The Effect of Ownership Structure and Capital Structure on Return on Assets (ROA) with Firm Size as a Moderating Variable (A Study on Food and Beverage Sub-sector Companies Listed on the IDX in 2020–2024)

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Abstrak: This study aims to analyze the effect of ownership structure and capital structure on Return on Assets (ROA), with firm size as a moderating variable. The research was conducted on food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The independent variables consist of managerial ownership, institutional ownership, and capital structure (measured by the Debt to Equity Ratio/DER), while Return on Assets (ROA) is used as the dependent variable. The analytical method employed is Moderated Regression Analysis (MRA), with data processing carried out using SPSS version 27. The results show that both managerial and institutional ownership have a significant positive effect on ROA, while capital structure (DER) has a significant negative effect. Furthermore, firm size significantly moderates the influence of each independent variable on ROA, either strengthening or weakening the relationship depending on the variable interaction. These findings support agency theory, trade-off theory, and the resource-based view (RBV) in explaining the relationships among ownership, capital structure, firm size, and financial performance. The practical implication suggests that companies should strategically manage ownership composition and funding structure while considering firm size and internal resources to improve efficiency and profitability.

Keywords: Managerial Ownership, Institutional Ownership, Capital Structure, Firm Size, Return on Assets (ROA)

1. Introduction

Financial performance is a crucial indicator for assessing a company's operational efficiency and financial stability. According to Indri et al (2024), this performance reflects the company's ability to manage assets and generate profits optimally. One important indicator that reflects the effectiveness of management in generating profits from owned assets is Return on Assets (ROA).

In 2020, many food and beverage (F&B) companies experienced a sharp decline in ROA due to decreased sales and operational disruptions. This was caused by a drop in demand following restrictions on public activities, disruptions in raw material supply chains, and increased operational costs for health protocols. However, as economic activity recovered and public consumption increased, some companies managed to reverse the situation and recorded improved ROA figures through 2024. Nevertheless, the upward trend in ROA was not evenly distributed. Several companies

A. Mursid and F. Lukiastuti (eds.), *Proceedings of the 2nd International Conference on Business, Accounting, Banking, and Economics (ICBABE 2025)*, Advances in Economics, Business and Management Research 350,
https://doi.org/10.2991/978-94-6463-862-2_16

continued to record low ROA due to high operating costs and weak asset utilization strategies.

A company's capital structure is also a fundamental aspect in determining its financial performance. Capital structure relates to the composition of debt and equity used to finance its operations. Moreover, capital structure, as reflected in the Debt to Equity Ratio (DER), serves as a key determinant in evaluating a company's financial health. A high DER indicates dependence on debt, which can increase financial risk and reduce profitability if not well managed. During the 2020–2024 period, several F&B companies recorded an increase in DER due to expansion financing and efforts to maintain cash flow during the pandemic. In 2020, DER increased as liabilities rose, while equity stagnated or even declined due to net losses. Some issuers experienced DER spikes exceeding 1.5 times in 2020. This imbalance between debt and equity proved to significantly affect ROA. However, by 2024, DER showed improvement, reflecting a healthier financial structure and lower financial risk.

According to Abbana & Marimuthu (2023), trade-off theory suggests that companies must balance the benefits and costs of using debt to achieve an optimal capital structure. Ahmed et al (2023) reinforced that firm size moderates the relationship between capital structure and profitability, where larger firms tend to be better at managing leverage risks. Said (2025) also found that the composition of short- and long-term debt has different impacts on ROA and ROE, indicating the need for a more detailed approach in examining the relationship between capital structure and performance. Similar findings were put forward by Pranata & Nugroho (2025), who highlighted that agency cost can strengthen or weaken this relationship.

In addition to internal financial factors, a company's ownership structure also plays an important role in its financial performance. Managerial ownership—where managers hold company shares—is believed to align the interests of managers and shareholders, thus improving performance. Meanwhile, institutional ownership can enhance the effectiveness of monitoring and promote good corporate governance practices. Variations in ownership proportions among F&B companies lead to differences in control levels and strategic decision-making, which affect company performance, including ROA. One factor influencing this is the ownership structure, which has implications for the mechanisms of managerial oversight and decision-making (Boshnak, 2023). In developing countries like Indonesia, ownership structures tend to be concentrated, potentially creating conflicts of interest between majority and minority shareholders (Nnaji-Ihedinmah et al., 2025). In this context, the manufacturing sector—including the food and beverage sub-sector—plays a significant role in the national economy (Candy & Quinn, 2023).

During the early period of the COVID-19 pandemic (2020–2021), there was a trend of stagnation or even decline in managerial ownership in several F&B companies. This was due to liquidity pressures that forced some managers or founders to sell their shares to maintain personal or corporate cash flow (Pranata & Nugroho, 2025). Additionally, the rise in transparency and strengthening of corporate governance driven by the Financial Services Authority (OJK) and IDX encouraged companies with dispersed (public) ownership structures to begin consolidation, where major shareholders increased their ownership stakes to strengthen control over the company. According to a study by Din et al (2022), high institutional ownership concentration in developing countries like Indonesia can serve as an effective managerial monitoring mechanism, positively affecting company efficiency and financial performance.

Overall, during the 2020–2024 period, ownership structures in F&B companies showed a consolidative trend, with institutions playing a dominant role in securing control and optimizing management. However, variations among companies remained high, depending on firm size, ownership history, and adopted governance strategies. More concentrated ownership structures have proven capable of creating stronger oversight over managers, but also pose risks of neglecting minority shareholder interests (Nnaji-Ihedinmah et al., 2025). Additionally, firm size is considered an important factor in explaining the relationship between capital structure and financial performance. Ahmed et al (2023) emphasized that large companies have greater access to financing and can benefit from economies of scale, resulting in more stable performance. While the impact of ownership structure and capital structure on financial performance has been widely studied, findings remain inconsistent, especially in specific sectors such as food and beverage in Indonesia. Studies by Indri et al (2024) and Din et al (2022) showed varying results depending on firm size and industry characteristics.

In Indonesia's food and beverage (F&B) industry, which has shown resilience and growth during the 2020–2024 period, this study examines how managerial ownership, institutional ownership, and capital structure (measured by DER) affect financial performance (ROA), with firm size as a moderating variable. Guided by agency theory, trade-off theory, and resource-based view, six hypotheses are proposed to explore the direct effects of ownership and capital structure on ROA, and how firm size may strengthen or weaken these relationships. This research focuses on F&B companies listed on the Indonesia Stock Exchange, particularly during the post-pandemic recovery phase.

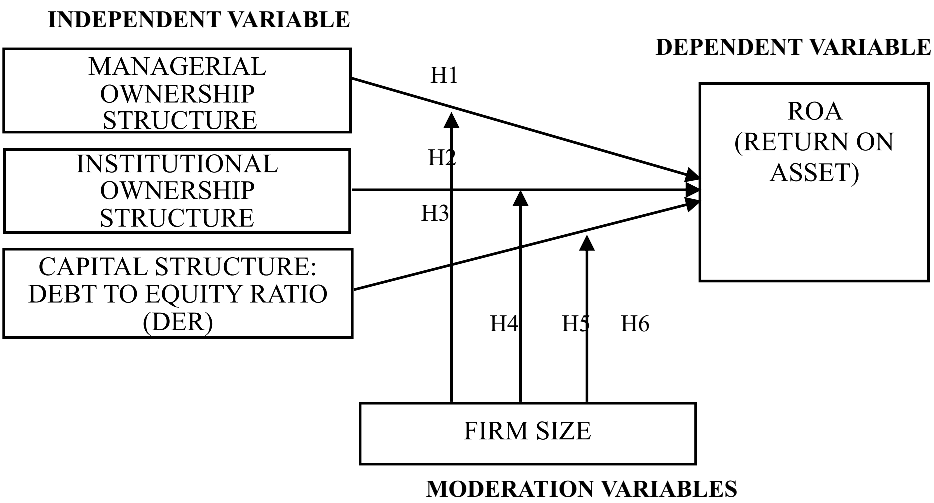

Figure 1

2. Methods

The population of this study includes all companies in the food and beverage (F&B) sub-sector listed on the Indonesia Stock Exchange (IDX) from 2020 to 2024. The sample selection technique used is purposive sampling with the following criteria:

1. Companies in the food and beverage sub-sector listed on the IDX during the 2020–2024 period.
2. Companies that published complete annual financial reports throughout the observation period.
3. Companies that have complete data on the research variables (ownership structure, capital structure (DER), ROA, and total assets).
4. Companies that did not undergo delisting during the observation period.

2.1 Analysis Technic

This study employed a quantitative data analysis approach using inferential statistical methods based on regression analysis, specifically Multiple Linear Regression or Moderated Regression Analysis (MRA). To analyze the relationships among variables, several stages of quantitative statistical analysis were employed, assisted by IBM SPSS software version 27, as recommended by Ghozali (2018). This analysis tool was chosen due to its high accuracy in processing quantitative data and its ability to provide a range of statistical tests suitable for multiple linear regression models and moderation analysis. The results will be presented in the form of regression tables, coefficient interpretations, and moderation interaction analyses.

3. Research Results

Table 1
Statistical Test Results t

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.043	.027		1.583	.117
	KM	.236	.053	.217	4.426	<,001
	KI	.396	.063	.365	6.315	<,001
	DER	-.059	.027	-.055	-2.210	.030
	KM*SIZE	.092	.037	.084	2.472	.015
	KI*SIZE	.128	.051	.137	2.500	.014
	DER*SIZE	.245	.056	.235	4.341	<,001
a Dependent Variable: ROA						

Source: Processed Secondary Data, SPSS Version 27

All independent variables (including interaction/moderation variables) have a statistically significant partial effect on ROA (as Sig < 0.05). The moderating variable SIZE strengthens the effect of Managerial Ownership (KM), Institutional Ownership (KI), and Capital Structure (DER) on ROA (all interaction terms are significant).

H1 Managerial Ownership Structure Positively Affects Return on Assets (ROA)

The test results confirm that managerial ownership has a positive and significant effect on Return on Assets (ROA), thereby supporting Hypothesis H1. This finding aligns with the fundamental premise of Agency Theory, as proposed by Jensen & Meckling (1976), which asserts that managerial ownership serves to align the interests of managers (agents) and shareholders (principals). When managers possess equity stakes in the firm, they are incentivized to act in ways that enhance firm value, thereby reducing agency costs and promoting operational efficiency. In addition, from the perspective of the Resource-Based View (RBV), managerial ownership reflects a strategic involvement of top executives in managing internal capabilities and resources. Such involvement enables firms to better leverage their assets to achieve superior and sustainable financial performance.

Empirical evidence from the food and beverage sub-sector in Indonesia reinforces this conclusion. For instance, PT Ultrajaya Milk Industry Tbk (ULTJ), which had the highest level of managerial ownership (48.18%) during the 2020–2024 period, also recorded strong financial performance with ROA ranging from 11.32% to 17.24%. In contrast, companies with minimal or no managerial ownership tended to experience weaker performance. PT Prima Cakrawala Abadi Tbk (PCAR), with only 0.3% managerial ownership, recorded a negative ROA of -15.44% in one period, suggesting a lack of internal motivation and control. PT Sekar Laut Tbk (SKLT), despite having a low managerial ownership level of 0.86%, managed to achieve relatively stable ROA between 5.5% and 9.6%, indicating that while managerial ownership is influential, its effects may interact with other firm-specific factors such as leverage or firm size.

These results are consistent with findings from previous studies. Boshnak (2023) revealed that insider ownership, including managerial stakes, significantly enhances firm performance as measured by both ROA and Tobin's Q, suggesting a strong link between ownership alignment and firm efficiency. Similarly, Din et al (2022), in their study of manufacturing firms in Pakistan, found that insider ownership had a significant and positive impact not only on ROA but also on ROE, Market-to-Book Ratio (MBR), and Tobin's Q. Furthermore, research by Nnaji-Ihedinmah et al (2025) on firms in emerging markets demonstrated that managerial block ownership positively affects firm performance. Their study emphasized that concentrated managerial ownership strengthens internal oversight and motivates managers to pursue long-term value creation. Taken together, these findings affirm the argument that managerial ownership is a critical governance mechanism for improving firm profitability, particularly in contexts where external monitoring is limited.

H2 Institutional Ownership Structure Positively Affects Return on Assets (ROA)

The test results reveal that institutional ownership has a positive and significant effect on Return on Assets (ROA), thereby supporting Hypothesis H2. This finding is theoretically grounded in Agency Theory, which posits that institutional investors—such as pension funds, mutual funds, and insurance companies—possess the resources, expertise, and incentive to act as effective monitors of managerial behavior. Their presence mitigates agency conflicts by encouraging transparency, accountability, and a long-term strategic focus among corporate managers. Empirically, this relationship is evident in several Indonesian food and beverage companies with high levels of institutional ownership. For instance, PT Indofood CBP Sukses Makmur Tbk (ICBP) and PT Indofood Sukses Makmur Tbk (INDF), both of which had institutional ownership exceeding 86%, consistently reported stable and positive ROA values ranging from 4.9% to 10.4% and 5.1% to 6.7%, respectively, during 2020–2024. Similarly, PT Tiga Pilar Sejahtera Food Tbk (AISA), with over 65% institutional ownership, achieved a remarkable ROA of 59.9% in one observation period, despite its high leverage, suggesting that strong institutional oversight can offset financial risk and enhance performance. In contrast, companies with low institutional ownership—such as PT Sekar Bumi Tbk (SKBM) at 15.94%—tended to experience fluctuating and even negative ROA, reflecting the weakness of external governance.

From the perspective of the Resource-Based View (RBV), institutional investors contribute more than capital—they bring strategic value through intangible assets such as credibility, governance expertise, and access to market insights. Their involvement signals professional management and increases market confidence, leading to improved firm value. This is not only theoretically plausible but also supported by empirical research. Nnaji-Ihedinmah et al (2025) found that block institutional ownership significantly improves profitability in emerging markets by strengthening managerial discipline. Din et al (2022) confirmed the positive and significant influence of institutional ownership on performance metrics such as ROE, MBR, and Tobin's Q in Pakistani manufacturing firms. Likewise, Boshnak (2023) demonstrated that institutional ownership enhances both accounting-based (ROA, ROE) and market-based (Tobin's Q, market-to-book ratio) performance indicators in Saudi companies, primarily due to the active and professional role institutional shareholders play in overseeing corporate management. Collectively, these findings affirm that institutional ownership is not merely passive but serves as an effective external governance mechanism, improving financial performance and fostering sustainable corporate strategies—especially in the context of emerging markets like Indonesia.

H3 Capital Structure Negatively Affects Return on Assets (ROA)

The test results show that capital structure, as measured by the Debt to Equity Ratio (DER), has a negative and significant effect on Return on Assets (ROA). This implies that as leverage increases, profitability declines, supporting the argument that excessive reliance on debt weakens a firm's financial performance. The empirical evidence strongly illustrates this relationship. PT Prasidha Aneka Niaga Tbk (PSDN) presents an extreme case, with a DER reaching as high as 1704 and consistently negative ROA, often below -10%, highlighting the detrimental impact of financial overextension. Similarly, PT Prima Cakrawala Abadi Tbk (PCAR) recorded a negative ROA of -15.44% amid high leverage, indicating that a large debt burden can suppress profitability. Although PCAR briefly achieved a positive ROA in one year, it failed to sustain stability—largely due to its elevated debt levels. An exceptional case is PT Tiga Pilar Sejahtera Food Tbk (AISA), which once posted an extraordinary ROA of 59.9% despite high leverage. However, its fluctuating ROA across other periods reveals that while debt can amplify returns, it also introduces substantial financial risk, and its effectiveness depends on how efficiently borrowed capital is deployed.

Theoretically, these findings are in line with the trade-off theory, which posits that firms must balance the benefits of debt—such as tax shields—against the costs of financial distress. When debt levels surpass the optimal threshold, rising interest expenses and repayment obligations can diminish net earnings and reduce asset efficiency. Especially in uncertain economic environments, high leverage constrains financial flexibility, often forcing management to prioritize short-term liquidity over long-term strategic investment. Furthermore, from an agency theory perspective, excessive debt may exacerbate conflicts between shareholders and creditors. While creditors seek financial prudence, managers and shareholders may pursue riskier strategies, increasing the likelihood of value-destructive decisions under pressure.

These conclusions are supported by prior studies in emerging market contexts. Said (2025) and Ahmed et al (2023) found that high leverage significantly reduces profitability in Egyptian and Iranian firms, respectively, underscoring the risks of aggressive debt financing in less mature capital markets. Although Din et al (2022) focused more broadly on ownership structures, their findings indirectly support this conclusion by showing a negative effect of leverage on ROA, reinforcing the notion that high DER undermines profitability due to elevated financial risk. Therefore, maintaining a balanced capital structure—one that considers both financing costs and operational capacity—is crucial for sustaining firm performance in the long term.

H4 Firm Size Moderates the Effect of Managerial Ownership Structure on Return on Assets (ROA)

The inclusion of the interaction term KM×SIZE in the regression model resulted in a notable improvement in model fit, with the R Square increasing from 0.804 to 0.836 and the standard error decreasing from 0.43508 to 0.40013. These results provide statistical evidence that firm size (SIZE) significantly and positively moderates the relationship between managerial ownership and Return on Assets (ROA). This suggests that the effectiveness of managerial ownership in enhancing financial performance is amplified in larger firms. The case of PT Ultrajaya Milk Industry Tbk (ULTJ) illustrates this pattern: with consistently high managerial ownership (ranging from 39.11% to 48.76%) and classification as a large-sized firm (log of total assets between 29.6 and 29.8), ULTJ achieved strong ROA levels between 11.32% and 17.24% throughout the 2020–2024 period. The firm's scale, combined with direct managerial involvement, likely supports more efficient asset utilization, strategic decision-making, and stronger internal governance. Similarly, PT Siantar Top Tbk (STTP), despite having relatively modest managerial ownership (around 3.19%–3.27%), recorded even higher ROA levels (13.60%–19.44%), suggesting that in the presence of large firm size (log of assets between 28.8 and 29.5), even moderate ownership can significantly enhance performance.

These findings imply that firm size acts as a contextual enhancer, reinforcing the positive impact of managerial ownership on firm performance. In large firms, managerial accountability is generally higher due to closer scrutiny from external stakeholders, such as investors, creditors, and regulators. Managers who hold equity stakes in such environments are incentivized not only by financial returns but also by reputational concerns, thereby promoting more disciplined and performance-oriented behavior. From the perspective of the Resource-Based View (RBV), large firms benefit from access to valuable strategic resources—such as capital, human talent, technology, and brand reputation—that can be more effectively leveraged when managers have ownership interests. Consequently, managerial ownership becomes more impactful when supported by the scale and resource endowment typical of large firms.

The empirical findings of this study are supported by prior research. Mu & Wang (2025) concluded that larger firms possess more robust governance structures, which enhance the strategic influence of managerial ownership on performance. Din et al (2022) also emphasized the positive role of firm size in shaping performance outcomes, showing that it significantly affects ROE, MBR, and Tobin's Q. Moreover, Pranata & Nugroho (2025) found that firm size strengthens the positive influence of managerial ownership on financial performance, as larger firms tend to exhibit better internal controls and more predictable operational environments. These complementary studies reinforce the conclusion that firm size is not only a control variable but also a moderating factor that enhances the role of managerial ownership in improving firm profitability.

H5 Firm Size Moderates the Effect of Institutional Ownership Structure on Return on Assets (ROA)

The inclusion of the interaction variable KI × SIZE led to a significant improvement in the model's explanatory power, as evidenced by an increase in R Square from 0.876 to 0.910 and Adjusted R Square from 0.875 to 0.908, along with a reduction in standard error from 0.34582 to 0.29631. These results confirm that firm size (SIZE) positively and significantly moderates the relationship between institutional ownership and Return on Assets (ROA). In other words, the positive impact of institutional ownership on financial performance becomes more pronounced in larger firms. Theoretically, this finding is consistent with Agency Theory, which posits that institutional investors serve as effective external monitors of management. In larger firms, where agency risks and operational complexity are higher, the presence of institutional investors is even more critical in curbing managerial opportunism and ensuring the implementation of value-enhancing decisions. The effectiveness of institutional oversight is thus amplified in firms with greater exposure, broader stakeholder engagement, and more demanding governance expectations.

From the perspective of the Resource-Based View (RBV), large firms typically possess more diverse and strategic resources—such as advanced technologies, brand reputation, skilled labor, and financial capital. Institutional investors, when involved in such environments, contribute not only financial resources but also intangible assets such as strategic insight, reputational leverage, and governance expertise. This enables better resource alignment and more professional management practices, leading to improved profitability. Empirical evidence supports this theoretical framework. For instance, PT Indofood CBP Sukses Makmur Tbk (ICBP), which consistently maintained very high institutional ownership (86.02%–88.57%) and operated at a large scale (SIZE log between 32.27–32.47), achieved stable ROA ranging from 4.9% to 10.4% during 2020–2024. This stability reflects the synergy between institutional oversight and the firm's robust governance infrastructure and internal capabilities. A similar pattern is seen in PT Indofood Sukses Makmur Tbk (INDF), which, despite lower institutional ownership (11.65%–16.35%), posted stable ROA between 5.1% and 6.7%, likely due to its large firm size (SIZE log between 32.73–32.94), which enhanced the effectiveness of even moderate institutional involvement.

This finding aligns with previous studies. Boshnak (2023) noted that institutional investors exert greater monitoring effectiveness in large firms due to enhanced transparency and the complexity of operations, which demand more rigorous oversight. Similarly, Din et al (2022) highlighted that institutional ownership has a stronger impact in large firms because they provide better access to information and require more sophisticated governance mechanisms. Additionally, Mudjijah (2019) found that firm size moderates the relationship between financial governance variables and performance, as larger firms are more equipped with resources and systems that allow institutional investors to actively participate in strategic decision-making. Collectively, these findings confirm that firm size is a critical contextual factor that enhances the effectiveness of institutional ownership in improving firm performance.

H6 Firm Size Moderates the Effect of Capital Structure on Return on Assets (ROA)

The inclusion of the interaction term DER × SIZE resulted in a substantial improvement in the regression model's explanatory power, with R^2 increasing from 0.075 to 0.838 and standard error declining from 0.94568 to 0.39759. These changes indicate that firm size significantly and positively moderates the relationship between capital structure and financial performance, suggesting that the negative impact of leverage on ROA is significantly reduced in larger firms. This is consistent with the trade-off theory, which asserts that while debt offers tax advantages, excessive leverage introduces financial distress costs. However, larger firms generally have greater access to capital markets, stronger debt repayment capacity, and more effective risk management systems—enabling them to absorb the burden of debt without severely compromising profitability. Empirical evidence from PT Indofood CBP Sukses Makmur Tbk (ICBP) illustrates this dynamic well. Despite maintaining a relatively high DER (88–116) during 2020–2024 and operating at a very large scale (log SIZE between 32.27 and 32.47), ICBP consistently reported stable and positive ROA (4.9%–10.4%). This confirms that firm size enhances a company's ability to manage high leverage through operational efficiency, financial flexibility, and organizational robustness.

In contrast, smaller firms such as PT Prasidha Aneka Niaga Tbk (PSDN) and PT Prima Cakrawala Abadi Tbk (PCAR) demonstrate a different outcome. PSDN, with an extremely high DER (up to 1,704) and small-to-medium firm size (SIZE 25.71–27.36), consistently reported negative ROA values between –14% and –4%, suggesting that its limited internal capacity could not support its debt burden. Similarly, PCAR, with a DER of 49–78 and very small firm size (SIZE 25.25–25.41), experienced the lowest ROA in the dataset at –15.44%. These findings reinforce that smaller firms are more vulnerable to the negative effects of high leverage, primarily due to restricted access to funding, weaker cash flow management, and a lack of internal control systems. Conversely, intermediate cases such as PT Garudafood Putra Putri Jaya Tbk (GOOD) and PT Siantar Top Tbk (STTP) further support the moderating role of firm size. GOOD, with a moderate size (SIZE 29.5–29.7) and high DER (90–127), maintained ROA between 3.7% and 8.15%, while STTP, with large firm size and low DER (10–29), achieved high ROA levels (13.6%–19.4%). These cases suggest that the ability to mitigate leverage-related risk is strongly tied to firm size, even when capital structure varies from the resource-based view (RBV), large firms possess strategic resources such as capital, skilled labor, advanced technologies, and governance infrastructure, enabling them to convert debt into a source of competitive advantage rather than a financial burden. The findings are consistent with Ahmed et al (2023), who concluded that firm size amplifies the effect of capital structure on profitability in emerging markets like Iran. Similarly, Din et al (2022) acknowledged that larger firms are better positioned to manage the adverse effects of leverage on performance due to their ability to access external capital and maintain internal stability. Pranata & Nugroho (2025) also emphasized that while capital structure typically hurts ROA, this relationship is significantly moderated by firm size, as larger firms are more capable of transforming debt into productive assets. Overall, these results confirm that firm size acts as a strategic buffer, strengthening the firm's ability to manage capital structure decisions effectively and mitigating the financial risks associated with high DER levels.

4. Conclusion, Recommendation and Limitations

Based on the results of data analysis and hypothesis testing, this study concludes that managerial and institutional ownership both have a positive and significant effect on ROA, while capital structure (measured by DER) has a negative and significant effect, reflecting the risks of high leverage. Firm size positively moderates all three relationships, indicating that larger firms benefit more from managerial and institutional ownership and are better able to manage the negative effects of debt. The study recommends that companies maintain strong managerial and institutional ownership to enhance performance and optimize capital structure to balance risk and return, especially in larger firms. For investors, ownership structure can serve as a useful indicator of financial health. However, the study is limited by its sector-specific focus (F&B companies listed on IDX during 2020–2023), its exclusion of broader governance and macroeconomic factors, the initial non-normality of some variables due to the pandemic, and its purely quantitative design without qualitative insights, which may restrict the generalizability and depth of its findings.

Reference

1. Abbana, S., & Marimuthu, F. (2023). Financing of state-owned entities: Can the Trade-off Theory explain the debt structure? *International Journal of Entrepreneurship and Sustainability Studies*, *3*(1), 62–78. https://doi.org/10.31098/ijeass.v3i1.1483
2. Ahmed, A. M., Sharif, N. A., Ali, M. N., & Hágen, I. (2023). Effect of Firm Size on the Association between Capital Structure and Profitability. *Sustainability (Switzerland)*, *15*(14). https://doi.org/10.3390/su151411196
3. Boshnak, H. A. (2023). Ownership structure and firm performance: evidence from Saudi Arabia. *Journal of Financial Reporting and Accounting*. https://doi.org/10.1108/JFRA-11-2022-0422
4. Candy, C., & Quinn, F. (2023). The Relationship Between Ownership Structure, Capital Structure, and Firm Performance: The Evidence From Indonesian Manufacturing Sector. *Almana : Jurnal Manajemen Dan Bisnis*, *7*(2), 369–382. https://doi.org/10.36555/almana.v7i2.2185
5. Din, S. U., Arshad Khan, M., Khan, M. J., & Khan, M. Y. (2022). Ownership structure and corporate financial performance in an emerging market: a dynamic panel data analysis. *International Journal of Emerging Markets*, *17*(8), 1973–1997. https://doi.org/10.1108/IJOEM-03-2019-0220
6. Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25*. Badan Penerbit Universitas Diponegoro.
7. Indri, I. S., Widowati, A. R., & Murni, S. (2024). Pengaruh Konsentrasi Kepemilikan terhadap Kinerja Perusahaan: Studi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2016-2020. *Perspektif Akuntansi*, *7*(1), 1–16. https://doi.org/10.24246/persi.v7i1.p1-16
8. Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm : Managerial Behavior, Agency Costs and Ownership Structure. In *Journal of Financial Economics* (Vol. 3). Q North-Holland Publishing Company.

9. Mu, Q., & Wang, Y. (2025). Ownership Structure and Firm Performance: Evidence from United Kingdom Listed Companies. *International Business & Economics Studies*, *7*(1), p152. https://doi.org/10.22158/ibes.v7n1p152
10. Nnaji-Ihedinmah, N. C., Okoroji, N. O., Cyril-Nwuche, O. F., & Onwuchekwa, J. A. (2025). Ownership structure and financial performance: An emerging market study. *Corporate Ownership and Control*, *22*(1), 169–178. https://doi.org/10.22495/cocv22i1art14
11. Pranata, R., & Nugroho, V. (2025). Enrichment: Journal of Management The relationship between capital structure and firm performance: The moderating role of agency cost. In *Enrichment: Journal of Management* (Vol. 14, Issue 6).
12. Said, S. (2025). The Impact of Capital Structure on Firm Performance: Empirical Evidence from Egypt. *OALib*, *12*(02), 1–16. https://doi.org/10.4236/oalib.1112839
13. Slamet Mudjijah, Z. K. A. S. A. (2019). Pengaruh Kinerja Keuangan dan Struktur Modal Terhadap Nilai Perusahaan yang Dimoderasi Variabel Ukuran Perusahaan. *Jurnal Akuntansi Dan Keuangan*, *Vol. 8*.