(RESEARCH ARTICLE)

Profit growth of technology sector companies after the COVID-19 pandemic in Indonesia

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Abstract

The profit growth of technology sector companies in Indonesia is supported by stable economic growth, an increase in the number of internet and smartphone users, as well as the rising penetration of e-commerce in Indonesia. The ability of companies to address challenges and adapt to market changes is crucial in determining the profit development of technology sector companies. This research aims to examine the relationship between financial ratios and company profit growth. Specifically, the study aims to investigate the impact of Profitability Ratios (net profit margin and return on assets) and Activity Ratio (total asset turnover) on technology companies listed on the Indonesia Stock Exchange. The research period used is during the COVID-19 pandemic, from 2020 to 2023. The study employs Multiple Linear Regression analysis with a significance level of 5%. The results indicate that Profitability Ratios (net profit margin and return on assets) have a positive and significant influence on profit growth. On the other hand, the Activity Ratio (total asset turnover) has a positive but not significant impact on profit growth.

Keywords: Activity Ratio; Profitability Ratio; Profit Growth; Total Asset Turnover

1. Introduction

Many large and small technology companies have emerged and grown in Indonesia, many of which have achieved tremendous success. This makes the development and growth of technology companies in Indonesia over the past few years can be said to have been very rapid. Indonesia's population of more than 270 million, including 170 million internet users, makes it one of the largest technology markets in the world. When compared to other countries after China, India, and the United States, Indonesia is the fourth largest internet user in the world. Although the technology market in Indonesia is growing rapidly, there are still several challenges faced. Among them are technology infrastructure that still needs to be improved, limited access to funding, and a lack of skilled labour in the technology field. Tech start-ups in Indonesia also face issues such as lack of access to capital, lack of talent, and unclear government regulations.

The rapid development of the technology sector also indirectly affects other sectors such as the financial sector. Many tech companies in Indonesia have also experienced employee layoffs due to over hiring. Although some companies experienced losses in certain periods, in general, technology sector companies in Indonesia showed growth. This growth data was taken before the covid-19 pandemic. For example, Gojek reported consolidated revenue of USD 2.8 billion in 2020, an increase of 10.8% over the previous year. Meanwhile, Tokopedia experienced significant profit growth in the last three years, increasing net profit by 88% from 2017 to 2019. Unfortunately, this positive profit growth could not last longer due to the covid-19 pandemic. However, if the company can overcome these problems properly, for example by developing new technological solutions or finding ways to take advantage of opportunities in the market, then the company can grow more rapidly and increase the company's financial gain. Therefore, the company's ability to

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overcome problems and adjust to changes in the market is very important in determining the development of technology sector companies' profits.

Seeing the rapid development of technology sector companies in Indonesia coupled with the emergence of the covid-19 pandemic, research was conducted to determine the correlation between profit growth and financial ratios. The existence of the covid-19 pandemic which also has an impact on technology sector companies is interesting to be re-examined. The correlation between profit growth and financial ratios can be seen specifically through the influence of the variables net profit margin, return on assets and total asset turnover as financial ratios on the profit growth of technology companies listed on the Indonesia Stock Exchange in 2020-2023. It is hoped that the results of this study will be useful for investors to provide consideration in deciding to invest in the company.

2. Literature review and hypothesis development

The higher the NPM, it can be said that the net profit the company earns from sales activities is also getting bigger. The amount of net profit earned indicates that the company has more opportunities to increase operating capital without having to take on new debt. This is what results in increased revenue. (Harahap, 2011).

H1: NPM partially has a significant positive effect on profit growth.

The increasing value of return on assets (ROA) indicates that the company has increased net profit. The higher the net profit means that the company has a greater opportunity to increase the company's operating capital without taking on new debt, so that in the end it will increase the revenue earned.

H2: ROA partially has a significant positive effect on profit growth.

Total asset turnover or also known as TATO. This activity ratio is used by companies to show how effective the use of all the company's assets is to generate sales. The TATO ratio is said to increase if the company can generate more sales by investing fewer assets, this will indirectly increase the company's revenue.

H3: TATO partially has a significant positive effect on profit growth.

3. Methods

This research takes place on the Indonesia Stock Exchange. The data in this study are time series data for three years, namely 2020-2022. As a quantitative descriptive study, the purpose of this study is to provide a description or description of a particular phenomenon or situation using quantitatively measured data. This study uses a population, namely companies from the technology sector listed on the Indonesia Stock Exchange. Furthermore, the sample of this study was determined using purposive sampling method. The criteria are determined as follows:

- Technology sector company listed on the Indonesia Stock Exchange for the period 2020-2022.
- Company that publishes financial reports for the period 2020-2022.
- Company whose financial statements use currency units in the form of rupiah.
- As a research sample, 15 companies were obtained from the criteria determined above.
- The data analysis used in this study is multiple linear regression. Testing the effect of financial ratios on the profit growth of technology sector companies in Indonesia using multiple linear regression analysis.

4. Result and discussion

4.1. Classical Assumption Test

4.1.1. Normality Test

To know whether the residual value is normally distributed or not, it is necessary to do a normality test. If the residuals are normally distributed, then the normality test can be said to be good. Based on the multiple linear regression output, the following histogram can be displayed:
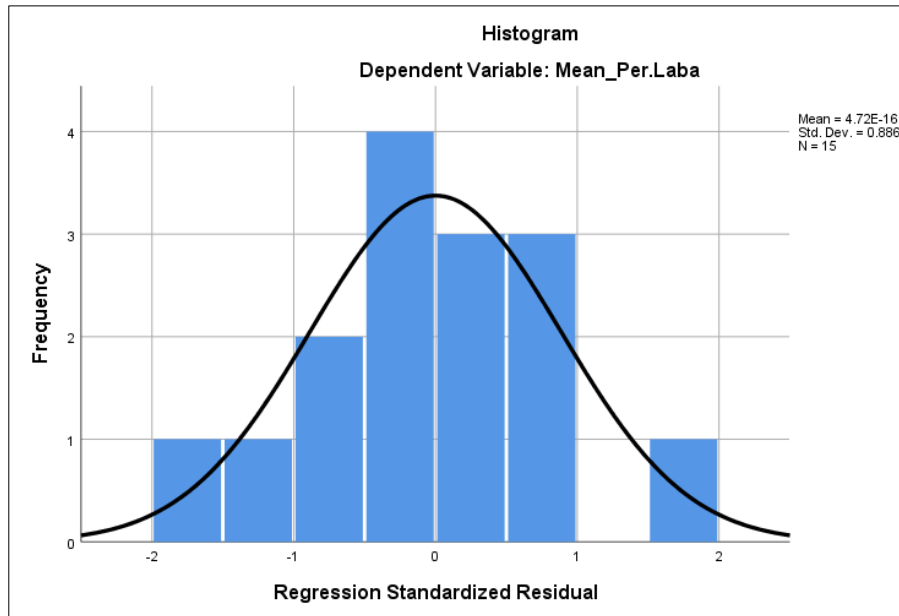
Figure 1 Normality Test Results

The regression residuals are spread close to normal, as shown by the histogram above.

4.1.2. Multicollinearity Test

Multicollinearity testing is carried out to identify whether there is a significant correlation or relationship between the independent variables used in the multiple regression model. The following table shows the previous multiple linear regression output:

Table 1 Multicollinearity Test Result

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	NPM	0.488	2.050
	GPM	0.532	1.879
	TATO	0.868	1.153

Secondary Data, 2023

The table above shows that the VIF coefficient ranges from 1.153 to 2.050 < 10 and the tolerance value > 0.10. These results can state that the regression equation obtained is free from multicollinearity.

4.1.3. Heteroscedasticity Test

To find out the inequality of variance between residuals from one observation to another can be through heteroscedasticity testing. If the regression model meets the requirements, the residual variance of one observation with other observations is vertically the same, this is called homoscedasticity. Based on the multiple linear regression output, the following graph can be displayed:
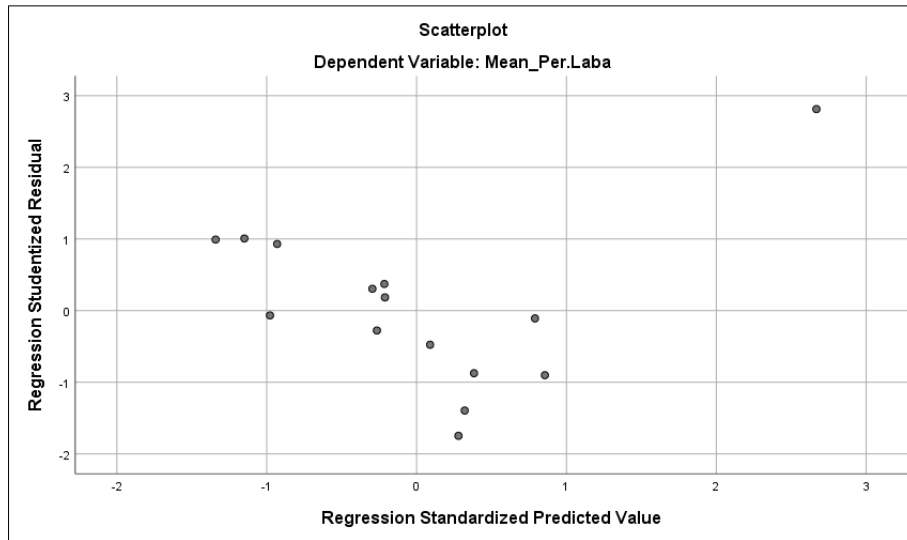
Figure 1 Heteroscedasticity Test

The results above show that the points spread to the right and left of the number 0, and above and below the number 0, are not patterned. This means that the regression equation does not have a heteroscedasticity problem.

4.1.4. Autocorrelation Test

The autocorrelation test is simply carried out to test the effect of the independent variable on the dependent variable, to ensure that there cannot be a correlation between the current data and the data seen previously.

Table 2 Autocorrelation Test Results

Model Summary[b]				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	0.920[a]	0.846	0.804	1.050471579443	1.849
a. Predictors: (Constant), Mean_TATO, Mean_ROA, Mean_NPM					
b. Dependent Variable: Mean_Per.Laba					

Primary Data, 2023

In the table above, the DW coefficient = -2 < 1.941 < 2 means there is no autocorrelation in the regression equation.

4.1.5. Model Feasibility Test (F Test)

Table 3 Model Feasibility Test Results (F Test)

ANOVA[a]					
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	66.557	3	22.186	20.105	0.000[b]
	Residual	12.138	11	1.103		
	Total	78.696	14			
a. Dependent Variable: Per.Laba						
b. Predictors: (Constant), TATO, ROA, NPM						

The feasibility of the regression model as a tool in testing the effect of independent variables simultaneously on the dependent variable can be determined by conducting the F test. The above are the results of the model feasibility test.

The table above shows that the significance level of the F test = 0.000 <0.05. These results indicate that the independent variables in this study consisting of net profit margin, total asset turnover, and return on assets simultaneously affect the profit growth of technology companies. Based on the results shown, the research model may need to be continued to the next analysis.

4.1.6. Multiple Linear Regression Analysis

After the classical assumption test is carried out, then perform multiple linear regression analysis. This analysis is carried out with the aim of testing whether the Profitability Ratio variable and the Activity Ratio variable have an influence on the profit growth of Technology Sector Companies in Indonesia.

Table 4 Multiple Linear Regression Analysis Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.765	0.518		1.476	0.168
	Mean_NPM	13.081	4.601	0.482	2.843	0.016
	Mean_ROA	38.273	5.333	1.165	7.176	0.000
	Mean_TATO	-0.090	0.129	0.089	.698	0.500

Primary Data, 2023

Based on Table 4, multiple linear regression analysis obtained results with the following equation:

$$Y = 0{,}765 + 13{,}081X_1 + 38{,}273X_2 - 0{,}090X_3 + \varepsilon$$

α = 0.765 means that if all Net Profit Margin (X1), Return on Asset (X2), and Total Asset to Turnover (X3) variables are declared to be zero (0), then there is a Profit Growth (Y) of 0.765 units.
β1 = 13.081 on the Net Profit Margin variable means that if the other variables are constant while Net Profit Margin (X1) increases by 1 unit, then Profit Growth (Y) increases by 13.081%.
B2 = 38.273 in the Retun on Asset variable means that if other variables are constant while Retun on Asset (X2) increases by 1 unit, then Profit Growth (Y) will increase or increase by 38.273%.
B2 = 0.090 on the Total Asset to Turnover variable means that if other variables are constant while Total Asset to Turnover (X3) increases by 1 unit, then Profit Growth (Y) will increase by 0.09%.

The results show that independent variables such as net profit margin, return on assets, and total asset turnover affect the profit growth of technology companies. This condition indicates that the research model should be continued in the next analysis. Based on these results, it can also be said that the factors that determine how much profit growth of companies engaged in the technology sector on the Indonesia Stock Exchange include net profit margin, return on assets, and total asset turn over. The results of obtaining the correlation coefficient obtained a result of 84.6%. These results explain that the variables in this study have a strong correlation with profit growth.

4.1.7. Net Profit Margin on Profit Growth

The first hypothesis (H1) is accepted because the net profit margin variable has a significance value of 0.016 which is smaller when compared to the real level of 0.05. This means that the net profit margin variable has a positive and significant impact on profit growth. Conceptually, net profit margin is a measure of profit margin on sales. A higher level of net profit margin is considered as the company's ability to earn a large enough profit and has a positive effect on profit growth. Meanwhile, a lower level of net profit margin is considered as the company's ability to earn profits is quite low.

4.1.8. Return on Assets on Profit Growth

Testing the second hypothesis (H2) shows that return on assets affects profit growth significantly and positively. This shows that the higher the return on assets value of a company, the higher the profit growth of the company. A low level of return on assets will result in low profits. This also means that if the level of return on assets is high, it can be said that the company's asset management is efficient and successful in generating high profits.

4.1.9. Total Asset Turnover on Profit Growth

The results of testing the third hypothesis (H3) that total asset turnover has an influence on profit growth are not significant. However, the test results can show that if the higher the total asset turnover value, it can be said that the company's ability is getting better at managing its wealth to increase sales and make more money.

5. Conclusion

Based on the results of the research conducted, several things can be explained as follows: 1) The test results show that the independent variables consisting of net profit margin, return on assets, and total asset turnover affect the profit growth of companies included in the technology industry. This condition indicates that the research model should be continued in the next analysis. The correlation coefficient supports this result. This indicates that there is a strong correlation between the variables used in this study and profit growth. 2) Further testing shows that net profit margin has a significant positive impact on profit growth. The magnitude of the net profit margin value shows that sales activities cause the company to earn more net profit. This profit achievement gives investors a better understanding of the performance of technology sector companies, so they can expect the highest possible return on capital. Due to increased profit growth. 3) Further testing also shows that return on assets has a significant positive effect on profit growth. The higher the level of return on assets of a company, the higher its profit growth. Conversely, a low return on assets results in lower profits. 4) The last test can be seen that total asset turnover has a positive but insignificant effect on profit growth.

There are several suggestions that can be conveyed from this research, including: 1) It is hoped that the company can reduce unnecessary operational costs in order to increase profits as expected and increase the rate of profit growth. 2) Companies are expected to consider the utilization and management of all existing resources entrusted to them in order to increase business growth, and companies can also consider the level of risk associated with business development. 3) The company should conduct regular performance evaluations and assessments so that it can find out whether its performance is increasing or decreasing. By conducting an evaluation, the company can also find out the causes of its performance increasing or decreasing. Later the results of this evaluation can assist the company in making the right policies to achieve optimal profits in the future. 4) For future researchers, it is hoped that they can increase the number of samples and extend the research period.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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