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The Influence of Return On Assets, Debt To Equity Ratio, Price Earning Ratio on Stock Returns in Manufacturing Companies listed on the Indonesia Stock Exchange for the 2017 - 2019 Period

Pengaruh Return On Assets, Debt To Equity Ratio, Price Earning Ratio terhadap Return Saham pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia Periode 2017 - 2019

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ABSTRACT
Financial reports are considered to possess informational content when their publication triggers a response in the market. Market reaction refers to investors and other market participants engaging in transactions, such as buying or selling shares, in reaction to significant decisions communicated by issuers to the market. This reaction is evidenced by fluctuations in stock prices, typically measured through stock returns. The focus of this study is on manufacturing companies listed on the Indonesian Stock Exchange. The choice of manufacturing companies is based on their prevalence among listed firms on the exchange. Notably, this study differs from previous research in that it incorporates market ratios, such as Return On Assets, Debt To Equity Ratio, Price Earning Ratio, and Stock Return variables, as control variables. Given that a substantial portion of companies listed on the Indonesian Stock Exchange are manufacturing firms, they serve as the primary research subjects. The researcher aims to explore the impact of changing independent variables on the dependent variable.
Keywords: *Return On Asset, Debt To Equity Ratio, Price Earning Ratio,*Stock Returns

1. Introduction

Financial reports document business transactions or economic activities that occurred during a specific time frame, typically expressed in numerical form. Evaluating a company's financial status and performance involves comparing these figures within the financial reports. Financial ratios, derived from these comparisons, serve as tools for assessing a company's financial health and performance. These ratios involve comparing various financial statement items to identify relevant relationships. Such comparisons may occur within a single financial report or across multiple reports.

The publication of financial reports can influence market reactions, prompting investors and other market participants to engage in transactions such as buying or selling shares in response to significant decisions made by the issuing company. This market response is typically reflected in changes in share prices, often measured using stock returns to quantify the extent of change.

This study focuses on manufacturing companies listed on the Indonesian Stock Exchange, chosen due to their prevalence among listed companies. Unlike previous research that omitted market ratios, this study incorporates market ratios such as Return On Asset, Debt To Equity Ratio, Price Earning Ratio, and Stock Return as control variables.

The researcher aims to examine the impact of independent variables on the dependent variable by altering the independent variables used for analysis. Among the manufacturing companies observed, three companies were selected for this research.

Empirical data regarding Return On Assets, Debt To Equity Ratio, Price Earning Ratio, and Stock Return variables are presented. For instance, in 2018, PT. INTP, Tbk experienced a decrease in Return on Assets by 2.3%, while Debt increased by 2%, accompanied by a 0.4% increase in Stock Market Prices and a 2.4% decrease in Stock Returns. In contrast, PT. ARNA, Tbk witnessed a 1% increase in Return on Assets in 2019, with stable Share Returns. PT. KIAS, Tbk experienced a slight increase in debt in 2018, with stable stock returns. This scenario deviates from the expected concept where Return on Assets, Debt, and Stock Prices should ideally increase in tandem.

To further explore these relationships, researchers utilized Return On Assets, Debt To Equity Ratio, Price Earning Ratio, and Stock Returns to assess their impact on Stock Returns.

2. Literature Review

Return On Asset Theory

Return On Asset (ROA) is a ratio that indicates the results (return) of utilizing company assets in generating net profit, as explained by (Herry, 2016). ROA is a ratio used to measure the ability of capital invested in all assets to generate net profits, according to (Sujarweni, 2017).

$$Return\,On\,Asset = \frac{Earning\ available\ for\ common\ stockholders\text{Earning}}{\text{Total Assets}}$$

Debt To Equity Ratio Theory

The Debt To Equity Ratio (DER) is a metric that assesses a company's capacity to meet its long-term obligations. A company is deemed insolvent if its total debt surpasses its total assets. This ratio evaluates a company's long-term solvency and primarily examines the liabilities side of the balance sheet. Various calculations can be derived, including the Total debt to total assets (DER) ratio, Debt to share capital ratio, Times Interest Earned ratio, and Fixed charges coverage ratio, as outlined by (Hanafi & Halim, 2019). The Debt to Equity Ratio (DER), also known as the Debt to Equity Ratio in Indonesian, quantifies the relationship between total debt and total equity, according to (Harahap, 2016).

$$Debt\ To\ Equity\ Ratio = \frac{\text{Current Assets}}{\text{Current Liabillities}}$$

Price Earning Ratio*Theory*

As per (Abdullah et al., 2016), the Price Earning Ratio (PER) stands out as a crucial indicator in the capital market, given its fundamental role in stock analysis. PER, commonly utilized to gauge market prices per share, is considered a fundamental measure in stock analysis. According to (Soedjatmiko, 2018), PER represents a comparison between a share's market price and its earnings per share (EPS), which reflects the profit attributable to each ordinary share.

$$Price\ Earning\ Ratios = \frac{Market\ Price\ Per\ Share}{\text{Earning Pershare}}$$

Stock Return Theory

According to (Mutia and Martaseli, 2018) the definition of stock return is the goal of investors investing in their shares, namely to get a return. According to (Wahyuningsih and Susetyo, 2020) Stock Return is the expected rate of return on shares on investments made in shares or several groups of shares through a portfolio.

$$\textbf{Stock Return} = \frac{\text{Pit} - (\text{Pit} - 1)\ x\ 100\ \%}{\text{Pit} - 1}$$

Conceptual Framework

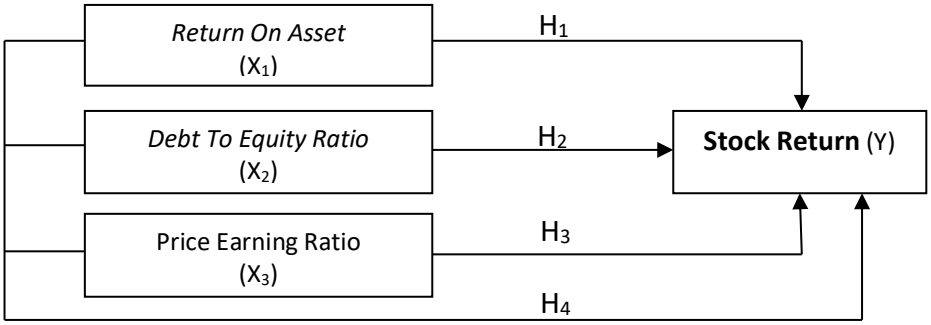

Figure 1. Conceptual Framework

Research Hypothesis

Hypothesis can also be considered a theoretical answer to the formulation of a problem, not an empirical answer. According to the explanation above, the researcher created a research hypothesis, namely:

H1 : *Return On Asset* partial effect on stock returns.

H2 : *Debt To Equity Ratio* partial effect on stock returns.

H3 : *Price Earning Ratio* partial effect on stock returns.

H4 : *Return On Asset, Debt To Equity Ratio*and*Price Earning* together they influence share prices.

3. Research Methods

Population and Sample

The research population comprised 101 manufacturing companies listed on the Indonesian Stock Exchange. These companies were chosen due to their availability and relevance to the study's objectives. Purposive Sampling was employed as the sampling technique to select a representative sample of 60 companies from the population. These selected companies were deemed suitable based on specific criteria, including financial stability, market performance, and availability of relevant data. The sample was chosen to ensure diversity and representativeness, allowing for a comprehensive analysis of the research variables.

Research Instrument

The research instrument utilized in this study included a structured questionnaire designed to collect relevant data from the selected manufacturing companies. The questionnaire was carefully developed based on established theories, previous research findings, and the specific objectives of the study. It consisted of items addressing key variables such as Return on Assets (ROA), Debt to Equity Ratio (DER), Price Earning Ratio (PER), and Stock Returns. Additionally, the questionnaire incorporated demographic questions to gather information about company characteristics and other relevant factors.

Data Analysis Technique

The data collected through the questionnaire were subjected to rigorous analysis using multiple linear regression analysis. This statistical technique was chosen to examine the relationship between the independent variables (ROA, DER, and PER) and the dependent

variable (Stock Returns). Before conducting regression analysis, the collected data underwent several classic assumption tests to ensure the validity and reliability of the results. These tests included the normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. Furthermore, the coefficient of determination (R2) was calculated to assess the goodness of fit of the regression model. Simultaneous hypothesis testing (F-test) and partial hypothesis testing (t-test) were also performed to determine the collective and individual effects of the independent variables on the dependent variable. Overall, these analytical techniques were employed to provide robust and meaningful insights into the relationship between financial indicators and stock returns in manufacturing companies listed on the Indonesian Stock Exchange.

4. Results and Discussion

Normality test

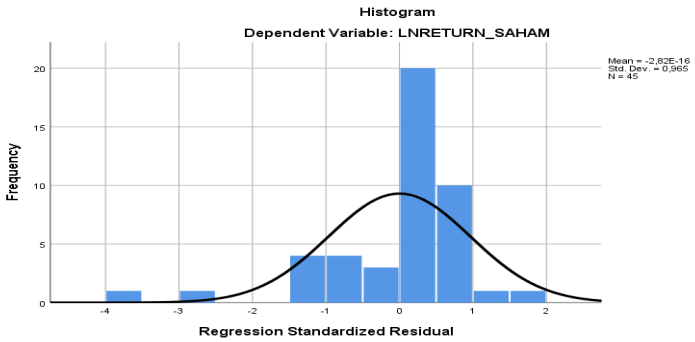

Figure 2. Normality Test Results with Histogram Graph
Source: Results of data processing using SPSS, 2021

Picture 2 shows that the line has a bell-like shape, does not deviate to the right or left. This shows that the data meets the assumptions of normality and that the distribution is normal.

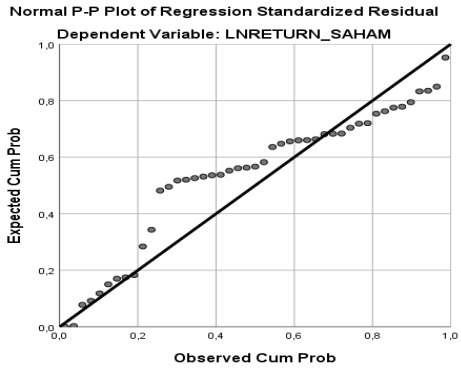

Figure 3. Normality Test Results using the Probability Plot Method
Source: Results of data processing using SPSS, 2021

Picture 3shows that the data is spread around the diagonal line and leads to the diagonal line. This proves that the data in the regression has a normal distribution.

Table 1. One-Sample KolmogrovSmirnov Normality Test Results

One-Sample KolmogorovSmirnov Test

	Unstandardized Residual
N	45

NormalParameter[a,b]	-2,2254	. 0000000
	0,95653	1. 37341816
Most ExtremeDifference	0,120	. 111
	0,059	. 111
	-0,120	-. 078
TestStatistic		0,120
AsympSig. (2tailed)		,108[c]

a. Test distribution isNormal.

b. Calculated fromdata.

c. LillieforsSignificanceCorrection.

Source: Results of data processing using SPSS, 2021

The Komolgrov-Smirnov test for the results of data processing after transformation in this study shows that Return On Assets, Debt to Equity Ratio, Price Earning Ratio and Stock Returns have a significance value of 0.108 which is greater than 0.05, so the data is normally distributed.

Multicollinearity Test

Table 2. Multicollinearity Test

Coefficients[a]

Model			Collinearity Statistics	
			Tolerance	VIF
1	(Constant)	-1,600		
	LNROA	-0,276	0,906	1,103
	LNDER	0,144	0,920	1,087
	LNPER	0,289	0,947	1,056

a. Dependent Variable: LNRETURN_SAHAM

Source: Results of data processing using SPSS, 2021

Following the transformation, the outcomes of the multicollinearity test reveal that the tolerance values for Return On Assets, Debt To Equity Ratio, and Price Earning Ratio are 0.920, which exceeds the threshold of 0.01. Meanwhile, the Variance Inflation Factor (VIF) for current ratio and return on equity stands at 1.087, which is less than 10. This indicates the absence of multicollinearity symptoms among the independent variables under investigation in this study.

Autocorrelation Test

Table 3. Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	Durbin-Watson
					R Square Change	
1	,603[a]	0,363	0,316	1,81461	0,363	1,897

a. Predictors: (Constant), LNPER,LN DER,LNROA

b. Dependent Variable: LNRETURN_SAHAM

Source: Results of data processing using SPSS, 2021

The presented findings illustrate the outcomes of the Durbin-Watson test conducted for autocorrelation assessment. The computed Durbin-Watson value from the data processing

results is 1.897. This value is juxtaposed with the critical table values, considering a significance level of 5%, alongside the number of independent variables (k=3) and the sample size (n=45). Subsequently, with the lower critical value (dL) set at 1.3832 and the upper critical value (dU) at 1.6662, it follows that dU < d < 4 - dU. Consequently, the calculated value of 1.897 falls within the range of 1.6662 < 1.897 < 2.3338, indicating the absence of autocorrelation.

Heteroscedasticity Test

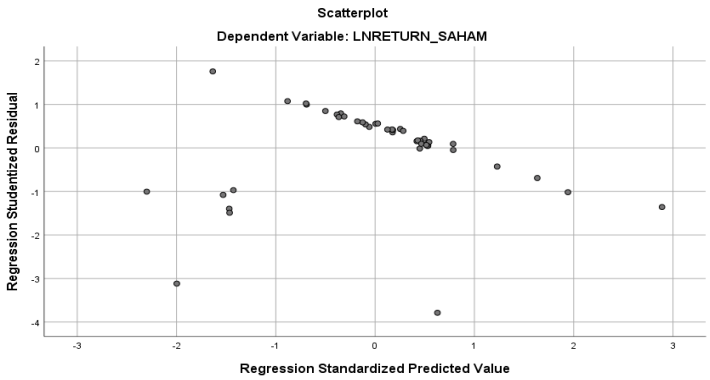

Figure 4. Heteroscedasticity Test Results

Source: Results of data processing using SPSS, 2021

Based on the illustration depicted, the scatterplot diagram indicates a random dispersion of points distributed both above and below the zero (0) mark on the Y axis. There is no clustering observed, nor does any specific pattern emerge, leading to the conclusion that heteroscedasticity is absent.

Glejser Test Results

Table 4. Glejser Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,600	0,369		-4,341	0,000
	ROA	-0276	0,104	-0,346	-2,646	0,011
	DER	0,144	0,187	0,100	0,768	0,548
	PER	0,289	0,085	0,435	3,398	0,002

a. Dependent Variable: RETURN_SAHAM

Source: Results of data processing using SPSS, 2021

The table above shows the significant values of the variables Return On Assets (0.011) > 0.05, Debt to Equity Ratio (0.548) > 0.05 and Price Earning Ratio (0.002) < 0.005, so it can be concluded that heteroscedasticity does not occur.

Research Model

Tabel 5. Multiple Linear Regression Result

Coefficients[a]

Model		Unstandardized Coefficient		Standardized Coefficient	t	Sig.	Collinearity Statistic	
		B	StdError	Beta			Tolerance	VIF
1	(Constant)	-1,600	0,369		-4,341	0,000	-1,600	0,369

	LNROA	-0276	0,104	-0,346	-2,646	0,011	-0276	0,104
	LNDER	0,144	0,187	0,100	0,768	0,548	0,144	0,187
	LNPER	0,289	0,085	0,435	3,398	0,002	0,289	0,085

a. DependentVariable: LN_Harga_Saham

Source: Results of data processing using SPSS, 2021

Return On Equity = -1,600, (-0.276 Return On Asset),(0.144 Debt To Equity Ratio),(0.289 Price Earning Ratio)

1. The constant of -1,600 states that if the independent variables are Return On Asset, Debt To Equity Ratio and Price Earning The ratio is considered constant or zero, so Return On Equity is assessed at -1,600.
2. The Return On Asset regression coefficient of -0.276 states that if Return On Assets increases by 1%, and other variables remain constant, Return On Equity will decrease by 0.276%.
3. The Debt To Equity Ratio regression coefficient of 0.144 states that if the Debt To Equity Ratio decreases by 1%, and other variables remain constant, Return On Equity will increase by 0.144%.
4. The Price Earning Ratio regression coefficient of 0.289 states that if the Price Earning Ratio decreases by 1%, and other variables remain constant, Return On Equity will increase by 0.289%.

Hypothesis Determination Coefficient

Table 6. Hypothesis Determination Coefficient Analysis Test Results

ModelSummary[b]

Model	R	RSquare	Adjusted RSquare	StdError of the Estimate	DurbinWatson
1	,497[a]	0,247	0,197	,497[a]	0,247

a. Predictor: (Constant), LN_ROA, LN_DER, LN_PER

b. DependentVariable: LN_Return_Saham

Source: Results of data processing using SPSS, 2021

From table 8, the adjusted R Square (R2) coefficient of determination is 0.247 or equal to 24.7%. This means that the ability of the Return On Asset, Debt to Equity Ratio and Price Earning Ratio variables is 19%. While the remaining 75.3%.

Simultaneous Hypothesis Testing (F Test)

Table 7. Results of Simultaneous Hypothesis Testing

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	76,948	3	25,649	7,789	,000[b]
	Residual	135,005	41	3,293		
	Total	211,952	44			

a. Dependent Variable: LNRETURN_SAHAM

b. Predictors: (Constant), LNPER, LNDER, LNROA

Source: Results of data processing using SPSS, 2021

The outcomes of the concurrent examination (F-test) revealed an F-count of 7.789 at a 95% confidence level, with α = 5%, comprising three independent variables and (n-k) = 57. Consequently, an F-table value of 2.769 was obtained. It is therefore deduced that F-count exceeds F-table (7.789 > 2.769), accompanied by a significant value of 0.000b, surpassing the threshold of 0.05. Thus, the null hypothesis (H0) is rejected, and the alternative hypothesis

(Ha) is accepted, indicating that Return On Assets, Debt To Equity Ratio, and Price Earning Ratio collectively exert a significant influence on Profitability in Manufacturing Companies Listed on the Indonesian Stock Exchange for the 2017-2019 Period.

Partial Hypothesis Testing (Uji t)

Table 8. Partial Hypothesis Testing Results

Coefficients[a]								
		Unstandardized Coefficient		Standardized Coefficient			Collinearity Statistic	
	Model	B	StdError	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-1,600	0,369		-4,341	0,000	-1,600	0,369
	LNROA	-0276	0,104	-0,346	-2,646	0,011	-0276	0,104
	LNDER	0,144	0,187	0,100	0,768	0,548	0,144	0,187
	LNPER	0,289	0,085	0,435	3,398	0,002	0,289	0,085

a. Dependent Variable: LNRETURN_SAHAM

Source: Results of data processing using SPSS, 2021

The partial results of the statistical tests are as follows:

1. According to Table IV.14, it is elucidated that the Return On Assets variable exhibits a significant value of 0.011, which is less than the threshold of 0.05. Additionally, the calculated t-value of -2.646 is less than the critical t-value of 1.67065. Consequently, the null hypothesis (H0) is accepted while the alternative hypothesis (Ha) is rejected, indicating that Return On Assets has a partial significant impact on Profitability in Manufacturing Companies Listed on the Indonesian Stock Exchange for the 2017-2019 Period.
2. Conversely, the Debt to Equity Ratio variable yields a significant value of 0.548, exceeding the threshold of 0.05. Furthermore, the calculated t-value of 0.768 is less than the critical t-value of 1.67065. Consequently, H0 is accepted, and Ha is rejected, suggesting that the Debt to Equity Ratio has no partial significant effect on Profitability in Registered Manufacturing Companies on the Indonesian Stock Exchange for the 2017-2019 period.
3. Lastly, the Price Earning Ratio variable demonstrates a significant value of 0.002, which is below the threshold of 0.05. Moreover, the calculated t-value of 3.398 is less than the critical t-value of 1.67065. Therefore, H0 is accepted, and Ha is rejected, signifying that the Price Earning Ratio has a partial significant effect on Profitability in Manufacturing Companies Listed on the Stock Exchange Indonesia for the 2017-2019 period.

5. Conclusion

The study findings reveal that Return On Assets, Debt To Equity Ratio, and Price Earning Ratio collectively exert a significant influence on stock returns within manufacturing companies listed on the Indonesia Stock Exchange during the 2017-2019 period. However, upon closer examination, it is evident that Return on Assets, Debt To Equity Ratio, and Price Earning Ratio individually exhibit no significant impact on stock returns during the same period. Despite the statistical significance observed in the collective effect, the adjusted R square value of 0.197 indicates that only 19.7% of the variance in stock returns can be explained by these independent variables, leaving the majority, 80.3%, unaccounted for and attributed to external factors beyond the scope of this study.

In light of the aforementioned limitations, several recommendations are proposed for further research endeavors. Firstly, companies, particularly those in the financial sector, are advised to diligently manage their operational costs to enhance profitability and potentially influence stock returns positively. Secondly, academic institutions are encouraged to encourage their students and faculty members to explore additional research references and juxtapose them with their findings to enrich the scholarly discourse.

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