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The Paradox of Profitability Amidst Oversupply: Investor Responses to Performance and Capital Structure in the Cement Industry

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ABSTRACT

The cement industry in Indonesia faces severe structural challenges due to chronic domestic market oversupply and skyrocketing energy costs post-pandemic. This study aims to analyze the influence of Capital Structure and Profitability on Firm Value in cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2024 period. The research method used is descriptive with a quantitative approach. The research sample was selected using a purposive sampling technique that resulted in five main companies: PT Indocement Tunggal Prakarsa Tbk, PT Solusi Bangun Indonesia Tbk, PT Semen Baturaja Tbk, PT Waskita Beton Precast Tbk, and PT Wijaya Karya Beton Tbk. Data analysis techniques include classical assumption tests and panel data regression analysis using the EViews 12 program. The results of the study show that partially, Capital Structure has a significant and positive effect on Firm Value (3.977 > table 2.052). Conversely, Profitability has a significant and negative effect on Firm Value (-2.237 > table 2.052), indicating a market paradox where short-term earnings efficiency fails to reflect long-term growth sustainability amidst industry saturation. Simultaneously, Capital Structure and Profitability have a significant effect on Firm Value with a Calculated F value of 7.669 > table 3.35. The value of the Coefficient of Determination R^2 of 0.362 indicates that 36.2% of the variation in Firm Value can be explained by these two variables, while the remaining 63.8% is influenced by other factors outside the model.

1. Introduction

In the last decade, the cement industry in Indonesia has faced very complex structural challenges due to oversupply conditions in the domestic market (Eli, 2023). The aggressiveness of factory expansion that is not proportional to the growth rate of real consumption has created tight market saturation. This situation is exacerbated by the economic slowdown after the COVID-19 pandemic which had stopped various strategic infrastructure projects (Atikah et al., 2026). The massive but not optimally absorbed national production capacity triggers a price war between producers, which directly squeezes profit margins and threatens the financial stability of cement companies, especially those with high debt exposures.

This saturated condition has proven to provide strong negative sentiment in the capital market, which is reflected in sharp fluctuations and downward trend in the share price of the cement sector for the 2019–2024 period. For instance, PT Indocement Tunggal Prakarsa Tbk (INTP) experienced a sharp decline in its stock price from IDR 12,425 in 2019 to IDR 7,400 in 2024, driven by pandemic-induced pressures and a surge in coal prices, which serve as a primary cost component. A similarly drastic downturn was recorded by state-owned cement enterprises and their subsidiaries; PT Semen Baturaja Tbk (SMBR) plunged to IDR 204 in 2024 after previously peaking at IDR 1,065 in 2020, while PT Waskita Beton Precast Tbk (WSBP) lost over 80% of its market value, plummeting from IDR 304 to IDR 16 per share. This collapse in stock prices serves as a stark representation of how massive destruction of firm value has manifested across the sector.

In the midst of these unfavorable industry conditions, a paradox emerges that attracts investors' attention: how is profitability and capital structure valued by the market when the industry as a whole

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is experiencing financial sluggishness? Theoretically, the value of a company reflects the level of investor confidence in the ability of management to manage its resources which is manifested through stock prices (Naibaho & Gusmiarni, 2025; Nurcahyani, 2026). In order to comprehensively measure the value of a company, the Price to Book Value (PBV) indicator is used to see the market valuation of the company's equity (Amelia & Anhar, 2019; Scott, 2017). while Tobin's Q is applied to measure the effectiveness of the combined management of tangible and intangible assets in creating growth opportunities (Dewi, 2025; Indrarini, 2019).

Based on the Signaling Theory, the delivery of financial performance acts as an informational cue for external parties to change their assessment of the company's prospects (Efendi et al., 2021; Ross, 1977). In oversupply conditions, profitability ratios such as Return on Assets (ROA) and Return on Equity (ROE) are no longer just profit numbers, but are crucial signals for investors to filter which companies have the highest resilience in the midst of a crisis (Putri et al., 2026; Thanya, 2026). Positive signals of high profitability are generally linear with increased market investment interest (Nafi, 2026). However, efforts to maintain profitability in capital-intensive industries often come at the expense of the health of a company's capital structure. The use of debt reflected through the Debt to Assets Ratio (DAR) and Debt to Equity Ratio (DER) is a double-edged sword (Rismawandi, 2026; Yuvita et al., 2023).

According to Pecking Order Theory, managers tend to prioritize internal financing over external sources, and prefer debt to issuing new equity (Isabella, 2017; Myers & Majluf, 1984). Although debt is perceived as a cheap capital source due to tax incentives, excessive utilization of leverage amidst the cement price war instead escalates corporate financial and solvency risks (Alexander, 2021; Cahyaningtias et al., 2025). The impact of capital structure and profitability on firm value during these turbulent times has triggered sharp inconsistencies in prior empirical findings. Regarding the profitability variable, the majority of studies identify a significant positive effect on firm value (Angelina & Wahyuni, 2025; Fitriawati, 2026; Nianty et al., 2026; Sulisti & Safii, 2025), whereas Amaliah et al. (2025) and Zuliatama et al. (2024) find a negative impact, and Julian & Febrianto (2025) even report an insignificant result.

Similar inconsistencies also occur within the capital structure variable. Several researchers demonstrate that additional debt provides a positive signal that increases firm value (Angelina & Wahyuni, 2025; Julian & Febrianto, 2025; Nianty et al., 2026; Shafira, 2026). Conversely, Zuliatama et al. (2024) confirm a negative impact due to interest burdens and bankruptcy risks, while Fitriawati (2026) and Sulisti & Safii (2025) find that capital structure has no partial effect. Interestingly, a prior study specifically focusing on the cement sub-sector by Teke et al. (2024) revealed that capital structure had a significant negative effect, whereas ROA had an insignificant negative effect on PBV. This confirms the presence of a theoretical deviation or a real-world paradox within the Indonesian cement industry.

Research Gap & Urgency: Most prior studies examine these financial variables within broad, heterogeneous macro-sectors (such as banking, coal mining, or textiles) or under linear and normal economic conditions (Maskar et al., 2026; Teofelus & Alhazami, 2026). To date, no in-depth, post-pandemic study has specifically highlighted how investor responses shift when confronted with the 'paradox of profitability' within the specific manufacturing sub-sector of cement, which simultaneously experiences chronic oversupply, price wars, and commodity cost shocks.

Based on these empirical and phenomenal gaps, this study aims to analyze the effect of capital structure (DAR and DER) and profitability (ROA and ROE) on firm value (PBV and Tobin’s Q) of cement manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2019–2024 observation period. The findings of this research are expected to provide theoretical contributions by enriching corporate financial management literature based on Signaling Theory and Pecking Order Theory in emerging markets, while simultaneously serving as an empirical guide for investors in assessing risks and responding to financial performance dynamics in a saturated market.

2. Research Methods

This study uses an associative quantitative approach to analyze corporate financial performance and its impact on firm value across Indonesian cement sub-sector companies. A quantitative approach is adopted as it fulfils rigorous scientific criteria—being empirical, objective, measurable, rational, and systematic—wherein research data are presented in numerical form and analyzed through statistical procedures (Prima Jaya, 2025). The research framework comprises three primary variables: capital structure (measured by Debt to Asset Ratio [DAR] and Debt to Equity Ratio [DER]) and profitability

(measured by Return on Assets [ROA] and Return on Equity [ROE]) as the independent variables, and firm value (proxied by Price to Book Value [PBV] and Tobin's Q) as the dependent variable.

The data used are secondary data obtained from audited annual financial reports published on the official websites of each company and the Indonesia Stock Exchange (IDX) across the 2019–2024 observation period. The study population consists of all 7 cement manufacturing companies listed on the IDX. Employing a purposive sampling technique based on specific criteria—namely, continuous financial reporting and reporting denominated in Indonesian Rupiah—2 companies were excluded due to incomplete annual disclosures, yielding a final sample of 5 companies: PT Indocement Tunggal Prakarsa Tbk (INTP), PT Solusi Bangun Indonesia Tbk (SMCB), PT Semen Baturaja Tbk (SMBR), PT Waskita Beton Precast Tbk (WSBP), and PT Wijaya Karya Beton Tbk (WTON).

Data collection was carried out via the documentation method by retrieving corporate annual reports and tracking historical stock closing prices. Data analysis was performed using panel data regression techniques in EViews 12, encompassing descriptive statistics, model estimation selection (Common Effect Model, Fixed Effect Model, and Random Effect Model) through the Chow, Hausman, and Lagrange Multiplier tests, panel-diagnostic classical assumption tests, and hypothesis testing (t-test, F-test, and Adjusted R^2) evaluated under two distinct regression models to accommodate both PBV and Tobin's Q specifications.

3. Results And Discussion

Descriptive Analysis

Descriptive statistical analysis aims to describe data that can be seen from *mean*, standard deviation, *variance*, sum, range, minimum, maximum, kurtosis and distribution inclination. This can be said to be the process of analyzing population data by describing the data. The following are the results of the descriptive statistical analysis of the research variables:

Test Panel Data Model

Chow Test

The Chow test was performed to determine the most appropriate panel data regression model to use between the Common Effect Model (CEM) and the Fixed Effect Model (FEM). This test is carried out by looking at the probability value on the cross-section of the Chi-Square. If the probability value is greater than the significance level ($\alpha = 0.05$), then the model chosen is the Common Effect Model (CEM). On the other hand, if the probability value is less than 0.05, then the model chosen is the Fixed Effect Model (FEM).

Table 1. Chow test results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.554493	(4,23)	0.0662
Cross-section Chi-Square	11.027903	4	0.0263

(Source : Output of EViews 12 processed, 2026)

Based on the results of Chow's testing using EViews 12 on cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2019–2024 period, obtained a Chi-Square cross-section value of 11.027903 with a probability value (Prob.) of 0.0263. The probability value is smaller than the predetermined significance level of 0.05 (0.0263 < 0.05). Thus, H_0 is rejected and H_1 is accepted, so that the more appropriate model used in this study is the Fixed Effect Model (FEM).

These results show that there are significant differences in characteristics between the sample companies, namely PT Indocement Tunggal Prakarsa Tbk (INTP), PT Solusi Bangun Indonesia Tbk (SMCB), PT Semen Baturaja Tbk (SMBR), PT Waskita Beton Precast Tbk (WSBP), and PT Wijaya Karya Beton Tbk (WTON), which affects the relationship between capital structure and profitability to the value of the company. These differences in characteristics can be in the form of company size, production capacity, market share, operational efficiency, funding policies, and management conditions of each company that cannot be observed directly (unobserved heterogeneity).

Hausman Test

The Hausman test was performed to determine the most appropriate panel data regression model to use between the Fixed Effect Model (FEM) and the Random Effect Model (REM). This test was carried out by comparing the probability value in the Random Cross-section with the significance level (α = 0.05). If the probability value is greater than 0.05, then the chosen model is the Random Effect Model (REM). On the other hand, if the probability value is less than 0.05, then the model chosen is the Fixed Effect Model (FEM).

Table 2. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section Random	1.074462	2	0.5844

(Source: Output of EViews 12 processed, 2026)

Based on the results of Hausman's tests, using EViews 12 on cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2019-2024 period, obtained a Chi-Square Statistic value of 1.074462 with a probability value (Prob.) of 0.5844. The probability value is greater than the predetermined significance level of 0.05 (0.5844 > 0.05). Thus, H_0 is accepted and H_1 is rejected, so the more appropriate model used in this study is the Random Effect Model (REM).

The results of this test showed that the differences in individual characteristics between the sample firms did not have a significant correlation with the independent variables used in the study, namely capital structure and profitability. In other words, the variation that occurs in each company can be considered as a random component (random effect) so it does not need to be estimated specifically as in the Fixed Effect Model.

Lagrange Multiplier (LM) Test

The Lagrange Multiplier (LM) test was performed to determine the most appropriate panel data regression model to use between the Common Effect Model (CEM) and the Random Effect Model (REM). This test uses the Breusch-Pagan Lagrange Multiplier Test method by comparing the probability value (Prob.) in the Breusch-Pagan cross-section to the level of significance (α = 0.05). If the probability value is greater than 0.05, then the model chosen is the Common Effect Model (CEM), while if the probability value is less than 0.05, the model chosen is the Random Effect Model (REM).

Table 3. Langrange Multiplier (LM) Test Results

Test Hypothesis	Cross-section	Time	Both
Breusch-Pagan	1.832856 (0.1758)	0.500124 (0.4794)	2.332980 (0.1267)

(Source: Output of EViews 12 processed, 2026)

Based on the results of the Lagrange Multiplier (LM) test using EViews 12 on cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2019–2024 period, a probability value (Prob.) in the Breusch-Pagan cross-section was obtained of 0.1758. This value is greater than the predetermined significance level of 0.05 (0.1758 > 0.05). Thus, H_0 is accepted and H_1 is rejected, so a more appropriate model to use based on the LM Test is the Common Effect Model (CEM).

These results show that individual effects between firms do not have a significant influence on the regression model. In other words, the differences in the characteristics of each sample firm are not strong enough to produce a significant random effect in the model. Therefore, the Common Effect Model approach is considered to be able to explain the relationship between the variables of capital structure, profitability, and company value without the need to include the company's special effects.

In addition, the probability value in the Time dimension of 0.4794 and the combined probability value (Both) of 0.1267 also indicate a number greater than 0.05. This indicates that neither the time effect nor the combined effect between the company and time exerted significantly influenced the research model.

Based on the results of the panel data model tests that have been carried out through the Chow Test,

Hausman Test, and Lagrange Multiplier (LM) Test, different results were obtained in each test. The Chow test shows that the Fixed Effect Model (FEM) is better than the Common Effect Model (CEM), while the Hausman test shows that the Random Effect Model (REM) is more accurate than the Fixed Effect Model (FEM). Meanwhile, the results of the Lagrange Multiplier (LM) test show that the Common Effect Model (CEM) is more suitable than the Random Effect Model (REM).

Although there were differences in results in each test, the study used the Common Effect Model (CEM) as the best model in the analysis of panel data. The selection of such models is based on several considerations. First, the number of research samples is relatively limited, consisting of only 5 cement sub-sector manufacturing companies with an observation period of 6 years (2019–2024), so that the total observations used are only 30 data. In conditions of a relatively small sample size, the use of the Common Effect Model is considered simpler and more efficient than models that accommodate the individual effects of the company specifically.

Second, the companies that are the research sample have relatively homogeneous business characteristics because they are all engaged in the cement sub-sector and building materials industry which have relatively similar operational characteristics, cost structure, and market conditions. The similarity of these characteristics causes the differences between companies to be less dominant so it can be assumed that the data behavior between companies tends to be the same.

Third, the results of the Lagrange Multiplier (LM) test showed a Breusch-Pagan cross-section probability value of 0.1758 which is greater than the significance level of 0.05. These results indicate that the individual effect between firms is not significant so the use of the Random Effect Model is not necessary. In other words, the variations that occur in the research data are more influenced by the independent variables studied, namely capital structure and profitability, than by the specific characteristics of each company.

Fourth, the phenomenon behind the study shows that all sample companies faced relatively the same external conditions during the study period, such as the impact of the COVID-19 pandemic, the oversupply condition of the national cement industry, tight price competition, and fluctuations in demand due to the development of the construction and infrastructure sectors. The similarity of external conditions causes the pattern of changes in the company's value in each company to tend to be influenced by the same industry factors, so the Common Effect Model approach is considered to be able to explain the relationship between capital structure, profitability, and company value in a more representative manner.

Thus, based on statistical considerations, the characteristics of the research sample, industrial homogeneity, and phenomena that occurred in the cement industry during the period 2019–2024, the panel data regression model used in this study is the Common Effect Model (CEM). Therefore, hypothesis testing, panel data regression analysis, partial test (t test), simultaneous test (F test), and determination coefficient (R^2) were then carried out using the Common Effect Model (CEM) approach.

Classic Assumption Test

In the Common Effect Model, the classical assumption test includes the multicollinearity test and the heteroscedasticity test. Here are the results of the classic assumption test:

Heteroscedasticity Test

The heteroscedasticity test aims to find out whether in the regression model there is an inequality of variance from one residual observation to another. A good regression model is one that does not experience heteroscedasticity or has a constant residual variance (homoscedasticity). In this study, heteroscedasticity testing was carried out using the Glejser Test, which is by regressing the residual absolute value to an independent variable. The decision-making criterion is that if the probability value (Prob.) of each independent variable is greater than 0.05, then the model does not experience heteroscedasticity. On the other hand, if the probability value is less than 0.05, heteroscedasticity occurs.

Table 4. Heteroscedastisity Test Results

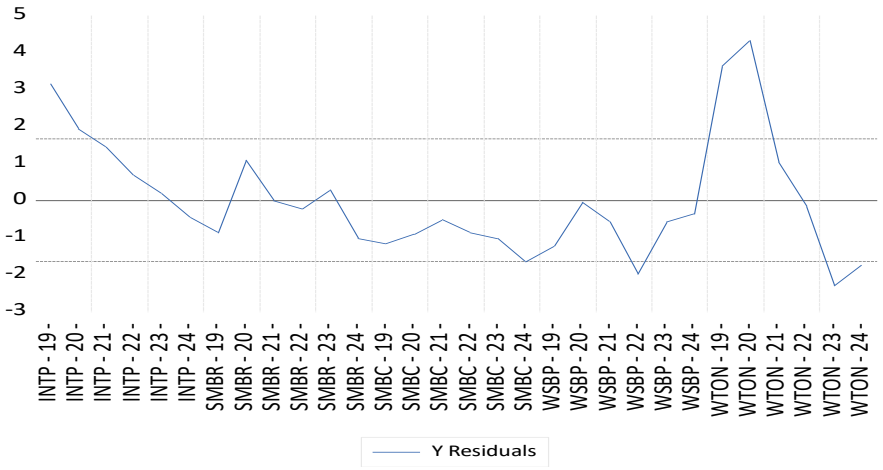
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.007975	0.217455	4.635317	0.0001
Capital Structure (X_1)	0.160384	0.097994	1.636864	0.1133
Profitability (X_2)	0.005226	0.002743	1.905486	0.0674

(Source: Output of EViews 12 processed, 2026)

Based on the results of the Glejser Test in the table above, it is known that the probability value of the Capital Structure variable (X1) is 0.1133 and the Profitability variable (X2) is 0.0674. The two probability values are greater than the significance level of 0.05, namely 0.1133 > 0.05 and 0.0674 > 0.05. Thus, it can be concluded that the independent variables in this study do not have a significant effect on the residual absolute value.

These results show that the regression model does not experience symptoms of heteroscedasticity. Residual variance in the research data tends to be constant or homogeneous in all observations of cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2019–2024 period. In other words, the residual spread does not form a specific pattern that can indicate the existence of heteroscedasticity problems.

Figure 1. Heteroscedasticity Test



(Source: Output of EViews 12 processed, 2026)

Meanwhile, based on the residual graph of the results of the Glejser Test in figure 4.6, the residual distribution is seen to fluctuate around the center line and does not form a systematic pattern, either constricting, widening or wavy patterns regularly. This condition further strengthens that the regression model used has met the assumption of homogeneity.

Therefore, it can be concluded that the panel data regression model used in the study "The Paradox of Profitability Amidst Oversupply: Investor Responses to Performance and Capital Structure in the Cement Industry" has met the assumption of heteroscedasticity or in other words no symptoms of heteroscedasticity, so the model is feasible to use for regression analysis and subsequent hypothesis testing.

Multicolininierity Test

The multicollinearity test was performed to find out whether there was a high relationship or correlation between independent variables in the regression model. A good regression model should not

show a strong correlation between independent variables. In this study, multicollinearity testing was carried out by looking at the value of correlation coefficients between independent variables. If the correlation value between independent variables is less than 0.80, then it can be concluded that the regression model does not experience multicollinearity problems.

Table 5. Multicollinearity Test Results

Variable	Capital Structure (X_1)	Profitability (X_2)
Capital Structure (X_1)	1.000000	-0.600500
Profitability (X_2)	-0.600500	1.000000

(Source : Output of EViews 12 processed, 2026)

Based on the results of the multicollinearity test in the table above, it is known that the correlation value between the variables Capital Structure (X1) and Profitability (X2) is -0.600500. This value is smaller than the set limit of 0.80. Thus, it can be concluded that there is no strong relationship between independent variables in the research model.

A negative correlation value indicates that there is an inverse relationship between capital structure and profitability, but the relationship is still at a moderate level and not strong enough to give rise to the problem of multicollinearity. This shows that each independent variable has different information in explaining the variation in the company's value.

Therefore, the regression model used in the study "The Paradox of Profitability Amidst Oversupply: Investor Responses to Performance and Capital Structure in the Cement Industry" is free from the symptoms of multicollinearity. In the absence of multicollinearity problems, the variables of Capital Structure and Profitability are suitable to be used together in the regression analysis of panel data to test their influence on the Company's Value.

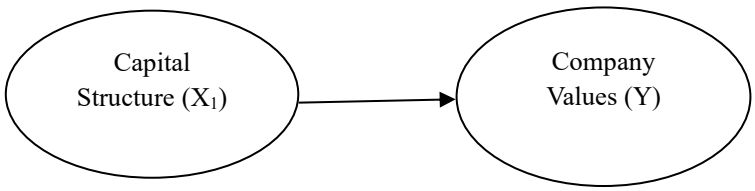
Partial Testing (t-test)

This analysis was conducted to determine the influence of each independent variable, namely Capital Structure (X1) and Profitability (X2) on Company Value (Y) partially in cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2019–2024 period. The test was carried out by comparing the tcal value with the ttable and looking at the significance value (Prob.). In this study, the ttable value was obtained as 2.052 ($\alpha = 0.05$; df = 27). The results of multiple linear regression calculation in this study are as follows:

Capital Structure to Company Value

The effect of Capital Structure on Company Value in cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the period 2019–2024 can be partially described as follows:

Figure 2. Constellation of Capital Structure to Company Value



(Source : Data processed, 2026)

$Y = \alpha + ß_1x_1 + ei$
$Y = 2.392087 + 0.449841\ X_1 + ei$
$T_{stat} = 3.977099$
$t_{table} = 2.052$
Sig = 0.0004
R = 0.338161
$R^2 = 0.360983$

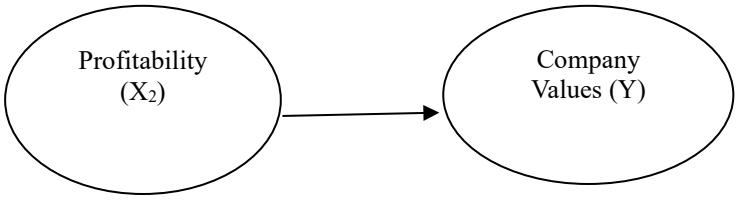
Based on the results of the simple regression analysis above, it is known that the tcal value is 3.977099, while the ttable value is 2.052. Because the tcal value of the table > (3.977099 > 2.052) and the significance value of 0.0004 < 0.05, it is concluded that the Capital Structure has a significant effect on the Company's Value. The regression coefficient of the modal structure variable of 0.449841 indicates the direction of a positive relationship. This means that any increase in the Capital Structure by 1 unit will increase the Company Value by 0.449841 units assuming other variables are considered constant.

The value of the determination coefficient (R^2) of 0.338161 shows that 33.82% of the variation in Company Value can be explained by the Capital Structure, while the remaining 66.18% is influenced by other factors outside the research model. Thus, it can be concluded that the Capital Structure is influential and significant, so it can be stated that the Capital Structure variable has a significant effect on the Company Value in cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2019-2024 period.

Profitability to Company Value

Based on the results of the Common Effect Model (CEM) regression, the effect of Profitability on Company Value can be partially seen in the following test results:

Figure 3. Constellation of Profitability to Company Value



(Source : Data processed, 2026)

The partial regression equation of Profitability to Company Value is:

$Y = \alpha + ß_1x_2 + ei$

$Y = 2.961456 + (-) 0.009044\ X_2 + ei$

$T_{stat} = -2.237975$

$t_{table} = 2.052$

Sig = 0.0334

R = 0.121439

$R^2 = 0.151734$

Based on the results of the test above, it is known that the tcal value is -2.237975, while the ttable value is 2.052. Because the value of the calculation < the table (-2.237975 < 2.052) and the significance value of 0.0334 < 0.05, it is concluded that the Profitability variable has a negative and significant effect on the Company's Value. The regression coefficient of -0.009044 shows that any increase in profitability by one unit will decrease the company's value by 0.009044 units assuming other variables are fixed.

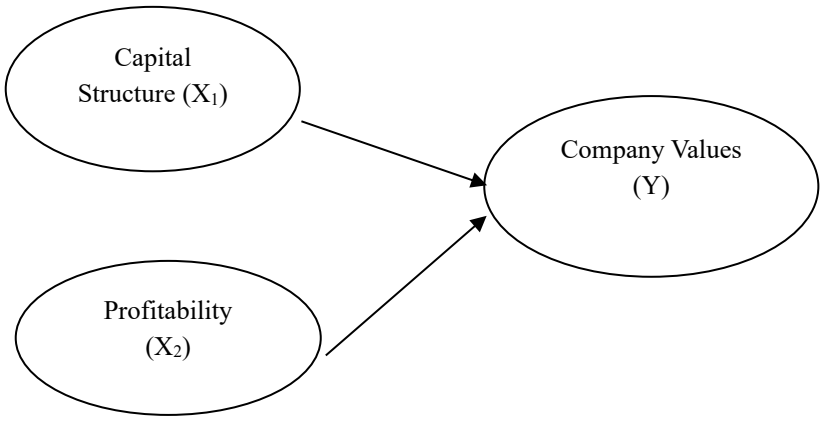
The value of the determination coefficient (R^2) of 0.121439 indicates that 12.14% of the variation in Company Value can be explained by Profitability, while the remaining 87.86% is influenced by other factors outside the research model. Thus, it can be concluded that Profitability has a negative and significant effect, so it can be stated that the Profitability variable has a significant effect on the Company Value in cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2019-2024 period.

Simultaneous Testing (F Test)

Capital Structure and Profitability to Company Value

The Effect of Capital Structure and Profitability on Company Value in Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019–2024 Period can simultaneously be described as follows:

Figure 4. Constellation of Capital Structure and Profitability to Company Value



(Source : Data processed, 2026)

$Y = \alpha + ß_1x_1 + ß_2x_{2+} ei$
$Y = 2.415442 + 0.476017\ X_1 + 0.001044\ X_2 + ei$
$F_{stat} = 7.669000$
$f_{table} = 3.35$
Sig. $= x_1\ 0.0060\ x_2\ 0.8169$
$R = 0.3150$
$R^2 = 0.362275$

Based on the constellation image and panel data regression analysis using the Common Effect Model (CEM), it is known that the Fcal value is 7.669000. When compared to the Ftable of 3.35, the result is that Fcal > Ftable (7.669000 > 3.35). In addition, the F-statistic probability value of 0.002304 is smaller than the significance level of 0.05 (0.002304 < 0.05). Thus, it can be concluded that the Capital Structure and Profitability simultaneously have a significant effect on the Company Value of the Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019–2024 Period.

The R^2 value (Coefficient of Determination) of 0.362275 indicates that 36.23% variation in Company Value can be explained by the variables Capital Structure and Profitability. Meanwhile, the remaining 63.77% is explained by other variables outside the research model that were not studied, such as company size, company growth, dividend policy, liquidity, company activities, macroeconomic conditions, and other factors.

Meanwhile, an R value of 0.3150 shows that the relationship between Capital Structure and Profitability to Company Value is in the category of quite strong. This indicates that changes in Capital Structure and Profitability together are quite closely related to changes in Company Value in cement sub-sector manufacturing companies during the study period.

Hypothesis Testing

Based on the results of the panel data regression analysis using the Common Effect Model (CEM) on cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2019–2024 period, the results of hypothesis testing can be seen as follows:

Table 6. Hypothesis Test Results

Variable	R^2	t_{stat}	t_{table}	Sig	Description
X_1 ➔ Y	0.360983	3.977099	2.052	0.0004	Significant
X_2 ➔ Y	0.151734	-2.237975	2.052	0.0334	Significant
	R^2	f_{stat}	f_{table}		
X1 X2 ➔ Y	0.362275	7.669000	3.35	0.000	Significant

Source : Data processed 2024

H1: Accepted can be seen from the value of the calculation of the > table of 3.977099> 2.052 and the Capital Structure < significance level (0.0004 < 0.05) shows that the Capital Structure variable (X1) partially has a significant effect on the Company Value in the Cement Sub-Sector Manufacturing Company Listed on the Indonesia Stock Exchange for the 2019-2024 Period with an R2 value of 0.360983, in other words, the Capital Structure has an effect of 36.1% on the Company Value while The remaining 63.9% were influenced by other factors.

H2: Accepted can be seen from the value of the calculation > table of -2.237975> 2.052 and Profitability < significance level (0.0334 < 0.05) shows that the Profitability variable (X2) partially has a significant effect on the Company Value in Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019-2024 Period with an R2 value of 0.151734, in other words, the Capital Structure has an effect of 15.1% on the Company Value While the remaining 84.9% were influenced by other factors.

H3: Accepted can be seen from the F_{stat} value of F_{table} > of 7.669000 > 3.35 and Variables X1 and X2 < significance level (0.060 < 0.05 and 0.8169 < 0.05) showing that the variables Capital Structure (X2) and Profitability (X2) simultaneously have a significant effect on the Company Value in Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019-2024 Period with a determination coefficient obtained a value of R^2 of 0.3150, in other words, Capital Structure and Profitability have an effect of 31.5% on the Company Value while the remaining 68.5% is influenced by other factors that are not explained in this study.

The Effect of Capital Structure (X1) on Company Value (Y) in Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019-2024 period

Capital structure reflects the strategic composition of debt and equity financing utilized to maintain financial stability and balance risk-return profiles (Hidayat, 2022; Thian, 2022). The empirical estimation yields a t-statistic of 3.977 with a significance value of 0.0004 ($p < 0.05$) and a regression coefficient of 0.4498. Consequently, the first hypothesis (H_1) is accepted, confirming that capital structure has a positive and significant effect on firm value, accounting for 36.10% ($R^2 = 0.3610$) of its variance.

This positive relationship aligns with Signaling Theory (Ross, 1977), indicating that prudent leverage utilization signals managerial confidence in prospective cash flows and operational capacity. Furthermore, consistent with Pecking Order Theory (Myers & Majluf, 1984), external debt financing functions as a viable mechanism when internal funds are exhausted, allowing firms to sustain critical operational assets, navigate market pressures, and fund strategic expansion. Among the sampled cement producers (INTP, SMCB, SMBR, WSBP, and WTON), maintaining an active yet manageable debt profile was perceived positively by market participants as a commitment to business continuity amidst industry-wide oversupply and infrastructure fluctuations.

These results corroborate prior empirical findings where optimal leverage enhanced firm valuation across manufacturing and financial sectors (Angelina & Wahyuni, 2025; Nianty et al., 2026; Shafira, 2026). Conversely, they diverge from studies reporting insignificant or adverse effects due to debt distress burdens (Sulisti & Safii, 2025; Teke et al., 2024), differences largely attributable to variations in sample periods, valuation proxies, and specific financial constraints. In sum, effective capital structure management in capital-intensive industries serves as an essential driver of investor confidence, directly contributing to firm value enhancement.

The Effect of Profitability (X2) on Company Value (Y) in Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019-2024 period

Profitability reflects management's effectiveness in generating returns from corporate assets and equity, proxied in this study by Return on Assets (ROA) and Return on Equity (ROE) (Sujarweni, 2023). Empirical testing yields a t-statistic of -2.238 with a significance value of 0.0334 ($p < 0.05$) and a regression coefficient of -0.0090. These results lead to the acceptance of the second hypothesis (H_2), indicating that profitability has a significant negative effect on firm value, explaining 15.17% ($R^2 = 0.1517$) of its variance.

This negative relationship presents an apparent contradiction to conventional Signaling Theory (Ross, 1977), which posits that higher earnings serve as positive cues for investors. In the context of the Indonesian cement industry during the 2019–2024 period, market valuation deviated from this

baseline due to severe structural oversupply, post-pandemic infrastructure slowdowns, and intense price competition among producers. Under such constrained market dynamics, reported profit surges were primarily interpreted by capital markets as the outcome of short-term cost-cutting rather than sustainable operational growth. Furthermore, Pecking Order Theory (Myers & Majluf, 1984) suggests that highly profitable firms tend to rely strictly on internal financing, reducing debt-fuelled market expansion signals that investors often look for in heavy manufacturing industries.

Consequently, higher accounting margins failed to elevate equity valuations. These findings align with prior industry-specific observations by Teke et al. (2024), who confirmed that profitability exerted an adverse influence on cement firm valuation amidst domestic sector headwinds, as well as broader empirical evidence documenting negative market responses to accounting profits in capital-constrained environments (Amaliah et al., 2025; Zuliatama et al., 2024). Conversely, this outcome contrasts with evidence from defensive sectors such as consumer goods and logistics, where profitability reliably boosts firm valuation (Angelina & Wahyuni, 2025; Nianty et al., 2026). Overall, the evidence across the sampled firms—INTP, SMCB, SMBR, WSBP, and WTON—demonstrates that when an industry faces chronic saturation and cost volatility, investors prioritize long-term viability and industry risk profiles over isolated profitability metrics.

The Effect of Capital Structure and Profitability on Company Value (Y) in Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019-2024 period

According to Brigham & Houston (2018), company value is an investor's perception of the company's success rate as reflected in the company's stock price. A high company value indicates that the market gives a positive assessment of the company's performance and prospects in the future. In an effort to increase the company's value, management needs to pay attention to various factors that can affect it, including capital structure and profitability.

Based on the results of the study, it was shown that the Fcal value of 7.669 was greater than the Ftable value of 3.35 (7.669 > 3.35) with a significance level of 0.0023 < 0.05. Therefore, it can be concluded that the third hypothesis (H3) in this study is accepted. These findings show that Capital Structure and Profitability simultaneously have a significant effect on the Company Value of Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019–2024 Period.

The value of the determination coefficient (R^2) of 0.362 indicates that Capital Structure and Profitability together are able to explain the variation in Company Value by 36.2%, while the remaining 63.8% is influenced by other factors outside the research model, such as company size, dividend policy, company growth, liquidity, company activities, macroeconomic conditions, interest rates, and other external factors that are not included in this study.

The results of this study indicate that the company's decision to manage its capital structure and profit-generating ability are two factors that are jointly considered by investors in assessing the company. The right capital structure can signal that a company is able to manage its funding sources effectively, while profitability indicates the company's ability to generate profits from its assets and capital. The combination of these two factors will affect investors' perception of the company's prospects, resulting in an increase or decrease in the company's value.

The results of this study support the Signalling Theory put forward by Ross (1977), which explains that the financial information published by the company will be a signal for investors to make investment decisions. Capital structure and profitability are part of a company's fundamental information that investors can use to assess the company's risk level and future prospects. The better the management of the company's capital structure and profitability, the greater the chances of the company gaining the trust of investors.

In addition, the results of this study are also in line with the Trade-Off Theory which states that companies need to balance the benefits of using debt with the risks involved. The optimal use of debt can increase the value of the company through tax benefits (tax shield), Meanwhile, high profitability reflects the company's ability to generate profits that can be used to support operational activities and business expansion. Therefore, a combination of a well-managed capital structure and profitability can increase the value of a company.

The results of this study strengthen the findings of Mohamad (2025), which demonstrate that capital structure and profitability simultaneously have a significant effect on firm value. The study

explains that the company's ability to manage funding and generate profits together is a key factor influencing investors' perceptions.

This research also supports the research of Angelina & Wahyuni (2025) who found that capital structure and profitability simultaneously have a significant effect on the value of the company. The results show that investors are not only paying attention to the company's ability to generate profits, but also considering how the company manages its funding sources.

However, the results of this study are not in line with the research of Teke et al. (2024) which states that capital structure and profitability simultaneously do not have a significant effect on the value of the company. The difference in results is suspected to be caused by differences in the research period, the characteristics of the company being studied, industry conditions, and the measurement indicators used.

Based on the results of research conducted on PT Indocement Tunggal Prakarsa Tbk (INTP), PT Solusi Bangun Indonesia Tbk (SMCB), PT Semen Baturaja Tbk (SMBR), PT Waskita Beton Precast Tbk (WSBP), and PT Wijaya Karya Beton Tbk (WTON), shows that during the 2019–2024 period cement sub-sector companies faced various challenges, such as the COVID-19 pandemic, the oversupply conditions of the national cement industry, increasingly fierce price competition, and fluctuations in demand from the construction and property sectors. In these conditions, investors tend to pay attention to the company's financial condition as a whole, both in terms of capital structure and profitability, before making investment decisions.

From an investor's point of view, a healthy capital structure indicates the company's ability to manage funding risk, while profitability indicates the company's ability to generate profits from the resources it has. Therefore, companies that are able to maintain a balance between capital structure and profitability will have a greater chance of increasing investor confidence which ultimately translates into an increase in the company's value.

Thus, it can be concluded that the Capital Structure and Profitability simultaneously have a significant effect on the Company Value in the Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019–2024 Period. This shows that the increase in a company's value is not only determined by the company's ability to generate profits, but is also influenced by how the company manages its funding sources effectively and efficiently.

Implications of Research Results

The results of the study show that Capital Structure has a positive and significant effect on Company Value, while Profitability has a negative and significant effect on Company Value. In addition, Capital Structure and Profitability simultaneously have a significant effect on the Company Value of Cement Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2019–2024 period. These findings have important implications for company management, investors, and academia.

For companies, the results of this research are expected to be considered in formulating financial policies, especially those related to the management of capital structure and profitability. Companies need to maintain an optimal funding composition between their own capital and debt in order to increase investor confidence and encourage increased company value. The right use of debt can be used to support business expansion, increase production capacity, and strengthen the company's competitiveness without causing excessive financial risk.

In addition, companies also need to improve the quality of profitability management as measured through Return on Assets (ROA) and Return on Equity (ROE). The results of the study show that an increase in profitability is not necessarily followed by an increase in the value of the company. Therefore, the company not only needs to focus on increasing profits, but also must be able to create sustainable business growth, improve operational efficiency, increase asset productivity, and maintain investor confidence in the company's future prospects.

For investors, the results of this research can be used as a consideration in making investment decisions. Investors are not only looking at the level of profitability of the company, but also need to pay attention to the condition of the capital structure, the company's ability to manage funding risks, as well as the company's long-term growth prospects. Thus, the investment decisions taken can be more objective and able to minimize investment risks.

For companies in the cement sub-sector, the results of this study show that industry conditions that face fierce competition, oversupply, and fluctuations in market demand cause investors to tend to assess companies as a whole. Therefore, companies need to maintain a balance between the ability to generate

profits and the ability to manage funding sources in order to be able to increase the company's value in the midst of the ever-evolving industry dynamics.

For academics and researchers, the results of this research are expected to be a reference in the development of research on factors that affect company value. Considering that the value of the determination coefficient of this study is 36.2%, there is still a 63.8% variation in the company's value which is influenced by other factors outside the research model. Therefore, further research can add other variables such as company size, liquidity, dividend policy, company growth, good corporate governance, and macroeconomic factors so that it can provide more comprehensive results regarding the factors that affect the company's value.

Overall, the results of this study indicate that the increase in corporate value in cement sub-sector manufacturing companies is not only determined by the company's ability to generate profits, but also greatly influenced by the company's ability to effectively manage its capital structure, maintain financial stability, and build investor confidence in the company's future prospects.

Research Limitations

This research still has some limitations that need to be considered. The variables used are only limited to Capital Structure and Profitability in explaining the Company's Value, while there are still various other factors that have the potential to affect the Company's Value but are not included in this study. In addition, the research sample only consists of 5 cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange with an observation period of 2019–2024, so the research results have not been able to describe all companies and other industrial sectors. In addition, the determination coefficient value of 36.2% indicates that there is still a 63.8% variation in Company Value that is influenced by other factors outside the research model. Therefore, further research is expected to add other variables, expand the number of samples, and extend the research period to obtain more comprehensive and accurate results.

4. Conclusion and Suggestion

Based on data analysis on cement subsector manufacturing companies on the IDX for the 2019–2024 period, it is concluded that:

1) Capital Structure has a positive and significant effect partially on the Company's Value. Optimal funding has been proven to increase investor confidence and company value.
2) Profitability has a negative and partially significant effect on the Company's Value. Increased profit (ROA & ROE) does not necessarily increase the value of a company because investors tend to focus on industry risks and growth prospects.
3) Capital Structure and Profitability simultaneously (together) have a significant effect on Company Value. The synergistic combination of fund management efficiency and profit achievement is the main determinant of the company's value movement.

The results of this study still have limitations and weaknesses. Therefore, the advice given is:

1) For the Company: Optimizing the balance of debt and capital composition to minimize financial risks, as well as spurring operational efficiency to maintain long-term profitability.
2) For Investors: Conduct a comprehensive analysis by not only fixating on profitability, but also considering the capital structure and market dynamics before making investment decisions.
3) For the Next Researcher: Expand the scope of research by adding new variables (such as *firm size*, liquidity, dividend policy, or macroeconomic factors), as well as extending the observation period and the industrial sector of the object of the research.

REFERENCES

Alexander, N. (2021). Trade-off Theory dan Pengaruh Insentif Pajak Utang Terhadap Nilai Perusahaan. *Jurnal Finansial Dan Pasar Modal*, *3*(1), 15–27.

Amaliah, R., Firmansyah, A., & Hidayat, R. (2025). Fenomena Anomali Pengaruh Profitabilitas Terhadap Nilai Perusahaan di Masa Turbulensi Ekonomi. *Jurnal Ilmiah Manajemen Dan Kewirausahaan*, *6*(2), 340–352.

Amelia, R., & Anhar, M. (2019). Pengaruh Debt to Equity Ratio dan Return on Asset Terhadap Nilai Perusahaan dengan Price to Book Value. *Jurnal Riset Manajemen Dan Bisnis*, *4*(3), 321–334.

Angelina, C., & Wahyuni, S. (2025). Pengaruh Profitabilitas dan Kebijakan Struktur Modal Terhadap Nilai Perusahaan Sub Sektor Material Konstruksi. *Jurnal Ekonomi Dan Manajemen Bisnis*, *13*(2), 180–193.

Atikah, S., Rahmawati, D., & Pratama, H. (2026). Dampak Perlambatan Proyek Infrastruktur Pasca-Pandemi Terhadap Kinerja Emiten Barang Baku di BEI. *Jurnal Riset Ekonomi Dan Bisnis Terapan*, *8*(1), 112–125.

Brigham, E. F., & Houston, J. F. (2018). *Fundamentals of Financial Management* (15th ed.). Cengage Learning.

Cahyaningtias, R., Kusuma, I., & Handayani, T. (2025). Eskalasi Risiko Kebangkrutan Akibat Tingginya Leverage Finansial pada Masa Perang Harga. *Jurnal Riset Akuntansi Kontemporer*, *17*(1), 50–63.

Dewi, A. P. (2025). Pengukuran Valuasi Aset Tidak Berwujud Menggunakan Rasio Tobin's Q pada Perusahaan Manufaktur. *Jurnal Ilmiah Akuntansi Dan Finansial*, *9*(1), 67–78.

Efendi, B., Sugiono, A., & Wibowo, S. (2021). Pengungkapan Kinerja Keuangan sebagai Isyarat Informasi dalam Memprediksi Respon Investor. *Jurnal Manajemen Bisnis Kontemporer*, *10*(2), 95–106.

Eli, M. (2023). Analisis Dampak Kelebihan Pasokan (Oversupply) Terhadap Kinerja Keuangan Industri Semen di Indonesia. *Jurnal Riset Ekonomi Dan Industri*, *5*(2), 88–99.

Fitriawati, D. (2026). Pengaruh Profitabilitas dan Leverage Terhadap Nilai Perusahaan di Bursa Efek Indonesia. *Jurnal Ilmu Dan Riset Manajemen*, *15*(2), 1–16.

Hidayat, W. W. (2022). *Buku Referensi: Struktur Modal (Capital Structure)*. PT Pena Persada Kerta Utama.

Indrarini, S. (2019). *Nilai Perusahaan Melalui Kualitas Laba (Good Governance dan Kebijakan Finansial)*. Scopindo Media Pustaka.

Isabella, I. (2017). Uji Empiris Pecking Order Theory pada Keputusan Pendanaan Perusahaan Manufaktur di Indonesia. *Jurnal Manajemen Dan Bisnis*, *9*(2), 80–92.

Julian, D., & Febrianto, H. (2025). Pengaruh Kinerja Profitabilitas dan Rasio Utang Terhadap Valuasi Saham Sektor Barang Baku. *Jurnal Akuntansi Berkelanjutan*, *11*(1), 55–67.

Maskar, A., Darmawan, I., & Wijaya, K. (2026). Penentu Nilai Perusahaan pada Sektor Makro Perbankan dan Pertambangan Terbuka. *Jurnal Riset Manajemen Dan Strategi Bisnis*, *9*(1), 105–118.

Mohamad. (2025). Analisis Struktur Modal dan Profitabilitas Terhadap Nilai Perusahaan. *AKUNTANSI 45: Jurnal Ilmiah Akuntansi*, *6*(1), 184–192. https://doi.org/10.30640/akuntansi45.v6i1.4259

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

Nafi, M. (2026). Respon Sentimen Pasar Modal Terhadap Fluktuasi Profitabilitas Sektor Industri Berat. *Jurnal Pasar Modal Dan Portofolio*, *6*(1), 78–89.

Naibaho, K., & Gusmiarni, T. (2025). Pengaruh Efisiensi Operasional Terhadap Fluktuasi Harga Saham Emiten Industri Dasar dan Kimia. *Jurnal Manajemen Keuangan Dan Perbankan*, *7*(2), 145–158.

Nianty, F., Wardani, D., & Prasetyo, B. (2026). Sinyal Positif Tambahan Hutang dan Kinerja Laba Terhadap Peningkatan Valuasi Pasar Perusahaan. *Jurnal Eksplorasi Akuntansi*, *8*(1), 210–224.

Nurcahyani, R. (2026). Persepsi Pasar Terhadap Tata Kelola Sumber Daya dan Pembentukan Nilai Perusahaan Manufaktur. *Jurnal Riset Akuntansi Dan Keuangan*, *14*(1), 34–46.

Prima Jaya, F. (2025). *Filsafat & Metodologi Penelitian*.

Putri, D. A., Lestari, M., & Hidayat, F. (2026). Profitabilitas Sebagai Sinyal Ketahanan Finansial Perusahaan Modal Padat pada Masa Krisis. *Jurnal Riset Manajemen Dan Bisnis*, *11*(1), 45–57.

Rismawandi, R. (2026). Pengaruh Struktur Modal Terhadap Tingkat Solvabilitas Emiten Barang Industri Dasar. *Jurnal Riset Keuangan Perusahaan*, *7*(1), 101–114.

Ross, S. A. (1977). The Determination of Financial Structure: The Incentive-Signalling Approach. *The Bell Journal of Economics*, *8*(1), 23–40. https://doi.org/10.2307/3003485

Scott, W. R. (2017). *Financial Accounting Theory* (7th ed.). Pearson Education.

Shafira, A. (2026). Kebijakan Pendanaan Sebagai Sinyal Pertumbuhan Nilai Perusahaan Publik di Indonesia. *Jurnal Keuangan Dan Perbankan*, *22*(1), 40–51.

Sujarweni, V. W. (2023). *Analisis Laporan Keuangan: Teori, Aplikasi dan Hasil Penelitian*. Pustaka Baru Press.

Sulisti, N., & Safii, M. (2025). Analisis Pengaruh ROA dan DER Terhadap Price to Book Value Perusahaan Manufaktur. *Jurnal Riset Akuntansi Terapan*, *7*(2), 89–101.

Teke, M., Samosir, P., & Siregar, H. (2024). Pengaruh Struktur Modal dan Profitabilitas Terhadap Nilai Perusahaan pada Subsektor Semen di Bursa Efek Indonesia. *Jurnal Riset Akuntansi Dan Pasar Modal*, *6*(2), 160–174.

Teofelus, T., & Alhazami, R. (2026). Valuasi Pasar Industri Tekstil dan Produk Tekstil dalam Kondisi Ekonomi Linear. *Jurnal Ilmiah Akuntansi Dan Manajemen*, *12*(1), 12–24.

Thanya, E. (2026). Daya Lentur Kinerja Keuangan Emiten Manufaktur Menghadapi Kenaikan Biaya Bahan Baku. *Jurnal Akuntansi Keuangan Terapan*, *8*(1), 21–33.

Thian, A. (2022). *Analisis Laporan Keuangan*. Andi Offset.

Yuvita, A., Salim, U., & Rahayu, S. (2023). Analisis Struktur Hutang dan Pengaruhnya Terhadap Risiko Finansial Emiten Manufaktur. *Jurnal Akuntansi Dan Keuangan Indonesia*, *20*(2), 130–142.

Zuliatama, R., Maryanto, E., & Santoso, B. (2024). Beban Bunga dan Risiko Finansial: Pengaruh Negatif Struktur Modal Terhadap Nilai Perusahaan. *Jurnal Riset Ekonomi Dan Bisnis*, *14*(3), 245–258.