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Financial Resilience and Market Valuation in Indonesia's Consumer Non-Cyclicals Sector: Evidence from the Pandemic Recovery Period (2021–2024)

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Abstract

Purpose – This study examines the determinants of firm value in Indonesia's Consumer non-cyclicals sector during the post-pandemic recovery period (2021–2024), focusing on the roles of profitability, liquidity, and capital structure, and testing profitability as a mediating variable.

Design/methodology/approach – Panel data from 48 publicly listed companies on the Indonesia Stock Exchange (IDX) yielding 192 firm-year observations are analyzed using fixed-effects panel regression and Baron & Kenny four-step path analysis to test both direct effects and mediation mechanisms.

Findings – Profitability (ROA) significantly and positively affects firm value (PBV) (β=0.421, $p<0.01$). Liquidity (CR) and capital structure (DER) do not directly influence PBV but operate exclusively through profitability as a full mediating channel, confirmed for both H4 and H5.

Originality/value – This is the first comprehensive empirical analysis of firm value determinants specific to Indonesia's Consumer non-cyclicals sector in the post-pandemic period, demonstrating that the profitability–valuation mechanism remains robust under macroeconomic disruption.

Research limitations/implications – Results are limited to consumer non-cyclicals companies in Indonesia during 2021–2024. Managers should prioritize ROA improvement as the most direct path to shareholder value creation, while treating liquidity and leverage as indirect levers operating through earnings generation.

Keywords: Capital structure; consumer non-cyclicals; firm value; Indonesia; panel data; profitability; post-pandemic recovery.

Article Type: Research paper

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Introduction

Firm value maximization represents a fundamental objective of corporate financial management, serving as a critical indicator of managerial effectiveness and shareholder wealth creation (Brigham & Ehrhardt, 2020). In emerging markets such as Indonesia, understanding the determinants of firm value is particularly important given the unique institutional environment, market volatility, and evolving regulatory landscape (Damodaran, 2012). The relationship between financial performance metrics and market valuation has been extensively studied across various sectors and geographies, yet sector-specific dynamics and temporal contexts continue to yield important insights for both theory and practice (Ross et al., 2013).

The consumer non-cyclicals sector—encompassing food and beverage, personal care, household products, and other essential goods—presents a particularly interesting context for examining firm value determinants. Unlike cyclical industries, consumer staples companies typically exhibit stable demand patterns, lower earnings volatility, and distinctive working capital characteristics due to inventory-intensive operations and established brand equity (Fajaria & Isnalita, 2018). These sector-specific features may influence how financial ratios translate into market valuations, yet empirical evidence specific to this sector in Indonesia remains limited.

The 2021–2024 period offers a unique temporal context for this investigation. Following the COVID-19 pandemic's disruption of global supply chains, consumer behavior, and macroeconomic conditions, Indonesian companies navigated a complex recovery environment characterised by shifting consumption patterns, inflationary pressures, and monetary policy adjustments (Chabachib et al., 2019). The consumer non-cyclicals sector experienced both challenges (supply chain disruptions, input cost inflation) and opportunities (increased health consciousness, e-commerce growth) during this period.

Despite extensive research on financial determinants of firm value in Indonesia, four specific gaps motivate this study and establish its novelty. First, most Indonesian studies examine manufacturing, mining, or broad cross-sector samples (Nurfitriani et al., 2025; Febriana et al., 2025; Putri Supriyanto et al., 2025), and the few that address consumer goods typically pool cyclical and non-cyclical segments together, obscuring the distinct financial dynamics of defensive industries. The consumer non-cyclicals sector, characterized by inelastic demand, stable cash flows, and high inventory turnover, has received no dedicated empirical attention in the Indonesian corporate finance literature, representing a significant gap given the sector's substantial market capitalization (approximately 18% of IDX total as of 2024).

Second, the 2021–2024 period represents a structurally distinct macroeconomic regime—marked by pandemic recovery, supply-chain reconfiguration, elevated commodity prices, and monetary tightening—that may fundamentally alter the relationships between financial ratios and market valuations. Prior studies using pre-pandemic data (Chabachib et al., 2019; Fajaria & Isnalita, 2018) may not capture these shifted dynamics; indeed, Patmasari et al. (2025) call for post-pandemic replications as a research priority.

Third, while direct effects of profitability, liquidity, and capital structure on firm value are well documented, the indirect pathways through which liquidity and leverage influence valuation via profitability remain less explored in the Indonesian context (Sukmayanti & Sembiring, 2022), particularly with rigorous mediation testing (Sobel test and bootstrap confidence intervals) rather than simple causal-step logic alone.

Fourth, unlike prior studies that omit firm-level controls, this research incorporates firm size and firm age as control variables to isolate the net effects of focal financial ratios, thereby reducing omitted-variable bias and strengthening causal inference. Collectively, these four dimensions—sector specificity, temporal novelty, methodological rigor in mediation testing, and inclusion of control variables—distinguish this study from extant literature and contribute both theoretically and empirically to the corporate finance discourse on emerging-market firm valuation.

This study pursues four objectives:
(1) To examine the direct effect of profitability (ROA) on firm value (PBV).
(2) To examine the direct effects of liquidity (CR) and capital structure (DER) on firm value.
(3) To test whether profitability mediates the relationship between liquidity and firm value.
(4) To test whether profitability mediates the relationship between capital structure and firm value.

Literature Review

Signalling Theory

Signalling Theory (Spence, 1973) posits that firms use financial metrics as credible signals of quality to information-asymmetric markets. High profitability signals superior management and competitive advantage, justifying premium valuations. Consistently strong ROA communicates operational efficiency and future earnings potential, driving investor demand and higher PBV ratios.

Trade-off Theory

Trade-off Theory (Modigliani & Miller, 1963) suggests that firms balance the tax benefits of debt against financial distress costs, seeking an optimal capital structure. Excessive leverage raises distress risk and depresses firm value, while moderate debt can enhance returns through the tax shield, thereby supporting profitability and valuation.

Pecking Order Theory

Pecking Order Theory (Myers, 1984) proposes that firms prefer internal financing over external debt and equity due to information asymmetry costs. Under this framework, higher profitability enables greater reliance on retained earnings, reducing costly external financing and supporting firm value through financial flexibility.

Related Empirical Work

Profitability and Firm Value

Consistent positive relationships between ROA and PBV are documented across Indonesian sectors (Chabachib et al., 2019; Simanjuntak & Sembiring, 2023). Brigham and Ehrhardt (2020) confirm that earnings generation capability is the primary driver of market premium over book value. Nafisah et al. (2020) find positive associations in manufacturing, while Putri Supriyanto et al. (2025) confirm the ROA–PBV link across diverse Indonesian firms.

Liquidity and Firm Value

Evidence on the Current Ratio–PBV relationship is mixed. Nafisah et al. (2020) find positive associations in manufacturing, while Febriana et al. (2025) report insignificant or negative effects in energy companies. Sukmayanti and Sembiring (2022) demonstrate that liquidity effects are often indirect, transmitted through profitability—consistent with the mediation mechanism tested in this study.

Capital Structure and Firm Value

The DER–PBV relationship is highly heterogeneous. Kurnianti (2022) finds negative effects in infrastructure, while Cristy et al. (2025) report mixed evidence in pharmaceuticals. Putri Supriyanto et al. (2025) confirm that capital structure effects depend heavily on sector and time period, reinforcing the need for sector-specific analysis.

Mediation through Profitability

Simanjuntak and Sembiring (2023) and Sukmayanti and Sembiring (2022) demonstrate that ROA mediates the relationships between CR/DER and PBV in automotive and LQ45 firms, respectively. Chabachib et al. (2019) confirm this mediation pathway across multiple Indonesian sectors. These findings motivate the mediation framework adopted in this study.

Hypothesis Development

Based on the theoretical foundations and empirical evidence reviewed above, the following hypotheses are proposed:

H1: Profitability (ROA) has a significant positive effect on firm value (PBV).
H2: Liquidity (CR) has a significant effect on firm value (PBV).
H3: Capital structure (DER) has a significant effect on firm value (PBV).
H4: Profitability (ROA) mediates the effect of liquidity (CR) on firm value (PBV).
H5: Profitability (ROA) mediates the effect of capital structure (DER) on firm value (PBV).

Methods

This study employs a quantitative, causal-comparative design using secondary panel data. The population comprises all consumer non-cyclicals companies listed on the Indonesia Stock Exchange (IDX) during 2021–2024. Purposive sampling criteria required: (i) continuous listing throughout the study period; (ii) complete audited financial statements available; and (iii) no major corporate restructuring events. After applying these criteria, the final sample comprises 48 companies yielding 192 firm-year observations (48 firms × 4 years) as shown in Tabel 1. Data were collected from audited annual reports and IDX financial disclosures via the IDX, KSEI, and Refinitiv Eikon platforms.

Table 1. Sample Selection Process

Description	Total
Total consumer non-cyclicals companies listed on IDX	65
Companies not consistently listed during 2021–2024	(9)
Companies with incomplete financial data	(5)
Companies with major corporate restructuring	(3)
Final sample companies	48
Study period (years)	4
Total firm-year observations	192

Variable Operationalization

In addition to the three focal independent variables (ROA, CR, DER), two control variables are incorporated into the analytical model to reduce omitted-variable bias and improve the internal validity of the estimated relationships, as shown in Table 2. Firm Size (SIZE), measured as the natural logarithm of total assets, is included because larger firms typically exhibit higher market valuations due to economies of scale, greater diversification, enhanced market visibility, and superior access to external financing (Damodaran, 2012; Kurnianti, 2022; Putri Supriyanto et al., 2025). Omitting firm size would risk attributing size-related valuation differences to the focal financial ratios.

Table 2. Variable Definitions and Measurement

Symbol	Variable	Measurement	Scale
PBV	Price-to-Book Value (Dependent)	Market Price per Share / Book Value per Share	Ratio
ROA	Return on Assets (Independent/Mediator)	Net Income / Total Assets × 100%	Ratio
CR	Current Ratio (Independent)	Current Assets / Current Liabilities	Ratio
DER	Debt-to-Equity Ratio (Independent)	Total Liabilities / Total Equity	Ratio
SIZE	Firm Size (Control)	Natural Logarithm of Total Assets	Ratio
AGE	Firm Age (Control)	Years since Initial Public Offering (IPO)	Ratio

Firm Age (AGE), measured as the number of years since IPO, is included to control for life-cycle effects on valuation. Mature firms may have more predictable earnings and lower information asymmetry, potentially affecting both profitability and market premium (Titman & Wessels, 1988). Both control variables are widely used in the Indonesian corporate finance literature (Nurfitriani et al., 2025;

Kurnianti, 2022) and ensure that the estimated focal effects represent net relationships isolated from systematic firm-characteristic variation.

Analytical Framework

Classical Assumption Tests

Prior to estimation, classical assumption tests were conducted: (a) normality of residuals using the Jarque-Bera test; (b) multicollinearity using Variance Inflation Factor (VIF < 10); (c) heteroscedasticity using the Breusch-Pagan test; and (d) autocorrelation using the Durbin-Watson statistic. All tests confirmed that classical assumptions were satisfied.

Panel Data Model Selection

The choice between fixed-effects (FE) and random-effects (RE) specifications was determined using the Hausman test. The result (χ^2=18.43, p=0.000) rejected the null hypothesis, confirming that the fixed-effects model is the preferred and consistent estimator for this data.

Panel Data Regression

The primary specification is a fixed-effects panel regression:

$$PBV_{it} = \alpha_i + \beta_1 ROA_{it} + \beta_2 CR_{it} + \beta_3 DER_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \varepsilon_{it} \quad (1)$$

where α_i captures unobserved firm-level heterogeneity and ε_{it} is the idiosyncratic error term. Standard errors are clustered at the firm level to address potential serial correlation (Wooldridge, 2010). Two control variables are included to mitigate omitted-variable bias: SIZE (natural logarithm of total assets) controls for the well-documented size effect on firm valuation, as larger firms tend to have more diversified operations, better access to capital markets, and higher analyst coverage, all of which influence PBV (Damodaran, 2012; Kurnianti, 2022). AGE (number of years since initial public offering) controls for firm maturity effects, as older firms may exhibit more stable valuations due to established market positions and reduced information asymmetry (Titman & Wessels, 1988). The inclusion of these controls ensures that the estimated coefficients on ROA, CR, and DER reflect their net effects after accounting for systematic variation attributable to firm characteristics.

Mediation Analysis

Mediation is tested using a multi-method approach combining Baron and Kenny's (1986) causal-steps procedure, the Sobel (1982) test for indirect-effect significance, and bootstrap confidence intervals (Preacher & Hayes, 2008) to ensure methodological robustness.

Baron and Kenny's (1986) four-step procedure: Step 1 establishes the total effect by regressing PBV on the independent variable (CR or DER) without the mediator; a significant total effect is traditionally required but recent methodological advances suggest mediation can exist even without it (Zhao et al., 2010). Step 2 confirms the a-path by regressing the proposed mediator (ROA) on the independent variable to verify that the IV significantly predicts the mediator. Step 3 confirms the b-path by regressing PBV on both the independent variable and the mediator (ROA) simultaneously; the mediator must remain significant while controlling for the IV. Step 4 assesses mediation type: if the direct effect (c'-path) of the IV on PBV becomes non-significant when ROA is included, full mediation is established; if it is reduced but remains significant, partial mediation is indicated.

The significance of the indirect effect (a × b) is assessed using the Sobel (1982) test statistic: $z = (a \times b) / \sqrt{(b^2 \cdot SE_a^2 + a^2 \cdot SE_b^2)}$, where SE_a and SE_b are the standard errors of the a-path and b-path coefficients, respectively. A z-value exceeding ±1.96 indicates a statistically significant indirect effect at $\alpha = 0.05$.

Following Preacher and Hayes (2008), 5,000 bootstrap resamples are drawn to construct bias-corrected 95% confidence intervals for the indirect effect. If the confidence interval excludes zero, the indirect effect is deemed significant. This non-parametric approach is preferred over the Sobel test when sample sizes are moderate, as it does not assume normality of the indirect effect's sampling distribution.

To quantify mediation magnitude, the VAF ratio is calculated as: VAF = indirect effect / (indirect effect + direct effect). A VAF above 80% indicates full mediation, 20%–80% indicates partial mediation, and below 20% suggests no meaningful mediation (Hair et al., 2017). This metric complements the significance-based determination from Baron and Kenny's (1986) procedure by providing a continuous measure of mediation strength.

Results

Descriptive Statistics

Table 3 presents summary statistics for all study variables over the 2021–2024 period (n = 192 firm-year observations).

Table 3. Descriptive Statistics (n = 192 firm-year observations)

Variable	Mean	SD	Min	Max	Median
PBV	2.84	3.12	0.18	18.65	1.76
ROA (%)	8.32	9.14	−5.20	42.30	6.15
CR	1.98	1.24	0.42	7.83	1.65
DER	0.87	0.76	0.04	4.21	0.68
SIZE (Ln)	28.94	1.72	25.18	33.47	28.86
AGE (years)	18.6	9.83	2	42	17

The mean PBV of 2.84 indicates that, on average, consumer non-cyclicals firms traded at nearly three times book value during the study period, reflecting investor confidence in this defensive sector. The relatively high standard deviation (3.12) reflects substantial cross-sectional heterogeneity. Mean ROA of 8.32% is consistent with the sector's reputation for stable profitability, while the CR mean of 1.98 suggests adequate short-term liquidity across the sample.

Correlation Analysis

Table 4 presents the Pearson correlation matrix. The strong positive correlation between ROA and PBV (0.612) supports Hypothesis H1. Moderate correlations between CR and ROA (0.324) and between DER and ROA (−0.289) are consistent with mediation mechanisms (H4 and H5). No correlation exceeds 0.7 in absolute value, indicating the absence of severe multicollinearity.

Table 4. Pearson Correlation Matrix

	PBV	ROA	CR	DER	SIZE	AGE
PBV	1.000	0.612***	0.187**	−0.143*	0.324***	0.098
ROA		1.000	0.324***	−0.289***	0.218***	0.042
CR			1.000	−0.418***	−0.112	0.067
DER				1.000	0.186**	−0.023
SIZE					1.000	0.356***
AGE						1.000

*Note: *p<0.10; **p<0.05; ***p<0.01*

Main Regression Results

Table 5 reports the fixed-effects panel regression results for equation (1). The results show that H1 is supported. ROA exerts a significant positive effect on PBV (β=0.421, p<0.01), even after controlling for firm size and firm age. A one-percentage-point increase in ROA is associated with a 0.421-unit increase in PBV, holding all other variables constant. This is the strongest and most robust finding of the study, with ROA alone accounting for approximately 37% of within-firm variation in PBV. The economic magnitude is substantial: moving from the 25th to the 75th percentile of ROA (approximately 2.1% to 12.8%) is associated with a PBV increase of approximately 4.5 units, representing a shift from below-average to premium valuation territory. The control variable SIZE is also significant (β=0.218, p<0.05), confirming that larger firms command higher market valuations due to economies of scale, greater market visibility, and reduced information asymmetry. AGE is not significant (β=0.043, p>0.10),

suggesting that firm maturity does not independently drive valuation once profitability and size are accounted for in this sector.

Table 5. Fixed-Effects Panel Regression Results (Dependent Variable: PBV)

Variable	Coefficient	Std. Error	Sig.
Constant	0.842	0.312	***
ROA	0.421	0.058	***
CR	0.124	0.098	n.s.
DER	−0.186	0.142	n.s.
SIZE	0.218	0.094	**
AGE	0.043	0.031	n.s.
R^2 (within)	0.524		
F-statistic	42.31		***
Hausman χ^2	18.43		*** (FE preferred)
Observations	192		

*Note: ***p<0.01; **p<0.05; *p<0.10; n.s. = not significant. FE = Fixed Effects.*

In another side, the results show that H2 is not supported. CR does not significantly affect PBV directly (β=0.124, p>0.10) after controlling for firm size, age, and profitability. This finding diverges from Nafisah et al. (2020), who report significant positive CR–PBV effects in manufacturing, but aligns with Febriana et al. (2025) and Cristy et al. (2025), who find insignificant direct effects in energy and pharmaceutical sectors. The non-significance can be explained by two mechanisms specific to Consumer Non-Cyclicals: first, firms in this sector maintain relatively homogeneous liquidity levels (mean CR = 1.98, SD = 1.24) driven by similar working-capital requirements for inventory-intensive operations, creating insufficient cross-sectional variation for a direct market signal; second, the market may already incorporate liquidity information through its effect on operating performance (ROA), rendering the direct path redundant. This interpretation is supported by the significant a-path in the mediation analysis (CR→ROA: β=0.312, p<0.01), confirming that liquidity's value relevance operates through profitability.

Similarly, the results show that H3 is not supported. DER does not significantly affect PBV directly (β=−0.186, p>0.10) after controlling for firm size and age. This finding is consistent with Pecking Order Theory predictions that capital structure per se is value-irrelevant once profitability effects are isolated (Myers, 1984), and aligns with Cristy et al. (2025) and Nurfitriani et al. (2025), who report insignificant direct DER–PBV effects in Indonesian contexts. The result contradicts Kurnianti (2022), who finds significant negative effects in infrastructure—a difference likely attributable to sector characteristics: infrastructure firms carry large long-term project-finance debt that directly signals financial risk, whereas Consumer non-cyclicals firms typically use shorter-term working-capital debt whose risk implications are absorbed into operating margins. The mean DER of 0.87 in our sample suggests moderate leverage that does not trigger distress concerns among investors, further explaining the absence of a direct valuation penalty. Importantly, the significant negative indirect path (DER→ROA→PBV: −0.121, p<0.01) confirms that leverage does affect value—but exclusively through its erosion of profitability via interest burden, not through direct market signaling.

Mediation Analysis Results

Table 6 summarizes the path analysis results for hypotheses H4 and H5. The results show that H4 is supported. ROA fully mediates the CR–PBV relationship. The a-path (CR→ROA: β=0.312, p<0.01) confirms that higher liquidity enhances profitability—firms with adequate current assets can maintain uninterrupted production cycles, negotiate better supplier terms, and avoid costly emergency financing, all of which improve operating margins. The b-path (ROA→PBV: β=0.421, p<0.01) confirms that enhanced profitability translates into higher market valuation. The direct effect of CR on PBV (c'-path: β=0.124) becomes statistically non-significant once ROA is controlled, satisfying Baron and Kenny's (1986) criterion for full mediation. The indirect effect magnitude is 0.131 (= 0.312 × 0.421),

and the Sobel test confirms its significance (z = 3.12, p = 0.002). Bootstrap 95% confidence interval [0.067, 0.214] excludes zero, corroborating the Sobel test result. The VAF is calculated as 0.131 / (0.131 + 0.124) = 51.4%, which—combined with the non-significance of the direct path—supports full mediation. The total effect of CR on PBV is 0.255 (direct + indirect), of which over half operates through the profitability channel, underscoring that liquidity creates shareholder value only to the extent that it enhances operational efficiency.

Table 6. Path Analysis Results: Mediation through ROA

Path	Coeff.	Std. Error	Sig.
Hypothesis H4: CR → ROA → PBV			
CR → ROA (a-path)	0.312	0.087	***
ROA → PBV (b-path)	0.421	0.058	***
CR → PBV (direct)	0.124	0.098	n.s.
Indirect effect (a×b)	0.131	0.042	***
Hypothesis H5: DER → ROA → PBV			
DER → ROA (a-path)	−0.287	0.094	***
ROA → PBV (b-path)	0.421	0.058	***
DER → PBV (direct)	−0.186	0.142	n.s.
Indirect effect (a×b)	−0.121	0.039	***

*Note: ***p<0.01; n.s. = not significant. Full mediation confirmed for both H4 and H5.*

The results show that H5 is supported. ROA fully mediates the DER–PBV relationship. Higher leverage significantly reduces profitability (a-path: β=−0.287, p<0.01), reflecting the interest burden and financial rigidity imposed by debt obligations. Firms with elevated DER allocate a greater proportion of operating income to debt servicing, reducing retained earnings and constraining reinvestment capacity—a mechanism consistent with Trade-off Theory's prediction of distress costs eroding firm value at high leverage (Modigliani & Miller, 1963). The indirect effect is −0.121 (= −0.287 × 0.421), and the Sobel test confirms significance (z = −2.87, p = 0.004). Bootstrap 95% confidence interval [−0.198, −0.062] excludes zero. The VAF is |−0.121| / (|−0.121| + |−0.186|) = 39.4%; however, because the direct effect is non-significant, the mediation is classified as full (indirect-only) following Zhao et al.'s (2010) typology. The total effect of DER on PBV is −0.307 (direct + indirect), with 39.4% channelled through profitability. This finding has critical policy relevance: it demonstrates that leverage risk in consumer non-cyclicals manifests not through direct market penalty but through progressive erosion of the firm's ability to generate returns, which in turn depresses valuation. Managers should therefore monitor the ROA implications of financing decisions rather than assuming that moderate leverage is valuation neutral.

Robustness Checks

To verify the stability of results, three robustness checks were conducted (Table 7): (i) re-estimation using random-effects GLS; (ii) winsorization of PBV and ROA at the 5th and 95th percentiles; and (iii) sub-period analysis (2021–2022 vs. 2023–2024).

Table 7. Robustness Checks: ROA Coefficient on PBV

Specification	ROA Coeff.	Std. Error	Sig.
Baseline (Fixed Effects)	0.421	0.058	***
Random Effects (GLS)	0.398	0.052	***
Winsorised (5th–95th pct.)	0.387	0.061	***
Sub-period: 2021–2022	0.403	0.083	***
Sub-period: 2023–2024	0.436	0.079	***

The ROA coefficient remains positive and highly significant across all specifications (range: 0.387–0.436), confirming the robustness of the primary finding. The Random Effects GLS estimate (0.398) falls within the confidence interval of the fixed effects estimate, providing reassurance that the Hausman test's preference for FE does not materially bias the focal coefficient. Winsorization at the 5th–95th percentiles reduce the estimate only marginally (0.387), confirming that results are not driven by

outlier firms with extreme PBV or ROA values. The sub-period analysis reveals a noteworthy pattern: the ROA coefficient strengthens from 0.403 in 2021–2022 to 0.436 in 2023–2024, suggesting that as post-pandemic normalization progressed and supply-chain disruptions eased, investors placed even greater emphasis on earnings quality as a discriminating factor—consistent with the prediction that market efficiency improves during stable periods. The control variables (SIZE and AGE) maintain consistent signs and significance across all specifications, further validating the model's stability. Additionally, the inclusion of control variables increases within-R^2 from 0.487 (base model without controls) to 0.524 (full model), indicating that SIZE and AGE account for an additional 3.7 percentage points of within-firm variation, a non-trivial improvement that justifies their inclusion.

The ROA coefficient remains positive and significant across all specifications (range: 0.387–0.436), confirming the robustness of the primary finding. The slightly larger coefficient in the 2023–2024 sub-period (0.436 vs. 0.403) suggests that the profitability–valuation link may have strengthened as post-pandemic recovery matured.

Discussion

Profitability as the Primary Value Driver

The dominant role of ROA in determining PBV is consistent with signaling theory (Spence, 1973). In the consumer non-cyclicals sector, where products are commoditized and demand is relatively inelastic, the ability to generate superior returns on assets serves as a credible signal of managerial quality and operational efficiency. Investors appear to reward earnings quality with premium valuations because, in this sector, profitability differences primarily reflect operational capabilities (cost management, supply chain optimization, product mix) rather than demand-side volatility. This finding is consistent with results in automotive (Simanjuntak & Sembiring, 2023), LQ45 (Sukmayanti & Sembiring, 2022), and pharmaceutical contexts (Cristy et al., 2025), but the magnitude of the ROA coefficient (0.421) in our consumer non-cyclicals sample is notably higher than the 0.28–0.35 range typically reported in Indonesian manufacturing studies (Chabachib et al., 2019; Putri Supriyanto et al., 2025), suggesting that investors place a premium on profitability in defensive sectors where revenue stability allows cleaner attribution of earnings to managerial competence. The significant control variable SIZE ($\beta=0.218$, $p<0.05$) confirms that scale advantages contribute independently to valuation, aligning with Damodaran (2012), but the ROA effect dominates, explaining nearly twice the variation attributable to firm size. This hierarchy of importance carries direct implications for investor screening models.

The robustness of this finding across sub-periods (2021–2022 and 2023–2024) and alternative specifications confirms that the profitability–valuation mechanism is stable even under macroeconomic disruption. The slightly strengthened coefficient in 2023–2024 suggests that as post-pandemic normalization progressed, investors placed even greater emphasis on earnings quality as a discriminating factor.

Indirect Role of Liquidity

The finding that CR affects PBV only through ROA suggests a nuanced interpretation of liquidity's role in firm valuation. Adequate liquidity supports operational efficiency through multiple channels: enabling timely procurement of raw materials at favorable prices, maintaining continuous production schedules, meeting customer delivery commitments, and avoiding costly short-term emergency borrowing. These operational benefits manifest as improved margins and higher ROA, which the market then rewards with higher PBV. However, excess liquidity beyond operational requirements may be value-destructive, as holding idle current assets (excessive cash, slow-moving inventory, or over-extended receivables) reduces asset productivity and depresses ROA. This interpretation aligns with the inverted-U relationship between liquidity and performance documented in inventory-intensive industries (Fajaria & Isnalita, 2018) and with agency theory predictions that excess cash may facilitate managerial slack or empire-building (Ross et al., 2013). The full mediation finding contradicts Nafisah et al. (2020), who report a significant direct CR–PBV link in broad manufacturing samples. This discrepancy likely reflects sector-specific dynamics: in consumer non-cyclicals, where liquidity

requirements are relatively homogeneous and moderate, the market has learned to evaluate liquidity through its profitability implications rather than as an independent valuation signal. For corporate managers, the implication is clear: optimizing working capital for operational efficiency (rather than simply maximizing CR) is the value-creating strategy.

Capital Structure as an Indirect Lever

The full mediation of the DER–PBV relationship through ROA aligns with pecking order theory (Myers, 1984) and extends it by providing sector-specific evidence on the transmission mechanism. Higher leverage increases fixed financial obligations (interest payments), which directly reduce net income and ROA. In consumer non-cyclicals, where operating margins are typically moderate (mean ROA = 8.32% in our sample), the interest burden from excessive leverage can materially erode profitability, triggering a negative cascade to firm valuation. This finding resonates with the results of Simanjuntak and Sembiring (2023) in automotive and Ristiani and Sudarsi (2022) in LQ45 companies, but provides novel evidence that the mechanism is sector-invariant in its direction while sector-specific in its magnitude. The absence of a direct DER–PBV relationship in Consumer non-cyclicals contradicts studies finding direct negative effects in infrastructure (Kurnianti, 2022) and mining sectors—a difference attributable to the nature of debt. Consumer non-cyclicals firms primarily utilize short-to-medium term working-capital facilities rather than long-term project finance, and their stable revenue streams provide implicit reassurance to investors that moderate leverage is sustainable. Consequently, the market does not penalize leverage directly but instead monitors its profitability consequences. From a Trade-off Theory perspective, this suggests that Consumer non-cyclicals firms have not reached the tipping point where distress costs outweigh tax benefits—but the significant negative indirect path (−0.121) indicates that even moderate leverage incrementally destroys value through the profitability channel. The Sobel test ($z = -2.87$, $p = 0.004$) and bootstrap CI [−0.198, −0.062] provide robust statistical confirmation of this mediation mechanism.

This study makes four contributions to the corporate finance literature. First, it provides the first dedicated sector-specific evidence on financial determinants of firm value in Indonesia's Consumer non-cyclicals sector, filling a gap identified across prior studies that predominantly examined manufacturing, mining, or broad market indices. The sector's unique characteristics—demand inelasticity, stable cash flows, high inventory turnover—produce distinct financial-valuation dynamics that are masked in cross-sector analyses. Second, it demonstrates that the mediation structure, liquidity and leverage affecting value exclusively through profitability, is robust to the post-pandemic macroeconomic context (2021–2024), suggesting that the fundamental profitability–value mechanism is structurally stable even under supply-chain disruption, inflationary pressures, and monetary tightening. The sub-period analysis (2021–2022 vs. 2023–2024) confirms temporal stability. Third, methodologically, this study advances mediation testing in Indonesian corporate finance by employing a triangulated approach combining Baron and Kenny's (1986) causal steps, the Sobel (1982) significance test, and Preacher and Hayes' (2008) bootstrap confidence intervals, providing more rigorous evidence than the simple coefficient comparisons prevalent in prior Indonesian studies. Fourth, by incorporating firm size and age as control variables, this study produces cleaner estimates of the focal relationships that are less susceptible to omitted-variable bias than models using only financial ratios.

For corporate managers, the central implication is to prioritize operational efficiency: since ROA is the dominant driver of PBV, management should focus on cost control, asset utilization, and margin improvement. Maintaining CR in the range of 1.5–2.5 appears optimal for supporting profitability without holding excessive idle assets. Given the negative indirect effect of DER on PBV through ROA, firms should avoid excessive debt that erodes net income, particularly during periods of rising interest rates.

For investors and analysts, ROA is the most reliable financial predictor of PBV in Consumer non-cyclicals stocks; screening for high-ROA firms is likely to identify undervalued or premium-justified opportunities. Liquidity and leverage ratios should be evaluated primarily for their impact on

profitability sustainability rather than as direct valuation signals. For policymakers, policies that support profitability in Consumer non-cyclicals (e.g., stable input cost environments, supply chain resilience programs will have multiplier effects on firm valuations and investor confidence.

Conclusion

This study examined the financial determinants of firm value in Indonesia's Consumer non-cyclicals sector during the post-pandemic recovery period (2021–2024), using panel data from 48 listed companies (192 firm-year observations). The central finding is that profitability (ROA) is the dominant and statistically robust driver of firm value (PBV), with a one-percentage-point increase in ROA associated with a 0.421-unit increase in PBV. Liquidity (CR) and capital structure (DER) do not directly affect firm value but operate through full mediation via profitability—confirmed by path analysis for both H4 and H5.

These findings carry important messages for theory and practice. Theoretically, they confirm that Signaling Theory explains market valuation in stable-demand sectors, where operational efficiency is the primary credible signal to investors. Practically, they direct managers toward ROA improvement as the most effective shareholder value creation strategy, while framing liquidity and leverage management as indirect levers that operate through their effects on earnings generation.

Several limitations should be acknowledged. First, the study cannot fully rule out reverse causality between firm value and financial ratios; future research should employ instrumental variables or dynamic panel methods (e.g., system GMM) to establish stronger causal identification. Second, only three independent variables are included; future studies should incorporate firm size, growth opportunities, dividend policy, corporate governance quality, and ESG factors. Third, results are specific to Consumer non-cyclicals in Indonesia during 2021–2024; cross-sector comparisons and international replication are needed to assess boundary conditions. Fourth, the study assumes linear relationships; future research should test for threshold effects, U-shaped relationships, and quantile-specific dynamics.

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