

## **Du Pont System Analysis In Measuring Financial Performance Of Pharmaceutical Companies Listed On The Indonesia Stock Exchange (Idx)**

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### **ABSTRACT**

*This study aims to determine the financial performance of pharmaceutical companies listed on the Indonesia Stock Exchange (IDX) for the 2015-2019 period. The analysis in this study uses the Du Pont system, namely Net Profit Margin, Total Assets Turn Over and Return On Investment. The data used in this study is sourced from the Balance Sheet and Income Statement. Based on the results, it can be said that PT Darya-Varia Laboratoria Tbk, PT Kalbe Farma Tbk, PT Tempo Scan Pacific Tbk and PT Industri Jamu and Pharmacy Sido Muncul Tbk still lack efficiency in managing their assets so that they get a low score on Return On Investment, but PT Industri Jamu and Pharmacy Sido Muncul managed to get an Net Profit Margin value above the average.*

**Keywords:** Financial Statement Analysis; Du Pont System; Financial Performance; NPM; TATO; ROI.

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### **Introduction**

Economic growth during this pandemic has resulted in many declines experienced by various fields, including the business world. In line with the increasingly complex and uncertain economy, intense competition between companies, both local and international competitors, the company is expected to survive and be supported by good strategies in various aspects, especially in terms of financial management in order to produce good company performance.

Financial performance appraisal is intended as a management tool for a company which is usually assessed by reviewing financial statements periodically to assess the operational effectiveness of a company based on the goals, standards and criteria that have been previously determined by the company.

The basis of the assessment used in measuring the company's financial performance is the Du Pont System analysis. Du Pont System has a comprehensive nature and assesses the effectiveness of the company in using its assets and the level of profit from selling products within a certain period of time produced by the company.

Based on the background and problems described above, the objectives of the study are (1) to determine the financial performance of PT Darya-Varia Laboratoria Tbk. by using the Du Pont system analysis method, (2) Knowing the financial performance of PT Kalbe Farma Tbk. using the Du Pont system analysis method, (3) Knowing the financial performance of PT Tempo Scan Pacific Tbk. by using the Du Pont system analysis method, and (4) Knowing the financial performance of PT Industri Jamu Dan Pharmacy SIDO Muncul Tbk. with the Du Pont System Analysis method.

### **Research Method**

In reviewing the data, the researcher used a quantitative descriptive method. According to (Wiratna, 2018: 19) "descriptive quantitative, namely research conducted in obtaining the value of one or more variables is independent in nature in order to obtain a description of these variables". The analysis method used is the Du Pont System. Some calculations used According to (Kasmir, 2017): 1) Net Profit Margin : This ratio is used to find out how much the company's net income on sales.

$$\text{Net Profit Margin} = \frac{\text{Net Profit After Tax}}{\text{Sale}} \times 100\%$$

2) Total Assets Turn Over : The ratio is used as a measure of the turnover of all assets and measures the amount of total sales generated from each rupiah of assets.

$$\text{Total Assets Turn Over} = \frac{\text{Sale}}{\text{Total assets}}$$

3) Return On Investment : This ratio is used to determine the return on total assets used with the overall funds used for the company's operational activities in creating profits invested in assets.

$$\text{Return On Investment} = \text{NPM} \times \text{TATO}$$

## Results

### Research Findings

#### PT Darya-Varia Laboratoria Tbk

**Table 1**  
**Analysis Results of PT Darya-Varia Laboratoria Tbk**

Company	Variable	Year					Average DVLA	Industry average	Information
		2015	2016	2017	2018	2019			
	DVLA								Below average
	NPM(%)	8,26	10,48	10,30	11,81	12,23	10,61	20	average
		0,95	0,95	0,96	1,01	0,99	0,97		Below average
	TATO	time	time	time	time	time	time	2 time	average
									Below average
	ROI(%)	7,84	9,93	9,89	11,92	12,12	10,34	30	average

*Source: Processed Data*

The state of the financial performance of PT Darya-Varia Laboratoria Tbk from the results of the above analysis, it can be seen that the 2015 NPM showed a figure of 8.26%, which means that sales of Rp. 1.00 the company created a net profit of Rp. 0.0826. In 2016 there was an increase of 2.22% to 10.48%, which means that the company's sales of IDR 1.00 created a net profit of IDR 0.1048. In 2017 it decreased by 0.18% to 10.30%. In 2018 it increased by 1.51% to 11.81%. In 2019 it increased by 1.51% to 12.23%. This is in line with research (Yulia, 2021:99) that the decline was due to an increase in the cost of goods sold and other funds that caused a decrease in profits for a company such as tax on interest income, other operating expenses, administrative and general expenses, selling and distribution expenses, and other financial burdens.

Based on table 11, we can see that the NPM result of PT Darya-Varia Laboratoria Tbk the average NPM for the last 5 years is 10.61% below the industry average of 20%.

Based on the calculation of table 11 tattoos in 2015 as many as 0.95 times, it means that the company can rotate assets of Rp. 1.00 as much as Rp. 0.95 of sales. In 2016 had the same result 0.95 times. Total asset turnover in 2017 saw an increase of 0.01 times to 0.96 times. In 2018 it increased again by 0.05 times to 1.01 times and in 2019 it decreased again by 0.02 times to 0.99 times.

Based on table 11, we can see that the results of Total Assets TurnOver for the last 5 years are quite good with not too significant increases and decreases with an average of 0.97 times below the industry average.

The 2015 ROI calculation shows that the return on investment obtained by the company is 7.84%, which means that every IDR 1.00 asset managed by the company can create a profit of IDR 0.0784. Then, in 2016 it increased to 9.93% which means, every IDR 1.00 asset managed by the company can create a profit of IDR 0.0993. In 2017 ROI decreased by 0.04% to 9.89%. In 2018 ROI increased by 2.03% to 11.92. Then, in 2019 ROI showed an increase in ROI of 0.2% to 12.12%.

Based on table 11, we can see that the ROI for 5 years has an average ROI of 10.34% below the industry average of 30%.

## PT Kalbe Farma Tbk

**Table 2**  
**Analysis Results of PT Kalbe Farma Tbk**

Company	Variable	Year					KLBF Average	Industry average	Information
		2015	2016	2017	2018	2019			
KLBF									Below
	NPM(%)	11,5	12,13	12,16	11,85	11,21	11,77	20	average
		1,30	1,27	1,21	1,16	1,12	1,21		Below
	TATO	time	time	time	time	time	time	2 time	average
									Below
	ROI(%)	15,02	15,44	14,76	13,76	12,52	14,3	30	average

Source: Processed Data

The state of the financial performance of PT. Kalbe Farma Tbk based on the results of table 12, it can be seen that the NPM in 2015 showed a figure of 11.50%, which means that sales of Rp. 1.00 the company created a net profit of Rp. 0.115. In 2016 there was an increase of 0.63% to 12.13% which means that sales of Rp. 1.00 the company created a net profit of Rp. 0.1213. Then in 2017 there was an increase of 0.03% so that it became 12.16% which means, for every sales of Rp. 1.00 the company creates a net profit of Rp. 0.1216. In 2018 it decreased by 0.31% to 11.85%, which means that sales of Rp. 1.00 the company created a net profit of Rp. 0.1185. In 2019 the results showed a decrease in the ratio by 0.64% to 11.21%.

Based on table 12, the results of NPM for the last 5 years are quite good with an increase and decrease every year. The average NPM for 5 years is 11.77% below the industry average of 20%.

Based on the analysis above, it is known that tattoos in 2015 were 1.30 times, meaning that every Rp. 1.00 fixed assets can create Rp. 1.30 sales. In 2016 there was a decrease of 0.03 times to 1.27 times, meaning that every IDR 1.00 fixed assets can create IDR 1.27 sales. In 2017 it decreased by 0.06 times to 1.21 times which means that every IDR 1.00 fixed assets can create IDR 1.21 sales. Then, the decline continued to occur by 0.05 times in 2018 to 1.16 times, which means that every Rp. 1.00 of fixed assets can create Rp. 1.16 of sales. The decline in 2019 was 0.04 times to 1.12 times, meaning that every IDR 1.00 of fixed assets can create IDR 1.12 sales.

Based on table 12, we can see that the results of TATO for the last 5 years have decreased every year with an average of 1.21 below the industry average, which is 2 times.

The 2015 ROI calculation shows that the return on investment he gets is 15.02%, which means that every IDR 1.00 asset managed by the company can create a profit of IDR 0.1502. In 2016 there was an increase of 0.42% to 15.44% which means, every IDR 1.00 asset managed by the company can create a profit of IDR 0.1544. Then, in 2017 the ROI decreased by 0.68% to 14.76% which means, every IDR 1.00 asset managed by the company can create a profit of IDR 0.1476. ROI decreased by 1%

in 2018 to 13.76% which means, every IDR 1.00 asset managed by the company can create a profit of IDR 0.1376. Finally, in 2019 there was a decrease of 1.24% to 12.52%, which means that every IDR 1.00 asset managed by the company is able to create a profit of IDR 0.1252. This is in line with research (Damayanti et al, 2019:59) that the decline in ROI was due to a decrease in asset turnover and net profit margin.

Based on table 12, we can see that the ROI for 5 years has decreased for several years, and the average for 5 years is 14.3% below the industry average of 30%.

### PT Tempo Scan Pacific Tbk

**Table 3**  
**Analysis Results of PT Tempo Scan Pacific Tbk**

Company	Variable	Year					TSPC	Industry	Information
		2015	2016	2017	2018	2019	Average	average	
<hr/>									
TSPC									Below
	NPM(%)	6,47	5,97	5,83	5,36	5,41	5,81	20	average
		1,30	1,39	1,29	1,28	1,31	1,31		Below
	TATO	time	time	time	time	time	time	2 time	average
									Below
	ROI(%)	8,42	8,28	7,50	6,87	7,11	7,64	30	average

Source: Processed Data

The state of the financial performance of PT. Tempo Scan Pacific Tbk from the results in table 13, it can be seen that the 2015 NPM showed a figure of 6.47%, which means that sales of Rp. 1.00 the company got a net profit of Rp. 0.0647. In 2016 there was a decrease of 0.5% to 5.97% which means that sales of Rp. 1.00 the company got a net profit of Rp. 0.0597. In 2017 again there was a decrease of 0.14% to 5.83% which means, sales of Rp. 1.00 the company got a net profit of Rp. 0.0538. In 2018 there was a decrease of 0.47% to 5.36% which means, sales of Rp. 1.00 the company got a net profit of Rp. 0.0536. Then, in 2019 the company increased by 0.05% to 5.41% which means, sales of Rp. 1.00 the company got a net profit of Rp. 0.0541.

Based on table 13, we can see that the NPM results for the last 5 years have decreased in several years. The average NPM for 5 years is 5.81% below the industry average of 20%.

Furthermore, based on the results of the analysis in table 13, it can be concluded that the asset turnover in 2015 was 1.30 times, which means, every Rp. 1.00 fixed assets can create Rp. 1.30 sales. In 2016 asset turnover increased by 0.09 times to 1.39 times, which means, every Rp. 1.00 fixed assets can create Rp. 1.39 sales. In 2017 asset turnover decreased by 0.1 times to 1.29 times which means, every Rp 1.00 fixed assets can create Rp 1.29 sales. In 2018 asset turnover decreased by 0.01 times to 1.28 times, which means, every IDR 1.00 fixed assets can create IDR 1.28 sales. In 2019 it increased by 0.03 times to 1.31 times, which means, every IDR 1.00 fixed assets can create IDR 1.31 sales.

Based on table 13 shows the results of TATO for the last 5 years is quite good with an increase and decrease every year. The average TATO for 5 years is 1.31 times below the industry average of 2 times.

The 2015 ROI calculation showed that the return on investment he got was 8.42%, which means that Rp. 1.00 of assets managed by the company created a profit of Rp. 0.0842. In 2016 there was a decrease of 0.14% to 8.28% which means, every IDR 1.00 asset managed by the company creates a profit of IDR 0.0828. In 2017 there was a decrease of 0.78% to 7.50% which means, every IDR 1.00

asset managed by the company creates a profit of IDR 0.750. In 2018 it decreased by 0.63% to 6.87% which means, every IDR 1.00 asset managed by the company creates a profit of IDR 0.0678. In 2019 an increase of 0.24% to 7.11% which means, every IDR 1.00 asset managed by the company creates a profit of IDR 0.0711.

Based on table 13, we can see that the ROI for 5 years increases and decreases every year. The average ROI for 5 years is 7.64 below the industry average of 30%.

**PT Industri Jamu dan Farmasi Sido Muncul Tbk**

**Table 4**

**Analysis Results of PT Industri Jamu and Pharmacy Sido MunculTbk**

Company	Variable	Year					SIDO	Industry	Information
		2015	2016	2017	2018	2019	Average	average	
<b>SIDO</b>									
	NPM(%)	19,72	18,76	20,74	24,02	26,33	21,91	20	Above average
		0,16	0,86	0,81	0,83	0,87	0,71		Below
	TATO	time	time	time	time	time	time	2 time	average
									Below
	ROI(%)	15,65	16,08	16,90	19,89	4,91	22,84	30	average

Source: Processed Data

The state of the financial performance of PT. SIDO MUNCUL Tbk from the analysis in table 14, it can be seen that the 2015 NPM showed 19.72% which described that sales of Rp. 1.00 the company got a net profit of Rp. 0.1972. In 2016 it decreased by 0.96% to 18.76% which describes that sales of Rp. 1.00 the company got a net profit of Rp. 0.1876. In 2017 again, there was an increase of 1.98% to 20.74% which described that sales of Rp. 1.00 the company got a net profit of Rp. 0.2074. In 2018 it increased by 3.28% to 24.02% which describes that sales of Rp. 1.00 the company got a net profit of Rp. 0.2402. Then, in 2019 the company increased by 2.31% to 26.33% which described that sales of Rp. 1.00 the company got a net profit of Rp. 0.2633.

Based on table 14, we can see that the NPM results for the last 5 years are quite good and have increased every year. The average NPM for 5 years is 21.91% above the industry average of 20%.

Furthermore, based on the results of the analysis above, it is known that the asset turnover in 2015 was 0.16 times, which means, every Rp. 1.00 fixed assets can create Rp. 0.16 sales. In 2016 there was an increase of 0.7 times to 0.86 times, which means, every IDR 1.00 fixed assets can create IDR 0.86 sales. In 2017 there was a decrease in asset turnover due to an unbalanced increase between sales and total assets by 0.05 times to 0.81 times, which means, every Rp. 1.00 fixed assets can create Rp. 0.81 sales. In 2018 asset turnover increased by 0.02 times to 0.83 times, which means, every IDR 1.00 fixed assets can create IDR 0.83 sales. In 2019 asset turnover increased again by 0.04 times to 0.87 times, which means, every Rp. 1.00 fixed assets can create Rp. 0.87 sales.

Based on table 14, it is known that the results of TATO for the last 5 years are quite good with an increase and decrease every year. The average TATO for 5 years is 0.71 times below the industry average of 2 times.

The 2015 ROI calculation shows that the return on investment obtained is 15.65%, which means that every IDR 1.00 asset managed by the company can create a profit of IDR 0.1565. In 2016 there was an increase of 0.43% to 16.08%, which means, every IDR 1.00 asset managed by the company can generate a profit of IDR 0.1608. In 2017 there was an increase again of 0.82% to 16.90% which means,

every IDR 1.00 asset managed by the company can create a profit of IDR 0.1690. In 2018 it increased again by 2.99% to 19.89%, which means, every IDR 1.00 asset managed by the company can create a profit of IDR 0.1899. ROI continues to increase, most recently in 2019 it increased by 2.95% to 22.84% which means, every IDR 1.00 asset managed by the company can create a profit of IDR 0.2284. This is in line with research (Miswara and Amalia, 2020:72) that the high value of ROI is influenced by the high value of NPM and TATO achieved by the company.

Based on table 14 the ROI results for the last 5 years are good with an increase every year to reach 22.84%. The average ROI for 5 years is 18.27% below the industry average of 30%.

## **Conclusion**

Based on the analysis that the researchers have done, namely regarding the financial performance of pharmaceuticals using the Du Pont System method for the 2015 - 2019 period, conclusions can be drawn, namely:

Based on the calculation results of the Financial Performance of PT. Darya-Varia Laboratoria Tbk the average industrial ROI obtained is still low, but quite good because it is increasing every year. The low ROI is due to the low results of NPM and TATO, although NPM and TATO have increased every year the results are still below the industry standard average. The low TATO shows that the company's willingness to create sales is low, so the company's assets are difficult to rotate.

Based on the calculation results of the Financial Performance of PT. Kalbe Farma Tbk average industrial ROI obtained is still low, but quite good because it has increased in several years. The low ROI is due to the low results of NPM and TATO, although NPM and TATO have increased and decreased in several years, the results are still below the industry standard average. The low TATO shows that the company's willingness to create sales is low, so the company's assets are difficult to rotate.

Based on the results of the calculation of the Financial Performance of PT. Tempo Scan Pacific Tbk average industrial ROI obtained is still low, but quite good because it has increased and decreased every year. The low ROI is due to the low results of NPM and TATO, although NPM and TATO have increased every year the results are still below the industry standard average. The low TATO shows that the company's willingness to create sales is low, so the company's assets are difficult to rotate.

Based on the results of the calculation of the Financial Performance of PT. The Sido Muncul Herbal and Pharmaceutical Industry Tbk ROI is quite good but below the industry average, this illustrates that even though the NPM is above the industry average which means that the company's performance in creating profits is good but this is not supported by high TATO, low TATO indicates that the company's willingness to create sales are low then assets are difficult to rotate.

Of the four companies above, the company with superior financial performance as measured by the Du Pont analysis technique is the Herbal and Pharmaceutical Industry company Sido Muncul Tbk although the average ROI value of the Industry obtained is below the average with a value of 18.27, however, the NPM produces above average The industry average is with a value of 21.91%, which means the company can reduce costs such as HPP, expenses and others so that the company can provide the maximum role in net profit.

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