

Determinants of Firm Value: The Role of Capital Structure, Profitability, and Firm Size in Indonesian Food and Beverage Companies

¹*Rini Novianti

rini.nouve@gmail.com

¹STIE IBMT, Surabaya

Received ...; Received in revised form ...; Accepted ... Available online ...

DOI: doi.org/10.38156/sjpm.v1i02.xxx

Abstract

This study aims to examine the effects of capital structure, profitability, and firm size on the firm value of companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) during the 2021–2025 period. This study employs a quantitative approach using secondary data obtained from companies' annual financial statements. Capital structure is measured using the Debt-to-Equity Ratio (DER), profitability is measured using Return on Assets (ROA), firm size is measured using the natural logarithm of total assets (LNTA), and firm value is measured using Price-to-Book Value (PBV). The sample was selected using purposive sampling based on predetermined criteria, resulting in 9 companies and 54 firm-year observations. Data were analyzed using multiple linear regression with the coefficient of determination, F-test, and t-test using SPSS. The results indicate that capital structure, profitability, and firm size simultaneously have a significant effect on firm value. Partially, capital structure and profitability have a significant effect on firm value, whereas firm size does not have a statistically significant effect on firm value. These findings indicate that capital structure and profitability are important factors associated with firm value among food and beverage companies listed on the IDX during the study period, while firm size does not demonstrate a significant partial relationship with firm value.

Keywords: capital structure, profitability, firm size, firm value

Introduction

Increasingly competitive business conditions require manufacturing companies, particularly those operating in the food and beverage subsector, to maintain their competitiveness and create value for shareholders. Firm value is an important indicator of how the market perceives a company's performance and future prospects. A higher firm value generally reflects positive investor perceptions regarding the company's financial performance, growth prospects, and ability to generate returns for shareholders. Therefore, identifying the financial factors associated with firm value is important for both corporate managers and investors.

Firm value can be assessed using several market-based indicators, including the Price-to-Earnings Ratio (PER), Tobin's Q, and Price-to-Book Value (PBV). In this study, firm value is measured using PBV, which compares a company's market price per share with its book value per share. PBV is commonly used to reflect how the market values a company relative to the accounting value of its equity. A higher PBV indicates that the market assigns a higher value to the company relative to its book value. Therefore, PBV is

¹ Corresponding author: Author
email: author.com.id
<http://doi.org/10.38156/sjpm.v1i02.xxx>

considered an appropriate indicator for examining investors' perceptions of firm value in publicly listed companies.

Several financial factors may be associated with firm value, including capital structure, profitability, and firm size. Capital structure reflects the proportion of debt and equity used to finance a company's operations. In this study, capital structure is measured using the Debt-to-Equity Ratio (DER), which indicates the proportion of debt relative to shareholders' equity. A higher DER indicates greater reliance on debt financing and may consequently increase the company's financial risk. However, debt financing can also provide tax benefits because interest expenses are generally deductible for tax purposes. This trade-off between the benefits and costs of debt is consistent with the trade-off theory of capital structure (Brigham & Houston, 2019). Thus, the relationship between capital structure and firm value may depend on how effectively a company manages its debt.

Profitability is another important factor that may influence firm value. Profitability reflects a company's ability to generate earnings from the resources under its control. In this study, profitability is measured using Return on Assets (ROA), which indicates the extent to which a company is able to generate profit from its total assets. Higher profitability may provide a positive signal to investors because it indicates more efficient utilization of company resources and stronger financial performance. Positive investor perceptions may subsequently increase demand for the company's shares and contribute to higher market valuation (Nurhayati, 2013).

Firm size may also be associated with firm value. Firm size can be represented by total assets, sales, or other indicators of the scale of a company's operations. Larger companies generally possess greater resources and may have broader access to financing sources. In addition, their established market position may provide investors with greater information regarding their operations and financial performance. In this study, firm size is measured using the natural logarithm of total assets (Ln Total Assets). The logarithmic transformation is used to reduce differences in scale among companies and facilitate comparison across observations.

Previous empirical studies have reported inconsistent findings regarding the relationships between capital structure, profitability, firm size, and firm value. Susilo (2023), for example, reported that capital structure, profitability, and firm size did not have a significant effect on firm value. In contrast, Dian Eka Siswanti and Sutjipto Ngumar (2019) found that capital structure and profitability had significant effects on firm value, whereas firm size did not have a significant effect. Meanwhile, Dewi Anggraini and Ani Siska (2019) reported that capital structure and firm size significantly affected firm value, while profitability did not have a significant effect. These inconsistent findings indicate that the relationships between these financial characteristics and firm value may vary across samples and research contexts.

The inconsistency in previous findings provides a basis for conducting further research on the determinants of firm value. However, the present study focuses specifically on companies in the food and beverage subsector listed on the Indonesia Stock Exchange during the 2021–2025 period. This sector is particularly relevant because food and beverage companies operate in a highly competitive consumer market and require effective financial management to maintain operational sustainability and investor confidence. Examining capital structure, profitability, and firm size simultaneously may provide a more comprehensive understanding of the financial factors associated with firm value within this specific subsector.

Based on this background, this study aims to examine the effects of capital structure, profitability, and firm size on the firm value of food and beverage companies listed on the Indonesia Stock Exchange during the 2021–2025 period. Specifically, this

study addresses two research questions: (1) Do capital structure, profitability, and firm size simultaneously have a significant effect on firm value? and (2) Which independent variable demonstrates the strongest partial effect on firm value?

Literature Review

Firm Value

Firm value represents the market's perception of a company's overall performance and future prospects. According to Sudana (2011), firm value can be viewed as the present value of expected future income or cash flows generated by a company. From an investor perspective, firm value is reflected in the market valuation of the company's shares and represents investors' expectations regarding its future performance.

Firm value can be measured using several indicators, including the Price-to-Earnings Ratio (PER), Tobin's Q, and Price-to-Book Value (PBV). PER compares the market price of a share with earnings per share, while Tobin's Q compares the market value of a company with the replacement cost of its assets. PBV compares the market price per share with the book value per share.

This study uses PBV as the measure of firm value because it provides a market-based assessment of how investors value a company relative to the accounting value of its equity. PBV can also facilitate comparisons among companies with different asset scales and capital structures. Therefore, PBV is considered an appropriate measure for examining firm value in the context of publicly listed food and beverage companies.

Capital Structure

Capital structure refers to the composition of financing used by a company, particularly the relative proportion of debt and equity. Capital structure decisions are important because the use of debt involves both potential benefits and financial costs. Debt financing may provide tax advantages through the deductibility of interest expenses, but excessive debt may increase financial risk and the probability of financial distress.

In this study, capital structure is measured using the Debt-to-Equity Ratio (DER), which represents the proportion of total debt relative to shareholders' equity. A higher DER indicates greater dependence on debt financing. From the perspective of investors, a high DER may indicate greater financial risk. However, debt can also contribute to firm value when the funds obtained through debt are used effectively to generate returns that exceed the associated financing costs.

The relationship between capital structure and firm value can be explained by the trade-off theory. The theory suggests that companies determine their optimal capital structure by balancing the benefits of debt, such as tax advantages, against the potential costs associated with financial distress and agency problems (Brigham & Houston, 2019). Accordingly, the effect of capital structure on firm value is an empirical question that should be examined within the specific characteristics of the sample.

Profitability

Profitability reflects a company's ability to generate earnings from the resources available to it. According to Sudana (2011), profitability ratios measure the effectiveness and efficiency of a company's use of assets, capital, and sales to generate profit. Profitability is therefore an important indicator for investors when evaluating a company's financial performance and future prospects.

This study measures profitability using Return on Assets (ROA). ROA indicates the amount of profit generated from the company's total assets and reflects the efficiency with which those assets are utilized. A higher ROA indicates that a company is more effective in generating earnings from its asset base.

Higher profitability may send a positive signal to investors because profitable companies are generally perceived as having stronger financial performance and greater capacity to generate future returns. Positive market perceptions may increase investor demand for the company's shares and consequently increase its market valuation. Therefore, profitability is expected to be associated with firm value.

Firm Size

Firm size refers to the scale of a company's operations and resources. It can be measured using indicators such as total assets, sales, or equity. Riyanto (2013) explains that company size can be associated with a company's ability to access external financing and its position within capital markets.

Larger companies may possess greater asset resources, broader operational capacity, and potentially better access to financing. These characteristics may influence investors' perceptions of the company's stability and future prospects. However, firm size does not necessarily guarantee higher firm value because market valuation also depends on the company's profitability, growth prospects, financial risk, and ability to utilize its resources efficiently. In this study, firm size is measured using the natural logarithm of total assets (Ln Total Assets). Total assets represent the resources controlled by a company, while the logarithmic transformation helps reduce scale differences among companies and makes the variable more suitable for statistical analysis.

Research Methods

Research Design

This study is a type of causal-associative research using quantitative data. The associative approach aims to identify relationships or influences between variables.

Population and Sample

The population is the domain of generalisation comprising objects/subjects with specific quantities and characteristics defined by the researcher for study, from which conclusions are subsequently drawn (Sugiyono, 2015: 148). The population in this study comprises the financial statements of all manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (BEI) for the period 2017–2022, totalling 51 companies.

A sample is a subset of the population that shares the same characteristics as the population (Sugiyono, 2015: 149). The research sample was determined using *purposive sampling*, which is a non-random sampling method that selects only those units meeting specific criteria. These criteria include: 1) companies generating positive revenue, 2) companies that published annual reports during the period 2017–2022, 3) companies possessing the data required for the study, and which have not been delisted or undergone a merger. Thus, the sample for this study comprises nine manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) for the period 2017–2022, with a total sample of 54 financial statements from these companies.

Data Collection Method

The data collection method employed was the documentary method. This involved gathering data from various sources of literature as well as from annual reports published by the IDX.

Research Variables

The independent variables in this study include: 1) capital structure, measured by the DER (*Debt to Equity Ratio*); 2) profitability, measured by ROA (*Return on Assets*); and 3) company size, measured by Ln Total Assets. Meanwhile, the dependent variable is company value, measured by PBV (*Price to Book Value*).

Analytical Techniques

The analytical technique used in this study is multiple linear regression analysis to determine the effect of the independent variables on the dependent variable. Data processing was carried out using SPSS software.

Results

Results of the Multiple Linear Regression Equation

Given that the study involves more than one independent variable, multiple linear regression was employed. The multiple linear regression model is as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$

Notes:

Y = Company Value

A = Constant coefficient

b1-b3 = Regression coefficients for each variable

X1 = Capital structure

X2 = Profitability

X3 = Firm size

e = *estimate of the error* for each variable

The results of the multiple linear regression test on the effect of the independent variables on the dependent variable are as follows:

Table 1.
Results of the Multiple Linear Regression Test

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	57.065	50.590		1.128
	DER	39.208	9.999	.470	3.921
	ROA	.473	.220	.256	2.153
	LnAsset	-6.808	10.660	-.077	-.639

a. Dependent Variable: PBV

Based on this table, the following regression equation can be derived:

$$Y = 57.065 + 39.208X_1 + 0.473X_2 - 6.808X_3 + e$$

The regression equation above can be explained as follows:

- a. The constant in the equation above is 57.065; this figure represents the company's value if the values of X_1 , X_2 and X_3 are ignored.
- b. The regression coefficient (b_1) for the capital structure variable (X_1) is positive (39.208), meaning that every 1 (one) unit increase in the capital structure variable will increase the value of the firm by 39.208.
- c. The regression coefficient (b_2) for the profitability variable (X_2) is positive (0.473), meaning that a one-unit increase in the profitability variable will increase the firm value variable by 0.473.
- d. The regression coefficient (b_3) for the firm size variable (X_3) is negative (-6.808), meaning that a one-unit increase in the firm size variable reduces the value of the firm value variable by 6.808.

Results of the Coefficient of Determination Test (R^2)

According to Ghazali (2018), to determine the extent to which the independent variables can explain the dependent variable, it is necessary to know the value of the coefficient of determination (R-squared). The results of the coefficient of determination test are as follows:

Table 2.
Coefficient of Determination (R^2)
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.540 ^a	.292	.249	54.09275	.851

a. Predictors: (Constant), LnAsset, ROA, DER

b. Dependent Variable: PBV

Based on the table above, the R-squared value is 0.292 (29.2 per cent), indicating that the independent variables—comprising capital structure, profitability and firm size account for 29.2 per cent of the variation in the dependent variable, namely firm value. The remaining 70.8 per cent is explained by other unknown factors or independent variables not included in this study.

Hypothesis Test Results

The F-test aims to determine whether the independent variables (X) simultaneously (collectively) have a significant effect on the dependent variable (Y) (Ghozali, 2018). The acceptance criterion for the F-test is that if the calculated F-value is greater than the table F-value, or if the significance level is less than 0.05, then H_0 is rejected and H_1 is accepted; this means that the independent variables have a significant effect on the dependent variable.

Table 3.
Results of the F-Test (Simultaneous)

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60302.513	3	20100.838	6.870	.001 ^a
	Residual	146301.291	50	2926.026		
	Total	206603.803	53			

a. Predictors: (Constant), LnAsset, ROA, DER

b. Dependent Variable: PBV

Table 3 shows that the calculated F-value is 6.870, which is greater than the table F-value of 2.79, with a significance level of 0.001, which is less than 0.05. It can be concluded that H_0 is rejected and H_1 is accepted, meaning that capital structure, profitability and firm size simultaneously (collectively) have a significant effect on firm value.

Meanwhile, the t-test aims to determine the extent to which the independent variables influence the dependent variable individually (partially) (Ghozali, 2018).

Table 4.
Results of the t-Test (Partial)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	57.065	50.590		1.128	.265
	DER	39.208	9.999	.470	3.921	.000
	ROA	.473	.220	.256	2.153	.036
	LnAsset	-6.808	10.660	-.077	-.639	.526

a. Dependent Variable: PBV

Table 4 shows that the capital structure variable (DER) has a t-value of 3.921, which is greater than the t_{table} 2.0086; it can therefore be concluded that H_0 is rejected and H_1 is accepted, meaning that capital structure has a significant effect on firm value. The profitability variable (ROA) is found to have a t-value 2.153, which is greater than the t_{table} 2.0086; it can therefore be concluded that H_0 is rejected and is accepted, meaning that profitability has a significant effect on firm value. The firm size variable (Ln Assets) has a t-value 0.639, which is greater than the t_{table} 2.0086; with a significance level of $0.526 > 0.05$, it can be concluded that H_0 is accepted and H_1 is rejected. This means that firm size does not have a significant effect on firm value. Of these three independent variables, it is evident that capital structure has a dominant influence on firm value; this is demonstrated by the highest t-value compared with the other independent variables.

Discussion

The results of this study demonstrate that capital structure has a significant effect on firm value; indeed, it exerts a dominant influence on firm value compared with the other independent variables in this study. The higher the capital structure (DER value), the higher the firm's value. A capital structure composed of more debt than equity is, in fact, a risk in the eyes of investors. However, when a firm is able to make sound decisions

and effectively manage the use of debt to improve its performance by maximising profit, this shifts investors' perception to view it as an opportunity that may ultimately enhance their welfare. This leads to a rise in share prices, thereby increasing the firm's value. From another perspective, investors consider that a company's ease of accessing debt as a source of external funding reflects external parties' in this case, creditors' confidence in the company's ability to manage that debt in a way that benefits the company, such as through new investments or business expansion.

Profitability, as measured by ROA (*Return on Assets*), also has a significant impact on a company's value. High profitability sends a positive signal to investors to invest in the company. Profitability reflects the company's sound financial performance; the company is able to enhance shareholder wealth through *dividends*. High investor demand, driven by the company's strong profitability, causes the company's share price to rise, which in turn leads to an increase in the company's value.

Meanwhile, company size, as proxied by Ln Assets, shows the opposite result, namely a negative effect and no significant impact on the company's value. This is inconsistent with research conducted by Dewi and Ani (2019) and Susilo (2023), which states that company size has a significant impact on the company's value. From an investor's perspective, a company's size is not a primary factor in assessing a company. A large company does not necessarily have good financial performance that can guarantee the increase in prosperity expected by shareholders. Investors place greater emphasis on other factors, such as the company's performance as reflected in its financial statements and the management's positive reputation. Furthermore, according to Susilo (2023), large companies face limitations in the form of high operational complexity and a more intricate organisational structure; this results in increasingly cumbersome bureaucracy, slow decision-making, and a lack of flexibility in responding to market changes. These obstacles erode investor confidence, which in turn can reduce the company's value.

Conclusions

Based on the results of the analysis and discussion, the following conclusions can be drawn: The results of the F-test indicate that capital structure, profitability and firm size simultaneously have a significant effect on the value of manufacturing firms in the food and beverage sub-sector listed on the IDX for the period 2021–2025.

Based on the results of the t-test, it is found that, when considered individually, capital structure and profitability have a significant effect on firm value, whilst firm size does not have a significant effect on the value of firms in the food and beverage manufacturing sub-sector listed on the IDX for the period 2021–2025. Capital structure has a dominant influence on firm value compared to the variables of profitability and firm size, as can be seen from the highest t-value of 3.921, followed by 2.153 for the t-value of profitability, and -0.639 for the t-value of firm size.

Limitation

Company management is advised to consider capital structure in every decision regarding sources of funding. An optimal capital structure will send a positive signal to investors to invest, thereby increasing the company's value. Future researchers may expand upon this study by examining other factors that can enhance the company's value as independent variables not covered in this research.

References

- Anggraini Dewi, Siska Ani. (2019). The Effect of Capital Structure, Profitability, and Company Size on Firm Value. *E-Journal Management & Accounting Expose*. 2(1): 1-9.
- Ari Utomo, Nanang and Novia, Nisa. (2017). The Effect of Capital Structure, Profitability and Firm Size on Firm Value in LQ 45 Companies on the Indonesia Stock Exchange. *National Seminar and Call for Papers, STIE Dharma Putra Semarang*.
- Brigham & Houston. (2019). *Fundamentals of Financial Management* (13thed.).
- Indonesia Stock Exchange. (2025). *Summary of Listed Companies' Performance*. www.idx.co.id accessed on 15 May 2025.
- Fahmi, Irham (2016). *Introduction to Financial Management*. Bandung: Alfabeta.
- Ghozali, Imam. (2018). *Application of Multivariate Analysis using IBM SPSS 21: PLS Regression Update*. Semarang: Diponegoro University Press.
- Hanafi, Mamduh M. (2016). *Financial Management*. Second Edition. Yogyakarta: BPFE.
- Hendra Sintyana, I Putu, Sri Artini, Luh Gede. (2019). The Effect of Profitability, Capital Structure, Firm Size, and Dividend Policy on Firm Value. *E-Journal of Management*. 8(2): 7717-7745
- Hermuningsih, Sri. (2013). The Effect of Profitability, Growth Opportunities and Capital Structure on the Value of Public Companies in Indonesia, *Bulletin of Monetary Economics and Banking*, 16 (2), 127-148.
- Husein, Umar. (2010). *Marketing and Business Research*. Jakarta: Gramedia Pustaka Utama.
- Husnan, Suad. (2019). *Financial Management: Theory and Application (Long-Term Decisions)*. (4thed.). BPPE.
- Jogiyanto, Hartono. (2017). *Portfolio Theory and Investment Analysis*. Tenth Edition. Yogyakarta: BPFE.
- Kurniawan, Albert. (2014). *Research Methods for Economics and Business*. Bandung: CV. Alfabeta.
- Nurhayati, M. (2013). Profitability, Liquidity and Firm Size: Their Impact on Dividend Policy and Firm Value in the Services Sector. *Journal of Finance and Business*. 5(2), pp. 144-153.
- Riyanto, Bambang. (2013). *Fundamentals of Corporate Expenditure*. 4th edition. Yogyakarta: BPFE.
- Rahayu, Maryati and Sari, Bida. (2018). Factors Influencing Firm Value. *IKRAITH-Humaniora Journal*. 2(2): 69-76.
- Siswanti, Dian Eka and Ngumar Sutjipto. (2020). The Influence of Capital Structure, Profitability and Firm Size on Firm Value. *E-Journal of Accounting Science and Research*. 8(2): 2460-0585.
- Sudana, I Made. (2011). *Financial Management: Theory and Practice*. Surabaya. Arilangga University Press.
- Sugiyono. (2015). *Management Research Methods*. Bandung: CV. Alfabeta.
- Susilo. (2023). The Effect of Capital Structure, Profitability and Firm Size on Firm Value (An Empirical Study of Manufacturing Companies in the Industrial Sector Listed on the Indonesia Stock Exchange from 2019 to 2022). Undergraduate Thesis. Semarang. Sultan Agung Islamic University.
- Widyantari, Ni Luh Putu and Yadnya, I Putu. (2017). The Effect of Capital Structure, Profitability and Firm Size on Firm Value in Food and Beverage Companies Listed on the Indonesia Stock Exchange. *UNUD E-Journal of Management*. 6(12): 6383-6409.
- Winarto, Jacinta. (2015). The Determinants of Manufacturer Firm Value on the Indonesia Stock Exchange. *International Journal of Information, Business and Management*. 7 (4), pp. 323-349.

