

The Impact Of Dar, Der, Fato, And Tato On Roa In Companies Listed On Idx Health Subsector

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Abstract

This research was conducted because it saw the phenomenon and problem of an increase in profits in health sector companies when the co-19 pandemic occurred, and a decrease in profits when the co-19 pandemic receded (endemic) with the aim of analyzing and knowing how the impact of DAR, DER, FATO, and TATO affects ROA before, during, and after the co-19 pandemic occurred in health sector companies listed on the Indonesia Stock Exchange for the 2019-2022 period. Quantitative methods were used in this study. This study also involved 30 companies as a population, and 14 of them were taken as samples using purposive sampling technique. The analysis method used in this research is the Classical Assumption Test method, Multiple Linear Regression Analysis, Coefficient of Determination Analysis (R²). The data processing was carried out using SPSS version 23. The results of hypothesis testing research, namely, partial tests show that DAR, DER, and FATO have no effect and are not significant to ROA and TATO has a positive and significant effect on ROA. While the simultaneous test shows that DAR, DER, FATO, and TATO together have a significant effect on ROA.

Keywords: DAR, DER, Fixed Asset Turnover, TATO, ROA

1. Introduction

Every business strives to increase the value and wealth of its owners. Companies can maximize this by maintaining good financial performance. Good financial performance can be a measure of how well the company is doing. [1]. Companies compete to survive and be the best by generating increased profits and the value of company shares [2]. If a business makes a profit, it will positively affect the business in several ways, such as giving it the opportunity to expand the business so that it can be taken into account in stock exchange competition by potential domestic and foreign investors [3].

Companies also need to pay attention to financial reports that provide useful information in terms of decision making, evaluation and also carry out internal control. Basically, financial statements are a product of the accounting process that can serve as a medium to communicate between the activities or financial data of a company. Analytical tools such as financial ratios are needed to analyze and assess the financial position of a company.

It is necessary to be careful with the issue of solvency, activity and profitability ratios because these are very important for the smooth running of the business. So that the company does not have difficulty paying all its obligations that are due. The solvency ratio, also referred to as the leverage ratio, is a measure of how much debt is available to finance the company's assets. Activity ratios, also known as operating ratios, are used to determine how effectively a business utilizes assets to generate cash and revenue. Operating ratios can also be

used to determine how much investment is being made in assets and the resulting income. Profitability ratios show how well the company's management [4].

From previous research M.Thoyib et al., 2018 [5] shows the results of his research that both debt to equity ratio and total asset turnover have a significant effect on return on assets. Research Darminto & Fuadati, 2020 [6] found that debt to equity ratio (DER) and total asset turnover (TATO) have a significant effect on return on assets. This research discusses the efforts made by the company to obtain profits.

From previous research that has been conducted by previous researchers, it shows that there is a relevant relationship to the research being carried out, but in this study there is an update, namely adding fixed asset turnover (FATO) as an independent variable (x), and also in this study refers to companies engaged in the health sector listed on the Indonesian stock exchange by looking at issues and also phenomena that occur in the growth of health sector companies before, during, and after the covid-19 pandemic.

When the government had to implement social distancing restrictions, as a result of the covid-19 pandemic. This includes changing the company's operating system. This condition will actually have a negative impact on some businesses. However, due to the crisis, there is hope that arises in some companies that record an increase in profits. By knowing the company's financial conditions and performance, the company's financial performance before and during the covid-19 pandemic can be observed. [7].

This research was conducted looking at the problems that occurred in health companies listed on the Indonesia Stock Exchange, which experienced an increase in profits during the covid-19 pandemic, during the pandemic many medical devices and medicines were needed so that demand for supplies increased rapidly in health sector companies which meant increasing production, increasing sales and resulting in increased profits, not to mention the government providing all facilities such as budget funds to the health sector in order to help handle the covid-19 pandemic properly.

However, there are also several health sector companies that do not have a significant impact on the profits earned or do not have much effect on the company's bottom line, one of the reasons is because not all health sectors carry out the production process, some only carry out distribution, there are also many health products so that the contribution of covid-19 to the product is relatively small. The government has also appealed to the health sector not to take advantage of the covid-19 pandemic.

As for when the covid-19 pandemic began to subside, by looking at the news on the internet, companies engaged in the health sector began to experience a decline in profits, this happened because the demand for supplies of medical devices and drugs began to decrease as when the peak of the covid-19 pandemic occurred, the government also began to shrink the budget for the health sector because it had entered the endemic era, one of which was quoted from the website <https://www.trenasia.com>, namely the only sector that experienced a contraction was the health company, according to the Head of the Central Statistics Agency (BPS) in the third quarter of 2022 by minus 1.74%, unlike when the Covid-19 pandemic peaked in 2020 the health sector grew by 11.6% compared to the previous year.

This study aims to analyze and determine the impact of Debt to Assets Ratio (DAR), Debt to Equity Ratio (DER), Fixed Asset Turnover (FATO), and Total Asset Turnover

(TATO) on Return on Asset (ROA) of health sector companies listed on the Indonesia Stock Exchange during the 2019-2022 period before, during, and after the covid-19 pandemic occurred.

2. Methodology

Type of Research

This research uses a quantitative approach to understand how dependent variables and independent variables impact each other. Quantitative data on the other hand is research data consisting of numbers that will be analyzed using statistical data to test the hypothesis that has been made.

Population and Sample

This study uses 30 companies in the health sector listed on the Indonesia Stock Exchange as a population and takes 14 companies with purposive sampling technique where this is part of nonprobability sampling, which meets the criteria to be taken as a sample. The sample criteria in this study are:

1. Companies engaged in the health sector and listed on the official website of the Indonesia Stock Exchange (IDX) for the 2019-2022 period.
2. Companies engaged in the health sector and have published their annual financial report data from 2019-2022 in full (have financial reports up to quarter 4) on the official website of the Indonesia Stock Exchange (IDX).

From the research sample criteria above, 6 companies were selected that met these criteria, namely: PT Hetzer Medical Indonesia Tbk (MEDS), PT Prodia Widyahusada Tbk (PRDA), PT Kimia Farma Tbk (KAEF), PT Sarana Meditama Metropolitan Tbk (SAME), PT Darya Varia Laboratoria Tbk (DVLA), PT Mitra Keluarga Karya Sehat Tbk (MIKA), PT Pyridam Farma Tbk (PYFA), PT Kalbe Farma Tbk (KLBF), PT Merck Indonesia Tbk (MERK), PT Indofarma Tbk (INAF), PT Organon Pharma Indonesia Tbk (SCPI), PT Siloam International Hospitals Tbk (SILO), PT Sejahteraraya Anugrahjaya Tbk (SRAJ), PT Itama Ranoraya Tbk (IRRA). And the amount of data observed in this study comes from the financial statements of 14 companies, namely for 4 years starting from 2019-2022, $14 \times 4 = 56$, so the sample data used amounted to 56 data.

Data Collection Sources and Methods

This research data comes from secondary data taken from the financial statements of companies engaged in the health sector found on the official website of the Indonesia Stock Exchange (IDX) during the 2019-2022 period. The data collection method of this study also uses documentation techniques by downloading company financial reports from the official website of the IDX and issuers. www.kontan.co.id

Variable Operationalization

This study uses 5 research variables, namely, 4 variables are DAR (X1), DER (X2), FATO (X3) and TATO (X4) as independent variables with the X mark, and 1 variable is ROA (Y) as the dependent variable with the Y mark.

Data Analysis Method

The data analysis method uses Classical Assumption Test analysis, Multiple Linear Regression Analysis, Coefficient of Determination Analysis (R^2), Hypothesis Testing consists of Partial Effect Test (t) and Simultaneous Effect Test (F).

Table I. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		56
Normal Parameters ^{a,b}	Mean	-.0280561
	Std. Deviation	.14711261
MostExtreme Differences	Absolute	.103
	Positive	.103
	Negative	-.095
Test Statistic		.103
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

3. Result and Discussion

Result

Classical Assumption Test Results

Normality Test

Normality testing using the One Sample Kolmogorov- Smirnov Test (K-S) nonparametric statistical test.

From the results of the normality test in table I. above, it can be seen that the significant value is $0.200 > 0.05$, which means it can be concluded that the data tested in this study can be said to be normally distributed.

Multicollinearity Test

The multicollinearity test aims to ascertain whether the independent variables have a correlation in the regression model.

Table II. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.113	.058		-1.956	.056
DAR	.001	.124	.001	.007	.995
DER	-.021	.011	-.254	-1.900	.063
FATO	-.002	.005	-.046	-.405	.688
TATO	.258	.045	.652	5.697	.000

a. Dependent Variable: ROA

Source: spss 23 output results

Multicollinearity in the regression model can be assessed by the tolerance value and Variance Inflation Factor (VIF). The tolerance value should be > 0.10 or equal to the VIF value < 10 . The multicollinearity test results, as shown in table II. above, indicate that the tolerance value is more than 0.10 and the VIF value is less than 10. Therefore, these results indicate that there is no or passes the multicollinearity test.

Heteroscedasticity Test

The heteroscedasticity test aims to determine whether the regression model causes differences in the residual variance between one observation and another.

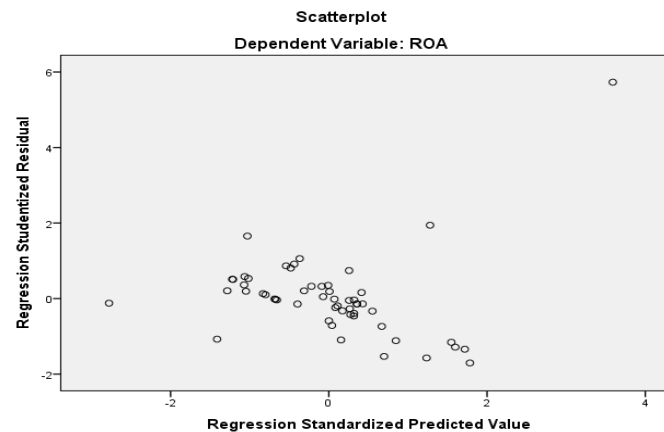


Figure I. Scatterplot

Source: spss 23 output results

From figure I. it is concluded that there are no symptoms of heteroscedasticity, so the regression model is good and meets the criteria in conducting the next test.

Autocorrelation Test

In the autocorrelation test with the aim of determining whether there is a correlation between confounding errors in period t and errors in the previous period $t-1$. In addition, the Durbin-Watson test can be used to determine whether there is autocorrelation in a linear regression model.

Table III. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.698 ^a	.487	.446	.14212	2.032

a. Predictors: (Constant), TATO, DAR, FATO, DER

b. Dependent Variable: ROA

Source: spss 23 output results

It can be seen in the DW table above with a 5% error rate, 4 independent variables and $n = 56$ observations, the lower limit result with the table value (dl) = 1.420 and the upper limit with the value (du) = 1.725, then the value of $4-du = 2.275$. That way in this study it is known that the DW value is $du < d < 4-du$ or is between $1.725 < 2.032 < 2.275$, and it can be concluded that the regression equation model in this study does not have autocorrelation problems.

Multiple Linear Regression Analysis

One of the objectives of the multiple linear regression test is to determine the strength of the relationship between two or more variables. In addition, this test shows how the dependent variable and the independent variable interact with each other.

Table IV. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
11 (Constant)	-.113	.058		-1.956	.056
DAR	.001	.124	.001	.007	.995
DER	-.021	.011	-.254	-1.900	.063
FATO	-.002	.005	-.046	-.405	.688
TATO	.258	.045	.652	5.697	.000

a. Dependent Variable: ROA

Source: spss 23 output results

From table IV. the regression equation model that can be written in the form of an Unstandardized regression equation is as follows:

$$Y = -0.113 + 0.001X_1 - 0.021 X_2 - 0.002 X_3 + 0.258 X_4$$

1. At the constant value obtained of 0.113 states that if the independent variable DAR (X_1), DER (X_2), FATO (X_3), and TATO (X_4) is worth 0, so the dependent variable ROA (Y) is negative 0.113.
2. In the regression coefficient value of the independent variable DAR (X_1) is positive, which is equal to 0.001, it means that if the independent variable DAR (X_1) has increased by 1%, the dependent variable ROA (Y) will also increase by 0.001 and vice versa, assuming that the other independent variables are considered constant. Model Summary
Model R R Square Adjusted R Square Std. Error of the Estimate Durbin-Watson 1 .698a .487 .446 .14212 2.032 a. Predictors: (Constant), TATO, DAR, FATO, DER b. Dependent Variable: ROA
3. In the regression coefficient value of the independent variable DER (X_2) is negative, which is equal to 0.021, it means that if the independent variable DER (X_2) has increased by 1%, the dependent variable ROA (Y) will decrease by 0.021 and vice versa, assuming that the other independent variables are considered constant.
4. In the regression coefficient value of the independent variable FATO (X_3) is negative, which is equal to 0.002, it means that if the independent variable FATO (X_3) has increased by 1%, the dependent variable ROA (Y) will decrease by 0.002 and vice versa, assuming that the other independent variables are considered constant.
5. In the regression coefficient value of the independent variable TATO (X_4) is positive, which is equal to 0.258, it means that if the independent variable TATO (X_4) has increased by 1%, the dependent variable ROA (Y) will also increase by 0.258 and vice versa, assuming that the other independent variables are considered constant.

Coefficient of Determination Analysis (R^2)

The purpose of the coefficient of determination (R^2) test is to determine how far the independent variables DAR, DER, FATO, and TATO can explain the variation in the dependent variable ROA.

Table V. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.698 ^a	.487	.446	.14212

a. Predictors: (Constant), TATO, DAR, FATO, DER

Source: spss 23 output results

Table.V shows that the coefficient of determination R^2 is 0.446, which indicates that the independent variables DAR, DER, FATO, and TATO have an influence of 44.6%. Other variables not included in this study have an influence of 55.4%.

Partial Effect Test (t)

The partial effect test or t-test is used to test the effect of each independent variable on the dependent variable partially.

Table VI. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 1 (Constant)	-.113	.058		-1.956	.056
DAR	.001	.124	.001	.007	.995
DER	-.021	.011	-.254	-1.900	.063
FATO	-.002	.005	-.046	-.405	.688
TATO	.258	.045	.652	5.697	.000

a. Dependent Variable: ROA

Source: spss 23 output results

From table.VI above shows the results of how the influence between each independent variable DAR, DER, FATO, and TATO on the dependent variable ROA, which is as follows: It is known that the t test results of the independent variable DAR on the dependent variable ROA explain the value of t count $0.007 < t$ table 2.00856 and has a significance value of $0.995 > 0.05$. The independent variable DER on the dependent variable ROA explains the value of t count $-1.900 < t$ table 2.00856 and has a significance value of $0.063 > 0.05$. The independent variable FATO on the dependent variable ROA explains the value of t count $-0.405 < t$ table 2.00856 and has a significance value of $0.688 > 0.05$, the conclusion is that the independent variables DAR, DER, and FATO have no significant effect on the dependent variable ROA (hypothesis rejected). While the independent variable TATO on the dependent variable ROA explains the value of t count $5.697 > t$ table 2.00856 and has a significance value of $0.000 < 0.05$, the conclusion is that the independent variable TATO has a positive and significant effect on the dependent variable ROA (hypothesis accepted).

Simultaneous Effect Test (F)

The F test is a regression relationship test carried out simultaneously in order to determine whether all independent variables DAR, DER, FATO, and TATO together have a significant influence on the dependent variable ROA.

According to the results shown in table VII, the independent variables DAR, DER, FATO, and TATO have a significant influence on the dependent variable ROA as a whole. This is evidenced by the fact that the value of F count $>$ F table which is $11.863 > 2.55$ and has a probability value (sig) of $0.000 < 0.05$, this indicates that the independent variables DAR, DER, FATO, and TATO have a significant influence on the dependent variable ROA (hypothesis accepted).

Discussion

The Effect of Debt To Asset Ratio (DAR) on Return On Asset (ROA)

Partial test results (t test), DAR has no influence and is not significant to ROA because the company uses more debt as a source of funding to run its operations. Therefore, high DAR has a negative impact on the company, namely reducing the profit or profit earned by the company due to the loan interest expense that must be paid by the company. Therefore, high DAR actually reduces profits. The research results obtained are not in line with the theory of Darsono and Ashari 2014: 55 [8] saying that DAR shows that if the debt ratio is high, the amount of borrowed capital will be increasingly used in obtaining profits for the business. The research is in line with Zulkarnaen's research, 2018 [9] stated that the results of the partial test (t test) DAR had no effect and was also insignificant to ROA.

The Effect of Debt To Equity Ratio (DER) on Return On Asset (ROA)

The partial test results (t test) show that DER has no influence and is not significant to ROA. Because when viewed from the company's financial data from 2019-2022, almost the average DER value in each health sector company shows a good DER value or debt is smaller than its equity, this shows that health sector companies use a lot of capital to cover their obligations. So that it will affect reduced profits. Which means that the research results obtained are in line with Sitanggang's theory [10], which says that DER serves to calculate the relative contribution of long-term debt and equity in the company's capital structure. The research is in line with Supriyadi & Yuliani's research, 2015 [11] which shows the partial test results (t test) that DER has no influence and is also insignificant to ROA.

The Effect of Fixed Assets TurnOver (FATO) on Return On Asset (ROA)

Partial test results (t test) show that FATO has no effect and is not significant to ROA. Because this health sector company before, during, and after the co-19 pandemic in its business management has not been maximized or has not utilized its fixed assets to generate income, and also other ratios have more influence on return on assets than fixed asset turnover, so companies do not need to be so afraid of their fixed asset turnover. The results of the research obtained are not in line with the theory of Hery 2016 [12] FATO is a ratio that explains how the contribution of assets to generate net income, or the greater the return on assets, the greater the net profit generated by each rupiah of funds put into total assets, and vice versa, if the return on assets is lower, the less net profit will be generated by each rupiah of funds put into total assets. The research is in line with the research of Erlian & Tambun,

2019 [13] explains the partial test results (t test) that FATO has no influence and is also insignificant to ROA.

The Effect of Total Asset TurnOver (TATO) on Return On Asset (ROA)

The partial test results (t test) show that TATO has a positive and significant effect on ROA. Where this indicates that TATO is directly proportional to ROA, which means that any increase that occurs in TATO will also experience ROA. This positive directional effect shows that increasing asset turnover also has an impact on increasing profits. This indicates that the management of health sector companies in the 2019-2022 period, where this period is the period before, during, and after the covid-19 pandemic in terms of managing their assets, is good enough to be able to generate income from a number of assets owned by the company, which in turn will result in an increase in the profit ratio ROA. which means this research is in line with the theory of Pongrangga, R. A 2015: 4 [14] says that the amount of profit generated is positively correlated with the speed of asset turnover. The research is in line with the research of Pangestika et al., 2021 [15] which shows the partial test results (t test) that TATO has a positive and significant effect on ROA.

4. Conclusion

The purpose of this study was to determine how the impact of Debt to Assets Ratio (DAR), Debt to Equity Ratio (DER), Fixed Asset Turnover (FATO), and Total Asset Turnover (TATO) affects Return on Asset (ROA) before, during, and after the covid-19 pandemic occurred, in companies engaged in the health sector listed on the Indonesia Stock Exchange during the 2019-2022 period. The research results obtained are concluded as follows: From the partial test results (T test) states: DAR, DER, and FATO have no effect and are not significant to ROA, and TATO has a positive and significant effect on ROA. From the simultaneous test results (F test) states that the DAR, DER, FATO, and TATO variables together have a significant effect on ROA.

From the research that has been done, based on the results of the analysis and conclusions in this research, the researcher provides several suggestions, namely as follows:

1. For companies seen from the results of this study which shows Total Asset Turnover (TATO) has a positive and significant effect, therefore companies are advised to optimize asset management properly to generate greater profits. The company must also pay attention to other financial ratios by looking at factors that can affect the size or size of the Return On Asset (ROA) in the company.
2. Only the TATO variable has a positive influence, so investors and potential investors should pay attention to this variable. The results of this study can be used as a reference for making decisions before investing in health sector companies listed on the IDX.
3. For future researchers, it is recommended to expand this research and include more variables that affect the company's ROA. In addition, it is recommended to look for other industries listed on the IDX and expand the research period.

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