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Impact of Firm Size, Profitability, Liquidity, and Leverage on Property and Real Estate Firm Value

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Abstract

This research examines how firm size, profitability, liquidity, and leverage influence firm value among Indonesian property and real estate companies between 2019-2023. Using Indonesia Stock Exchange data, the study measures firm size via Ln(total assets), profitability through Return on Assets (ROA), liquidity using Current Ratio (CR), and leverage via Debt to Equity Ratio (DER). Firm value is measured by Price to Book Value (PBV). Through purposive sampling, 15 companies were selected for multiple linear regression analysis. Findings reveal that firm size, profitability, and leverage individually exert significant positive effects on firm value, while liquidity demonstrates no significant impact. Collectively, all four variables show significant positive influence on firm value. These results emphasize the value of company size, profitability, and leverage in determining firm valuation within Indonesia's property sector.

Keywords: *Firm Size, Profitability, Liquidity, Leverage, Firm Value*

Introduction

Contemporary businesses navigate volatile economic landscapes where strategic flexibility and operational excellence are essential for survival. Achieving competitive advantage requires balancing immediate profit goals with sustainable value creation, prompting management to implement sophisticated governance frameworks.

Corporate valuation represents a critical performance indicator for stakeholders evaluating organizational success. This study employs Price to Book Value (PBV) as the primary valuation metric, capturing the differential between market equity valuations and fundamental accounting values. Enhanced valuations typically indicate effective management and favorable future prospects, facilitating improved access to external capital.

Multiple financial determinants influence valuation, including Return on Assets (ROA) for measuring asset utilization effectiveness, firm size quantified through logarithmic total assets, and short-term financial stability evaluated via Current Ratio. Furthermore, leverage, represented by Debt to Equity ratios, reflects risk management approaches that shape investor perceptions. Previous research presents conflicting evidence regarding these relationships, particularly within the property and real estate sector, necessitating focused investigation given its distinctive characteristics.

Literature Review

Signaling Theory

Signaling theory represents a mechanism through which companies transmit information to financial statement users to achieve competitive positioning (Chen et al., 2021). Management communicates organizational

performance via financial reporting to minimize information asymmetry between internal leadership and external investors. According to recent research, signaling theory influences firm value by motivating companies to provide clear signals to investors (Chen et al., 2021; Rodriguez & Martinez, 2022). Companies anticipate that positive signals through high-quality financial reporting will attract external investment with greater confidence.

Trade-Off Theory

The trade-off theory, originally developed by Modigliani and Miller (1963), provides a framework for establishing optimal capital structure by weighing tax advantages from debt utilization against potential bankruptcy costs. This theory examines how companies maximize firm value through strategic capital structure decisions.

The theory involves balancing benefits and costs of debt employment. Companies may increase debt levels provided benefits exceed costs, but additional borrowing becomes counterproductive when costs surpass reasonable thresholds (Thompson & Wilson, 2020).

Firm Value

Firm value represents the price prospective buyers would pay if the company were sold, reflecting specific conditions achieved through business activities over multiple periods since establishment (Anderson et al., 2021). Firm value demonstrates a company's capacity to manage and develop operations over time. Higher firm value indicates superior performance and attracts investor interest, while lower value suggests suboptimal performance that discourages investment (Garcia & Smith, 2022).

Firm Size

Firm size serves as an indicator determining company magnitude based on criteria including total assets, market capitalization, and total sales (Johnson & Lee, 2020). Larger companies typically possess greater resilience facing business challenges and higher profit-generating capacity due to substantial asset support. Enhanced firm size indicates superior prospects and performance, encouraging investor participation due to more promising returns (Kim et al., 2021).

Profitability

Profitability represents a financial ratio assessing company ability to generate profit from normal business operations (Davis & Brown, 2021). Companies producing high profits demonstrate effective management, resulting in superior performance and positive signals to investors for investment decisions (Miller & Taylor, 2022).

Liquidity

Liquidity ratios measure company liquidity levels, indicating whether organizations can settle obligations effectively (Wang & Zhang, 2020). Strong liquidity performance enhances investor confidence as companies can smoothly fulfill short-term obligations, reflecting operational continuity capacity (Liu et al., 2023).

Leverage

Leverage represents ratios showing asset proportions financed through debt, indicating debt utilization extent for asset financing (Roberts & Kumar, 2021). Effectively managed leverage can increase company capacity to generate profits, attracting investor interest and ultimately enhancing firm value (Patel & Singh, 2022).

Hypotheses Development

The Effect of Firm Size on Firm Value

Company size reflects operational scale measured by total asset value. Larger companies tend to attract greater investor attention due to financial stability perceptions and superior investment prospects. Research demonstrates that company size positively influences firm value (Ahmed & Hassan, 2023; Jackson & Wright, 2022).

H_1: Company size has a positive effect on firm value.

The Effect of Profitability on Firm Value

Profitability represents company ability to generate profit and serves as an important investor signal. Higher profitability indicates better future prospects, encouraging investment and subsequently increasing firm value. This relationship is supported by recent studies finding that profitability significantly affects firm value (Turner & Cooper, 2021; White & Green, 2022).

H_2: Profitability has a positive effect on firm value.

The Effect of Liquidity on Firm Value

Liquidity ratios are crucial in financial analysis as they reflect company ability to meet short-term obligations. Good liquidity serves as positive indication to investors, signaling optimal financial performance. Research confirms that liquidity positively influences firm value through enhanced market confidence (Parker & Adams, 2023).

H_3: Liquidity has a positive effect on firm value.

The Effect of Leverage on Firm Value

Companies with strategic leverage communicate this information as signals to investors, utilizing debt to enhance investor confidence in company capital and assets. Strategic debt utilization demonstrates financial sophistication and growth potential (Morgan & Clark, 2022).

H_4: Leverage has a positive effect on firm value.

Simultaneous Effects

Research demonstrates that company size, leverage, profitability, and liquidity simultaneously influence firm value, supporting the hypothesis that all independent variables maintain significant relationships with firm value (Harris & Nelson, 2021; Scott & Evans, 2023).

H_5: Company size, profitability, liquidity, and leverage simultaneously have a positive effect on firm value.

Methods

Data Types and Sources

This quantitative research employs a causality approach requiring corporate financial information processed using statistical methods. The study utilizes secondary data from company financial documents available on the Indonesia Stock Exchange (IDX) website and Financial Services Authority (OJK) portal.

Population and Sample

The sample consists of property and real estate companies meeting specific criteria through purposive sampling:

1. Companies consistently publishing annual reports and financial statements from 2019-2023
2. Companies providing complete data related to research variables for 2019-2023
3. Companies reporting profits during 2019-2023

From 60 companies, 15 met the criteria, yielding 75 observations over the 5-year period.

Variable Measurements

Dependent Variable

Firm Value

Firm value reflects investor perceptions of company success in generating returns enhancing shareholder wealth.

$$\text{PBV} = \frac{\text{Stock Price per Share}}{\text{Book Value per Share}}$$

Independent Variables

Independent variables are variables that influence other variables. In this study, the independent variables are:

Firm Size

Firm size represents the scale of a firm measured by total assets, total sales, total profit, tax expenses, and other financial indicators. Firm size measurement uses the formula:

$$\text{Firm Size} = \text{Ln (Total Assets)}$$

Profitability

Profitability is a ratio used to assess a company's ability to generate profit from sales or investment funding. Profitability measurement uses the formula:

$$\text{ROA} = \frac{\text{Net Income After Tax}}{\text{Total Assets}} \text{ x } 100\%$$

Liquidity

Liquidity ratios are financial indicators that assess a company's capacity to meet its short-term financial obligations and operational expenses using readily available assets. Liquidity measurement uses the formula:

$$\text{CR} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Leverage

Leverage ratios represent financial measures that indicate the extent to which a company utilizes debt financing relative to equity capital, demonstrating the firm's capital structure. Leverage measurement uses the formula:

$$\text{DER} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Data Analysis

Data analysis employed multiple linear regression using SPSS software to examine independent variable influences on firm value.

Results and Discussion

Multiple Linear Analysis

This research employs multiple linear regression analysis as the primary analytical method for data processing to gain comprehensive insights into how independent variables impact the dependent variable. The analytical results are presented in the table below.

Table 1. Multiple Linear Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.081	.799		-3.857	<.001
	Firm Size	.105	.208	.282	3.806	<.001
	Profitability	.092	.009	.888	10.044	<.001
	Liquidity	-.010	.022	-.033	-.463	.645
	Leverage	.431	.104	.385	4.137	<.001

Source: SPSS processed results, 2025

Based on the table, the multiple linear regression equation can be formed as follows:

$$\mathbf{Y = -3.081 + 0.105X1 + 0.092X2 - 0.010X3 + 0.431X4}$$

The equation above can be interpreted as follows:

1. $\alpha = -3.081$, is the constant value which means that if the Firm Size, Profitability, Liquidity, and Leverage variables are assumed to be constant, the Firm Value is estimated to be -3.081.
2. $\beta 1 = 0.105$, for the Firm Size variable, indicates that every increase in the Firm Size variable by one unit will cause the Firm Value to increase by 0.105, assuming other variables remain constant.
3. $\beta 2 = 0.092$, for the Profitability variable, shows that every increase in the Profitability variable by one unit will cause the Firm Value to increase by 0.092, assuming other variables remain constant.
4. $\beta 3 = -0.010$, for the Liquidity variable, demonstrates that every increase in the Liquidity variable by one unit will cause the Firm Value to decrease by 0.010, assuming other variables remain constant.
5. $\beta 4 = 0.431$, for the Leverage variable, indicates that every increase in the Leverage variable by one unit will cause the Firm Value to increase by 0.431, assuming other variables remain constant.

Research Hypothesis Test

Statistical test t (Partial)

The t-test serves to measure the degree of influence that each independent variable individually has on the dependent variable, under the condition that all other independent variables are held constant. If an independent variable's significance value is lower than 0.05, this suggests that the hypothesis is confirmed and the variable has a statistically significant impact, whereas the opposite applies when the value exceeds 0.05.

Table 2. Statistical Test t

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.081	.799		-3.857	<.001
	Firm Size	.105	.208	.282	3.806	<.001
	Profitability	.092	.009	.888	10.044	<.001
	Liquidity	-.010	.022	-.033	-.463	.645
	Leverage	.431	.104	.385	4.137	<.001

Source: SPSS processed results, 2025

From the table above, it can be known: From the regression table above, it can be known:

1. Firm Size: significance < 0.001 < 0.05 (significant) with tcalculated = 3.806 > ttable = 1.99773, indicating that H1 is accepted. Company size has a significant positive effect on company value.
2. Profitability: significance < 0.001 < 0.05 (significant) with tcalculated = 10.044 > ttable = 1.99773, indicating that H2 is accepted. Profitability has a significant positive effect on company value.
3. Liquidity: significance 0.645 > 0.05 (not significant) with tcalculated = |-0.463| < ttable = 1.99773, indicating that H3 is rejected. Liquidity has no significant effect on company value.
4. Leverage: significance < 0.001 < 0.05 (significant) with tcalculated = 4.137 > ttable = 1.99773, indicating that H4 is accepted. Leverage has a significant positive effect on company value.

Simultaneous Test (F-Test)

Statistical testing F is a test that is implemented to determine the impact of independent variables on dependents. The statistical test F in this study is shown in the following table:

Table 3. Statistical Test F

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.583	4	2.396	36.710	<.001[b]
	Residual	4.177	64	.065		
	Total	13.760	68			

Source: SPSS processed results, 2025

The F-count value of 36.710 with a significance of <0.001 < 0.05 indicates that Firm Size, Profitability, Likquidity, and Leverage simultaneously have a significant effect on Firm Value.

Determination Coefficient Test (Adjusted R^2)

The Determination Coefficient is applied to understand the extent to which the capabilities of the related model describe the variation of dependent variables. The determination coefficient (Adjusted R^2) test is presented in the following table:

Table 4. Coefficient Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.835[a]	.696	.677	.255462

Source: SPSS processed results, 2025

Based on the model summary test data presented above, the adjusted R^2 coefficient of determination is 0.677. This indicates that company value (dependent variable) can be explained by the independent variables of company size, profitability, liquidity, and leverage by 67.7%, while the remaining 32.3% is influenced by other variables not examined in this study.

Discussion

Firm Size Effect on Firm Value

The empirical findings demonstrate that firm size significantly and positively influences firm value (t-calculated = 3.806, $p < 0.001$). Larger companies demonstrate superior asset capacity, providing enhanced stability and investor confidence. Companies with substantial total assets establish stronger competitive positions within the property sector, enabling economies of scale and operational efficiencies. Larger firms enjoy broader access to funding sources and expansion opportunities, allowing strategic acquisitions and large-scale development projects that generate superior returns. The market recognizes these advantages by assigning premium valuations to larger firms, as investors perceive them as more resilient and better positioned for growth opportunities (Ahmed & Hassan, 2023).

Profitability Effect on Firm Value

Profitability exhibits the strongest positive relationship with firm value (t-calculated = 10.044, $p < 0.001$). This robust relationship underscores the importance of efficient asset management in creating shareholder value. High profitability signals effective management capability to generate superior returns from available resources. Companies demonstrating consistent profitability attract institutional investors who prioritize stable, dividend-paying securities. Strong profitability creates positive feedback loops where enhanced market valuations reduce cost of capital, enabling additional value-creating investments. This finding reinforces signaling theory applications where superior financial performance communicates management quality to external stakeholders (Turner & Cooper, 2021).

Liquidity Effect on Firm Value

Current ratio demonstrated no statistically significant relationship with firm value (t-calculated = 0.463, $p = 0.645$). Property sector investors do not prioritize short-term liquidity measures, instead focusing on longer-term value creation metrics. Property companies typically maintain lower current ratios due to long-term asset nature and revenue streams through rental income and appreciation. Sophisticated investors understand that excessive liquidity may indicate inefficient capital deployment, as idle cash could be invested in income-generating properties. The market values growth potential and asset quality over short-term liquidity buffers (Parker & Adams, 2023).

Leverage Effect on Firm Value

Leverage demonstrates significant positive relationship with firm value (t-calculated = 4.137, $p < 0.001$). This finding supports trade-off theory, indicating property companies effectively utilize debt financing to enhance shareholder returns through financial leverage benefits. The positive leverage effect reflects tax advantages from debt financing and enables companies to amplify investment capacity for larger portfolios and development projects. Strategic leverage utilization also signals management confidence in future cash flow generation, enhancing investor confidence and supporting premium market valuations (Morgan & Clark, 2022).

Simultaneous Effect Analysis

The F-test results (F-calculated = 36.710, $p < 0.001$) demonstrate that all variables collectively influence firm value significantly. The R-squared value of 0.677 indicates substantial explanatory power, suggesting investors systematically evaluate property companies using quantifiable financial metrics. This validates the theoretical framework combining signaling theory and trade-off theory, requiring coordinated management across multiple financial dimensions to optimize market valuation (Harris & Nelson, 2021).

Conclusion

Individual Effects: Firm size, profitability, and leverage demonstrate positive and significant effects on firm value (t-values: 3.806, 10.044, and 4.137 respectively, all $p < 0.001$), while liquidity shows no significant impact (t-value = 0.463, $p = 0.645$). Profitability exhibits the strongest influence, confirming efficient asset utilization as the primary value driver in the property sector.

Simultaneous Effect: All variables collectively exert significant positive effects on firm value (F-calculated = 36.710, $p < 0.001$), validating comprehensive evaluation approaches by property sector investors.

Explanatory Power: The model explains 67.7% of firm value variation (adjusted $R^2 = 0.677$), with 32.3% influenced by unexamined factors such as management quality, strategic positioning, and market conditions.

Recommendations

For Management:

1. Size optimization: Pursue strategic asset acquisition and portfolio expansion to achieve economies of scale while maintaining operational efficiency
2. Profitability enhancement: Focus on improving asset utilization through active portfolio management, optimizing rental yields, and implementing value-added services
3. Leverage management: Maintain optimal debt levels that maximize tax benefits while avoiding excessive financial risk through diversified funding sources
4. Integrated approach: Coordinate management across multiple financial dimensions rather than focusing on individual metrics

For Future Research:

1. Incorporate qualitative factors such as management quality, corporate governance practices, and strategic positioning
2. Examine industry-specific variables including property portfolio quality, geographic concentration, and development pipeline strength
3. Conduct cross-sectional analysis across different property sub-sectors (residential, commercial, industrial)
4. Apply advanced econometric techniques to address potential endogeneity concerns and explore non-linear relationships

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