

# Analysing Debt Ratio, Equity Ratio, Asset Turnover Impact on Return on Assets in Transport and Logistics

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## ABSTRACT

This study analyzes the financial performance of transportation and logistics companies listed on the Indonesia Stock Exchange (IDX) during the 2023–2024 period, with a focus on the influence of Debt Ratio, Equity Ratio, then Asset Turnover against Return on Assets. Secondary data were obtained from the company's annual financial reports, processed using robust regression methods, considering the violation of the normality assumption in the data. The results showed that DR and ER had a significant negative effect on ROA, indicating that high proportions of debt and equity can reduce company profitability. This finding is in line with Trade Off Theory, which highlights the financial risks resulting from leverage or excess equity. Meanwhile, ATO was not proven to have a significant effect on ROA, indicating that asset turnover efficiency was not yet able to drive profitability during this study period. The robust regression model was able to explain 32.8% of the variation in ROA, while the remainder was influenced by factors outside the model, such as operational costs, company size, or macroeconomic conditions. This study provides practical implications for management in optimally managing funding structures and improving operational efficiency. For investors, these results provide an important signal in assessing a company's financial risk. Future research is recommended to expand the analysis variables and conduct comparative studies across transportation and logistics sub sectors.

## Introduction

The transportation and logistics sector has played a crucial role in Indonesia's post-pandemic economic recovery, particularly throughout 2023–2024. The Central Statistics Agency (BPS) reported that the transportation and warehousing sector recorded the highest growth in 2023, at 13.96%, compared to national economic growth of around 5% [1]. This continued in the second quarter of 2024, when the sector grew by 9.56% year on year and contributed 6.24% to Gross Domestic Product (GDP). Despite this positive growth, the sector remains burdened by high domestic logistics costs, which reached 14.29% of GDP in 2023 [2]. Even when export logistics costs (around 8.98% of

GDP) are included, the total could reach around 23.08% of GDP. This issue underscores the need for greater efficiency in the national logistics cost structure.

The urgency of this study arises from the persistent financial and operational challenges faced by transportation and logistics companies in Indonesia, despite strong sectoral growth. High logistics costs, volatile fuel prices, and rising operational expenses continue to reduce company margins and hamper efficiency. Moreover, capital structure issues, such as excessive reliance on debt or inefficient utilization of equity pose financial risks that may erode profitability. Given that the transportation and logistics sector is a major contributor to national economic growth and a backbone of supply chain performance, understanding the financial determinants of profitability becomes essential. This research is urgently needed to help companies optimize their funding structures, improve operational efficiency, and strengthen their resilience in a highly competitive market.

In this study, it is important to analyze the financial performance of transportation and logistics companies listed on the Indonesia Stock Exchange (IDX) during the 2023–2024 period. The variables studied include Debt Ratio (DR) to measure the proportion of funding through debt, Equity Ratio (ER) to see the portion of funding from own capital, Asset Turnover (TATO) as a measure of the efficiency of asset use in generating income, as well as Return on Assets (ROA) as an indicator of profitability of owned assets. High logistics costs can depress the profitability and efficiency of transportation and logistics companies. High operating expenses lower ROA due to reduced net income and drive an increase in the Debt Ratio (DR) due to higher external funding requirements. This condition can also weaken the Equity Ratio (ER) due to reduced retained earnings accumulation and lower Asset Turnover (TATO) due to decreased asset efficiency. Therefore, high logistics costs have the potential to worsen a company's capital structure and financial performance.

Several previous studies support the relevance of this variable. For example, [3] found a significant relationship between capital structure and profitability in transportation and logistics companies on the IDX. In addition, [4] the efficiency of asset use, measured through Asset Turnover, positively impacts ROA and that the combination of capital structure, asset efficiency, and profitability contributes to firm value, especially for large-scale firms. Based on this macro context and empirical findings, this study aims to analyze the interaction between Debt Ratio, Equity Ratio, Asset Turnover, and ROA in describing the financial performance of transportation and logistics companies on the IDX, in order to provide theoretical and practical insights to encourage the efficiency and profitability of this vital sector.

However, there are still research gaps that need to be addressed by this study. Most previous studies have focused on the relationship between capital structure and profitability without considering the current macroeconomic context, such as the impact of post-pandemic recovery and the pressure of high national logistics costs. Therefore, this study adds value by analyzing the interaction between Debt Ratio, Equity Ratio, Asset Turnover, and ROA during the 2023–2024 economic recovery period, providing up-to-date empirical insights into how financial efficiency and capital structure influence the profitability of the transportation and logistics sector in Indonesia.

## Research Methods

This study applies a quantitative approach using regression analysis methods to determine the influence of independent variables on dependent variables. The quantitative approach was chosen because it is considered capable of producing measurable, objective findings that can be proven through statistical testing [5]. The population in this study includes all transportation and logistics companies listed on the Indonesia Stock Exchange (IDX) during the 2023–2024 period, totaling 38 companies. Through purposive sampling, 30 companies met the criteria and were selected as the research sample. Using panel data observation, the total observation units obtained were 30 companies multiplied by the two year study period, resulting in 60 observations.

## Data Types and Sources

The data used in this study is secondary data obtained from the annual financial reports of companies listed on the Indonesia Stock Exchange (IDX). Secondary data was selected because it is historical, standardized, and publicly accessible, thus supporting the validity and reliability of the study.

## Research Variables

This research involves four variables, namely:

Independent variables:

1. Debt Ratio (DR), as a proxy for the company's leverage level. This ratio reflects the company's level of dependence on external funding sources [6]. Companies with *Debt Ratio* high debt tend to have large financial costs, but also have the opportunity to obtain higher profits if debt-funded investments provide optimal returns [7].
2. Equity Ratio (ER), which reflects the proportion of equity in the company's capital structure. This ratio reflects the company's level of independence in financing its assets without relying too much on external funding sources [8]. However, a ratio that is too high can also indicate that the company is not utilizing financial leverage to increase profits [9].
3. Asset Turnover (ATO), as a measure of the efficiency of asset use in generating sales. This ratio describes how often a company's assets are used or "turned over" in generating sales during a certain period [10]. Research by [11] shows that the average ATO in this sector is still below the industry standard, indicating potential improvements in asset management.
4. Dependent variable, Return on Assets (ROA), which measures the company's level of profitability. According to [7], ROA serves as a primary indicator for assessing the extent to which a company's assets are utilized effectively to support operational activities and generate profits. A study by [12] shows that increasing operational efficiency and utilizing technology can have a positive impact on the ROA of transportation and logistics companies listed on the IDX.

## Analysis Method

The analysis was conducted using the robust regression method. This method was chosen because it is more robust to violations of classical assumptions, such as data

abnormality or the presence of outliers, which are often found in corporate financial data [13, 14]. Classical assumption tests such as normality, multicollinearity, heteroscedasticity, and autocorrelation were conducted first to ensure model suitability. To strengthen the validity of the results, it was also carried out bootstrap resampling, which provides more stable parameter estimates and confidence intervals without relying on the normal distribution assumption.

#### Regression Model

The regression equation model used can be formulated as follows:

$$ROA = \alpha + \beta_1 (DR) + \beta_2 (ER) + \beta_3 (ATO) + \varepsilon$$

Information:

- ROA: Return on Assets
- IS: Equity Ratio
- $\alpha$ : Constant
- DR: Debt Ratio
- ATO: Asset Turnover
- e: Error term

#### Result and Discussion

##### Classical Assumption Test Results

The results of the normality test indicate that the variables DR, ER, ATO, and ROA deviate significantly from a normal distribution ( $p < 0.001$ ). This outcome is consistent with the typical characteristics of financial data within the transportation and logistics sector, which frequently exhibit heterogeneity in asset size, leverage structures, and operating cost volatility. In response to these conditions, the application of robust regression supported by bootstrap resampling is methodologically appropriate for generating stable and reliable parameter estimates under non-normal data conditions.

Moreover, given the structural identity  $DR + ER \approx 1$ , there is an inherent risk of multicollinearity between these two variables. This structural multicollinearity may influence the stability and interpretability of the estimated coefficients, and thus must be explicitly considered in the analytical process.

##### Robust Regression Analysis Results

###### 1. Simultaneous Significance Test (ANOVA)

Before discussing the analysis results, the purpose of this study is to examine the influence of predictor variables Asset Turnover, Equity Ratio, and Debt Ratio on Return on Assets. This analysis uses a Simultaneous Significance Test (ANOVA) to assess how well the three variables explain variations in ROA. The results of the analysis are presented in the following table:

Table 1. Coefficient of Determination Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.573 <sup>a</sup>	.329	.293	.082253

a. Predictors: (Constant), Asset Turnover, Equity Ratio, Debt Ratio

(Source: Processed data, 2025)

Table 1 shows the results of a regression analysis measuring the relationship between the predictor variables, namely Asset Turnover, Equity Ratio, and Debt Ratio, on the dependent variable Return on Assets. The R Square of 0.329 indicates that approximately 32.9% of the variation in ROA can be explained by these three predictor variables. However, the remaining 67.1% is influenced by other factors not included in this model. Overall, this model provides a fairly good picture of the influence of the three predictor variables on ROA, although there are other factors that also influence the dependent variable.

Table 2. ANOVA

	Model	Sum of Squares	df	Mean Square	F	Say.
1	Regression	.185	3	.062	9.136	<.001 <sup>b</sup>
	Residual	.379	56	.007		
	Total	.564	59			

a. Dependent Variable: ROA

b. Predictors: (Constant), Asset Turnover, Equity Ratio, Debt Ratio

(Source: Processed data, 2025)

The results of the ANOVA analysis show that the robust regression model is significant with an F value of 9.136 and a significance level below 0.001. This indicates that the Debt Ratio, Equity Ratio, and Asset Turnover variables simultaneously have a significant effect on Return on Assets.

## 2. Partial Significance Test (Coefficients)

After the simultaneous test showed significant results, the next step was to conduct a partial test to examine the effect of each predictor variable on the dependent variable, Return on Assets, separately. This partial test aims to examine the contribution of each predictor (Asset Turnover, Equity Ratio, and Debt Ratio) in explaining variations in Return on Assets. The following table presents the analysis results, which can be interpreted based on the table.

Table 3. Partial Significance Test (Coefficients)

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Say.
		B	Std. Error	Beta		
1	(Constant)	.230	.040	-	5.739	<.001
	Debt Ratio	-.176	.035	-1.325	-4.968	<.001
	Equity Ratio	-.147	.036	-1.098	-4.121	<.001
	Asset Turnover	-.022	.022	-.111	-1.016	.314

a. Dependent Variable: ROA

(Source: Processed data, 2025)

Based on the results in table 3. above, it can be interpreted as follows:

1. Debt Ratio (X1) has a regression coefficient of -0.176 with a significance value of <0.001, meaning this variable has a negative and significant effect on ROA. This

finding indicates that the greater the proportion of debt funding, the lower the company's profitability tends to be.

2. Furthermore, Equity Ratio (X2) shows a regression coefficient of -0.147 with a significance value of <0.001. These results indicate that the Equity Ratio also has a negative and significant effect on ROA. This condition can be interpreted as meaning that the amount of equity is not always directly proportional to increased profitability, possibly because equity capital has not been utilized efficiently.
3. Meanwhile, Asset Turnover (X3) has a regression coefficient of -0.022 with a significance value of 0.314 (>0.05), indicating that this variable does not significantly influence ROA. This means that the level of asset utilization efficiency has not been proven to make a significant contribution to increasing profitability in the companies included in this study's sample.

### 3. Bootstrap for Coefficients (Robust Regression)

Analysis results Table 4, Bootstrap for Coefficients used to obtain more robust parameter estimates with a resampling approach, so that it does not rely too much on the assumption of a normal distribution of residuals. This approach bootstrap provide confidence intervals (confidence interval) and more stable significance, especially when the data shows indications of heteroscedasticity or deviations from normality.

Table 4. Robust Regression Test (Bootstrap for Coefficients)

Model	B	Bias	Std. Error	Bootstrap <sup>a</sup> Sig. (2-tailed)	95% Confidence Interval	
					Lower	Upper
1 (Constant)	.230	.012	.149	.016	-.015	.830
Debt Ratio	-.176	-.015	.143	.016	-.779	.039
Equity Ratio	-.147	-.013	.152	.033	-.767	.113
Asset Turnover	-.022	-.003	.023	.443	-.072	.016

a. Unless otherwise noted, bootstrap results are based on 60 bootstrap samples

(Source: Processed data, 2025)

Based on the results bootstrap, variables Debt Ratio And Equity Ratio proven to significantly influence Return on Assets (ROA) at the 5% significance level. This is indicated by the 95% confidence interval, which excludes zero, thus strengthening the t-test results in the robust regression model. In other words, the higher the debt and equity ratios, the lower the company's profitability (ROA). This finding indicates that an inefficient funding structure actually puts pressure on financial performance, in line with capital structure theory, which states that excessive use of debt and equity poses financial risks.

On the other hand, the variable Asset Turnover showed insignificant results, both in the robust regression test and in the results bootstrap. The bootstrap confidence interval includes zero, thus concluding that asset turnover has no consistent effect on ROA in this study. This could be due to relatively small variations in asset utilization efficiency between companies or the presence of other external factors that are more dominant in determining profitability.



Thus, the results Bootstrap for Coefficients provides additional validation that Debt Ratio And Equity Ratio is the main determinant in influencing the profitability of the company, while Asset Turnover not proved significant. This demonstrates the consistency of the findings and increases the reliability of the research results.

#### Regression Equation

Based on the results of the analysis above, the robust regression equation obtained is:

$$ROA = 0.230 - 0.176X_1 - 0.1472X_2 - 0.022X_3$$

Information:

- ROA = Return on Assets
- X1 = Debt Ratio
- X2 = Equity Ratio
- X3 = Asset Turnover

Interpretation of the equation:

- The constant value of 0.230 indicates that when the variable Debt Ratio, Equity Ratio, And Asset Turnover is zero, then the ROA value generated by the company is 0.230.
- Regression coefficient for Debt Ratio of -0.176 indicates that every one unit increase in Debt Ratio will reduce ROA by 0.176, assuming other variables remain constant.
- Next, the regression coefficient Equity Ratio of -0.147 indicates that a one unit increase in Equity Ratio will cause a decrease in ROA of 0.147.
- As for the regression coefficient for Asset Turnover of -0.022 indicates that every one unit increase in this ratio will decrease ROA by 0.022, but this effect is not statistically significant, so it cannot be concluded that it has a real impact on the company's profitability.

#### Discussion

The results of the study show that the capital structure (Debt Ratio And Equity Ratio) has a significant negative effect on profitability (ROA). This is in line with the theory Trade Off which states that increasing the proportion of debt can increase interest expenses, thereby depressing net income [15, 16]. Similarly, although equity is an internal source of funds, excessive equity can reduce capital efficiency and lead to lower profitability.

The robust regression analysis reveals that both DR and ER exert significant negative effects on ROA, whereas ATO does not exhibit a statistically significant relationship with profitability. These findings are corroborated by the bootstrap confidence intervals, which exclude zero for DR and ER but include zero for ATO, thereby confirming the robustness of the estimates.

#### Effect of Debt Ratio

The negative coefficient associated with DR suggests that higher leverage levels are detrimental to profitability [17]. This result aligns with Trade Off Theory by Modigliani & Miller, 1963, which posits that excessive debt increases financial risk and

the cost of financial distress. In the context of the Indonesian transportation and logistics industry, this finding reflects several sector specific conditions:

- Elevated borrowing costs, influenced by the increase in Bank Indonesia's policy rate during 2023–2024.
- Heightened default risk, particularly among firms operating with narrow profit margins.
- Instances of overleveraging, with some publicly listed firms reporting Debt to Asset Ratios exceeding 70%, resulting in interest expenses that substantially erode net income.

These results are consistent with the empirical findings [18], who report a negative effect of leverage on profitability in transportation firms in Indonesia.

#### Effect of Equity Ratio (ER)

The negative coefficient on ER is theoretically counterintuitive, as higher equity typically implies lower financial risk and, under normal circumstances, should be associated with improved profitability when debt levels decline. However, several plausible explanations within the industry context justify this result:

- Overcapitalization, whereby firms maintain excessive equity balances that are not allocated efficiently to productive investments, resulting in idle capital.
- Equity dilution, particularly among firms that repeatedly issue new shares to offset operational losses, thereby reducing earnings per share.
- Suboptimal leverage utilization, where firms refrain from accessing debt financing that could otherwise support profitable expansion activities.

That excessive equity capitalization may reduce overall financial efficiency if not accompanied by corresponding investment in productive assets [19]. This phenomenon is observable among several transportation and shipping companies in Indonesia, including state-owned enterprises, that hold substantial equity positions while exhibiting limited asset expansion. The simultaneous negative coefficients on DR and ER therefore constitute strong evidence of structural multicollinearity, indicating that the estimates for ER may be statistically significant yet economically unstable.

#### Effect of Asset Turnover (ATO)

The insignificance of ATO suggests that improvements in asset utilization did not translate into higher profitability during the study period. This may be attributed to several persistent sectoral challenges:

- High operational cost burdens, including fuel expenses, fleet maintenance, and logistics system inefficiencies.
- Low industry profit margins, which limit the capacity of sales based improvements to affect net profitability.
- Underutilization of asset capacity, particularly in land and maritime transport segments, where operational constraints inhibit full asset productivity.

This finding is consistent with [18], who argue that operational efficiency alone is insufficient to enhance profitability without concurrent improvements in cost



structure and financial management. Meanwhile, Asset Turnover was insignificant on ROA, indicating that asset efficiency has not been able to increase profits in the sample of companies studied [20, 21]. This may be due to external factors, such as the level of industry competition, high operating costs, or low profit margins, so that increased sales do not always directly correlate with increased profits.

Overall, the estimated robust regression model was significant with an  $R^2$  of 32.8%. This indicates that other factors are more dominant in influencing ROA, such as cost efficiency, company size, and external industry factors. Therefore, the results of this study emphasize that, in the context of the companies studied, capital structure management plays a more important role than asset efficiency in determining profitability.

## **Conclusion**

This study concludes that both the Debt Ratio (DR) and Equity Ratio (ER) have a significant negative effect on the Return on Assets (ROA) of transportation and logistics companies listed on the Indonesia Stock Exchange (IDX) during the 2023–2024 period. These findings indicate that imbalances in capital structure whether due to excessive leverage or inefficient use of equity can reduce profitability, consistent with the Trade-Off Theory. Asset Turnover (ATO), however, does not demonstrate a significant influence on ROA, suggesting that improvements in asset utilization have not been sufficient to enhance financial performance due to the sector's persistent challenges, including high operating costs, narrow margins, and variations in asset management efficiency. The model explains 32.8% of ROA variability, indicating that other factors such as cost structure, firm size, diversification strategies, and macroeconomic conditions also play essential roles.

Company management is advised to optimize capital structure by maintaining a more balanced proportion of debt and equity, reducing excessive interest burdens, and ensuring that equity is allocated to productive investments. Enhancing operational efficiency through digitalization, fleet management technologies, route optimization, and real-time logistics monitoring may also improve profitability. Investors should consider DR and ER as key indicators of financial risk when evaluating firms in this sector, given the complex financing dynamics involved. Policymakers can support industry performance by reducing national logistics costs, improving transportation infrastructure, and providing incentives for operational innovation. Future research is encouraged to incorporate additional financial and macroeconomic variables, as well as comparative analyses across subsectors, to produce a more comprehensive understanding of the determinants of profitability in the transportation and logistics industry.

## **References**

- [1] Badan Pusat Statistik Indonesia, "Ekonomi Indonesia Triwulan IV-2023 Tumbuh 5,04 Persen (y-on-y)," Badan Pusat Statistik (BPS - Statistics Indonesia). [Online]. Available: <https://www.bps.go.id/id/pressrelease/2024/02/05/2379/ekonomi-indonesia-triwulan-iv-2023-tumbuh-5-04-persen--y-on-y-.html>
- [2] Bappenas, "Perkuat daya saing, pemerintah target biaya logistik," Badan

- Perencanaan Pembangunan Nasional, 2023.
- [3] Delima Delima and Eka Purnama Sari, "Pengaruh Current Ratio, Debt To Equity Ratio Dan Debt To Asset Ratio Terhadap Return On Assets Pada Perusahaan Transportasi Dan Logistik Yang Terdaftar Di Bursa Efek Indonesia Tahun 2016-2020," *Student Res. J.*, vol. 1, no. 1, pp. 339–359, 2023, doi: 10.55606/sjryappi.v1i1.198.
  - [4] I. N. F. Marsha Natania Santoso, Wiwik Handayani, Albertus Eka Putra Haryanto, "Pengaruh CR Dan DER Terhadap ROA Pada Perusahaan Transportasi Yang Terdaftar Di Bursa Efek Indonesia," *Innov. J. Soc. Sci. Res.*, vol. 5, no. 1, pp. 585–593, 2025, doi: 10.31004/innovative.v5i1.17418.
  - [5] Sugiyono, "Metode penelitian kuantitatif, kualitatif, dan R&D.," Bandung: Alfabeta.
  - [6] R. D. N. Elfira Malinda, "Pengaruh Current Ratio (CR) Dan Debt To Asset Ratio (DAR) Terhadap Return On Asset (ROA)," *J. Soc. Sci. Humanit.*, vol. 1, no. 1, pp. 1–20, 2024, doi: 10.33753/sociora.v1i1.4.
  - [7] J. F. H. Eugene F. Brigham, *Dasar-Dasar Manajemen Keuangan (14th ed., Vol. 3)*. 2020. [Online]. Available: <https://elearning.penerbitsalemba.com/dasar-dasar-manajemen-keuangan-brigham-houston>
  - [8] K. T. K. Telaumbanua, T. H. S. Hulu, S. M. Kakisina, and S. Zebua, "Analisis Penerapan Kinerja Keuangan Berdasarkan Rasio Solvabilitas Di PT. Pegadaian Cabang Kota Gunungsitoli," *J. Ekon. Bisnis, Manaj. dan Akunt.*, vol. 4, no. 3, pp. 1426–1439, 2024, doi: 10.47709/jebma.v4i3.4652.
  - [9] Atul Nafi Umma, Sari Inda Nur Yuwita, and Lestari Juwita Yuyun, "Analisis Rasio Keuangan Untuk Mengukur Kinerja Keuangan Perusahaan Umma Nafi Atul Yuwita Nur Inda Sari Yuyun Juwita Lestari," *E-Jurnal Akunt. Tsm*, vol. 2, no. 3, pp. 89–96, 2022, doi: 10.34208/ejatsm.v2i3.1396.
  - [10] A. Purbaja *et al.*, "Profitabilitas Keuangan Perusahaan," *hafir J. Islam. Econ. Financ. Bank.*, vol. 4, no. 1, pp. 1–10, 2022.
  - [11] Firah Nur Rizky Said, Muhammad Ichwan Musa, Anwar Anwar, Andi Mustika Amin, and Annisa Paramaswary Aslam, "Analisis Kinerja Keuangan Perusahaan pada Sektor Transportasi dan Logistik yang Terdaftar di Bei Periode 2019-2023," *Trending J. Manaj. dan Ekon.*, vol. 3, no. 2, pp. 62–79, 2025, doi: 10.30640/trending.v3i2.3916.
  - [12] A. R. Amelia, "Pengaruh Ukuran Perusahaan, Penghindaran Pajak, Dan Profitabilitas Terhadap Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Moderasi," *Univ. Islam. 45" Unisma Bekasi*, p. 282, 2023.
  - [13] P. J. Huber, "Robust regression: Asymptotics, conjectures and Monte Carlo," *Ann. Stat.*, vol. 1, no. 5, pp. 799–821, 1973, doi: 10.1214/aos/1176342503.
  - [14] J. W. Tukey, "Exploratory data analysis. Addison-Wesley."
  - [15] Siregar, B. G., Salman, M., & Lubis, A., "Optimalisasi Struktur Modal Dengan Trade Off Theory Pada Bank Umum Syariah," *Jurnal Penelitian Ekonomi Akuntansi (JENSI)*, vol. 8, pp. 264–278, 2024, doi: 10.33059/jensi.v8i2.10663.
  - [16] Harahap, P. E. W., & Yusra, I., "Business Risk in Moderating the Effect of Capital Structure on Financial Performance in Listed Companies in Indonesia," *Jurnal*

- Sejarah, Pendidikan Dan Humaniora, vol. 9, no. 1, pp. 138–150, 2025, doi: 10.36526/js.v3i2.5004.
- [17] Khasanah, U. A., “Pengaruh Leverage, Pertumbuhan Penjualan, Ukuran Kemasan,” *Jurnal Ilmu Dan Riset Manajemen*, vol. 10, no. 4, 2021, <https://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/3959>
- [18] Balqis, R., & Ansori, M. (2025). The Effect of Good Corporate Governance on Firms Financial Performance in Transportation and Logistics Companies. *Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis*. <https://doi.org/10.30871/jaemb.v13i1.10236>.
- [19] Yen, D., Huong, N., & Anh, D., “The Impact of Capital Investments on Firm Financial Performance – Empirical Evidence from the Listed Food and Agriculture Companies in Vietnam,” *Vietnam Journal of Agricultural Sciences*, vol. 6, no. 1, 2023, doi: 10.31817/vjas.2023.6.1.04.
- [20] Azrinindita, M. N., & Nurhamdi, M., “Pengaruh Cash Turnover, Receivable Turnover, dan Total Asset Turnover Terhadap Return On Asset Pada Perusahaan Subsektor Kayu dan Pengolahannya yang Terdaftar di BEI Periode 2017–2023,” *Jurnal Ilmiah Ekonomi Manajemen Bisnis Dan Akuntansi*, vol. 2, no. 5, pp. 559–570, 2025, doi: 10.61722/jemba.v2i5.1381.
- [21] Rizal, S., Kadir, A., Akhmad, A., Qosim, N., & Wulandari, P., “Pengaruh Current Ratio dan Perputaran Aktiva Terhadap Return on Asset Industri Teknologi di Bursa Efek Indonesia (BEI) 2019–2023,” *Jurnal Ekonomi Trend*, vol. 13, no. 1, pp. 136–148, 2025, <https://jurnaltrend.com/index.php/trend/article/view/562>