.x

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review, 76*(2), 323–329.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics, 3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm. *Journal of Financial Economics, 3*(4), 305–360.

Kasmir. (2019). *Analisis laporan keuangan*. Rajawali Pers.

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance, and the theory of investment. *American Economic Review, 48*(3), 261–297.

Myers, S. C. (1984). The capital structure puzzle. *Journal of Finance, 39*(3), 575–592. https://doi.org/10.1111/j.1540-6261.1984.tb03646.x

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics, 13*(2), 187–221. https://doi.org/10.1016/0304-405X(84)90023-0

Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2019). *Fundamentals of corporate finance* (12th ed.). McGraw-Hill.

Serrasqueiro, Z., & Caetano, A. (2015). Trade-off theory versus pecking order theory: Capital structure decisions in a peripheral region of Portugal. *North American Journal of Economics and Finance, 32*, 54–69. https://doi.org/10.1016/j.najef.2015.02.007

Sugiyono. (2017). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.

Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *Journal of Finance, 43*(1), 1–19. https://doi.org/10.1111/j.1540-6261.1988.tb02585.x