

Capital Structure and Firm Size Effects on Firm Value: The Mediating Role of Profitability

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Abstract - This study aims to analyze the effect of capital structure and firm size on firm value with profitability as a mediating variable in property and real estate companies listed on the Indonesia Stock Exchange during the 2020–2024 period. The property sector plays an important role in supporting the Indonesian economy but is highly vulnerable to global economic fluctuations, especially during and after the COVID-19 pandemic. This research applies a quantitative approach using secondary data collected from company financial statements and the Indonesia Stock Exchange website. The sample consists of 16 companies with 80 observations selected through non-random sampling techniques. Panel data regression analysis using E-Views software was employed to test the hypotheses. The findings reveal that capital structure has a negative and significant effect on profitability, while firm size does not significantly affect profitability. Furthermore, capital structure and firm size do not significantly influence firm value. Profitability, however, has a negative and significant effect on firm value and successfully mediates the relationship between capital structure and firm value, but fails to mediate the relationship between firm size and firm value. These findings indicate the importance of financial management strategies in maintaining firm value in the property and real estate sector.

Keywords: Firm Value, Property and Real Estate.

INTRODUCTION

The property and real estate sector is one of the strategic sectors that significantly contributes to the Indonesian economy through employment creation, investment growth, and infrastructure development as mentioned by Ekawarti et al. (2025). However, this sector is highly sensitive to changes in macroeconomic conditions and global economic disruptions, as its performance largely depends on consumer purchasing power, investment activity, and access to financing. During the COVID-19 pandemic, many property companies experienced declining sales, reduced profitability, and increased debt burdens due to weakened purchasing power, restricted economic activities and global uncertainties as mentioned by Madjid, et al. (2025). Although the property sector gradually recovered during 2022–2024 through government incentives such as tax reductions and housing credit relaxation, the performance and firm value of property companies remained fluctuating. This indicates that the recovery was not evenly reflected in the financial performance and market valuation of all firms. Firm value, commonly measured using Price to Book Value (PBV), reflects investor perceptions of a company's current performance and future growth prospects. Therefore, fluctuations in PBV suggest varying levels of investor confidence in the ability of property companies to sustain growth and generate long-term value (Lestari, 2017). The Price to Book Value of Property and Real Estate Companies in 2020–2024 can be illustrated as shown in the **Figure 1**.

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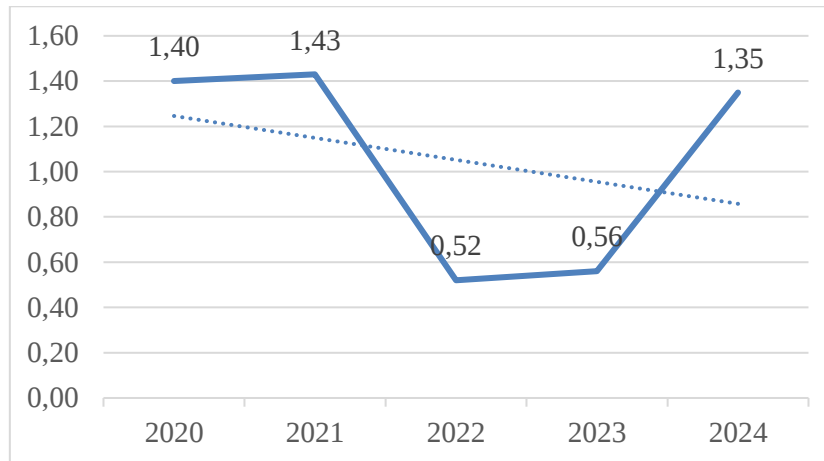


Figure 1. Average PBV of Property and Real Estate Companies in 2020–2024

The average firm value in the property and real estate sector during the 2020–2024 period, showed a declining trend despite a slight increase in 2024. The most significant declines occurred in 2022 and 2023, reflecting weaker market perceptions of the companies’ long-term prospects. This condition is noteworthy for further investigation because the decline in the post-pandemic period was lower than during the COVID-19 pandemic period. Several factors are considered to influence firm value, including capital structure, profitability, and firm size both directly and indirectly (Adityaputra & Perdana, 2024).

Based on the described phenomenon, the firm value of property and real estate companies fluctuates significantly, creating uncertainty for investors. Therefore, it is important to identify the factors affecting firm value before making investment decisions. Firm value not only reflects a company’s current condition but also indicates its ability to generate future returns for shareholders (Hirdinis, 2019). Previous studies suggest that capital structure, profitability, and firm size are among the key factors influencing firm value.

Capital structure is considered a fundamental factor affecting firm value because a balanced proportion of debt and equity can improve financial efficiency and support profitability. An appropriate capital structure may reduce the weighted average cost of capital (WACC) and increase firm value, while excessive debt can increase financial risk and potentially reduce firm value. Hence, establishing an optimal capital structure is a crucial managerial decision that supports business expansion, competitiveness, and long-term corporate sustainability as mentioned by Mutiara et al. (2024).

Profitability represents the company’s ability to generate earnings from its operations and directly contributes to increasing firm value. High profitability indicates stable and sustainable cash flow potential, enhances investor confidence, and strengthens positive market perceptions of the company. Profitability is commonly measured using financial ratios such as Return on Equity (ROE), which reflect the efficiency of equity management in generating profits (Hirdinis, 2019).

Meanwhile, firm size is associated with business diversification, operational efficiency, and financial stability, all of which may influence market perceptions of firm value. Larger firms generally have better access to financing, wider market share, and greater operational efficiency through economies of scale. In addition, large companies are often perceived as more stable, having lower bankruptcy risk and stronger growth opportunities, thereby attracting greater investor confidence and positively influencing firm value (Wulandari & Damayanti, 2022).

Signaling Theory explains that company management conveys information to investors to reduce information asymmetry in the capital market (Brigham & Houston, 2026). Corporate policies, such as capital structure decisions, dividend distribution, and earnings announcements, can serve as signals regarding the company’s prospects and financial condition. Positive signals may increase investor confidence and enhance firm value, whereas negative signals may reduce investor trust and lower stock prices. Previous studies have shown that capital structure and firm size have varying effects on profitability

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and firm value, both directly and indirectly through profitability as an intervening variable. Several studies found that capital structure has a negative effect on profitability, while firm size generally has a positive influence. Other studies revealed that both variables positively and significantly affect profitability and firm value. Furthermore, the findings regarding their direct effects on firm value remain inconsistent, showing positive, negative, or insignificant relationships. Profitability as a mediating variable also demonstrates mixed results, with some studies confirming its mediating role, while others indicate that its mediation effect is not sufficiently strong.

Research on the relationship between capital structure, firm size, profitability, and firm value has been widely conducted across various industrial sectors. However, limited studies have specifically examined these relationships in the Indonesian property and real estate sector during the post-pandemic recovery period, characterized by high uncertainty, fluctuating demand, and changing investor behavior. Unlike previous studies that generally assume profitability acts as a positive transmission mechanism between financial characteristics and firm value, this study investigates the possibility that profitability may transmit negative market signals during periods of economic recovery. Previous studies examining the relationships among capital structure, firm size, profitability, and firm value have produced inconsistent and inconclusive findings, creating a research gap that requires further investigation.

The novelty of this study lies in two aspects. First, it develops a sector-specific signaling framework by positioning profitability as a mediating variable within the unique capital-intensive context of property and real estate firms. Second, this study provides empirical evidence that profitability may not always be interpreted as a positive signal by investors during the post-pandemic recovery period. These findings extend Signaling Theory by demonstrating that the interpretation of financial signals is highly dependent on industrial characteristics and macroeconomic conditions. Therefore, this study examines the influence of capital structure and firm size on firm value with profitability as a mediating variable in property and real estate companies listed on the Indonesia Stock Exchange during the 2020–2024 period.

LITERATURE REVIEW

Signaling theory is used as the grand theory in this study to explain how company management provides information to external parties, especially investors, regarding the company's prospects and financial condition. According to signaling theory, management decisions related to capital structure, profitability, dividend policy, and investment activities can serve as signals that influence investor perceptions and company value. Positive signals such as stable profits, efficient financial management, and sustainable growth are expected to increase investor confidence and improve firm value in the capital market (Brigham & Houston, 2026).

Although Signaling Theory generally suggests that higher profitability should increase firm value, this relationship may become weaker or even negative under certain economic conditions. In the post-pandemic property and real estate sector, investors may interpret short-term increases in profitability differently from conventional expectations. High profitability can be perceived as temporary if it is generated from non-recurring transactions, asset sales, cost-cutting strategies, or accounting adjustments rather than sustainable operational improvements. Furthermore, the property sector is characterized by long investment cycles, high financing requirements, and strong dependence on macroeconomic conditions such as interest rates, inflation, and consumer purchasing power. Consequently, investors tend to place greater emphasis on future cash flow sustainability and project completion prospects than on short-term accounting profitability. Under such circumstances, profitability may not function as a positive signal but instead be viewed cautiously by investors, resulting in a weaker or even negative relationship between profitability and firm value.

Firm value reflects investors' perceptions of a company's performance and future prospects. In this study, firm value is measured using Price to Book Value (PBV), which compares market value with book value. A higher PBV indicates greater investor confidence in the company's growth opportunities and financial performance (Purwani & Oktavia, 2018). Firm value is influenced by several internal factors, including capital structure, profitability, and firm size, as well as external factors such as macroeconomic conditions and government policies.

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Capital structure refers to the proportion of debt and equity used by a company to finance its operations and investments as mentioned by Santosa et al. (2022). An optimal capital structure can increase firm value by minimizing the weighted average cost of capital and creating tax advantages through debt financing. However, excessive debt may increase financial risk and reduce profitability due to higher interest expenses. In this research, capital structure is proxied by the Debt to Equity Ratio (DER), which is considered suitable for property and real estate companies because of their high dependence on long-term financing.

Profitability represents a company's ability to generate profits from its operational activities and is an important indicator of financial performance (Purwani & Santoso, 2022). Companies with high profitability are generally more attractive to investors because they demonstrate efficient management and stronger future prospects. Profitability in this study is measured using Return on Equity (ROE), which indicates the company's effectiveness in generating net income from shareholders' equity. Higher profitability is expected to increase investor confidence and positively affect firm value.

Firm size reflects the scale and operational capacity of a company, commonly measured using total assets or the natural logarithm of total assets. Large companies usually have better access to financing, greater operational efficiency, and stronger market competitiveness. Therefore, firm size is often associated with higher firm value and financial stability as mentioned by A'yun et al. (2022). In the property and real estate sector, total assets are considered an appropriate indicator because companies in this industry are highly asset-based.

Previous studies have demonstrated that capital structure and firm size exert varying influences on profitability and firm value, both directly and indirectly through profitability as an intervening variable. Several studies, such as those conducted by Adityaputra and Perdana (2024), Prakoso et al. (2022), and Alwansyah et al. (2025), found that capital structure negatively and significantly effect on profitability, whereas firm size tends to have a positive influence, although in some cases the effect is not statistically significant. In contrast, studies by Natsir and Yusbardini (2020) and Hasanudin and Wijareni (2023) revealed that both capital structure and firm size positively and significantly affect profitability and firm value.

With regard to the direct effect on firm value, previous findings have also produced inconsistent results. Most studies suggest that capital structure and firm size may significantly influence firm value, either positively or negatively. For instance, Prakoso et al. (2022) and Mutiara et al. (2024) reported a positive effect of capital structure on firm value, whereas Puri et al. (2024) and Adelin et al. (2023) identified a significant negative effect. Meanwhile, studies conducted by Sihombing et al. (2021) and Widi et al. (2021) indicated that capital structure and firm size do not significantly affect firm value.

Furthermore, profitability as a mediating variable has also produced mixed findings. Studies by Natsir and Yusbardini (2020), Puri et al. (2024), and Hasanudin and Wijareni (2023) indicated that profitability partially or fully mediates the relationship between capital structure, firm size, and firm value. However, other studies, including those by Prakoso et al. (2022), Alwansyah et al. (2025), and Sihombing et al. (2021), concluded that profitability does not effectively mediate these relationships.

These inconsistencies indicate the existence of a research gap and justify the need for further investigation, particularly in the context of property and real estate companies listed on the Indonesia Stock Exchange during the 2020–2024 period. In addition, theoretical approaches such as Signaling Theory should be considered as a conceptual framework to explain the dynamics of the relationships among these variables within a more appropriate empirical context.

METHODS

This study employs a quantitative research approach with a causal associative design to examine the relationships among capital structure, firm size, profitability, and firm value in property and real estate companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The unit of analysis consists of 16 property and real estate companies selected through purposive sampling based on specific criteria (Nurdin & Hartati, 2019).

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Purposive sampling was employed to ensure data consistency and comparability across the observation period. The initial population consisted of 92 property and real estate companies listed on the Indonesia Stock Exchange (IDX) during 2020–2024. Based on the sampling criteria, 44 companies were excluded because they were in the development stage, 4 companies were excluded due to being in the acceleration stage, and 27 companies were excluded because they were under special monitoring status. These filtering steps resulted in a final sample of 16 companies that met the requirements of (1) being continuously listed on the IDX during 2020–2024, (2) publishing complete annual financial statements, (3) reporting financial information in a consistent format, and (4) having complete data for all research variables. Although the final sample size appears limited, these firms represent the most stable and continuously operating property and real estate companies during the post-pandemic period. With a five-year observation period, the study generated a balanced panel of 80 firm-year observations. Secondary data were obtained from annual financial statements published on the official IDX website and company websites.

The dependent variable in this study is firm value, proxied by Price to Book Value (PBV). The independent variables are capital structure, measured using Debt to Equity Ratio (DER), and firm size, measured using the natural logarithm of total assets (Ln Total Assets). Profitability acts as the mediating variable and is proxied by Return on Equity (ROE). The formulas used include PBV as the ratio of stock price to book value, DER as total debt divided by total equity, ROE as net income after tax divided by total equity, and firm size measured using the logarithm of total assets. The relationship among variables can be illustrated in the research model as shown in the **Figure 2**.

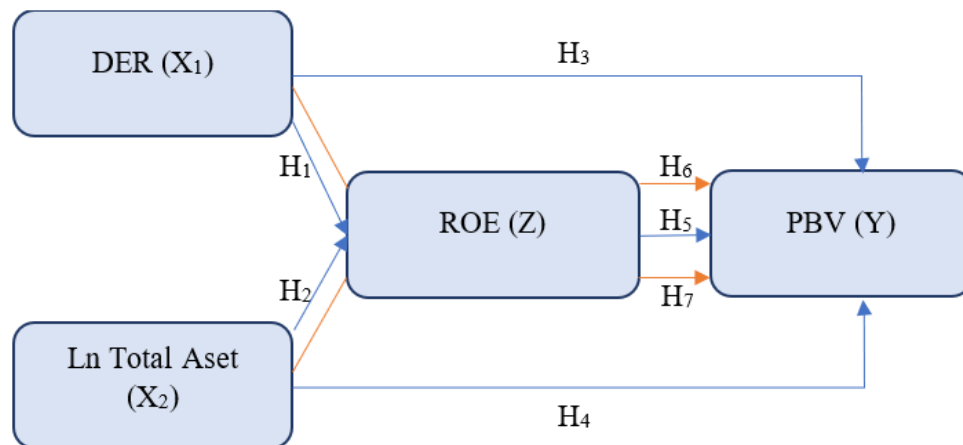


Figure 2. Conceptual Framework

Based on the conceptual framework presented in Figure 2, the following hypotheses are proposed in this study:

- H₁:** Capital structure (DER) has a significant positive effect on profitability (ROE).
- H₂:** Firm size (Ln Total Assets) has a significant positive effect on profitability (ROE).
- H₃:** Capital structure (DER) has a significant positive effect on firm value (PBV).
- H₄:** Firm size (Ln Total Assets) has a significant positive effect on firm value (PBV).
- H₅:** Profitability (ROE) has a significant positive effect on firm value (PBV).
- H₆:** Profitability (ROE) is able to mediate the effect of capital structure (DER) on firm value (PBV).
- H₇:** Profitability (ROE) is able to mediate the effect of firm size (Ln Total Assets) on firm value (PBV).

The study utilizes panel data regression analysis with the assistance of E-Views 13 software. Data analysis procedures include descriptive statistics, model selection tests, classical assumption tests, hypothesis testing, goodness of fit testing, and Sobel testing for mediation analysis. The panel data estimation models consist of the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random

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Effect Model (REM). Model selection was conducted using the Chow test, Hausman test, and Lagrange Multiplier test to determine the most appropriate regression model (Ghozali & Ratmono, 2017).

Classical assumption tests include normality, multicollinearity, heteroscedasticity, and autocorrelation tests to ensure the validity of the regression model. The coefficient of determination (Adjusted R²) and F-test were used to measure the explanatory power and simultaneous effect of the independent variables. Hypothesis testing was conducted using the t-test with a significance level of 5% to determine the partial effect of each independent variable on the dependent variable (Ghozali & Ratmono, 2017). The Sobel test was employed to examine whether profitability significantly mediates the relationships between capital structure and firm value, as well as between firm size and firm value.

RESULTS AND DISCUSSION

Descriptive Statistics Test

Descriptive statistical analysis was conducted by examining the mean, maximum, minimum, and standard deviation values of each research variable based on 80 observed data points. The data were processed using a 10% winsorizing method on both the upper and lower tails to reduce the influence of extreme values or outliers without decreasing the number of observations. The result of descriptive statistics test are as follows in **Table 1**.

Table 1. Descriptive Statistics Test

Variabel	Maximum	Minimum	Mean	Std. Deviation
DER	1,630	0,320	0,832	0,446
Ln TA	31,620	29,430	30,512	0,739
ROE	0,182	-0,054	0,056	0,060
PBV	1,490	0,250	0,688	0,387

The results indicate that the Debt to Equity Ratio (DER), Ln Total Assets, and Price to Book Value (PBV) variables have standard deviation values lower than their respective means, indicating relatively low data variation and more homogeneous distributions across cross-sectional and time-series observations. In contrast, Return on Equity (ROE) exhibits a standard deviation higher than its mean, indicating a high level of data variability. Therefore, the average ROE value is considered less representative of the overall research sample due to the substantial variation among observations.

Classic Assumption Test

Classical assumption tests were conducted to determine whether the data used in this study were appropriate for regression analysis. The results indicate that both sub-structure models satisfied the classical assumption requirements, including normality, absence of multicollinearity, heteroskedasticity, and autocorrelation. The result of classic assumption test are as follows in **Table 2**.

Table 2. Classic Assupption Test

Uraian Uji	Hasil Uji	
	Sub Struktur 1	Sub Struktur 2
Normalitas	Normal	Normal
Multikolinieritas	Tidak terjadi multikolinieritas	Tidak terjadi multikolinieritas
Heteroskedastisitas	Tidak terjadi heteroskedastisitas	Tidak terjadi heteroskedastisitas
Autokorelasi	Tidak terjadi autokorelasi	Tidak terjadi autokorelasi

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The normality test was performed using histogram analysis and the Jarque-Bera probability value. The results showed that the Jarque-Bera probabilities for Sub-Structure 1 and Sub-Structure 2 were 0.711153 and 0.97565, respectively, both exceeding the significance level of 0.05. Therefore, the data were normally distributed.

The multicollinearity test results indicated that the correlation values among independent variables in both sub-structure models were below 0.80. This finding suggests that there were no multicollinearity problems among the independent variables used in the study.

The heteroskedasticity test results showed that all probability values of the independent variables in both sub-structure models were greater than 0.05. Thus, the regression models were free from heteroskedasticity problems.

The autocorrelation test results demonstrated that the probability values of the Q-statistic at each lag were greater than 0.05 in both sub-structure models. This indicates the absence of autocorrelation, meaning that the residuals were independent and the regression models fulfilled the classical assumption requirements.

Regression Analysis Results

Regression analysis used in this study was multiple linear regression analysis with two regression models to identify the direct relationship between the independent and dependent variables, as well as the indirect relationship through the intervening variable.

Based on the model selection results, the panel data regression equation for Sub-Structure 1 is as follows:

$$ROE = -0.289 - 0.088DER + 0.014LnTA$$

The interpretation of the panel data regression equation is as follows:

- The constant value is -0.289, indicating that if DER and Ln TA as independent variables are equal to zero, then ROE will have a value of -0.289.
- The DER coefficient is -0.088, indicating that a one-unit increase in DER will decrease ROE by 0.088, assuming the other independent variables remain constant, and vice versa.
- The coefficient of Ln TA is 0.014, indicating that a one-unit increase in Ln TA will increase ROE by 0.014, assuming the other independent variables remain constant, and vice versa.

Based on the model selection results, the panel data regression equation for Sub-Structure 2 is as follows:

$$PBV = 0.954 - 0.121DER - 0.003LnTA - 1.219ROE$$

The interpretation of the panel data regression equation is as follows:

- The constant value is 0.954, indicating that if DER, Ln TA, and ROE as independent variables are equal to zero, then PBV will have a value of 0.954.
- The DER coefficient is -0.121, indicating that a one-unit increase in DER will decrease PBV by 0.121, assuming the other independent variables remain constant, and vice versa.
- The coefficient of Ln TA is -0.003, indicating that a one-unit increase in Ln TA will decrease PBV by 0.003, assuming the other independent variables remain constant, and vice versa.
- The ROE coefficient is -1.219, indicating that a one-unit increase in ROE will decrease PBV by 1.219, assuming the other independent variables remain constant, and vice versa.

Conformity Model Test (Goodness of Fit)

Based on the panel data regression results, the adjusted R-squared value in Sub-Structure 1 was 0.188 or 18.8%, indicating that variables X_1 and X_2 were able to explain 18.8% of the variation in variable Z, while the remaining 81.2% was explained by other variables not examined in this study. Meanwhile, the adjusted R-squared value in Sub-Structure 2 was 0.85 or 85%, indicating that variables X_1 , X_2 , and Z were

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able to explain 85% of the variation in variable Y, while the remaining 15% was explained by other variables not included in the study.

The probability value of the F-statistic in Sub-Structure 1 was $0.00 < \alpha$ ($\alpha = 0.05$) with an F-statistic coefficient of 10.14, while the probability value of the F-statistic in Sub-Structure 2 was $0.00 < \alpha$ ($\alpha = 0.05$) with an F-statistic coefficient of 25.89. These results indicate that, in both Sub-Structure 1 and Sub-Structure 2, the regression models simultaneously have a significant effect and are appropriate for use in this study.

Individual significance test (t test) aims to determine the relationship of each independent variable to the dependent variable. Based on the E-Views data processing results, the following findings can be presented as shown in **Table 3**.

Table 3. Hypothesis Test (Direct Effect)

Direct Effect	Coefficient	Prob.	Result
DER → ROE	- 0.08776	0.0000	Significant Negative Effect
Ln TA → ROE	0.013698	0.3162	No Significant Effect
DER → PBV	- 0.12124	0.3513	No Significant Effect
Ln TA → PBV	- 0.00318	0.9745	No Significant Effect
ROE → PBV	- 1.21987	0.0169	Significant Negative Effect

- The effect of the DER variable on ROE shows a significance value of $0.00 < \alpha$ ($\alpha = 0.05$) with a beta coefficient of -0.0877, indicating that DER has a significant negative effect on ROE.
- The effect of the Ln TA variable on ROE shows a significance value of $0.3162 > \alpha$ ($\alpha = 0.05$) with a beta coefficient of 0.0137, indicating that Ln TA does not have a significant effect on ROE.
- The effect of the DER variable on PBV shows a significance value of $0.35 > \alpha$ ($\alpha = 0.05$) with a beta coefficient of -0.1212, indicating that DER does not have a significant effect on PBV.
- The effect of the Ln TA variable on PBV shows a significance value of $0.97 > \alpha$ ($\alpha = 0.05$) with a beta coefficient of -0.0137, indicating that Ln Total Assets does not have a significant effect on PBV.
- The effect of the ROE variable on PBV shows a significance value of $0.016 < \alpha$ ($\alpha = 0.05$) with a beta coefficient of -1.219, indicating that ROE has a significant negative effect on PBV.

Hypothesis testing for mediation effects was conducted using the Sobel test. The mediation effect, indicated by the multiplication of the coefficient between the independent variable and the mediating variable and the coefficient between the mediating variable and the dependent variable, was examined to determine its significance through the Sobel test.

To further examine the mediating role of profitability, the Sobel test was employed to determine whether the indirect effects of capital structure and firm size on firm value through profitability were statistically significant. The Sobel test evaluates whether the mediation pathway contributes significantly to the relationship between the independent and dependent variables. By comparing the calculated Z-statistic with the critical value at the 5% significance level, the study assesses the effectiveness of profitability as an intervening variable. To determine the ability of ROE to mediate the effect of DER on PBV, the Sobel test was conducted as follows:

$$t = \frac{ab}{\sqrt{(b^2 S_a^2) + (a^2 S_b^2)}} = \frac{((-0.087759)(-1.219866))}{\sqrt{(1.219866)^2(0.019167)^2 + (0.087759)^2(0.496521)^2}} = 2.17$$

Meanwhile, the t-table value at a significance level of $\alpha = 5\%$ or 0.05 was 1.96. Since the calculated t-value (2.17) was greater than the t-table value (1.96), it can be concluded that ROE was able to significantly mediate the effect of DER on PBV.

To determine the ability of ROE to mediate the effect of Ln Total Assets on PBV, the Sobel test was conducted as follows:

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$$t = \frac{ab}{\sqrt{(b^2 S_a^2) + (a^2 S_b^2)}} = \frac{((0.013698)(-1.219866))}{\sqrt{(1.219866)^2 (0.013576)^2 + (0.013698)^2 (0.496521)^2}} = -0.93$$

Meanwhile, the t-table value at a significance level of $\alpha = 5\%$ or 0.05 was 1.96. Since the calculated t-value (-0.93) was smaller than the t-table value (1.96), it can be concluded that ROE was not able to mediate the effect of Ln Total Assets on PBV. Therefore, the results of sobel test which conducted in this study can be shown in the table as follows in **Table 4**.

Table 4. Hypothesis Test (Indirrect Effect)

Mediation Effect	Z-Statistic	Z-Table	Result
DER → ROE → PBV	2.17	1.96	Able to Mediate
Ln TA → ROE → PBV	-0.93	1.96	Unable to Mediate

Discussion

The results of this study indicate that the Debt to Equity Ratio (DER) has a significant negative effect on Return on Equity (ROE), implying that higher debt levels tend to reduce company profitability. In the property and real estate sector, companies generally require substantial capital to finance projects and operational activities, leading to the frequent use of external financing. Although debt can function as leverage to expand investment capacity, excessive debt increases interest expenses that ultimately reduce net profit. These findings suggest that companies in this sector have not optimally managed their capital structures to improve financial performance. This result is consistent with previous studies stating that high leverage tends to suppress profitability due to the increasing burden of interest expenses.

Furthermore, the findings reveal that Ln Total Assets does not significantly affect ROE, indicating that firm size does not necessarily guarantee higher profitability. In the property and real estate sector, a large proportion of company assets are often in the form of fixed assets or projects under development that do not directly generate income. As a result, larger firms are not always able to increase net income or shareholder returns. Although large companies theoretically benefit from economies of scale, this study demonstrates that asset management efficiency is more important than the absolute amount of assets owned. Operational inefficiency and high operating costs may also limit the profitability of large firms.

The study also demonstrates that DER does not significantly affect Price to Book Value (PBV), indicating that investors do not necessarily consider debt levels as the primary determinant of firm value. In the property and real estate industry, the use of debt financing is common due to the capital-intensive nature of the business. Consequently, investors may perceive debt as a normal financing strategy as long as the company remains capable of managing its financial obligations effectively. Investors are more likely to focus on growth prospects, profitability, and overall market conditions rather than solely on capital structure. This finding suggests that the market does not directly associate leverage levels with firm value in this sector.

Similarly, Ln Total Assets was found to have no significant effect on PBV, implying that firm size is not a dominant factor influencing firm value from investors' perspectives. Although large firms are generally considered more stable and financially secure, large asset ownership does not automatically indicate superior company performance. Investors tend to pay greater attention to a company's ability to generate profits and sustain long-term business growth rather than merely evaluating the size of its assets. Therefore, large firms in the property and real estate sector may not necessarily achieve higher market valuation if their operational performance is not optimal.

Interestingly, the results indicate that ROE has a significant negative effect on PBV. This finding contradicts conventional financial theory, which generally suggests that higher profitability should increase firm value by sending positive signals to investors. However, in the context of the property and real estate sector during the 2020–2024 period, investors may have been more concerned with long-term business sustainability, market uncertainty, and macroeconomic conditions following the COVID-19 pandemic.

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High fluctuations in profitability and dependence on economic conditions may have caused investors to respond negatively to short-term increases in profitability.

In terms of mediation analysis, ROE was found to significantly mediate the relationship between DER and PBV. This finding indicates that capital structure indirectly influences firm value through profitability. Higher debt levels increase interest expenses, which subsequently reduce profitability and influence investor perceptions of company value. Therefore, profitability acts as an important intermediary variable in explaining the relationship between capital structure and firm value.

On the other hand, ROE was unable to mediate the relationship between Ln Total Assets and PBV. This result suggests that larger company size does not automatically improve profitability or increase firm value. The findings imply that other factors, such as operational efficiency, managerial effectiveness, and business strategy, play a more significant role in determining profitability and market valuation than asset size alone.

From a managerial perspective, the findings indicate that management should not focus solely on increasing accounting profitability. Investors in the post-pandemic property market appear to prioritize sustainable growth, project completion capability, liquidity resilience, and long-term cash flow generation over short-term earnings performance. Therefore, management should emphasize transparent communication regarding future projects, financing strategies, and operational sustainability to strengthen investor confidence.

While, from a theoretical perspective, these findings suggest that the signaling mechanism proposed by Signaling Theory is context dependent. Financial indicators that traditionally function as positive signals may lose their effectiveness during periods of economic uncertainty. In the post-pandemic environment, investors appear to evaluate corporate signals more cautiously, considering not only profitability levels but also the sustainability and quality of earnings. This condition explains why profitability and firm size failed to generate positive market responses despite their theoretical importance in determining firm value.

CONCLUSIONS

The results of this study indicate that capital structure (DER) and firm size (Ln Total Assets) do not have a significant direct effect on firm value (PBV) in property and real estate companies. These findings suggest that investors tend to place greater emphasis on business prospects, market conditions, operational efficiency, and overall company performance rather than solely on debt levels or asset size. Furthermore, capital structure was found to have a significant negative effect on profitability (ROE), indicating that higher debt usage increases interest expenses and reduces the company's ability to generate profits. In contrast, firm size does not significantly influence profitability, implying that large asset ownership does not necessarily reflect the company's capability to generate earnings efficiently. The study also revealed that profitability has a significant negative effect on firm value, suggesting that increased profitability is not always positively perceived by investors, particularly when concerns regarding earnings sustainability and long-term prospects exist. In terms of mediation, profitability was able to mediate the relationship between capital structure and firm value, indicating that financial performance serves as an important intermediary in explaining the indirect effect of leverage on firm value. However, profitability was unable to mediate the relationship between firm size and firm value, demonstrating that company size does not significantly affect firm value either directly or indirectly through profitability.

This study contributes to the literature by providing evidence that the relationship between profitability and firm value may differ from conventional theoretical expectations within the post-pandemic property and real estate sector. The findings suggest that investor interpretation of financial signals is influenced not only by financial performance itself but also by the broader economic environment and industry-specific characteristics. Consequently, profitability may not always serve as a positive signal of firm value, particularly in sectors characterized by high capital intensity and prolonged investment cycles.

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