

## **The Effect of Liquidity and Total Asset Turnover on Profitability: Research Study n Pharmaceutical Companies in Indonesia Stock Exchange**

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**Abstract.** *Management companies will seize opportunities in order to improve financial performance. To measure the financial performance it will need the tool to measure it. Profitability ratio is a ratio to assess the company's ability to seek profit. And in this research it stated that liquidity and total asset turnover can affected profitability. The population of this study uses data from pharmaceutical companies listed on the Indonesia Stock Exchange in 2015-2019. So, it has 9 companies according to the given category. In total there are 45 samples used in this research. The result of this research are that liquidity has a negative effect on profitability, and so the total assets turnover on profitability. Simultaneously, liquidity and total asset turnover have a significant negative relationship to profitability.*

**Keywords :** *Liquidity; Total assets turnover; Profitability*

### **Intoduction**

Management companies will seize opportunities in order to improve financial performance. One part of the company's financial performance is a healthy level of profitability of the company higher than the cost of capital and the company's ability to settle short-term obligations. In addition, the company's management can use its assets to increase sales on an ongoing basis. This will lead to a positive sentiment for economic growth. The ultimate goal to be achieved is the important thing, namely to get the maximum profit. By obtaining maximum profits on target, companies can do much for the welfare of their owners, employees, as well as improve product quality and make new investments. Therefore, management in practice is required to be able to meet the targets that have been set. This means that the amount of profit must be achieved as expected. To measure the level of company profits using profit ratios or profitability ratios (Kasmir, 2015).

Profitability ratio is a ratio to assess the company's ability to seek profit. This is indicated by the profit generated from sales and investment income, which basically uses this ratio to show the efficiency of the company. The pharmaceutical industry is facing a moderate raised condition where the demand for pharmaceutical products related to the handling of Covid-19 has increased significantly, but on the other hand, the demand for products that are not directly related to Covid-19 has not experienced growth or has decreased. The Ministry of Industry projects that the non-oil and gas processing industry will grow by 3.95 percent in 2021. The use of profitability ratios can be done by using comparisons between various components in the financial statements, especially the income statement and balance sheet statements. Basically, net income is very dependent on the amount of sales, where the larger the net sales, the greater the net profit generated. The company's ability to pay short-term obligations in this case needs to be maintained so as not to interfere with the good relations that have been established. There are two assessments in measuring the liquidity ratio, namely if the company is able to fulfill its obligations, in other words the company is in an illiquid state, otherwise if the company cannot fulfill its obligations then the company is in a liquid state (Kasmir, 2015: 130). One measurement is to use the cash liquidity ratio.

This ratio describes the company's ability to generate profits, which is also called the operating ratio (Brigham and Ehrhard, 2010). Total Asset Turnover (TATO) is the total asset cycle speed in a certain period of time. The Total Assets Turnover ratio measures how many sales each rupiah asset can make, total assets, asset turnover and activity in measuring the company's ability to earn profits through its capabilities and resources. To measure this ratio, it is obtained to compare net sales with total assets.

### **Literatur Review**

#### **Liquidity**

One of the ratios to measure liquidity is using the cash ratio. The cash ratio is a tool used to measure how much cash is available to pay debts. Irwadi and Choiruddin (2015), stated that liquidity is a description of the company's ability to meet its short-term obligations in a timely manner. Martono and Harjito (2010: 53) describe the liquidity ratio, which is a ratio that shows the relationship between the company and cash and other current assets with debt. The liquidity ratio is used to measure the company's ability to meet financial obligations that must be met or

short-term obligations. Further explanation, the liquidity ratio is a ratio that describes the company's capability to meet short-term obligations that must be due immediately.

### ***Total Assets Turnover (TATO)***

Prihadi (2012: 162) explains that the total asset turnover ratio is to determine the effectiveness of the company's use of operating assets in generating sales, when the company produces fewer sales of the same asset, it means that the company is more effective, because it requires a lower level of investment, the more a company is effectively using its assets, the less of it needs to be in the company. In the end when the asset is used less than the cost of using the asset (cost of capital) will increase slightly and so profitability will increase. Total asset turnover is the ratio used to measure the turnover of all assets owned by the company and measure how many sales are obtained from each rupiah of assets (Kasmir, 2015: 185). The results of previous studies show that liquidity has a positive effect on profitability, Sunjoko and Arilyn (2016), Amrita et al. (2016), Syafei (2017) Alpi (2018), and Nurlaela et al. (2019). Kartikasari and Marisa, and Nurlaela et al. (2019) findings that leverage has a positive effect on profitability, while according to Alpi (2018) leverage has no effect on profitability. Nurlaela et al. (2019) stated that total asset turnover had a positive effect on profitability, but Sunjoko and Arilyn (2016) found that total asset turnover had no effect on profitability.

### ***Profitability***

Profitability ratios provide useful clues about a company's operating effectiveness, but profitability ratios continue to show the combined effect of liquidity, asset management, and debt on operating results. Kasmir (2015) states that profitability is the ability to generate profits and the proxies of profitability are return on equity, return on assets, and net profit margin. Return on Equity according to Alpi (2018) is the ratio between income after tax (Net Income) and total capital (Equity). The higher the Return on Equity, the more efficient the company in managing its own capital to generate net income. This ratio is used to measure the effectiveness of the company's or company's returns in generating profits by utilizing the equity owned by the company.

### ***Liquidity and Profitability***

The liquidity ratio aims to describe the company's ability to be able to pay off all its current liabilities by utilizing available current assets (Hartono, 2018). The low value of liquidity indicates the company's inability to meet its short-term obligations. This affects the level of profitability of the company, where companies that are unable to fulfill their obligations will be subject to an additional burden on their obligations (Vidyasari, et. al., 2021). Based on previous research from Saraswati (2020) and Haqiqi, et al (2020), liquidity has a significant effect on profitability. With the theory and previous research, the authors state the following hypotheses:

H1: Liquidity has a significant effect on profitability.

### ***Total Asset Turnover and Profitability***

The total asset turnover ratio aims to describe how efficiently the company utilizes company resources, namely all assets to support company sales (Kasmir, 2013). The total asset turnover ratio has an impact on profitability because this ratio shows the relationship between working capital and sales, as well as the number of sales a business unit gets for every rupiah of working capital (Supardi, 2016). According to previous research from Ginting & Nasution (2020) and Deli (2020), total asset turnover has a significant effect on profitability. Based on the theory and previous research, the authors state the following hypotheses:

H2: Total asset turnover has a significant effect on profitability.

### ***Liquidity, Total Asset Turnover and Profitability***

Companies that want to maximize profitability will regulate liquidity and asset turnover owned by the company. If the company decides to set a large amount of working capital, it is likely that the level of liquidity will be maintained. However, the opportunity to earn large profits will decrease and in the end have an impact on decreasing profitability (Bamaisharah & Fuadati, 2017). In contrast to the optimization of the company's asset turnover will increase the company's profits. Good company operations in using assets will bring profits and have an impact on profitability (Nugraha, 2019). Based on the above, the authors state the following hypotheses:

H3: Liquidity and total asset turnover have a significant effect on profitability

### ***Method***

The population of this study uses data from pharmaceutical companies listed on the Indonesia Stock Exchange in 2015-2019. The sampling technique used is purposive sampling which takes samples using several criteria. The criteria applied are: (a) Pharmaceutical companies that sequentially present their financial statements and are not

delisted in the 2015-2019 period, (b) Pharmaceutical companies that provide the data needed in this study are current assets, current liabilities, net profit/loss, total assets, and total equity.

**Table 1.**  
**List of Research Samples**

No.	Companies code	Companies
1	DVLA	Darya Varia Laboratoria Tbk
2	INAF	Indofarma (Persero) Tbk
3	KAEF	Kimia Farma (Persero) Tbk
4	KLBF	Kalbe Farma Tbk
5	MERK	Merck Indonesia Tbk
6	PYFA	Pyridam Farma Tbk
7	SCPI	Merck Sharp Dohme Pharma Tbk
8	SIDO	Industri Jamu & Farmasi Sido Muncul Tbk
9	TSCP	Tempo Scan Pasific Tbk

Source: processed data

This research was conducted using descriptive statistics. Descriptive statistics are used to describe the data seen from the mean, standard deviation, minimum value, and maximum value. The analysis technique used in this research is multiple linear regression. The multiple linear regression equation is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Information:

Y = Profitability (Return on Assets);  $\alpha$  = Constant;  $\beta_1 - \beta_2$  = Regression Coefficient;  $x_1$  = Liquidity;  $x_2$  = Total Asset Turnover

*The operational definition in this research is:*

*Liquidity (CR)*

Liquidity is the company's ability to pay its short-term obligations (Sujarweni, 2017). Liquidity is useful to determine the company's ability to finance and meet obligations or debts when billed or due. Liquidity in this study is measured using the current ratio (CR), which is the ratio between current assets and current liabilities.

Current Ratio = Current Asset / Current Liability

*Total Asset Turnover (TATO)*

Total Asset Turnover is an activity ratio used to measure the effectiveness of the company in using its resources in the form of assets (Halim, 2015).

Total Asset Turnover = Sales / Total Assets

Profitability is the level of net profit that can be achieved by the company when carrying out its operations (Fahmi, 2014). Profitability in this study is measured by using return on equity (ROE), the comparison between net profit after tax and the total equity owned by the company. Return on Equity = Net income / Total Equity

## Result

**Table 2**  
**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.021 <sup>a</sup>	.000	-.023	.38568	1.811

Source: processed data

The value of the coefficient of determination shows that the contribution of liquidity to profitability in the company is 0.00% and the remaining 100% is influenced by other factors not examined in this study. Liquidity's contribution to profitability states that the correlation between profitability and liquidity is very low.

**Table 3**  
**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.231	.069		3.346	.002
	CR	-.001	.010	-.021	-.139	.890

Source: processed data

Based on the table above, the calculated t value obtained is -1.39 and the significance value is 0.890. This value is greater than the 0.05 significance level, which means that liquidity has no significant effect on profitability. And from these results it can be concluded through this test that H1 is rejected.

**Table 4**  
**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.122 <sup>a</sup>	.015	-.008	.38290	1.734

Source: processed data

The coefficient of determination shows the contribution of asset turnover to the company's profitability is 1.5% and the remaining 98.5% is influenced by other factors not examined in this study. The contribution of profitability to profit growth states that there is a correlation between asset turnover and profitability, although the correlation is low.

**Table 5**  
**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.407	.232		1.751	.087
	TATO	-.161	.200	-.122	-.804	.426

Source: processed data

Based on the table above, the calculated t value obtained is -0.804 and the significance value is 0.426. This value is greater than the 0.05 significance level, which means that asset turnover has no significant effect on profitability. And from these results it can be concluded through this test that H1 is rejected.

**Table 6.**  
**Correlation Coefficient**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.129 <sup>a</sup>	.017	-.030	.38709

Source: processed data

From the table above shows that the correlation coefficient is 0.129. This means that the total asset turnover ratio and current ratio has positive relationship to return on equity. And the coefficient of determination / the r-square has a value of 0.017 or 1.7%. This means that the total asset turnover ratio and current ratio contributed 1.7% to return on equity and the rest was influenced by other variables.

**Table 7**  
**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.106	2	.053	.353	.705
	Residual	6.293	42	.150		
	Total	6.399	44			

Source: processed data

The value of the hypothesis test shows that the value (sig) is 0.091; greater than 0.05, which means that most of the current ratio and asset turnover ratio have no significant effect on return on equity. Simple linear regression for

return on equity =  $0.427 - 0.003$  (current ratio)  $- 0.170$  (asset turnover ratio). A constant value of 0.427 means that if the current ratio and asset turnover ratio are 0, the return on equity already has a value of 0.427. And if the current ratio increases by 1 unit, Profit Growth will increase by 0.427. Which means the current ratio will have a positive contribution to the increase in return on equity. And if the asset turnover ratio increases by 1 unit, Profit Growth will increase by 0.427. Which means that the asset turnover ratio will also have a positive contribution to the increase in return on equity.

## Conclusion

Empirical studies show that the company has a good current ratio, total asset turnover and return on equity. On average, the company is declared to have a good rate of return on equity. The ratio of liquidity on profitability has a negative relationship to profit growth, and also has a no significant effect on profitability. The ratio of liquidity contributed none to profitability. And linear regression shows the results that each addition of 1 unit of the current ratio will increase profitability by  $-0.001$ . The ratio of total asset turnover on profitability has a negative relationship with profitability. However, it does not affect profit growth. Total asset turnover contributed 1.5% to profitability. And linear regression shows the results that each addition of 1 unit of the total assets turnover will increase the reduction in profitability by  $-0.161$ . The ratio of total assets turnover on profitability has a negative relationship to profit growth. Likewise, it has no significant effect on profitability. Current ratio and total asset turnover contribute 0.5% to return on equity. It is suggested that the results of this study can be used as a consideration for investors to assess or estimate the possible level of return on equity obtained based on the role of the current ratio and the total asset turnover variable. It is expected also that company management can consider the results of this study in making decisions about the profitability where the liquidity and the total asset turnover do not have a significant effect. And also as a reference in making decisions. I hope that further researchers can examine other variables that might affect the company's return on equity.

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