

Liquidity, Solvency, and Profitability as Determinants of Firm Value: Empirical Evidence from the Food and Beverage Subsector on the Indonesia Stock Exchange

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ABSTRACT

Purpose: This study examines the effects of liquidity, solvency, and profitability on firm value in food and beverage companies listed on the Indonesia Stock Exchange during 2019–2022.

Research Method: An explanatory quantitative design was employed using secondary data obtained from audited financial statements and annual reports. The purposive sample comprised 17 companies and 68 firm-year observations. The data were analyzed using pooled multiple linear regression and supporting regression diagnostics.

Results and Discussion: Liquidity, proxied by the Current Ratio, has a positive and significant effect on PBV. Solvency, proxied by the Debt-to-Equity Ratio, has a negative and significant effect, while profitability, proxied by Return on Assets, has a positive and significant effect. The three variables are jointly significant, with $R^2 = .511$ and adjusted $R^2 = .488$.

Implications: Managers should maintain adequate but productive liquidity, align leverage with cash-flow capacity, and improve the productivity of assets in generating earnings. Investors should read CR, DER, and ROA jointly rather than treating each ratio in isolation when evaluating consumer-sector firms.

Originality: It integrates signaling theory with the trade-off perspective to explain why liquidity and profitability convey positive valuation signals, whereas leverage may signal heightened financing risk.

Keywords: firm value; food and beverage subsector; liquidity; profitability; solvency

1. Introduction

Firm value represents the market's assessment of a company's ability to create sustainable economic benefits for shareholders. In publicly listed companies, this assessment is reflected in share prices and market-based valuation ratios, including the Price-to-Book Value (PBV). PBV compares the market price per share to the book value per share, indicating the premium or discount the market assigns to the firm's net resources. For management, a higher firm value is strategically relevant because it is associated with access to capital, credibility in financial markets, and the ability to sustain long-term corporate strategies. For investors, changes in firm value provide a concise signal that combines growth expectations, earnings quality, risk, and the effectiveness of resource management.



The food and beverage subsector provides a meaningful setting for examining the formation of firm value. Its products are closely linked to everyday consumption. However, firms in this industry remain exposed to volatility in raw-material prices, changes in purchasing power, intense brand competition, shifts in distribution channels, and fluctuations in logistics costs. The 2019–2022 observation window is particularly relevant because it spans substantially different business conditions: the pre-pandemic period, the operational and demand disruptions associated with COVID-19, and the early stage of economic normalization. Under such circumstances, investors are likely to pay attention not only to sales growth but also to firms' ability to preserve liquid resources, manage financing obligations, and generate earnings from the assets employed. The sample data reveal substantial dispersion in market valuation across the firms and years observed. PBV has an overall mean of 2.4565, with values ranging from 0.33 to 7.55. This spread indicates that companies operating in the same subsector can receive markedly different valuations from the capital market. Industry similarity therefore does not automatically translate into uniform investor perceptions. The variation in PBV suggests that firm-specific fundamentals, particularly financial condition and the quality of resource management, continue to shape market responses even when firms face broadly comparable sectoral conditions.

Financial performance provides information that market participants use to assess a firm's ability to meet obligations, manage its financing structure, and generate returns. Harahap (2015) views financial statements as both an accountability mechanism and a source of decision-relevant information, while Fahmi (2017) explains that financial ratios enable users to evaluate liquidity, leverage, profitability, activity, growth, and valuation. Consistent with this logic, the present study does not collapse financial performance into a single composite index. Instead, it separates financial performance into three signals with distinct economic mechanisms: liquidity, proxied by the Current Ratio (CR); solvency, proxied by the Debt-to-Equity Ratio (DER); and profitability, proxied by Return on Assets (ROA). This distinction is important because a firm can be liquid but unprofitable, profitable but highly leveraged, or conservatively financed but inefficient in using its assets.

Liquidity reflects a company's ability to meet short-term obligations with current assets. Conceptually, adequate liquidity reduces the risk of payment disruption and can strengthen operating flexibility. In capital-market terms, sufficient liquidity may be interpreted as evidence that the firm has a buffer against uncertainty in demand, procurement, and cash flow. Nevertheless, the relationship between liquidity and firm value is not necessarily linear. Excessive liquidity can also indicate underutilized cash, receivables, or inventories that generate limited returns. The tension between liquidity security and asset-use efficiency helps explain why empirical evidence on the relationship between CR and firm value remains mixed.

Solvency captures the extent to which corporate financing relies on debt relative to equity. Debt can support growth, impose financial discipline, and magnify returns when invested productively. At the same time, higher leverage increases fixed commitments, interest costs, refinancing exposure, and the probability of financial distress. Ross (1977) showed that financing decisions can convey information to the market when managers possess information not fully available to outside investors. However, the market's interpretation of debt is conditional rather than mechanically positive. Under the trade-off perspective, tax and financing benefits must be balanced against expected distress costs (Myers, 1984). Consequently, the valuation effect of leverage depends on industry conditions, cash-flow stability, investment quality, and the broader level of economic uncertainty.

Profitability is directly related to a company's ability to convert controlled resources into earnings. A higher ROA indicates that assets are being used more productively to generate net income.



From an investor's perspective, sustained profitability can strengthen expectations of future cash flows, dividend capacity, retained earnings, and internally financed growth. Profitability is therefore expected to act as a positive signal in valuation decisions. Even so, profitability must be interpreted within the observed sample and period because temporarily high earnings may not be perceived as sustainable, particularly when they arise under unusual operating conditions or are accompanied by weak cash conversion.

The first research gap is empirical inconsistency. Wahyuningrum and Sunarto (2023) report that liquidity and profitability positively affect firm value while leverage has a negative effect. In contrast, Fridatien and Romadon (2023) find that liquidity does not significantly affect PBV, profitability is positive, and leverage is positive as well. Daniel and Hermanto (2024) likewise show that the effects of fundamental ratios on firm value are not uniform across models. Fitriana and Purwohandoko (2022) further demonstrate that the valuation relevance of liquidity and leverage can differ by industry setting. More recent evidence also indicates sensitivity to the valuation proxy itself: Nikonov and Setyawan (2025) report different patterns when firm value is measured using PBV and Tobin's Q. Taken together, these studies show that the financial-ratio-firm-value relationship remains empirically unsettled rather than conclusively established.

The second gap is contextual. A substantial part of the literature either focuses on relatively normal economic periods or pools industries with heterogeneous operating and financing risks. This study focuses on food and beverage firms during 2019–2022, a period that encompasses pre-pandemic conditions, pandemic-related disruptions, and the initial recovery stage. The information content of liquidity, leverage, and profitability may become more salient when uncertainty rises because investors have stronger incentives to distinguish firms that can preserve working-capital flexibility, contain financing risk, and maintain earnings capacity. The period does not allow the study to identify a causal effect of the pandemic. However, it does provide an economically meaningful environment in which the relevance of financial signals can be evaluated.

A third gap concerns theoretical interpretation. Many ratio-based studies treat liquidity, leverage, and profitability as parallel predictors without sufficiently distinguishing the information each ratio conveys. This can lead to a mechanical discussion in which all significant relationships are attributed to the same theory. The present study instead reads financial ratios as a set of complementary signals and uses trade-off theory specifically to deepen the interpretation of leverage. This distinction matters because the market may reward financial flexibility and earnings productivity while simultaneously discounting a financing structure that is perceived as increasing distress risk.

Based on these gaps, the originality of this study lies in identifying the direction and relative strength of three financial signals in explaining PBV in the Indonesian food and beverage subsector during a period of disruption and recovery. Standardized coefficients are used to compare the relative magnitude of the relationships within the same model, while avoiding the claim that any one variable is universally the most important determinant of firm value. The study therefore aims to examine the effects of liquidity, solvency, and profitability on firm value among food and beverage companies listed on the Indonesia Stock Exchange from 2019 to 2022. Theoretically, it seeks to strengthen the application of signaling theory while providing a more nuanced explanation of leverage through trade-off theory. Practically, it seeks to assist managers in prioritizing financial policies and help investors interpret fundamental ratios in an integrated manner.

The remainder of this paper is organized as follows. Section 2 provides a literature review and hypothesis development. Section 3 presents the research method and design. Section 4 provides the results and discussion. Section 5 presents Concluding Remarks and Recommendations.

2. Literature Review and Hypothesis Development

2.1 Literature Review

2.1.1 Signaling Theory

Signaling theory originates from conditions of information asymmetry in which one party possesses information that is not directly observable by another party. Spence (1973) explains that credible signals allow outside decision makers to infer otherwise unobservable quality. In public companies, management typically possesses more detailed knowledge of business prospects, operating risks, financing commitments, and internal performance than investors. Financial reports and the ratios derived from them can therefore serve as signals that prompt investors to revise expectations about future performance and value. The use of signaling theory in this study does not imply that all financial ratios should generate a positive market reaction. A signal derives its meaning from its economic content. Adequate liquidity may signal payment capacity and operating flexibility, while higher profitability may signal effective asset utilization and stronger cash-flow prospects. In contrast, high leverage may be interpreted as increasing financing risk. Signaling theory is therefore employed here as a framework for understanding how financial information is translated into investor perceptions, not as a device for imposing one-directional prediction on all financial decisions. Ross (1977) extended signaling logic to financial structure by arguing that financing choices can reveal information about firm quality. Nevertheless, debt signals are inherently contextual. Borrowing can be interpreted positively when it reflects managerial confidence in future cash flows and supports productive investment. However, the same borrowing can become a negative signal when debt commitments appear excessive relative to earnings and cash-flow capacity. This ambiguity provides a strong reason to combine signaling theory with a financing theory that explicitly recognizes both benefits and costs of leverage.

2.1.2 Trade-Off Theory and Financing Structure

Trade-off theory views the use of debt as a balancing decision between the benefits and costs of leverage. Myers (1984) explains that firms may have a target capital structure in which tax benefits and financing advantages are weighed against expected bankruptcy and financial-distress costs. The capacity to carry debt therefore depends on business risk, cash-flow stability, asset characteristics, and profitability. As leverage increases, the marginal benefit of additional debt can be overtaken by the marginal increase in expected distress costs. This perspective is relevant to food and beverage firms during 2019–2022 because changes in demand, raw material costs, logistics, and operating restrictions can heighten the market's sensitivity to fixed financing commitments. During periods of uncertainty, investors may assign a larger valuation penalty to debt if higher leverage reduces financial flexibility. Evidence from Fajaria and Isnalita (2018) and Septyanto and Nugraha (2021) also supports the view that leverage should be interpreted alongside profitability, growth, and other firm characteristics rather than treated as an isolated indicator. The trade-off perspective, therefore, provides a more direct theoretical basis for expecting a negative DER–PBV relationship when perceived financing risk outweighs the benefits of debt.

2.1.3 Firm Value

Firm value reflects how the capital market assesses a company's capacity to create wealth for shareholders. The present study uses Price-to-Book Value (PBV), calculated as the market price per share divided by the book value per share. A PBV above 1 indicates that the market prices the company at a premium to its accounting book value of equity. In contrast, a lower PBV can reflect weaker growth expectations, higher perceived risk, limited profitability, or lower confidence in the firm's ability to earn adequate returns. PBV is particularly useful for comparing companies within the same subsector because it connects market expectations with an accounting-based equity benchmark. Nevertheless, PBV is not a comprehensive measure of economic value. It is sensitive to fluctuations in share price and to accounting policies that influence the book value of equity. For this reason, the findings of the present study are interpreted specifically as explanations of PBV-based valuation. They are not assumed to be identical to the results from Tobin's Q or other market-value measures.

2.2 Hypothesis Development

2.2.1 Liquidity and Firm Value

Liquidity is the ability of a company to meet short-term obligations as they fall due. Sinaga (2021) explains that liquidity ratios reflect the availability of current resources to cover current liabilities. This study uses the Current Ratio, calculated as current assets divided by current liabilities. A higher CR indicates a larger current-asset buffer relative to obligations due within the operating cycle. From a signaling perspective, healthy liquidity can reduce investor concerns about payment disruptions, emergency financing needs, and working-capital pressures. In the food and beverage industry, this capacity is strategically important because continuous operations depend on inventory procurement, supplier relationships, receivable collection, and cash availability. Adequate liquidity can therefore signal resilience in maintaining production and distribution when demand or supply-chain conditions become less predictable. Prior evidence is inconsistent. Wahyuningrum and Sunarto (2023) find a positive relationship between liquidity and firm value in food and beverage companies, while Fridatien and Romadon (2023) report that CR does not significantly affect PBV. Nurohindrayani and Indrati (2022) similarly show that the valuation relevance of liquidity can depend on the configuration of fundamental variables. Fitriana and Purwohandoko (2022) provide additional evidence that liquidity effects vary across industry contexts. These differences suggest that investors may distinguish between liquidity that represents useful financial flexibility and liquidity that reflects inefficiently employed current assets. Given the heightened uncertainty during the 2019–2022 observation window, this study expects the security and flexibility benefits of liquidity to outweigh the potential inefficiency associated with idle current assets. Accordingly, the first hypothesis is formulated as follows:

H1: *Liquidity, proxied by the Current Ratio, has a positive effect on firm value, proxied by Price to Book Value.*

2.2.2 Solvency and Firm Value

Solvency describes a company's capacity to meet its overall obligations and indicates the extent to which corporate financing relies on debt. Hery (2018) and Kasmir (2019) emphasize that leverage ratios are used to assess dependence on external financing and the capacity of assets and equity to support liabilities. In this study, solvency is proxied by the Debt-to-Equity Ratio, calculated as total debt divided

by total equity. The DER–firm–value relationship is more complex than the relationship expected for many operating ratios. Debt can expand investment capacity and strengthen financial discipline, but higher leverage also increases interest commitments, refinancing pressure, covenant exposure, and the risk of financial distress. Under trade-off theory, firm value can decrease when the incremental expected cost of debt-related risk exceeds its tax and financing benefits. From a signaling perspective, the market can interpret high leverage as a warning sign when operating cash flows are uncertain. Empirical findings illustrate this ambiguity. Wahyuningrum and Sunarto (2023) report a negative leverage effect on firm value, whereas Fridatien and Romadon (2023) find a positive relationship. Fajaria and Isnalita (2018) show that the effect of leverage can depend on other financial policies, while Septyanto and Nugraha (2021) demonstrate that leverage interacts empirically with firm size, profitability, and risk-management characteristics. More recent evidence from Nikonov and Setyawan (2025) indicates that leverage can exhibit different patterns across PBV and Tobin's Q. These results reinforce the need for contextual interpretation rather than a universal assumption that debt is either value-enhancing or value-destroying. For the 2019–2022 period, this study takes the position that the risk content of leverage is more likely to dominate in investors' valuation judgments. The second hypothesis is therefore formulated as follows:

H2: *Solvency, proxied by the Debt-to-Equity Ratio, has a negative effect on firm value, proxied by Price to Book Value.*

2.2.3 Profitability and Firm Value

Profitability reflects a company's ability to generate earnings from the resources it employs. Return on Assets relates net income after tax to total assets, thereby indicating how effectively the asset base generates profit. Higher ROA implies that management is generating greater economic output from the assets under its control. For public companies, such information is fundamental because profitability affects dividend capacity, retained earnings, internal financing, and the ability to meet obligations. Signaling theory predicts that higher profitability will generally be interpreted as favorable information about operating quality and future cash flow prospects. Husna and Satria (2019) highlight the importance of ROA in explaining firm value, while Wahyuningrum and Sunarto (2023) find a positive effect on profitability in the food and beverage subsector. Fridatien and Romadon (2023) also report a positive relationship between ROA and PBV. Nikonov and Setyawan (2025) provide more recent support for a positive association between profitability and PBV. However, the significance of the relationship changes when Tobin's Q is used. Profitability measures of enterprise value are especially informative during periods of disruption because the ability to preserve earnings can distinguish companies that adapt effectively from those experiencing declining efficiency. When earnings increase relative to assets, investors obtain stronger evidence that the firm's resource base is producing returns. Accordingly, the third hypothesis is formulated as follows:

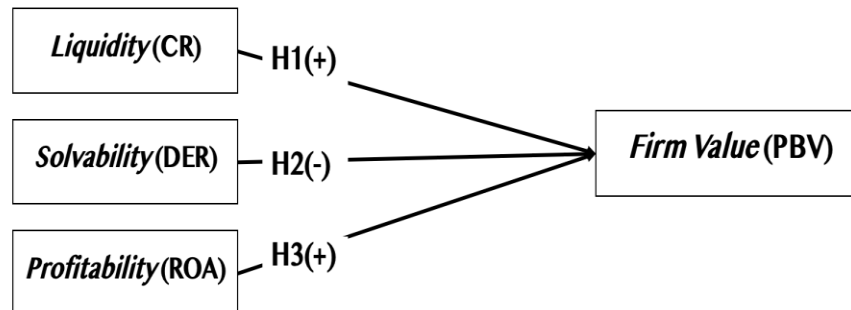
H3: *Profitability, proxied by Return on Assets, has a positive effect on firm value, proxied by Price to Book Value.*

2.3 Conceptual Framework

The research framework integrates three dimensions of financial condition: short-term payment capacity, financing structure risk, and the effectiveness of assets at generating earnings. These

dimensions are tested simultaneously against PBV to identify both the direction and the relative strength of each financial signal within a single empirical model.

Figure 1. Research Framework



3. Research Method

This study employs an explanatory quantitative design to examine the association between liquidity, solvency, profitability, and firm value using historical financial data. The unit of observation is the firm-year, defined as a specific company in a specific year. The study relies on secondary data obtained from financial statements and annual reports of food and beverage companies listed on the Indonesia Stock Exchange during 2019–2022. The population comprises food and beverage companies listed on the Indonesia Stock Exchange during the observation period. A purposive sampling procedure was applied based on the continuous availability of annual reports and financial statements and the availability of the data required to calculate CR, DER, ROA, and PBV. Seventeen companies met the criteria. After four years of observation, the final dataset comprises 68 firm-year observations. The dataset was checked for consistency across company codes, observation years, and variable calculations before statistical analysis.

The 2019–2022 period was selected because it provides a distinctive context for assessing how the market responds to fundamental financial information. The year 2019 represents conditions immediately before the pandemic, 2020–2021 capture a period of disruption and adjustment, and 2022 represents the initial normalization phase. The design is not intended to estimate the causal effect of the pandemic. Instead, the period is treated as an economic context that strengthens the relevance of liquidity, financing risk, and profitability in market valuation. Firm value is the dependent variable, measured by PBV. The independent variables are liquidity, solvency, and profitability. Liquidity is measured by the Current Ratio, solvency by the Debt-to-Equity Ratio, and profitability by Return on Assets. The ratios are calculated from the company's financial statements using the operational definitions summarized below. Safitri et al. (2022) and Fahmi (2017) support the use of financial-statement analysis as a basis for evaluating corporate financial performance, while Hery (2018), Kasmir (2019), and Sinaga (2021) provide the conceptual basis for the specific ratios employed.

The data are analyzed using descriptive statistics, regression diagnostics, and multiple linear regression. Descriptive statistics summarize the minimum, maximum, mean, and standard deviation of each variable. Model diagnostics include a visual examination of residual normality using the histogram and normal probability plot, multicollinearity assessment using Tolerance and the Variance Inflation Factor (VIF), visual assessment of heteroskedasticity using the residual scatterplot, and a supporting

assessment of serial correlation using the Durbin-Watson statistic. Hypotheses are evaluated using t-tests at the 5% significance level, while overall model significance is assessed with the F-test. The coefficient of determination is used to evaluate the proportion of PBV variation explained by the model.

The empirical specification is $PBV_{it} = \alpha + \beta_1 CR_{it} + \beta_2 DER_{it} + \beta_3 ROA_{it} + \varepsilon_{it}$, where i denotes the company and t denotes the year. Although the data structure is panel-like, with observations repeated across firms and years, the original analysis uses pooled multiple linear regression. Accordingly, the coefficients are interpreted as conditional associations within the pooled sample and are not presented as estimates of firm-specific or time-specific effects. This methodological limitation is explicitly recognized and motivates the recommendation for fixed-effects, random-effects, or other panel-data estimators in future research. Hypothesis decisions are based on coefficient direction and statistical probability. H1 is supported when the CR coefficient is positive and $p < .05$; H2 is supported when the DER coefficient is negative and $p < .05$; and H3 is supported when the ROA coefficient is positive and $p < .05$. Standardized beta coefficients are used only to compare the relative magnitude of relationships within the same estimated model. They are not used to claim universal importance outside the sample, period, and specification examined.

Table 1. Sample Criteria and Composition

Criterion	Number	Observation
Companies meeting the sampling criteria	17	-
Observation period	4 years	2019–2022
Total firm-year observations	68	17 × 4

Source: Research data processed, 2024.

Table 2. Operational Definitions of Variables

Variable	Proxy	Formula	Interpretation	Scale
Firm value	PBV	Market price per share / Book value per share	Market valuation relative to book equity	Ratio
Liquidity	CR	Current assets / Current liabilities × 100%	Capacity to meet short-term obligations	Ratio
Solvency	DER	Total debt / Total equity × 100%	Use of debt relative to equity	Ratio
Profitability	ROA	Net income after tax / Total assets × 100%	Effectiveness of assets in generating earnings	Ratio

Source: Compiled from Fahmi (2017), Hery (2018), Kasmir (2019), Sinaga (2021), and research data.

4. Results and Discussion

4.1 Analysis Results

4.1.1 Descriptive Statistics

Descriptive statistics provide an initial view of the variation in financial condition and firm value across the sample. Each variable contains 68 valid observations. The Current Ratio exhibits the widest dispersion, indicating considerable heterogeneity in working-capital positions. PBV likewise varies

substantially across firms and years, consistent with the premise that companies operating within the same subsector can be valued differently due to differences in fundamentals and market expectations.

Table 3. Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Liquidity (CR)	68	16.66	749.85	174.2768	129.16104
Solvency (DER)	68	9.79	71.14	38.8109	17.41445
Profitability (ROA)	68	1.04	41.63	9.2947	7.36087
Firm Value (PBV)	68	0.33	7.55	2.4565	1.61468

Source: SPSS output, processed research data, 2024.

The mean CR of 174.2768 indicates that, on average, current assets are approximately 1.74 times current liabilities when expressed as a percentage. However, the minimum of 16.66 and maximum of 749.85 reveal very different working-capital positions across the sample. The large standard deviation reinforces the conclusion that firms in this subsector pursue heterogeneous liquidity strategies. A very high CR should not be automatically interpreted as superior performance, because the composition and productivity of current assets remain economically important. DER has a mean of 38.8109 and ranges from 9.79 to 71.14, indicating substantial variation in financing strategies. Some companies maintain relatively conservative debt positions while others rely more intensively on debt relative to equity. ROA averages 9.2947 and ranges from 1.04 to 41.63, demonstrating meaningful differences in asset productivity. PBV averages 2.4565, suggesting that the market values the typical observation above book value, but the 0.33–7.55 range confirms that the market premium is highly uneven across firms and years.

4.1.2 Regression Diagnostics

Residual normality in the original analysis was assessed using a histogram and normal probability plot. The histogram was reported to approximate a bell-shaped distribution, and the points in the probability plot broadly followed the diagonal reference line. Because these are visual diagnostics, the appropriate interpretation is that the residuals do not display a dominant visual departure from normality rather than that exact normality has been proven. Multicollinearity was evaluated using Tolerance and VIF.

Table 4. Summary of Regression Diagnostics

Diagnostic	Indicator	Result	Interpretation
Residual normality	Histogram & P-P plot	Approximately normal pattern	No dominant visual departure
Multicollinearity	Tolerance / VIF	.953–.963 / 1.038–1.049	No indication of multicollinearity
Heteroskedasticity	Residual scatterplot	No clear systematic pattern	No strong visual indication
Serial correlation	Durbin-Watson	1.514	Relatively close to 2; interpreted cautiously

Source: Original statistical output reformatted for article presentation.

All predictors have Tolerance values above .95 and VIF values close to 1.04, indicating no evidence of problematic linear dependence among the independent variables. The residual scatterplot also did not display a clear funnel or systematic pattern, suggesting no strong visual indication of heteroskedasticity. The Durbin-Watson statistic is 1.514. Because the panel-like structure and formal lower and upper bounds were not reported in the original analysis, this value is treated as a supporting diagnostic. It is not used to make an absolute claim that serial correlation is absent.

4.1.3 Model Fit and Coefficient of Determination

The model summary reports $R = .715$, $R^2 = .511$, and adjusted $R^2 = .488$. The R^2 value indicates that 51.1% of the observed variation in PBV within the pooled sample is jointly associated with CR, DER, and ROA. The remaining 48.9% is attributable to factors outside the model, including firm size, sales growth, dividend policy, ownership structure, systematic risk, interest rates, macroeconomic conditions, corporate governance, and growth expectations. The adjusted R^2 of .488 shows that explanatory power remains relatively stable after accounting for the number of predictors.

Table 5. Model Summary

R	R Square	Adjusted R Square	Std. Error of Estimate	Durbin-Watson
.715	.511	.488	1.15543	1.514

Source: SPSS output, processed research data, 2024.

The overall F test is statistically significant, $F(3, 64) = 22.282$, $p < .001$. This result indicates that the specification containing CR, DER, and ROA provides significant explanatory information for PBV as a group. Overall model significance does not imply that all possible determinants of firm value have been captured; rather, it shows that the combined financial indicators are relevant for explaining cross-sectional and intertemporal differences in valuation within the pooled sample.

Table 6. Overall Model Test (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	89.242	3	29.747	22.282	< .001
Residual	85.441	64	1.335	-	-
Total	174.683	67	-	-	-

Source: SPSS output, processed research data, 2024.

4.1.4 Regression Results and Hypothesis Testing

The estimated regression equation is $PBV = 1.512 + 0.006 CR - 0.021 DER + 0.086 ROA$. The coefficient signs indicate that liquidity and profitability move in the same direction as firm value, whereas solvency measured by DER moves in the opposite direction. Coefficients are interpreted with the remaining independent variables held constant. Because CR, DER, and ROA have different units and ranges, relative effect magnitude is compared using standardized beta coefficients rather than unstandardized B coefficients.

Liquidity has a positive coefficient of $B = 0.006$, with $\beta = .441$, $t = 4.942$, and $p < .001$; H1 is therefore supported. Solvency has $B = -0.021$, $\beta = -.228$, $t = -2.546$, and $p = .013$; H2 is supported.

Profitability has $B = 0.086$, $\beta = .394$, $t = 4.426$, and $p < .001$; H3 is also supported. In absolute standardized terms, the CR–PBV relationship is the largest in this specification, followed by ROA and DER. This comparison is explicitly restricted to the estimated model and should not be read as a universal ranking of determinants of firm value.

Table 7. Multiple Linear Regression Results

Variable	B	Std. Error	Standardized Beta	t	Sig.
Constant	1.512	.470	-	3.215	.002
Liquidity (CR)	.006	.001	.441	4.942	< .001
Solvency (DER)	-.021	.008	-.228	-2.546	.013
Profitability (ROA)	.086	.020	.394	4.426	< .001

Source: SPSS output, processed research data, 2024.

Table 8. Summary of Hypothesis Testing

Hypothesis	Relationship	Empirical Direction	Sig.	Decision
H1	CR → PBV	Positive	< .001	Supported
H2	DER → PBV	Negative	.013	Supported
H3	ROA → PBV	Positive	< .001	Supported

Source: Processed research data, 2024.

4.2 Discussion

4.2.1 Effect of Liquidity on Firm Value

The empirical results show that the Current Ratio has a positive and significant effect on PBV. After controlling for DER and ROA, firms with stronger liquidity positions tend to have higher market valuations. The result should not be interpreted as evidence that increasing current assets without limit will necessarily increase firm value. Rather, within the observed range, the market appears to place greater weight on the benefits of short-term payment capacity than on concerns about the potential inefficiency of idle current assets. The result is consistent with signaling theory because liquidity signals a company's ability to meet payments to suppliers, short-term creditors, employees, and other parties involved in day-to-day operations. During a period that includes pandemic-related disruption, working-capital flexibility can carry greater strategic value. Firms may face interruptions in demand, distribution, receivable collection, or procurement. Investors can therefore interpret adequate liquidity as a signal that a company has a buffer capable of absorbing shocks without immediately depending on costly emergency financing.

The finding is consistent with Wahyuningrum and Sunarto (2023), who report a positive relationship between liquidity and firm value in the food and beverage subsector, and it is broadly compatible with the more recent evidence of Supriyatna and Akbar (2025), who show that liquidity remains relevant to firm-value formation in a food and beverage context. It differs, however, from Fridatien and Romadon (2023) and Daniel and Hermanto (2024), who report that liquidity is not always

a significant determinant. Nurohindrayani and Indrati (2022) and Fitriana and Purwohandoko (2022) also indicate that the relevance of liquidity depends on the model and industry characteristics. Differences in sample composition, observation period, control variables, valuation proxies, and estimation methods may therefore explain the divergent results.

The standardized coefficient for CR, $\beta = .441$, is the largest absolute coefficient in the model. This provides a sample-specific indication that the market placed substantial weight on short-term financial flexibility during 2019–2022. For managers, the implication is not to maximize CR mechanically but to maintain a liquidity position that is both sufficient and productive. Excess cash, slow-moving inventories, or poorly managed receivables can weaken returns even if they increase the accounting liquidity ratio. Liquidity management should therefore focus on the quality, convertibility, and efficiency of current assets as well as the headline ratio itself.

4.2.2 Effect of Solvency on Firm Value

DER has a significant negative effect on PBV, indicating that greater reliance on debt relative to equity is associated with lower firm value in the sample. Economically, a higher-leverage position increases fixed payment commitments and exposure to refinancing, interest rate, and cash flow risk. When uncertainty is elevated, investors may require a larger risk premium for such exposure, placing downward pressure on market valuation even if the debt originally financed productive investment. Trade-off theory provides the clearest explanation of this result. Debt can generate tax shields and expand financing capacity, but expected financial-distress costs increase as leverage rises. Myers (1984) emphasizes that capital structure must be understood as a balance rather than a monotonic relationship. For food and beverage companies, working-capital requirements and fixed investment must ultimately be supported by operating cash flows. When higher debt is not matched by sufficient profitability and cash generation, the market can interpret the financing structure as a source of vulnerability.

The negative result is also compatible with signaling theory. Ross (1977) demonstrates that financial structure can convey information, but the sign of that information depends on how investors interpret the underlying financing decision. In this sample, the risk content of leverage appears to dominate any confidence signal associated with borrowing. This interpretation is economically plausible because the observation period contains episodes in which cash-flow stability and debt-service capacity were particularly salient. Septyanto and Nugraha (2021) similarly show that leverage must be evaluated together with profitability, size, and risk-related characteristics rather than in isolation.

The finding is consistent with Wahyuningrum and Sunarto (2023), who report a negative effect of leverage on firm value, but differs from Fridatien and Romadon (2023), who find a positive relationship. Fajaria and Isnalita (2018) also show that leverage effects can vary when other financial policies are incorporated, while Nikonov and Setyawan (2025) demonstrate that the direction or strength of leverage effects can change with the valuation proxy. The implication is that leverage cannot be labeled universally beneficial or harmful. Its valuation relevance depends on business risk, cash-flow capacity, debt maturity, cost of capital, investment returns, and market sentiment.

For management, the appropriate response is not to eliminate debt but to align leverage with the firm's capacity to service and productively employ borrowed funds. Debt maturity, interest-rate exposure, covenant pressure, and cash-flow stress scenarios should be incorporated into financing decisions. For investors, DER should be evaluated jointly with profitability and liquidity. High leverage

in a firm with resilient earnings and strong liquidity can convey a different risk profile from the same DER in a firm with thin margins, weak cash generation, or limited short-term flexibility.

4.2.3 Effect of Profitability on Firm Value

ROA has a positive and significant effect on PBV, with $\beta = .394$. The result indicates that the capacity of assets to generate earnings is a major source of market-relevant information in the sample. Profitability provides evidence of operating effectiveness, the firm's ability to finance growth with retained earnings, and its capacity to generate returns for shareholders. Unlike asset growth by itself, ROA shows whether the asset base is being converted into measurable earnings performance. Under signaling theory, effective earnings generation from assets is interpreted as favorable information about operating quality and future cash flows. A higher ROA indicates that assets are not merely accumulating on the balance sheet but are producing economic benefits. This is particularly relevant in the food and beverage industry because firms may hold substantial production assets, inventory, and distribution infrastructure. Those resources contribute to firm value only when they support adequate sales, margins, and profitability.

The result is consistent with Fridatien and Romadon (2023), Wahyuningrum and Sunarto (2023), and Husna and Satria (2019), all of whom provide evidence of a positive relationship between profitability and firm value. Nikonov and Setyawan (2025) also report a positive effect of profitability on PBV in the food and beverage subsector, although the relationship changes when Tobin's Q is used. The consistency of the positive PBV association across several studies strengthens the interpretation of profitability as a relatively stable positive signal, while also reminding readers that the measured effect can remain sensitive to the chosen valuation metric.

For managers, the finding emphasizes that value creation should focus on the quality of asset deployment rather than on asset expansion alone. Investments in production capacity, machinery, distribution, or inventories should be assessed according to whether they improve operating returns. For investors, ROA is useful for distinguishing between companies with large asset bases that generate limited earnings and companies that convert assets into profits more effectively. Nevertheless, ROA should still be read alongside cash-flow quality, accounting policies, and margin sustainability to avoid mistaking temporary profitability for permanent operating strength.

4.2.4 Integrated Findings and Theoretical Contribution

When the three results are read together, a coherent pattern emerges: short-term payment capacity and earnings-generation ability receive positive market responses, whereas higher leverage receives a negative response. This pattern indicates that investors do not evaluate bottom-line earnings in isolation. They also appear to consider the quality of the financial position that supports the sustainability of those earnings. The relatively larger standardized coefficients for CR and ROA suggest that financial flexibility and asset productivity are particularly salient in this pooled 2019–2022 sample. The principal theoretical contribution is to clarify that signaling theory in financial-ratio research should be understood as a multidimensional system rather than a single positive-signal mechanism. Liquidity can convey operational security, profitability can convey earnings capability, and leverage can convey either confidence or risk depending on its economic context. The negative DER result demonstrates why trade-off theory adds explanatory value: it identifies the mechanism through which the expected cost of financial distress may outweigh the benefits of debt. Integrating the two perspectives therefore

produces a more disciplined interpretation than simply labeling every managerial financial decision as a favorable signal.

The findings also add context-specific evidence from a period characterized by substantial shifts in the business environment. The sample suggests that financial flexibility and earnings capability were rewarded while leverage was evaluated more cautiously. This does not establish that the pandemic caused a change in investor sensitivity, as the study does not estimate a crisis interaction or a counterfactual effect. It does, however, provide a sound empirical basis for future research that explicitly models economic shocks, time effects, or crisis-period moderation in the relationship between financial fundamentals and market valuation.

5. Concluding Remarks and Recommendation

This study examines the effects of liquidity, solvency, and profitability on firm value using 68 firm-year observations from 17 food and beverage companies listed on the Indonesia Stock Exchange during 2019–2022. Liquidity, proxied by the Current Ratio, has a positive and significant effect on PBV. Solvency, proxied by the Debt-to-Equity Ratio, has a negative and significant effect, while profitability, proxied by Return on Assets, has a positive and significant effect. The findings indicate that firm value is not associated solely with the ability to generate earnings. Investors also respond to short-term financial flexibility and to the risk embedded in the financing structure. Within the estimated model, liquidity has the largest absolute standardized coefficient, followed by profitability and solvency. The result suggests that the capacity to preserve payment flexibility and convert assets into earnings was particularly relevant to valuation during a period containing disruption and recovery. This comparison is model-specific and should not be generalized beyond the sample.

The study strengthens the application of signaling theory by demonstrating that financial information conveys different valuation content depending on its economic function. The positive effects of CR and ROA indicate that financial flexibility and earnings capability can be interpreted as value-supporting signals. The negative effect of DER indicates that financing information must be interpreted in light of the balance between the benefits of debt and the expected cost of financial distress. The contribution therefore extends beyond confirming statistical relationships; it demonstrates that the content and direction of financial signals vary across dimensions of corporate financial condition. The study also shows why relying on a single theoretical perspective can oversimplify the concept of leverage. Signaling theory explains how investors perceive financing information, while trade-off theory explains why the same information can reduce value when risk costs dominate. The integration of these perspectives provides a more coherent explanation of the negative DER coefficient in the food and beverage subsector. It encourages future studies to distinguish the economic mechanisms underlying different financial ratios.

For managers, the priority is to maintain liquidity at a level that supports operational continuity without creating unproductive accumulation of current assets. Cash, inventory, receivables, and trade payables should be managed as components of firm-value strategy rather than as purely operational accounts. The second priority is to align leverage with cash-flow capacity. Additional debt should be linked to investments with measurable returns and should not materially reduce financial flexibility. The third priority is to improve asset productivity so that growth in assets is translated into sustainable improvements in earnings and ROA. For investors, CR, DER, and ROA should be interpreted jointly. A



high CR combined with a weak ROA can indicate inefficient use of current assets, while a strong ROA accompanied by a very high DER may conceal substantial financing risk. The joint reading of the ratios therefore provides a more complete view of financial quality than any single indicator. This integrated interpretation is especially useful when comparing firms that operate in the same consumer subsector but differ materially in working-capital management, financing policy, and profitability.

Several limitations should be considered. First, the study covers 17 companies and four observation years, so generalizations to other industries and periods should be made with caution. Second, the model includes only three financial ratios and excludes other determinants of PBV, such as firm size, growth, dividend policy, ownership structure, systematic risk, interest rates, inflation, corporate governance, or market expectations. Third, firm value is measured only by PBV; results may differ when Tobin's Q, enterprise-value-based indicators, or alternative market-to-book measures are employed. Fourth, although the dataset has a panel structure, the original model is estimated using pooled multiple regression. This approach does not explicitly control for unobserved firm heterogeneity or common time effects. Future research should employ panel-data estimation and select among pooled/common effects, fixed effects, and random effects using appropriate specification tests, while also considering robust or clustered standard errors. Fifth, the original normality and heteroskedasticity diagnostics are partly visual. Subsequent studies can supplement them with formal tests and sensitivity analysis while avoiding mechanical reliance on tests that are sensitive to sample size. Future work can also test whether crisis and recovery periods moderate the relevance of financial ratios for valuation. A direct comparison between PBV and Tobin's Q would help determine whether investors respond consistently to financial signals across alternative valuation measures. The model can further be extended by examining dividend policy, optimal capital structure, earnings quality, or cash-flow resilience as mediating or moderating mechanisms. Such extensions would provide a more comprehensive explanation of how liquidity, financing risk, and profitability jointly shape market valuation.

Statement of Use of Generative AI

During the preparation of this work, the author used generative artificial intelligence tools to support the scientific writing process. Grammarly was used to check grammar, refine writing style, and improve clarity in scientific writing. All interpretations, analyses, and conclusions presented in this study are the sole responsibility of the author.

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