

The Effect of Current Ratio and Debt to Equity Ratio on Return on Assets in Food Sub Sector Companies and the Beverages Listed in Indonesian Stock Exchange 2018-2022

Abdul Hamid Syarif^{1*}, Isnan Murdiansyah²
Universitas Islam Negeri Maulana Malik Ibrahim

Corresponding Author: Abdul Hamid Syarif syarifg57@gmail.com

ARTICLE INFO

Keywords: Financial Ratios, Profitability, Food and Beverage Industry, Indonesia Stock Exchange

Received : 14, April

Revised : 16, May

Accepted: 18, June

©2024 Syarif, Murdiansyah: This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

The study investigates the impact of financial ratios on the profitability of food and beverage companies listed on the Indonesia Stock Exchange (IDX) between 2018 and 2022. Hypothesis testing indicates that neither the Current Ratio (CR) nor the Debt to Equity Ratio (DER) exert a statistically significant influence on Return on Assets (ROA) when considered individually. These findings imply that other variables, potentially beyond liquidity and capital structure, may have a more substantial effect on profitability. Future research should consider examining broader determinants such as managerial practices and market dynamics to attain a holistic understanding of profitability drivers. Employing longitudinal studies and incorporating a larger, more diverse sample size could enhance the robustness and generalizability of the research, offering valuable insights for industry stakeholders and academics.

INTRODUCTION

In the competitive business landscape, financial analysis is critical for companies to manage their financial health, especially in the food and beverage sector where market dynamics, consumer trends, and raw material costs are significant factors (Putri et al., 2020). This study examines the impact of the Current Ratio (CR) and Debt to Equity Ratio (DER) on Return on Assets (ROA) for food and beverage companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022. CR indicates a company's capacity to meet short-term obligations, while DER measures the proportion of debt relative to equity, reflecting the company's financial structure. ROA assesses how effectively a company utilizes its assets to generate profits (Putra, 2023). Research into the relationship between CR, DER, and ROA is essential to understand how a company's financial structure affects its performance amid market complexities (Irma Dwi Marsita & Meifida Ilyas, 2019). Long-term, companies aim to maximize their value through high stock prices, reflecting overall value, while short-term goals include maximizing profits and efficient resource utilization, increasing shareholder wealth as company value rises (Silanno, Glousa Lera & Loupatty, 2021).

Food and beverage companies must navigate unique financial dynamics, requiring robust strategies to survive and thrive. CR serves as a crucial liquidity indicator in rapidly changing conditions, and DER provides insights into financial risk levels. Understanding the combined effect of CR and DER on ROA, which evaluates asset use efficiency in profit generation, offers strategic insights for management (Metta Susanti & Aldi Samara, 2022; WAHYUDI & DEITIANA, 2020). The impact of CR and DER on ROA is vital in corporate financial analysis, particularly in the food and beverage sector. CR and DER are key indicators of financial health, with DER measuring loan proportions relative to equity, and ROA showing asset use efficiency in profit generation. Studies on CR and DER's effect on ROA provide insights into how financial structures influence performance (Lardin & Kasmir, 2022; Juwita & Mutawali, 2022).

Given the sector's operational cycles and competition levels, analyzing CR and DER is highly relevant. Understanding their impact on asset returns offers a comprehensive view of financial management efficiency, providing management guidelines for financial strategy adjustments to enhance performance (Sabrina Rosyaida & Jauhar Arifin, 2021). This study re-examines the relationship between CR, DER, and ROA in food and beverage companies on the IDX from 2018 to 2022. It aims to clarify how CR and DER, both individually and collectively, influence ROA. Theoretically, it expands knowledge on financial ratios and performance, offering a reference for future research. Practically, it provides insights for investors, managers, regulators, and academics on factors affecting financial performance in this sector, aiding in risk and return evaluations.

LITERATURE REVIEW

Agency Theory

Agency Theory, as described by Ramadona (2016), involves the agreements within a company among various parties. It examines the oversight of different costs and the relationships between groups. An agency relationship is a contract where one or more individuals (principals) hire another individual (agent) to perform tasks on their behalf and authorize the agent to make decisions in the principal's best interest (Ichsan, 2013). Issues arise when shareholders, who do not actively manage the company, appoint managers to maximize shareholder profits, but these managers may also seek personal benefits (Isabella, 2017). Managers focused on shareholder interests typically maintain a healthy Current Ratio (CR) to reduce bankruptcy risks, while self-interested managers might neglect optimal CR management (Fianti et al., 2022). Similarly, careful management of the Debt to Equity Ratio (DER) is important, but managers might increase DER if incentivized to take higher risks for personal gain. This study relates to Agency Theory as managers, acting as agents, must report their actions to investors, the principals. Positive management outcomes build investor trust.

Return on Assets

Return On Assets (ROA) stands as a pivotal profitability metric within financial analysis, gauging a firm's capacity to yield earnings from its deployed assets. As elucidated by Arif Kurnianto (2016), ROA functions as a retrospective assessment tool, scrutinizing historical asset-generated income to furnish a benchmark for future performance evaluations. It serves as a litmus test to ascertain whether managerial endeavors have yielded commensurate returns commensurate with the assets under their purview, thereby furnishing invaluable insights into a company's adeptness in fund management. In its essence, ROA, defined as the ratio of net income post-tax to total assets, encapsulates both internal and external capital allocations channeled into a company's operational machinery, as explicated by Firman (2018). It epitomizes the net profits accrued vis-à-vis the aggregate wealth encompassed within the company's asset pool. According to Fahmi (2017), ROA transcends its role as a mere financial metric, assuming the role of a predictive indicator capable of extrapolating future profit-generation capabilities based on historical performances. Similarly, Sartono (2015) conceptualizes ROA as a barometer of a company's prowess in translating asset holdings into revenue streams.

Current Ratio

The Current Ratio (CR) is a fundamental financial indicator widely utilized across diverse industries to gauge a company's immediate liquidity status, appraising its capacity to fulfill forthcoming financial commitments through the juxtaposition of accessible assets against present liabilities. This ratio, as explicated by Marjohan (2021), delineates the quotient of current assets relative to current liabilities, thereby furnishing insights into the extent of a company's asset liquidity, poised to promptly cover impending liabilities within the same operational cycle. In addition to its pivotal role in assessing financial stability, CR emerges as a critical tool in cash flow management and debt planning, as underscored by Kasmir (2012:132). Furthermore, CR assumes significance in performance evaluation, facilitating the identification of areas necessitating enhancement within the spectrum of current asset and liability components, as elucidated by Satar & Istinawati (2018:29). Additionally, the multifaceted determinants influencing liquidity, encompassing cash reserves, short-term financial instruments, trade credit, inventory, and prepaid expenses, as delineated by Kariyanto (2017), collectively contribute to the computation of CR. Thus, CR emerges as an integral gauge for assessing a company's liquidity position and its adeptness in promptly meeting short-term financial obligations, as expounded upon by Triwartono (2018) and Sujarweni (2017).

Debt to Equity Rasio

The Debt to Equity Ratio (DER) serves as a pivotal financial metric, delineating the ratio of a company's total debt to its shareholders' equity, thereby elucidating the degree of reliance on borrowed capital vis-à-vis internally generated funds. As articulated by Nasir (2018), a heightened DER signifies a greater proportion of creditor financing relative to shareholders' contributions, potentially exerting adverse effects on performance, primarily attributable to escalated interest obligations, as corroborated by Sunaryo & Adiyanto (2017). Additionally, DER assumes significance as a tool for assessing a company's adeptness in securing financial backing from creditors to bolster operational endeavors, thereby underpinning the viability of its ongoing activities, as posited by Santoso et al. (2020). Consequently, DER emerges as a multifaceted indicator, encapsulating both the capital structure dynamics and the financial risk exposure of a company within the intricate fabric of its operational landscape.

METHODOLOGY

Research Approach

The research employs a quantitative method, a structured scientific approach to investigate elements, phenomena, and their relationships. The main goal of this quantitative approach is to develop and use mathematical models, theories, and hypotheses related to natural phenomena (Yayuk, 2019). Specifically, the study uses an associative method to identify relationships between two or more variables. This research aims to develop a theory that can explain, predict, and control a phenomenon.

Population and Sample

The research population comprises 40 food and beverage companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022. Purposive Sampling was employed, selecting companies that were listed during this period, had complete financial reports, were profitable, and possessed relevant data. Eight companies met these criteria, providing a total of 40 samples to cover the five-year period. These firms were analyzed to gain insights into the financial performance and characteristics of the food and beverage sector within the specified timeframe.

Research Data

The research employs quantitative data, systematically investigating elements and phenomena through numerical analysis using methods such as documentation, correlation, and regression. The study is based on secondary data, including financial reports like balance sheets and income statements, sourced from food and beverage companies listed on the Indonesia Stock Exchange (IDX) between 2018 and 2022. Data collection is conducted through the documentation technique, involving the systematic gathering of information from financial reports accessed directly from the IDX's official website, www.idx.co.id. This method enables a comprehensive examination of the financial performance and characteristics of the selected companies within the specified timeframe, facilitating analysis and conclusions.

Data Analysis Technique

The data analysis involves organizing and visualizing responses using tables, graphs, and patterns identified by participants. This initial evaluation is the first step in data processing. The study uses SPSS 26 software for data analysis, starting with testing classical assumptions and then performing tests for normality, multicollinearity, and autocorrelation. Multiple linear regression is used to examine the relationships between variables like the Current Ratio (CR), Return on Assets (ROA), and Debt to Equity Ratio (DER), aiming to predict changes in the dependent variable. Hypotheses are tested using the t-test and F-test. The t-test checks the significance of individual independent variables' effects on the dependent variable, while the F-test evaluates the overall effect of the independent variables. The coefficient of determination (R^2) shows how much variation in the dependent variable can be explained by the independent variables. SPSS 26.0 is used for data processing, and hypothesis conclusions depend on the significance values of the tested variable coefficients.

RESEARCH RESULT

Descriptive Analysis

Table 1. Descriptive Analysis Result

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
CR	40	0,77	5,18	2,4660	1,33155
DER	40	0,00	1,29	,4672	,39970
ROA	40	3,26	57,76	12,3815	11,09041

Descriptive statistics are used to summarize data, making it easier to understand. In this study, statistics were used to describe Return on Assets (ROA), Current Ratio (CR), and Debt to Equity Ratio (DER) for 40 companies between 2018-2022. For CR, values ranged from 0.77 to 2.4660, with an average of 2.4660 and a standard deviation of 1.33155. DER ranged from 0.00 to 1.29, with an average of 0.4672 and a standard deviation of 0.39970. ROA ranged from 3.26 to 57.76, with an average of 12.3815 and a standard deviation of 11.09041.

Multiple Linear Regression Analysis

Table 2. Multiple Linear Regression Analysis Result

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17,800	6,237		2,854	0,007
	CR	-2,037	1,656	-0,245	-1,230	0,227
	DER	-0,848	5,518	-0,031	-0,154	0,879

The multiple linear regression equation for Return on Assets (ROA) is: $ROA = 17.800 - 2.037(\text{Current Ratio}) - 0.848(\text{Debt Equity Ratio})$. Breaking it down, the constant coefficient, 17.800, suggests that when all independent variables collectively affect ROA, it will be 17.800. The coefficient for Current Ratio (CR) is -2.037, indicating that a 1% increase in CR decreases ROA by -2.037. Similarly, the coefficient for Debt Equity Ratio (DER) is -0.848, meaning a 1% increase in DER decreases ROA by -0.848.

Partial Test (t Test)

Table 3. Partial Test (t Test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17,800	6,237		2,854	0,007
	CR	-2,037	1,656	-0,245	-1,230	0,227
	DER	-0,848	5,518	-0,031	-0,154	0,879

Based on the table data, we can draw the following conclusions:

1. Hypothesis testing (H1) indicates that the Current Ratio (CR) variable has no significant impact on Return on Assets (ROA). The significance value of 0.227 is greater than 0.05, and the t-value of -0.154 is smaller than the critical t-value of 2.00324, suggesting that CR does not affect ROA significantly.
2. Similarly, hypothesis testing (H2) shows that the CR variable does not significantly influence ROA, supported by a significance value of 0.879, which is greater than 0.05, and a t-value of -1.230, smaller than the critical t-value of 2.00324. Thus, it can be concluded that CR does not have a significant effect on ROA.

Coefficient of Determination

The R-squared (R²) test assesses how well the independent variables collectively explain the variation in the dependent variable. In this study, the adjusted R-square value is 0.001. This suggests that the independent variables, Current Ratio (CR), and Debt to Equity Ratio (DER), together influence Return On Assets (ROA) by only 0.1%. The remaining 99.9% of the variation in ROA is attributed to other variables not included in the model.

DISCUSSION

Effect of Current Ratio (CR) on Return on Assets

The results of hypothesis testing suggest that among food and beverage companies listed on the Indonesia Stock Exchange (BEI) from 2018 to 2022, the Current Ratio (CR) does not significantly influence Return On Assets (ROA). With a calculated t-value of -1.230, falling below the critical t-value of 1.67866 at a 5% significance level, and a significance value (sig) of 0.227, which exceeds the significance threshold of 0.05, it is concluded that CR only partially affects ROA. This finding resonates with Sugiyono's (2017) observation that while CR serves as a measure of short-term liquidity, it does not entirely capture the efficiency of asset utilization in generating profits, a core aspect assessed by ROA. While CR focuses on short-term liquidity, ROA delves into how effectively assets are managed to yield profitability. Therefore, the relationship between CR and ROA may not always be straightforward or significant due to various operational, industry-specific, and managerial factors, as highlighted by Sugiyono (2017). In essence, this study underscores the nuanced dynamics between liquidity measures like CR and performance metrics such as ROA, highlighting the importance of considering multiple factors beyond liquidity alone when evaluating a company's financial performance.

The Effect of Debt to Equity Ratio (DER) on Return on Assets

The results derived from hypothesis testing provide a comprehensive insight into the relationship between the Debt to Equity Ratio (DER) and Return On Assets (ROA) within the specific context of food and beverage companies listed on the Indonesia Stock Exchange (BEI) during the period spanning 2018 to 2022. Through meticulous analysis, it becomes evident that DER does not exert a statistically significant influence on ROA within this particular sector. The computed t-value of -0.154, when compared to the critical t-value of 1.67866 at a 5% significance level, underscores the absence of a substantial impact of DER on ROA. Moreover, the significance value (sig) of 0.879, surpassing the conventional threshold of 0.05, solidifies the conclusion that DER does not exert a partial effect on ROA among these food and beverage companies.

Sugiyono (2017) illuminates this finding further by emphasizing that while DER offers valuable insights into the capital structure and financial risk management strategies employed by firms, its correlation with ROA is not direct. Instead, DER primarily serves as a metric to gauge the financial risk associated with a company's capital structure, rather than providing a direct reflection of asset utilization efficiency, a key component evaluated by ROA. In essence, ROA is intricately linked to the day-to-day operational efficiency with which companies manage and deploy their assets. Conversely, DER is more closely associated with strategic financing decisions and the broader management of financial risk within the operational framework of these food and beverage companies. Therefore, despite its significance in assessing financial risk, DER does not emerge as a pivotal determinant of ROA within this specific industry context.

CONCLUSIONS AND RECOMMENDATIONS

In summary, the results of hypothesis testing unveil that neither the Current Ratio (CR) nor the Debt to Equity Ratio (DER) holds a significant sway over the Return On Assets (ROA) within the realm of food and beverage companies listed on the Indonesia Stock Exchange (BEI) throughout the duration of 2018 to 2022. Upon delving into a detailed examination, it becomes apparent that both CR and DER fail to exert a notable influence on ROA when considered individually. These findings underscore a pivotal aspect: while CR serves as a barometer of short-term liquidity and DER offers valuable insights into the intricacies of capital structure and financial risk, neither ratio directly translates into an impact on asset utilization efficiency, a critical metric gauged by ROA. Consequently, it suggests that other underlying factors beyond mere liquidity and capital structure dynamics likely wield a more substantial influence on the profitability trajectory of these companies over the specified timeframe. In essence, the failure of CR and DER to emerge as significant determinants of ROA underscores the complexity of the business landscape within the food and beverage sector. It highlights the multifaceted nature of profitability drivers, urging a deeper exploration into the myriad factors that intricately shape the financial performance of these companies. As such, this nuanced understanding becomes imperative for stakeholders and decision-makers tasked with navigating the

intricacies of financial management and strategic planning within this dynamic industry landscape.

ADVANCED RESEARCH

In future research, it's recommended to widen the analysis beyond just financial ratios to gain a fuller picture of what influences profitability in the food and beverage sector. This could involve looking at qualitative data like management strategies, market trends, and consumer habits. It's also worth exploring how external factors like economic shifts and regulatory policies impact company profits. Long-term studies tracking changes in financial ratios and profitability metrics over time would offer valuable insights into industry trends. Additionally, expanding the sample size to include a more diverse range of companies would strengthen the research findings and make them more applicable across the industry.

ACKNOWLEDGMENT

We would like to thank all the parties involved.

REFERENCES

- Fianti, F. O., Mayasari, I., & Juniwati, E. H. (2022). Pengaruh CR dan DER Terhadap ROA Pada Perusahaan Makanan & Minuman. *Indonesian Journal of Economics and Management*, 2(2), 266–276. <https://doi.org/10.35313/ijem.v2i2.3684>
- Firman, D. (2018). Pengaruh Perputaran Kas Dan Perputaran Piutang Terhadap Return on Assets Pada Perusahaan Keramik Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Studi Akuntansi & Keuangan*, 2(1), 7–14.
- Irma Dwi Marsita, & Meifida Ilyas. (2019). Pengaruh Current Ratio (CR), Debt To Equity Ratio (DER), Dan Return On Asset (ROA) Terhadap Return Saham Perusahaan Sub Sektor Konstruksi Yang Listing Di BEI Periode 2013 - 2017. *Jurnal Satya Mandiri Manajemen Dan Bisnis*, 5(2), 72–86. <https://doi.org/10.54964/satyamandiri.v5i2.336>
- Juwita, R. I., & Mutawali, M. (2022). Pengaruh Current Ratio, Debt to Equity Ratio, Net Profit Margin, Total Asset Turnover Ratio dan Earning Per Share terhadap Kinerja Keuangan PT Asahimas Flat Glass Tbk Periode 2012-2021. *Lensa Ilmiah: Jurnal Manajemen Dan Sumberdaya*, 1(2), 114–123. <https://doi.org/10.54371/jms.v1i2.190>
- Lardin, D. F., & Kasmir, H. (2022). Determinant of Debt Equity Ratio (Der), Earning Per Share (Eps), and Price Earning Ratio (Per), Stock Price in Indonesia Stock Exchange. *Advance Journal of Management, Accounting and Finance Adv. J. Man. Acc. Fin*, 7(3), 1–18. <https://aspjournals.org/ajmaf/index.php/ajmaf/article/view/17>
- Metta Susanti, & Aldi Samara. (2022). Pengaruh Quick Ratio, Current Ratio Terhadap Ukuran Perusahaan Studi Empiris Pada Perusahaan Sektor Industri Dasar Kimia Sub Sektor Pakan Ternak Yang Terdaftar Di Bursa Efek Indonesia. *CEMERLANG : Jurnal Manajemen Dan Ekonomi Bisnis*, 2(4), 28–42. <https://doi.org/10.55606/cemerlang.v2i4.427>

- Nasir, M. (2018). Analisis Perbandingan Kinerja Keuangan Pada Perusahaan Sebelum Dan Sesudah Merger Dan Akuisisi (Studi Perusahaan Yang Melakukan Merger Dan Akuisisi Yang Terdaftar Di Bei 2013-2015). *Jurnal Economic Resource*, 1(1), 71–85. <https://doi.org/10.33096/jer.v1i1.58>
- Putra, P. (2023). Pengaruh ROA, CR, dan DER terhadap PBV Pada Sektor Manufaktur Sub Sektor Makanan dan Minuman Yang Terdaftar di Bursa Efek Indonesia Periode 2018-2020. *Manajemen Kreatif Jurnal*, 1(4), 189–202.
- Santoso, S., Astuti, H., & Sayekti, L. (2020). *The Effect of Claim Expense, Liquidity, Risk-Based Capital, Company Size, Debt to Equity, and Debt To Asset on Profitability In Indonesia Islamic Insurance Companies*. <https://doi.org/10.4108/eai.5-8-2020.2301216>
- Silanno, Glousa Lera & Loupatty, L. G. (2021). Pengaruh Current Ratio, Debt To Equity Ratio dan Return On Asset terhadap Financial Distress Pada Perusahaan-Perusahaan Di Sektor Industri Barang Konsumsi. *Jurnal Ekonomi, Sosial & Humaniora*, 2(07), 85–109. <https://www.jurnalintelektiva.com/index.php/jurnal/article/view/482>
- Sulistiani, P., Budiman, A., Equity, R. O., Heteroskedastisitas, U., Equity, R. O., & Turnover, T. A. (2023). Pengaruh Current Ratio , Return on Equity , Debt To Equity Ratio Dan Total Asset Turnover Terhadap Harga Saham Perusahaan Makanan Dan Minuman Yang Terdaftar di Bursa Efek Indonesia Periode 2018-2022. *Community Development Journal*, 4(2), 1912–1921.
- Sunaryo, D., & Adiyanto, Y. (2017). Pengaruh Debt to Equity Ratio (DER) dan Deviden Payout Ratio (DPR) terhadap Nilai Perusahaan pada Perusahaan Manufaktur Sektor Hasil Industri untuk Konsumsi yang Terdaftar di BEI Tahun 2012-2017. *Jurnal Manajemen*, 7(1), 33–53.
- Sutrisno, S. (2020). Corporate Governance, Profitability, and Firm Value Study on the Indonesian Sharia Stock Index. *Jurnal Ekonomi Dan Bisnis Islam (Journal of Islamic Economics and Business)*, 6(2), 292. <https://doi.org/10.20473/jebis.v6i2.23231>
- Tahir, Y. A., Djuwarsa, T., & Mayasari, I. (2021). Pengaruh ROA, ROE, dan EPS terhadap Harga Saham Bank Umum Kelompok BUKU 4. *Indonesian Journal of Economics and Management*, 1(3), 544–560. <https://doi.org/10.35313/ijem.v1i3.3018>
- WAHYUDI, M., & DEITIANA, T. (2020). Pengaruh Current Ratio, Debt To Equity Ratio, Return on Equity, Total Asset Turnover, Dividen Payout Ratio Terhadap Return Saham Pada Perusahaan Otomotif. *Media Bisnis*, 11(2), 155–162. <https://doi.org/10.34208/mb.v11i2.940>
- Yayuk, S. dan S. (2019). *Pengumpulan data dalam penelitian ini menggunakan kuesioner. Analisis data dalam penelitian ini menggunakan analisis regresi dan analisis jalur*. 7(1), 84–96.