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THE EFFECT OF CURRENT RATIO, RETURN ON EQUITY, DEBT TO ASSET RATIO, INVENTORY TURNOVER, AND SALES GROWTH ON RETURN ON INVESTMENT IN RETAIL COMPANIESLISTED ON THE INDONESIAN STOCK EXCHANGE FOR THE PERIOD 2019–2024

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ABSTRACT
This study aims to analyze the impact of the Current Ratio (CR), Return on Equity (ROE), Debt to Asset Ratio (DAR), Inventory Turnover (IT), and Sales Growth (SG) on Return on Investment (ROI) for retail sector companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2024 period. The retail sector was selected because it plays a significant role in the national economy and is one of the sectors most affected by changes in consumer behavior. The research method employed a quantitative approach using purposive sampling, yielding 114 observation samples. The results of the study indicate that, individually, the Current Ratio, Inventory Turnover, and Sales Growth do not have a significant effect on Return on Investment, whereas Return on Equity and the Debt to Asset Ratio have a significant effect on Return on Investment. Simultaneously, all independent variables namely Current Ratio, Return on Equity, Debt to Asset Ratio, Inventory Turnover, and Sales Growth have a significant effect on Return on Investment. These findings indicate that profitability and financing structure play a crucial role in determining the rate of return on investment for companies in the retail sector in Indonesia.

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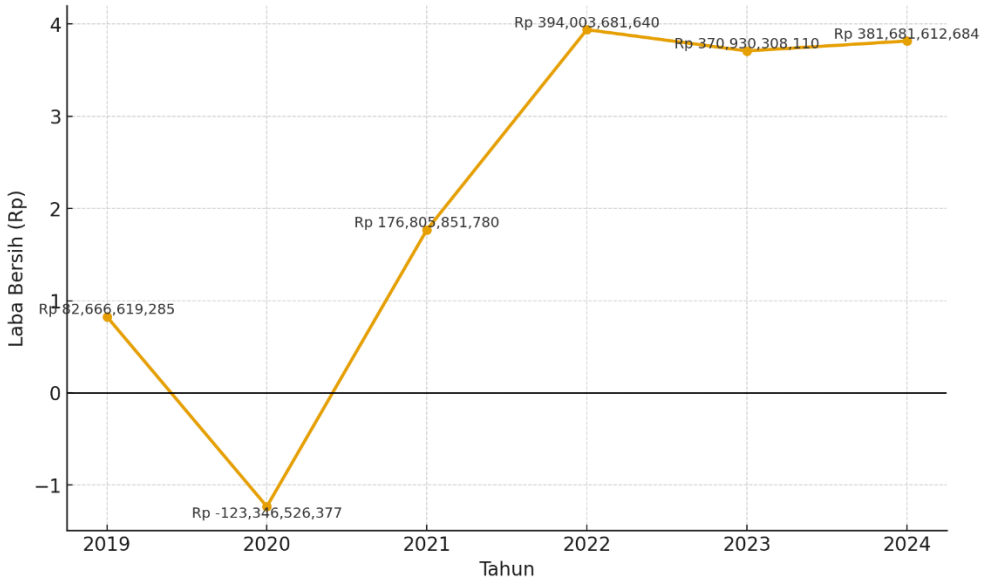
INTRODUCTION

The increasingly dynamic business environment compels companies to manage and implement corporate management processes more professionally, both internally and externally. This is due to the emergence of new competitors both domestic and international that impact companies (Kertati et al., 2023). Furthermore, the intensifying industrial competition is marked by the ease with which imported products can enter the Indonesian market, and is supported by technological advancements that facilitate production processes through to product marketing. This competitive landscape demands that companies remain competitive to avoid being outpaced by other firms (Romel, 2021).

The development of the internet has also brought many conveniences in various aspects, including the retail business. The retail sector consists of companies that sell goods or services at various outlets, such as small shops, modern markets, department stores, and others. The retail business in Indonesia is divided into two groups: modern retail and traditional retail. Modern retail is an evolution of traditional retail influenced by technological advancements and societal demands for a lifestyle that prioritizes convenience and practicality in shopping. Retail businesses are categorized by primary needs referring to stores selling essential goods and daily necessities while specialty retail is a type of retail focused on the sale of more specific products or services (Tuliabu et al., 2022). The following graph shows the fluctuations of retail industry companies listed on the Indonesia Stock Exchange during the 2019–2024 period:



Source: Primary data processed from the Indonesia Stock Exchange

Figure 1. Average Net Profit of Retail Companies Listed on the IDX

Figure 1 shows the instability of retail companies in generating profits from year to year, with their performance influencing and impacting the companies' profitability. As one of the strategic sectors in the national economy, the retail industry is crucial for measuring consumer purchasing power and economic stability. An analysis of the financial performance of retail companies listed on the Indonesia Stock Exchange (IDX) is relevant and critical for identifying the extent to which operational efficiency and management strategies can generate optimal Returns On Investment (ROI) for investors.

Based on the first quarter 2025 performance report published by kontan.co.id (April 2025), Matahari Department Store (LPPF) recorded a 97.3% increase in net profit compared to the same period the previous year. This performance was also supported by a 24.6% increase in sales to Rp4.6 trillion and an improvement in gross margin to 35.4%. However, despite the significant increase in net profit, analysis data indicates that Return on Investment (ROI) actually declined in previous years. For example, the 2021 ROI of approximately 16% fell to –14% in 2022, even though ROE remained on an upward trend. This indicates a discrepancy

between theory and reality, where the rise in net profit affecting ROE is not necessarily accompanied by an increase in ROI.

Given the ROI phenomenon described above where key indicators are used to measure the effectiveness of capital utilization in generating net profit a deep understanding is required of the various internal factors within a company that can influence ROI, particularly in the retail sector, which is characterized by rapid inventory and capital turnover. According to the findings presented by Fauzi et al., (2024), several financial ratios such as the Current Ratio (CR), Return on Equity (ROE), Debt to Asset Ratio (DAR), Inventory Turnover (IT), and Sales Growth (SG) that are considered key indicators capable of providing a comprehensive overview of liquidity, profitability, capital structure, and operational efficiency. The Sales Growth variable itself also provides an important signal regarding a company's ability to maintain and increase its sales over time, which ultimately affects the rate of return on investment (Fauzi et al., 2024).

Based on the above discussion, this study aims to analyze the extent to which these five ratios both simultaneously and individually influence ROI in retail companies in Indonesia, a topic that has not been thoroughly examined in recent years. Accurately mapping the financial factors that influence ROI is crucial for researchers as a response to the national economy, particularly since the retail sector is one of the most impacted by digital transformation and shifts in consumer behavior. Therefore, this analysis addresses an empirical need for financial data, as will be presented for retail companies listed on the Indonesia Stock Exchange, particularly for the period 2019–2024.

RESEARCH METHODOLOGY

The approach used in this study is a quantitative approach. The population for this study consists of 32 companies, and the sample size is 114. The analysis method employs multiple linear regression as the approach for data processing. To provide a comprehensive overview, classical assumption tests will be conducted to ensure the reliability of the analysis results, including tests for normality, multicollinearity, heteroscedasticity, and autocorrelation.

The relationship between variables will be assessed using the coefficient of determination to determine the extent to which the model explains the dependent variable, as indicated by the R^2 value. The hypothesis testing model is conducted using the t-test (partial) to examine the effect of each independent variable on the dependent variable, as well as the F-test (simultaneous) to determine the combined effect of the independent variables, with decision-making based on significance levels and comparisons between calculated values.

RESULTS AND DISCUSSION

Test of Classical Assumptions

Results of the Normality Test

The normality test aims to determine whether the residuals in the regression model are normally distributed. The following are the results of the normality test conducted, where:

Table 1. Normality Tests Before and After Transformation

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		114
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.05411296
Most Extreme Differences	Absolute	.165
	Positive	.165
	Negative	-.087
Test Statistic		.165
Asymp. Sig. (2-tailed)		.000[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		114
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.08785748
Most Extreme Differences	Absolute	.074
	Positive	.073
	Negative	-.074
Test Statistic		.074
Asymp. Sig. (2-tailed)		.173[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Source: Data processed using SPSS

Based on Table 1 above, it can be seen that the significance value (Asiymp.Sig (2-tailed)) after data transformation is 0.173, which is greater than 0.05. This indicates that the regression model satisfies the assumption of normality and can be used for further analysis.

Results of the Multicollinearity Test

Multicollinearity can be detected using the Variance Inflation Factor (VIF). A regression model is considered to suffer from multicollinearity if the VIF value is greater than 10; conversely, if there is no multicollinearity, the VIF value is less than 10. The results of the multicollinearity test are as follows:

Table 2. Results of the Multicollinearity Test

	Collinearity Statistics
Model	VIF
Current Ratio	3.452

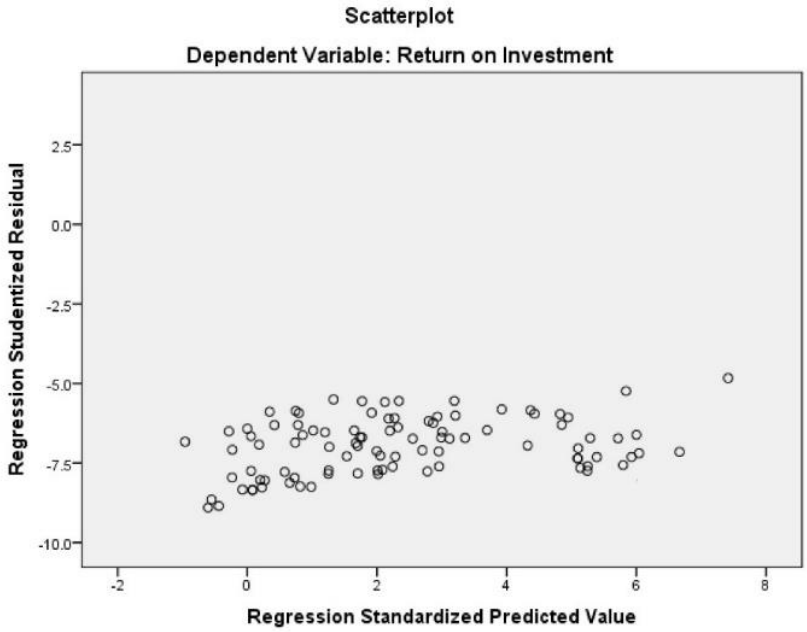
Return on Equity	1.120
Debt to Asset Ratio	3.393
Inventory Turnover	1.361
Sales Growth	1.060

Source: Data processed using SPSS

Based on Table 2, all variables namely the current ratio, return on equity, debt to asset ratio, inventory turnover, and sales growth have VIF values < 10. Therefore, it can be concluded that all variables meet the criteria and there is no multicollinearity in the model.

Results of the Heteroscedasticity Test

To determine whether or not there are signs of heteroscedasticity in a regression, we examine the following scatterplots:



Source: Data processed using SPSS

Figure 2. Scatterplot Results

Based on the scatterplot of the studentized residuals against the standard regression predictions, it can be seen that the points are randomly scattered around the horizontal zero line without forming any specific pattern. Therefore, it can be concluded that the regression model satisfies the assumption of homoscedasticity and there is no indication of a heteroscedasticity problem.

Results of the Autocorrelation Test

The autocorrelation test is a statistical procedure used to ensure that the residuals from a regression model are not correlated with one another, which could indicate problems with the model. The results are as follows:

Table 3. Autocorrelation Test Results

Model Summary[b]		dU (upper bound)	4 - dU (upper bound)
Model	Durbin-Watson	1.78	2,26
1	1.925		

Source: Data processed using SPSS

The Durbin-Watson test yielded a value of 1.925 with 114 data points and 5 (five) independent variables. This value falls between the upper bound (dU = 1.74) and 4 - dU (2.26), so it can be concluded that there is no autocorrelation in the regression model.

Results of Multiple Linear Regression Analysis

Based on the SPSS results, a multiple linear regression analysis was conducted for this study, where:

Table 4. Results of Multiple Linear Regression Analysis

1	(Constant)	0.356
	Current Ratio	-0.002
	Return on Equity	0.135
	Debt to Asset Ratio	-0.283
	Inventory Turnover	-0.008
	Sales Growth	0.086
a, Dependent Variable: Return on Investment		

Source: Data processed using SPSS

From Table 4 of the SPSS output above, the multiple linear regression equation can be interpreted as follows:

$$Y = 0.356\ \alpha - 0.002\ X1 + 0.135\ X2 - 0.283\ X3 - 0.008\ X4 + 0.086\ X5 + e$$

Based on the regression equation above, ROI is influenced by five variables, with a baseline value (constant) of 0.356 when all independent variables are zero. In summary, ROE and SG have a positive effect on ROI, meaning that an increase in either will increase ROI. Conversely, CR, DAR, and IT have a negative effect, so an increase in these variables tends to decrease ROI.

Results of Coefficient Determination

From the SPSS results, the coefficient of determination for this study is as follows:

Table 5. Coefficient of Determination Results

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std, Error of the Estimate
1	0.611	0.373	0.344	0.08987
a. Predictors: (Constant), Sales Growth, Inventory Turnover, Debt to Asset Ratio, Return on Equity, Current Ratio				
b. Dependent Variable: Return on Investment				

Source: Data processed using SPSS

Table 5 presents the results of the model summary analysis. It can be concluded that all independent variables collectively have a moderate influence on the dependent variable in this study. The Adjusted R-Square value of 0.344 indicates that approximately 34.4% of the variation in Return on Investment can be explained by these variables, while the remainder is influenced by other factors outside the scope of this study.

Results of Hypothesis Test

Partial Test (t)

Partial testing aims to determine the extent to which an independent variable influences the value of the dependent variable in a regression model. Partial testing is conducted by comparing the calculated t-value with the critical t-value. In this study, the critical t-value was calculated using the formula df = n-k-1, namely 114-5-1 = 108, which was then checked against the t-table at a significance level of 0.05, yielding a critical t-value of 1.982. The results of the partial tests are shown in the table below:

Table 6. Partial Test Results

Model		t	Sig.
1	Current Ratio	-0.082	0.934
	Return on Equity	7.079	0.000
	Debt to Asset Ratio	3.004	0.003
	Inventory Turnover	-0.863	0.390
	Sales Growth	1.647	0.102
a. Dependent Variable: Return on Investment			

Source: Data processed using SPSS

Based on the partial research findings in Table 6 the variables Current Ratio (CR), Inventory Turnover (IT), and Sales Growth (SG) do not have a significant effect on Return on Investment (ROI), as indicated by significance values greater than 0.05. However, conversely, the Return on Equity (ROE) and Debt to Asset Ratio (DAR) variables have a positive and significant effect on Return on Investment (ROI), as indicated by significance values below 0.05.

Simultaneous Test (F)

The simultaneous test aims to examine the combined effect of all independent variables on the dependent variable. In this study, the F-table value was calculated using the formula df1 = k and df2 = n - k - 1, where k = 5. This value was then checked against the F-table at a significance level of 0.05, yielding an F-table value of 2.30. The results of the simultaneous test are presented in the table below:

Table 7. Simultaneous Test Results

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.519	5	.104	12.862	.000[b]
	Residual	.872	108	.008		
	Total	1.392	113			
a. Dependent Variable: Return on Investment						
b. Predictors: (Constant), Sales Growth , Inventory Turnover , Debt to Asset Ratio , Return on Equity, Current Ratio						

Source: Data processed using SPSS

Based on the findings of the simultaneous analysis in Table 7, the significance level was found to be 0.000. It can therefore be concluded that the variables Current Ratio (CR), Return on Equity (ROE), Debt to Asset Ratio (DAR), Inventory Turnover (IT), and Sales Growth (SG) simultaneously influence Return on Investment (ROI).

DISCUSSION

The Effect of the Current Ratio on Return on Investment

Based on the results of the data analysis, the CR variable does not have a significant effect on ROI for retail companies listed on the IDX during the 2019–2024 period. This indicates that a company's liquidity level, as measured by the CR, has not been able to exert a tangible influence on the rate of return on investment. These findings align with a previous study by Kadir et al., (2024), which also found that the current ratio does not have a significant effect on ROI, as a company's ability to meet short-term obligations does not necessarily correlate directly with increased profitability.

The Effect of Return on Equity on Return on Investment

Based on the results of the data analysis, the ROE variable has a positive and significant effect on ROI in retail companies listed on the IDX. This means that the higher a company's ability to generate net profit from its own capital, the higher the rate of return on investment received by investors. These results are consistent with research conducted by Putra & Rachmawati (2022), who found that ROE has a positive effect on ROI. However, these results differ from the study by Nugroho (2020), which stated that ROE does not always have a significant effect on ROI when a company faces liquidity pressures and low capital efficiency.

The Effect of the Debt to Asset Ratio on Return on Investment

Based on the results of the data analysis, the DAR variable has a significant effect on ROI. This implies that a debt financed capital structure can enhance investment returns if the company effectively manages interest expenses and financial risks. These results align with research by Karmiyati (2024), which indicates that the proportional use of debt can increase ROI through enhanced operational activities funded by external capital. However, this contradicts the findings of Putra & Rachmawati (2022), who noted that a high debt to equity ratio can actually reduce ROI due to excessive financial risk.

The Effect of Inventory Turnover on Return on Investment

Based on the results of the data analysis, the IT variable does not have a significant effect on ROI. This implies that high or low inventory turnover rates do not necessarily influence the magnitude of a retail company's return on investment. This condition may be attributed to differing inventory policies among companies or the presence of unstable demand fluctuations in the retail sector. This study aligns with the findings of Khalik (2021), who also found that inventory turnover does not have a significant effect on ROI, as inventory management efficiency does not always lead to increased company profits.

The Effect of Sales Growth on Return on Investment

Based on the results of the data analysis, the SG variable does not have a significant effect on ROI. This indicates that an increase in sales does not necessarily have a direct impact on an increase in return on investment. High sales growth may be offset by increased operational costs, promotional expenses, or market expansion efforts that have not yet yielded optimal profits. This finding supports the research conducted by Hidayat (2021), who stated that sales growth does not always have a significant impact on a company's profitability. However, these results differ from the study by Ikayanti & Nurulrahmatiah (2022), which found a positive relationship between SG and ROI in the manufacturing sector.

The Effect of Current Ratio, Return on Equity, Debt to Asset Ratio, Inventory Turnover, and Sales Growth on Return on Investment

Based on the results of the data analysis, it is stated that the variables Current Ratio, Return on Equity, Debt to Asset Ratio, Inventory Turnover, and Sales Growth simultaneously have a significant effect on Return on Investment for retail companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2024 period. This indicates that the combination of these financial variables collectively explains the variation in changes to a company's ROI. This finding is consistent with previous research by Susanto & Dewi (2021), which stated that financial factors such as liquidity, profitability, and solvency simultaneously influence a company's investment performance.

CONCLUSIONS

Based on the results of a study involving 144 samples from retail companies listed on the IDX, it was concluded that the Current Ratio (CR) does not have a significant effect on Return on Investment (ROI) because its significance level is above 0.05; thus, liquidity levels have not been able to significantly influence investment returns. Conversely, Return on Equity (ROE) has a positive and significant effect on ROI with a significance level below 0.05, indicating that a company's ability to generate profits from its own capital can enhance investment returns. The Debt to Asset Ratio (DAR) also has a significant effect on ROI, as its significance level is below 0.05, suggesting that effective use of debt can support increased investment returns. Meanwhile, Inventory Turnover (IT) and Sales Growth (SG) do not have a significant effect on ROI because they have significance values above 0.05. However, simultaneously, all variables namely CR, ROE, DAR, IT, and SG are proven to have a significant effect on ROI with significance values below 0.05.

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