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FINANCIAL PERFORMANCE OF CAPITAL-INTENSIVE FIRMS AMID AUTOMOTIVE INDUSTRY DYNAMICS: EXAMINING THE ROLES OF CAPITAL STRUCTURE, LIQUIDITY AND FIRM SIZE

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ABSTRACT

This research investigates how capital structure, liquidity, and firm size influence the financial performance of capital-intensive manufacturers operating in Indonesia's automotive and components subsector, drawing on data from companies listed on the Indonesia Stock Exchange (IDX) between 2021 and 2024. A quantitative, descriptive-associative design was applied. Out of 18 firms in the population, purposive sampling yielded a final sample of 8 firms, producing 32 firm-year observations. Annual financial reports served as the secondary data source, processed through descriptive statistics, classical assumption testing, multiple linear regression, partial t-tests, simultaneous F-tests, and the coefficient of determination using SPSS software. Findings reveal that capital structure exerts a significant influence on financial performance, while liquidity and firm size individually show no significant partial impact. When tested together, however, the three variables jointly affect financial performance. The results suggest that prudent management of capital structure is essential for boosting profitability, whereas elevated liquidity levels and a larger asset base alone do not guarantee stronger financial outcomes unless paired with efficient management of assets and resources. The study concludes that sound financing strategies remain central to strengthening the financial performance of capital-intensive manufacturers, offering practical insight for company management, investors, and future researchers alike.
Keywords: Capital Structure, Liquidity, Firm Size, Financial Performance

A. INTRODUCTION

The manufacturing sector is one of the strategic sectors that makes a major contribution to Indonesia's economic growth through value addition, employment generation, and the strengthening of national industrial competitiveness. Data released by Statistics Indonesia, show that the manufacturing sector has consistently been among the top contributors to the country's Gross Domestic Product (GDP), representing roughly 18-19 percent of total output in recent years. Such a figure underscores manufacturing's role as a backbone of the national economy. One important subsector is the automotive and components industry, which falls within the category of capital-intensive industries. This industry requires substantial investment in fixed assets, such as machinery, production equipment, and technology; therefore, firms must manage their funding sources effectively to sustain operations and strengthen competitiveness (Tandi et al., 2018).

Financial performance is an indicator used to assess a firm's ability to manage its resources in generating profit. Publicly listed firms must consistently pay attention to firm value because it reflects the financial performance generated by the firm (Rahadatulaisy & Haryana, 2024). One commonly used measure is Return on Assets (ROA), as it indicates the effectiveness of a firm in utilizing its assets to generate returns.

Capital structure relates to a firm's decision regarding the proportion of debt and equity used as financing sources. Firms with a balanced debt proportion can leverage debt to increase profit while maintaining liquidity and avoiding excessive financial risk (Krishnankutty et al., 2022). Liquidity, meanwhile, denotes a company's capacity to settle short-term liabilities through its current assets. Beyond simply confirming a firm's capacity to honor obligations, healthy liquidity also signals efficient handling of current assets, which in turn shapes financia

performance outcomes (Sihite et al., 2025). Firm size, meanwhile, reflects the scale of the economic resources owned by a firm. Larger firms tend to receive greater scrutiny from various stakeholders and may therefore be more cautious in reporting profitability to avoid higher political costs and stricter regulatory oversight, as explained by the political cost hypothesis (Susanti et al., 2023).

From a theoretical standpoint, the Trade-Off Theory (Ai et al., 2020) posits that companies strive for an ideal capital structure by weighing the tax advantages associated with debt against the potential cost of financial distress. In contrast, the Pecking Order Theory (Rahman, 2019) suggests that firms tend to rely first on internally generated funds before resorting to debt or issuing new equity. Taken together, these two frameworks illustrate how financing choices can shape a firm's profitability and overall financial performance.

Earlier research examining how capital structure, liquidity, and firm size relate to financial performance has yielded inconsistent conclusions. (Setyabudi, 2022) for instance, reported that both capital structure and firm size contribute positively to financial performance, while liquidity showed no meaningful influence, pointing to leverage and company scale as more decisive profitability drivers. Conversely, (Wijaya & Fitriati, 2022) discovered that leverage was negatively associated with financial performance, whereas liquidity and firm size demonstrated positive associations. Such contrasting evidence highlights the need for further inquiry into how these three variables jointly and individually shape financial performance, particularly within capital-intensive manufacturing settings.

Beyond the Indonesian context, international evidence on this relationship also remains mixed. (F. Ahmed et al., 2024) found that capital structure significantly influences firm performance once agency costs are properly accounted for, while (Akin et al., 2025) reported that capital structure, profitability, and firm size jointly shape enterprise value among FTSE 100 companies, although the strength of these relationships varies considerably across institutional settings. Such cross-country evidence reinforces the view that the influence of capital structure, liquidity, and firm size on financial performance is highly context-dependent and cannot simply be generalized from one industry or economy to another.

Despite this growing body of research, most prior studies have examined manufacturing firms in general (Carey & Knowles, 2020; Olayemi & Fakayode, 2021) or specific subsectors other than automotive, such as food and beverage manufacturers (Estiasih et al., 2024) or firms in other emerging economies (Bui et al., 2023). Comparatively little empirical attention has been directed toward the automotive and components subsector, despite its distinctive capital-intensive characteristics-substantial fixed-asset investment, long production cycles, and heavy reliance on external financing-that differentiate its financing needs and profitability drivers from other manufacturing subsectors. This study therefore contributes to the literature by providing focused empirical evidence from capital-intensive automotive and components manufacturers listed on the IDX, an industry segment that remains underexplored relative to more commonly studied manufacturing subsectors. By simultaneously testing the partial and joint effects of capital structure, liquidity, and firm size within this specific industrial context, and by situating the findings within the competing predictions of the Trade-Off Theory and the Pecking Order Theory, this study offers new empirical insight into which financing- and resource-management-related factors are most relevant for strengthening financial performance amid the capital-intensive dynamics unique to the automotive industry (Pradnyaswari & Dana, 2022).

Motivated by these inconsistencies, this study sets out to evaluate the partial and simultaneous effects of capital structure, liquidity, and firm size on the financial performance of capital-intensive automotive and components manufacturers listed on the Indonesia Stock Exchange across the 2021-2024 period. It is hoped that the resulting evidence can enrich understanding of the determinants of financial performance and offer practical guidance for

corporate decision-makers, investors, and future scholars.

B. METHODS

This study employs a quantitative approach. Its main objective is to measure the extent to which numerical variables, such as liquidity, capital structure, and firm size, influence the financial performance of capital-intensive manufacturing firms (Sugiyono, 2017). Through this lens, the researchers can detect patterns and trends as well as estimate the strength of relationships among these corporate financial indicators.

The design applied here is associative in nature with descriptive elements. Associative studies are intended to uncover relationships or causal effects connecting two or more variables here, capital structure (X1), liquidity (X2), and firm size (X3) with financial performance serving as the outcome variable. Working from empirical evidence, this design allows the researchers to draw conclusions regarding causal links among the variables under study (Ghozali, 2016). The research focuses on capital-intensive automotive and components manufacturers listed on the Indonesia Stock Exchange (IDX), drawing data from these firms' annual financial reports for the 2021-2024 observation window.

The study population consists of 18 capital-intensive automotive and components manufacturers listed on the IDX. A purposive sampling technique, selecting firms that satisfy predetermined criteria aligned with the research objectives was used to determine the final sample. The criteria applied were: (1) the firm must have been listed on the IDX throughout 2021–2024; (2) the firm must not have recorded losses during the observation period; and (3) the firm must have consistently published annual financial statements across the entire period. Applying these filters narrowed the population to 8 qualifying firms, generating a total of 32 firm-year observations (8 firms multiplied by 4 years).

Secondary data gathered via documentation and a review of relevant literature formed the basis of this study. The documentation process involved compiling annual financial reports released by sampled firms through the IDX and their official corporate channels, capturing figures such as total assets, total liabilities, current assets, current liabilities and net income to compute the variables under examination. The literature review, meanwhile, drew on books, academic journal articles, and other pertinent sources to reinforce the theoretical framework and enrich the discussion of findings.

To improve the clarity and replicability of the measurement procedure, the operational definition, indicator, and measurement formula for each research variable are summarized in Table 1.

Table 1. Operational Definition of Research Variables

Variable	Operational Definition	Indicator / Measurement Formula	Scale
Capital Structure (X1)	The proportion of debt relative to equity used by the firm to finance its assets and operations	Debt to Equity Ratio (DER) = Total Liabilities ÷ Total Equity × 100%	Ratio
Liquidity (X2)	The firm's capacity to meet its short-term obligations using its current assets	Current Ratio (CR) = Current Assets ÷ Current Liabilities × 100%	Ratio
Firm Size (X3)	The scale of economic resources controlled by the firm, commonly proxied by its total assets	Firm Size = Ln (Total Assets)	Ratio
Financial	The firm's ability to generate	Return on Assets (ROA) = Net	Ratio

Performance (Y)	profit from the assets it employs	Income ÷ Total Assets × 100%	

All variables are measured on a ratio scale and computed from the audited annual financial statements of the sampled firms for the 2021–2024 period.

Data processing was carried out with SPSS software, proceeding through several stages: descriptive statistics to characterize the dataset; classical assumption tests covering normality, multicollinearity, heteroscedasticity, and autocorrelation; and multiple linear regression to evaluate how capital structure, liquidity, and firm size relate to financial performance. Hypothesis testing relied on partial t-tests to gauge each independent variable's individual contribution, an F-test to assess their combined effect, and the coefficient of determination (R^2) to measure how well the model accounts for variation in financial performance (Riyanto & Hatmawan, 2020).

C. RESULTS AND DISCUSSION

Results

Descriptive Statistics

Descriptive statistics were applied to summarize the characteristics of each study variable through its minimum, maximum, mean, and standard deviation values.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
X1	32	4	366	47.72	64.081
X2	32	96	2639	444.41	546.711
X3	32	1949	3068	2711.72	330.695
Y	32	0	23	9.28	6.269
Valid N (listwise)	32				

Based on Table 2, this study uses 32 observations from 8 capital-intensive automotive and components manufacturing firms listed on the Indonesia Stock Exchange during 2021–2024. The capital structure variable has a mean of 47.72 and a standard deviation of 64.081, indicating variation in financing policies among the sampled firms. The liquidity variable has a mean of 444.41 and a standard deviation of 546.711, indicating relatively wide data dispersion. Firm size has a mean of 2,711.72 and a standard deviation of 330.695, indicating that the sampled firms generally possess substantial total assets, consistent with the characteristics of capital-intensive industries. Financial performance has a mean of 9.28 and a standard deviation of 6.269, indicating variation in financial performance across firms.

Normality Test

The normality test was performed using the Kolmogorov–Smirnov method.

Table 3. Normality Test (One-Sample Kolmogorov-Smirnov Test)

		UnStandardized Residual
N		32
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	3.44354765
Most Extreme Differences	Absolute	.077
	Positive	.072
	Negative	-.077
Test Statistic		.077
Asymp. Sig. (2-tailed)		.200[c,d]

Based on the test results in Table 3, the number of observations analyzed (N) was 32. The Asymp. Sig. (2-tailed) value was 0.200, which is greater than the predetermined significance level of 0.05 (0.200 > 0.05). These results indicate that the residuals in this study are normally distributed. In addition, the mean residual of 0.0000000 indicates that the average residual is close to zero, while the residual standard deviation of 3.44354765 indicates dispersion of the residuals around their mean.

Multicollinearity Test

Multicollinearity testing was conducted to check whether the independent variables in the regression model exhibited excessively strong correlations with one another. A well-specified regression model should be free of such interdependence, since multicollinearity can distort coefficient estimates and weaken the reliability of hypothesis testing. The findings indicate tolerance and VIF values of 0.902 and 1.109 for capital structure (X1); 0.932 and 1.073 for liquidity (X2); and 0.965 and 1.037 for firm size (X3). Each independent variable records a tolerance figure exceeding 0.10 and a VIF below 10, confirming the absence of multicollinearity.

Heteroscedasticity Test

The heteroscedasticity test was conducted using the Glejser method by examining the significance value of each independent variable. The regression model is considered free from heteroscedasticity when the significance value is greater than 0.05.

Table 4. Heteroscedasticity Test

Model	B	Std. Error	Beta	t	Sig.
(Constant)	3.399	1.769	-	1.921	0.065
X1	-0.010	0.009	-0.223	-1.143	0.263
X2	4.482E-5	0.002	0.005	0.028	0.978
X3	0.002	0.003	0.112	0.594	0.557

As shown in Table 4, the significance values for capital structure (0.263), liquidity (0.978), and firm size (0.557) all surpass the 0.05 benchmark, meaning the regression model does not display heteroscedasticity. Given that every independent variable clears this threshold, the model can be considered to satisfy the homoscedasticity assumption, making it suitable for further regression analysis and hypothesis testing.

Autocorrelation Test

Autocorrelation among residuals was assessed using the Durbin–Watson (DW) statistic,

with values approaching 2 generally taken as evidence that a regression model is free from this issue. The computed DW value of 1.443 sits reasonably close to 2, suggesting minimal correlation between residuals across consecutive observations. In other words, the error term in one observation period is not influenced by the error term in another period. The absence of autocorrelation indicates that the regression model satisfies one of the classical assumptions of multiple linear regression analysis. This outcome confirms that the model fulfills another of the classical assumptions underpinning multiple linear regression.

Multiple Linear Regression Analysis

Multiple linear regression was applied to assess how capital structure, liquidity, and firm size relate to financial performance, both as individual predictors and as a combined set. This technique allows the study to determine both the direction and magnitude of each independent variable's relationship with the dependent variable while holding the influence of the other variables constant. It further offers evidence on whether shifts in capital structure, liquidity, and firm size meaningfully account for variation in the financial performance of capital-intensive automotive and component manufacturers.

Table 5. Multiple Linear Regression Analysis (Coefficients)

Model	B	Std. Error	Beta	t	Sig.
(Constant)	0.459	1.707	-	0.269	0.790
X1	0.027	0.008	0.509	3.230	0.003
X2	-0.003	0.002	-0.256	-1.653	0.110
X3	0.004	0.003	0.193	1.269	0.215

Based on Table 5, the following multiple linear regression equation is obtained:

$$\mathbf{Y = 0.459 + 0.027X_1 - 0.003X_2 + 0.004X_3}$$

This equation reveals that capital structure and firm size move in the same direction as financial performance, while liquidity moves inversely. The constant of 0.459 implies that financial performance would register at this level if all three independent variables held at zero. Based on the coefficients, each one-unit rise in capital structure corresponds to a 0.027 increase in financial performance; each one-unit rise in liquidity corresponds to a 0.003 decline; and each one-unit increase in firm size corresponds to a 0.004 rise—holding the remaining variables constant.

Partial t-Test

The partial t-test served to determine whether each independent variable individually influences the dependent variable, with significance values (Sig.) below 0.05 denoting a meaningful effect and values above 0.05 denoting otherwise. According to Table 5, capital structure (X1) returns a t-value of 3.230 with a significance level of 0.003; since this falls under 0.05, capital structure can be said to exert a positive and significant effect on financial performance. Liquidity (X2) produces a t-value of −1.653 alongside a significance level of 0.110, while firm size (X3) yields a t-value of 1.269 with a significance level of 0.215. As both figures exceed 0.05, neither liquidity nor firm size demonstrates a statistically meaningful effect on financial performance.

Simultaneous F-Test

The F-test was used to gauge whether the independent variables, taken together, significantly influence the dependent variable. A model qualifies as significant when its Sig.

value falls below 0.05; conversely, a Sig. value above 0.05 would indicate no meaningful combined effect.

Table 6. F-Test (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	231.946	3	77.315	5.868	0.003
Residual	355.741	27	13.176		
Total	587.687	30			

Table 6 reports an F-statistic of 5.868 accompanied by a significance value of 0.003. Given that this value is below the 0.05 threshold, it can be concluded that capital structure, liquidity, and firm size collectively exert a significant influence on financial performance.

Coefficient of Determination (R^2) Test

Table 7. Coefficient of Determination (R^2) Test

Model	R	R Square	Adjusted R Square
1	0.628	0.395	0.327

According to Table 7, the R Square value reaches 0.395, while the Adjusted R Square stands at 0.327, equivalent to 32.7 percent. This figure suggests that capital structure, liquidity, and firm size together account for 32.7 percent of the variation observed in financial performance, leaving the remaining 67.3 percent attributable to factors outside the model, such as company growth, asset composition, business activity levels, dividend policy, operational efficiency, and other economic or managerial considerations.

Discussion

Effect of Capital Structure on Financial Performance

The results show that capital structure has a positive and significant effect on financial performance, as evidenced by a significance value of 0.003 (< 0.05). This finding indicates that optimal capital structure management can improve a firm's ability to generate profit. The result supports the Trade-Off Theory, which states that the optimal use of debt provides tax-shield benefits and can therefore improve financing efficiency and financial performance. This finding is consistent with (Gunawan et al., 2022; Putra & Sugiyono, 2019) who reported that optimal debt use can increase profitability through tax-shield benefits, as explained by the Trade-Off Theory. However, this result differs from (Olayemi & Fakayode, 2021), who found that capital structure has no effect or even a negative effect on financial performance because of high interest expenses and financial risk. The positive effect documented in this study is further corroborated by (Bui et al., 2023) who found that capital structure significantly affects firm value in the Vietnamese stock market, an emerging economy that shares structural similarities with Indonesia in terms of institutional development and reliance on debt financing among manufacturing firms (A. M. Ahmed et al., 2023).

Effect of Liquidity on Financial Performance

The results show that liquidity does not have a significant effect on financial performance (Sig. = 0.110 > 0.05). This finding indicates that the ability to meet short-term obligations does

not directly improve profitability. In capital-intensive manufacturing firms, most funds are allocated to fixed-asset investment and production capacity; therefore, high liquidity does not necessarily reflect improved financial performance. In addition, excessively high liquidity may indicate current assets that have not been used productively to generate profit. This result is consistent with (Akenga, 2017), who similarly found no significant relationship between liquidity and Return on Assets (ROA), explaining that a firm's liquidity-maintenance capability does not automatically translate into higher profitability since portions of current assets may remain idle rather than being optimally utilized. This finding is also supported by (Kinyua & Fredrick, 2022), who argued that liquidity carries no significant bearing on manufacturing firms' financial performance because such companies tend to prioritize operational efficiency and productive-asset utilization over accumulating large current-asset reserves.

Effect of Firm Size on Financial Performance

Results further reveal that firm size does not significantly affect financial performance, as reflected in a significance value of 0.215, above the 0.05 cutoff. This implies that simply having a larger asset base does not guarantee higher profitability unless it is matched by sound asset management practices. Among capital-intensive manufacturers, a larger firm size typically goes hand in hand with greater investment in fixed assets, rising operating expenses, and more complex managerial demands. Consequently, how effectively assets are utilized matters more for financial performance than the sheer scale of assets owned. This finding is consistent with (Estiasih et al., 2024), who likewise found no significant link between firm size and manufacturing firms' financial performance, noting that larger companies are not inherently more proficient at managing their resources compared with smaller counterparts. This finding is also supported by (E. et al., 2022; Susanti et al., 2023), reach a similar conclusion, arguing that firm size holds no significant relationship with ROA since profitability hinges more on management's skill in deploying assets effectively than on the volume of assets held.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study set out to investigate how capital structure, liquidity, and firm size shape the financial performance of capital-intensive automotive and components manufacturers listed on the Indonesia Stock Exchange across 2021–2024. Drawing on the analysis presented above, it can be concluded that capital structure carries a positive and significant influence on financial performance, signaling that sound capital structure management can lift corporate profitability. Liquidity and firm size do not have significant effects on financial performance, indicating that the ability to meet short-term obligations and the magnitude of corporate assets do not necessarily improve profitability unless supported by effective resource management. These findings confirm that appropriate financing policies are a key factor in improving firms' financial performance, while the effective management of assets and resources remains an important aspect in achieving optimal profitability.

By focusing specifically on the capital-intensive automotive and components subsector-an industry segment that has received comparatively limited scholarly attention relative to manufacturing firms in general or to other subsectors this study extends the existing literature by offering new, industry-specific empirical evidence on how financing decisions and resource management jointly determine financial performance under conditions of heavy fixed-asset investment. This constitutes the main scientific contribution of the study, addressing a gap that prior, more generally focused research has yet to fill.

Theoretical and Practical Implications

From a theoretical standpoint, this study reinforces the relevance of the Trade-Off Theory

in explaining financing behavior among capital-intensive manufacturers, as evidenced by the positive and significant effect of capital structure on financial performance. It also contributes to a more nuanced understanding of the political cost hypothesis, since firm size alone did not translate into stronger financial performance, suggesting that asset scale must be accompanied by efficient asset utilization to generate profitability gains. These insights add to the ongoing scholarly debate surrounding the inconsistent findings on capital structure, liquidity, and firm size documented in prior studies.

From a practical standpoint, several specific and actionable recommendations can be offered to corporate management, investors, and policymakers. For company management, it is recommended to: (1) maintain a Debt-to-Equity Ratio within a prudent and closely monitored range, prioritizing debt financing for productive investments whose expected returns exceed the associated cost of capital; (2) improve current-asset turnover-particularly receivables and inventory-so that liquidity is channeled into productive use rather than held as idle funds; and (3) enhance fixed-asset utilization efficiency, for example through preventive maintenance, capacity optimization, and periodic evaluation of asset productivity, given that firm size alone does not guarantee stronger profitability.

For investors, capital structure indicators such as the Debt-to-Equity Ratio should be used as one, but not the sole, consideration in investment decision-making. Investors are advised to complement this indicator with an assessment of a firm's asset-utilization efficiency (e.g., asset turnover), profitability trends, and working-capital management practices before investing in capital-intensive manufacturing shares, since large total assets or high liquidity ratios do not automatically signal strong financial performance.

For policymakers and industry regulators (e.g., the Financial Services Authority/OJK, the Indonesia Stock Exchange, and the Ministry of Industry), the findings suggest the importance of encouraging capital-intensive manufacturers-particularly in the automotive and components subsector-to disclose asset-utilization and financing-efficiency metrics more transparently in their financial statements. Incentive schemes, such as tax relief for productive fixed-asset investment or preferential financing terms for firms demonstrating efficient capital structure management, may also help strengthen the competitiveness and financial resilience of this strategic industry.

Research Limitations

This study is subject to several limitations that should be considered when interpreting its findings. First, the research scope is confined to the automotive and components manufacturing subsector, so the findings may not be directly generalizable to other manufacturing subsectors with different capital structures and operational characteristics. Second, the observation period covers only four years (2021-2024), which, combined with the purposive sampling procedure, yields a relatively small final sample of 8 firms and 32 firm-year observations; a longer period and larger sample would allow for more robust statistical inference. Third, this study only examines capital structure, liquidity, and firm size as independent variables and does not account for other factors that may also influence financial performance, such as firm growth, asset structure, asset turnover, dividend policy, operational efficiency, corporate governance, and macroeconomic conditions. Fourth, financial performance is measured solely through Return on Assets (ROA), an accounting-based indicator, and does not incorporate market-based performance measures such as Tobin's Q or stock returns, which may capture different dimensions of firm performance.

Recommendations for Future Research

Future researchers are encouraged to expand the research object to other manufacturing subsectors, use a longer observation period, and include additional variables that may influence

financial performance, such as firm growth, asset structure, asset turnover, dividend policy, operational efficiency, corporate governance, and macroeconomic conditions. Incorporating market-based performance measures alongside accounting-based indicators, as well as employing panel data regression techniques capable of accommodating a larger number of firms and years, would further strengthen the robustness and generalizability of future findings in this research area, while also enriching the scientific contribution of subsequent studies to the development of financial management knowledge.

REFERENCES

Ahmed, A. M., Nugraha, D. P., & Hágen, I. (2023). The relationship between capital structure and firm performance: The moderating role of agency cost. *Risks*, *11*(6), 102. https://doi.org/10.3390/risks11060102

Ahmed, F., Rahman, M. U., Rehman, H. M., Imran, M., Dunay, A., & Hossain, M. B. (2024). Corporate capital structure effects on corporate performance pursuing a strategy of innovation in manufacturing companies. *Heliyon*, *10*(3). https://doi.org/10.1016/j.heliyon.2024.e24677

Ai, H., Frank, M. Z., & Sanati, A. (2020). *The trade-off theory of corporate capital structure*.

Akenga, G. (2017). Effect of liquidity on financial performance of firms listed at the Nairobi Securities Exchange, Kenya. *International Journal of Science and Research*, *6*(7), 279–285. https://doi.org/10.21275/ART20175036

Akin, I., Akin, M., Satiroglu, H., & Jhamb, M. (2025). Influence of growth, capital structure, profitability, and size on FTSE 100 enterprise value. *Journal of Corporate Accounting & Finance*, *36*(2), 157–168. https://doi.org/10.1002/jcaf.22761

Bui, T. N., Nguyen, X. H., & Pham, K. T. (2023). The effect of capital structure on firm value: A study of companies listed on the Vietnamese stock market. *International Journal of Financial Studies*, *11*(3), 100.

Carey, M., & Knowles, C. (2020). Financial Accounting. In *Accounting*. Oxford University Press. https://doi.org/10.1093/hebz/9780198844808.003.0011

E., A., J.U., O., A.J., A., & Y.A., T. (2022). Audit Firm Attributes and External Auditors' Switching Behaviour of Insurance Companies in Nigeria. In *African Journal of Accounting and Financial Research* (Vol. 5, Issue 2, pp. 73–92). African - British Journals. https://doi.org/10.52589/ajafr-kwbb3frl

Estiasih, S. P., Suharyanto, M. S., Putra, A. C., & Widhayani, P. S. (2024). The effects of leverage, firm size, and market value on financial performance in food and beverage manufacturing firms. *Jurnal Aplikasi Manajemen*, *22*(2), 1–12. https://doi.org/10.21776/ub.jam.2024.022.02.09

Ghozali, I. (2016). Aplikasi Analisis multivariete dengan program IBM SPSS 23 (Edisi 8). *Cetakan Ke VIII. Semarang: Badan Penerbit Universitas Diponegoro*, *96*.

Gunawan, C., Sudarsi, S., & Aini, N. (2022). Pengaruh Likuiditas, Struktur Modal, Ukuran Perusahaan Dan Risiko Operasional Perusahaan Terhadap Kinerja Keuangan Perusahaan Pada Industri Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Pada Tahun 2018-2020. *Dinamika Akuntansi Keuangan Dan Perbankan*, *11*(1), 31–40. https://doi.org/10.35315/dakp.v11i1.8951

Kinyua, F. W., & Fredrick, W. (2022). Liquidity risk and financial performance of manufacturing firms listed at Nairobi Securities Exchange. *International Academic Journal of Economics and Finance, 3 (8), 1*, *24*(2).

Krishnankutty, R., Bharti, T., & Mishra, N. (2022). Herding behaviour and capital structure decision in BSE listed Indian firms. In *International Journal of Managerial and Financial Accounting* (Vol. 14, Issue 2, p. 118). Inderscience Publishers. https://doi.org/10.1504/ijmfa.2022.122226

Olayemi, O. O., & Fakayode, O. P. (2021). Effect of capital structure on financial performance of quoted manufacturing companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, *9*(5), 73–89.

Pradnyaswari, N. M. A. D., & Dana, I. M. (2022). *Pengaruh likuiditas, struktur modal, ukuran perusahaan, dan leverage terhadap profitabilitas pada perusahaan sub sektor otomotif*. Udayana University.

Putra, A. G. G., & Sugiyono, S. (2019). Pengaruh Profitabilitas, Ukuran Perusahaan, Dan Struktur Aktiva Terhadap Struktur Modal Pada Perusahaan Makanan Dan Minuman. *Jurnal Ilmu Dan Riset*

Manajemen (JIRM), *8*(2).
Rahadatulaisy, N. Z., & Haryana, R. D. T. (2024). Pengaruh Leverage, Likuiditas dan Investasi Terhadap Nilai Perusahaan Barang Konsumsi yang Terdaftar Di Bursa Efek Indonesia. *JIMEK: Jurnal Ilmiah Mahasiswa Ekonomi*, *7*(02), 157–170.
Rahman, M. T. (2019). Testing trade-off and pecking order theories of capital structure: Evidence and arguments. *International Journal of Economics and Financial Issues*, *9*(5), 63.
Riyanto, S., & Hatmawan, A. A. (2020). *Metode Riset Penelitian Kuantitatif: Penelitian di Bidang Manajemen, Teknik, Pendidikan dan Eksperimen*. Deepublish.
Setyabudi, T. G. (2022). Pengaruh profitabilitas, leverage, dan kepemilikan institusional terhadap nilai perusahaan dengan kebijakan dividen sebagai variabel intervening. *Jurnal Ilmiah Akuntansi Dan Keuangan (JIAKu)*, *1*(1), 1–19.
Sihite, S. G. L., Putri, S. M. E., Hersyandana, N. S., & Lestari, H. S. (2025). Pengaruh Manajemen Likuiditas terhadap Kinerja Keuangan Perusahaan pada Perusahaan Manufaktur Barang Indonesia. *Paradoks: Jurnal Ilmu Ekonomi*, *8*(3), 302–313. https://doi.org/10.57178/paradoks.v8i3.1386
Sugiyono, P. D. (2017). Metode penelitian bisnis: pendekatan kuantitatif, kualitatif, kombinasi, dan R&D. *Penerbit CV. Alfabeta: Bandung*, *225*.
Susanti, S., Widyawati, D., & Iswara, U. S. (2023). the Effect of Profitability and Firm Size on Capital Structure. *Jurnal Ilmiah Akuntansi Dan Keuangan (JIAKu)*, *2*(2), 140–151. https://doi.org/10.24034/jiaku.v2i2.5883
Tandi, V. P., Tommy, P., & Untu, V. N. (2018). Pengaruh Struktur Modal Dan Pertumbuhan Aset Terhadap Profitabilitas Perusahaan Otomotif Yang Terdaftar Di Bei Periode 2013 – 2016 the Influence Capital Structure and Asset Growth on the Profitability of Automotive Companies Listed in Bei Period 2013 -201. *Jurnal EMBA*, *6*(2), 629–637.
Wijaya, N. S., & Fitriati, I. R. (2022). Pengaruh likuiditas, ukuran perusahaan, profitabilitas, dan struktur modal terhadap nilai perusahaan. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, *4*(12), 5606–5616.