

# ANALYSIS OF RETURN ON INVESTMENT WITH THE DU PONT SYSTEM MODEL: CASE STUDY AT PT. MAYORA INDAH TBK., PERIOD 2016-2020

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## **ANALYSIS OF RETURN ON INVESTMENT WITH THE DU PONT SYSTEM MODEL: CASE STUDY AT PT. MAYORA INDAH TBK., PERIOD 2016-2020**

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### **ABSTRACT**

*The purpose of this study is to find out the rate of return on investment in PT. Mayora Indah Tbk. PT. Mayora Indah Tbk., is a manufacturing company engaged in food and beverages and at the same time the largest coffee candy manufacturing company in the world. The analysis of the rate of return on investment in this study was measured using the Return On Investment analysis with the Du Pont System approach. The data collection method is carried out by documentation techniques using industry average assessment indicators from all companies such as research objects, namely in the form of food and beverage sub-sector manufacturing companies. The findings in this study show that the Return On Investment in PT. PT. Mayora Indah Tbk., for 5 years, namely 2016-2020, is in good condition because it is above the industry average. The findings in this study can help investors to invest in a company, it can be seen from how.*

**Keywords:** *Du Pont; Investment; Return On Investment.*

### **INTRODUCTION**

The entry of Covid-19 into Indonesia has affected many Multi National Corporations, one of which is PT. Mayora Indah Tbk., which is a company engaged in the food and beverage industry as well as one of the largest food and beverage companies in Indonesia. PT. Mayora Indah Tbk., made a significant contribution to the country's economy. The fulfillment of stakeholder expectations for company expansion is determined by good financial performance, but at the beginning of the Covid-19 pandemic entering Indonesia,

the sales rate of PT. Mayira Indah Tbk., experienced a decline, which is presented as follows:

| <b>Period<br/>(Year)</b> | <b>Sales<br/>(Rp.000.000)</b> | <b>Annual<br/>Profit<br/>(Rp.000.000)</b> | <b>Stock<br/>Price<br/>(Per sheet)</b> | <b>Total dividend<br/>(in Rupiah)</b> |
|--------------------------|-------------------------------|---|--|---------------------------------------|
| 2016                     | 18.349.960                    | 1.388.676                                 | 1.645                                  | 268.304.396.700                       |
| 2017                     | 20.816.674                    | 1.630.954                                 | 2.020                                  | 469.532.694.225                       |
| 2018                     | 24.060.802                    | 1.760.434                                 | 2.620                                  | 603.684.892.575                       |
| 2019                     | 25.026.739                    | 2.051.404                                 | 2.050                                  | 648.402.292.025                       |
| 2020                     | 24.476.954                    | 2.098.169                                 | 2.710                                  | 670.760.991.750                       |

Table 1 Summary of Financial Statements of PT. Mayora Indah Tbk.,  
(www.idx.co.id)

In 2020 the share price of PT. Mayora Indah Tbk., in the first quarter continued to experience a decline with a very low value, namely per share closed at 1,845 (January), 1,650 (February) and 1,360 (March) and rose again at the end of the year as of December 31, 2020, amounting to 2,710 /sheet. The increase in stock prices is because the company has been able to adapt to the market. For the sale of PT. Mayora Indah Tbk., decreased by 2.2% from the previous year. The decrease in sales was also followed by a decrease in the increase in the annual profit of PT. Mayora Indah Tbk., whose increase was only 2.88% from the previous year. This decline in sales was caused by the Covid-19 pandemic, where many customers from abroad suppressed inventory of goods, which had an impact on the company's revenue. In addition, in Indonesia, the government has implemented a Lockdown and LargeScale Social Restriction (PSBB) policy which makes the distribution of PT. Mayora Indah Tbk., became hampered so that the impact on the company's sales decreased. Despite the decline in sales, PT. Mayora Indah Tbk., remains consistent in distributing dividends, which is 2.74% of total sales in 2020. Consistent dividend distribution is carried out by PT. Mayora Indah Tbk., every year this is proof that the company pays attention to its investors. Local investors as well as foreign investors, all have the same goal in investing, namely they both want to get the maximum return or profit.

Referring to the research conducted by Sari, Fathul & Oktaviani (2019) with the title Du Pont Analysis in Measuring Investment Value and Organizational Effectiveness at PT. Ultrajaya Milk Industry and Trading Company Tbk., 2016-2019 period in which the research measures the investment value of a company using the Du Pont System method with ROI (Return On Investment) analysis. This method is considered to be able to analyze a company's investment in a certain period in terms of the company's financial performance in using its net income to return investment. The results of the study found that there was a decrease in ROI in 2017-2018, where the decline

has the potential to pose a risk to the company's investment because ROI is one of the factors considered by investors to invest in a company. The previous research explains how the Du Pont ROI method is important in analyzing a company's investment in a certain period. The research was conducted on the basis of the company's considerations in assessing investments that are assessed from the company's financial health to be one of the considerations for investors to invest, where investment is needed for company financing.

The similarity of this research and previous research that has been described previously, apart from the method used, lies in the object of research which is a manufacturing company that is both engaged in the beverage industry and at the same time a multi-national company. only drinks but also produce food and at the same time is the largest coffee candy manufacturing company in the world. The lack of research on similar themes makes this research still needs to be done. The formulation of the problem that will be answered in this study is how to invest in PT. Mayora Indah Tbk. 2016-2020 period.

Return On Investment (ROI) analysis with the Du Pont System approach can be used to analyze investment in a company, where this analysis can help business actors see investment returns in detail to reconsider investment plans in a particular asset or company (Sari, Fathul, & Oktaviani, 2019). The ROI (Return on Investment) of the Du Pont System approach is a profitability ratio that measures the company's efficiency by multiplying the net profit margin with asset turnover in a certain period (Kasmir, 2018). If the value of the ROI is positive, then the investment can provide benefits, but if the value of the ROI is negative, the investment has the potential to cause losses (Sari, Fathul, & Oktaviani, 2019). According to Kasmir (2018), to find the return on investment using the Du Pont approach, the following formula is used:

$$ROI = \text{Net Profit Margin} \times \text{Total Asets Turn Over}$$

Du Pont system analysis in measuring ROI (Return On Investment) provides advantages in assessing the company's financial performance particularly in company operations and sales. In addition, the Du Pont system has extensive and complete capabilities in measuring ROI (Return On Investment) because it can combine profitability ratios and activity ratios (Landorai, Rengkung, & Tangkere, 2017). Analysis using the Du Pont System has many advantages that can make it easier for investors to analyze the company's operational effectiveness which is the company's main point in facing business competition, thus the Du Pont System, can make investors easily make investment decisions (Sari, Fathul, & Oktaviani, 2019).

Investment is an activity to invest in one or more desired projects which are usually long-term with the aim of getting profits in the future (Nur, 2017). Another definition of investment is any capital expenditure or funds invested in various assets with the hope that these funds will be received back both in the

short and long term (Satiti, 2016). Du Pont is an analysis that combines several metrics, namely combining net profit margin, which measures profitability with asset turnover, which identifies the efficiency of the company in the use of its assets in generating revenue (Sugiono & Untung, 2016).

Previous research related to themes similar to this research will be explained in the following. Research conducted by Sari, Fathul & Oktaviani (2019) entitled Du Pont Analysis in measuring investment value and organizational effectiveness at PT. Ultrajaya Milk Industry and Trading Company Tbk., 2016-2019 period. The method used in this research is the Du Pont analysis method with descriptive analysis. The result of this research is that the results of the ROI show fluctuations for 4 years. The decrease in the ROI percentage occurred in 2017 by 13.9% and in 2018 it also decreased by 12.16%. The decline in ROI has the potential to bring risks to the company's investment because ROI is one of the factors considered by investors in investing in the company. The following research was conducted by Rogova (2016) entitled Dupont Analysis Of The Efficiency and Investment Appeal Of Russian Oil Extracting Companies. This study aims to analyze a certain rate of return on capital, the level of risk, and the rate of return on the market as well as other matters concerning the interests of the company's stakeholders. The method used in this research is to use ROE modified with the Du Pont System.

#### **RESEARCH METHOD**

This type of research is descriptive analysis, which in measuring the company's investment, uses the method of analysis of ROI (Return On Investment) with the Du Pont system approach. ROI analysis is an analysis that can help investors to see how a company is performing in managing its investments. By using the Du Pont analysis approach can provide more detailed information regarding the financial performance of a company, especially in functions directly related to operations and sales (Landorai, Rengkung, & Tangkere, 2017). The data used in the form of financial statements as material for calculations and as material for investment analysis are then analyzed using the Return On Investment (ROI) method with the Du Pont approach. After obtaining the results of the analysis, a conclusion is drawn based on the assessment indicators. The assessment indicator used in this study is the industry average of all similar companies with the object of research in this study, namely all manufacturing companies in the food and beverage subsector listed on the Indonesia Stock Exchange (IDX). The following is the industry average used in this study as an assessment indicator:

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| <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> | <b>2020</b> |
|-------------|-------------|-------------|-------------|-------------|
|-------------|-------------|-------------|-------------|-------------|

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|                    |             |             |             |             |            |
|--------------------|-------------|-------------|-------------|-------------|------------|
| <b>NPM (%)</b>     | <b>4</b>    | <b>6</b>    | <b>3</b>    | <b>25</b>   | <b>8</b>   |
| <b>TATO (kali)</b> | <b>1,32</b> | <b>1,15</b> | <b>1,16</b> | <b>1,07</b> | <b>1,1</b> |
| <b>ROI (%)</b>     | <b>6</b>    | <b>10</b>   | <b>6</b>    | <b>10</b>   | <b>5</b>   |

Tabel 2 Average Industry (source : Processed data)

The table above is the industry average obtained from the calculation of the data using the food and beverage sub-sector manufacturing companies listed on the IDX with the assessment criteria, namely: 1) If the NPM, TATO and ROI values of PT. Mayora Indah Tbk., in a certain period greater than or equal to the industry average of 27 in that year, then the investment in that period is considered "Good"; 2) If the value of NPM, TATO and ROI of PT. Mayora Indah Tbk., in a certain period close to the industry average in that year, then the investment in that period is considered "quite good"; 3) If the value of NPM, TATO and ROI of PT. Mayora Indah Tbk., in a certain period much smaller than the industry average in that year, then the investment in that period is considered "not good".

## RESULT AND DISCUSSION

### Company Overview

PT. Mayora Indah Tbk., (the Company) was established on February 17, 1977 and started its commercial business in May 1978 with the first factory in Tangerang with a target market in and around the Jakarta area. PT. Mayora Indah Tbk., was established by deed No. 204 dated February 17, 1977 from notary Poppy Savitri Parmanto SH, representing notary Riswan Suselo SH. PT. Mayora Indah Tbk., listed on the Jakarta Stock Exchange since July 1990. After being able to meet the Indonesian market, PT. Mayora Indah Tbk., conducted an initial public offering and became a public company in 1990 with one target market; ASEAN consumers. Then expand its market share to countries in Asia. Currently the products of PT. Mayora Indah Tbk., distributed in 5 continents in the world. also in 2017, one of the products of PT. Mayora Indah Tbk., namely Kopiko candy, was carried by the crew of the International Space Station while orbiting the Earth.

### Results Of Data Analysis and Research Discussion

| <b>Year</b> | <b>Net Profit Margin (%)</b> | <b>Asset Turn Over (Kali)</b> | <b>Return On Investment (%)</b> |
|-------------|------------------------------|-------------------------------|---------------------------------|
|             | <b>(1)</b>                   | <b>(2)</b>                    | <b>(3 = 1*2)</b>                |
| 2016        | 7,57                         | 1,42                          | 10,75                           |
| 2017        | 7,83                         | 1,40                          | 10,93                           |

|      |      |      |       |
|------|------|------|-------|
| 2018 | 7,32 | 1,37 | 10,01 |
| 2019 | 8,15 | 1,31 | 10,71 |
| 2020 | 8,57 | 1,24 | 10,63 |

Tabel 3. Results of data analysis with ROI Du Pont System  
(data Processed)

The calculation results in 2017 show an increase Return On Investment caused by an increase in Net Profit Margin from the previous year. The increase in NPM was caused by an increase in sales from the previous year which spurred the increase in Net Profit in 2017. And for TATO in that year decreased from the previous year due to an increase in sales followed by an increase in total assets. Companies are expected to increase sales or reduce the number of assets that are less productive in order to be able to maximize their assets. The results of calculations in 2018 show that Return On Investment has decreased from the previous year. The decline in ROI was caused by the simultaneous decline in NPM and TATO. The reason for the decrease in NPM was due to an increase in sales followed by an increase in total costs from the previous year. and the decrease in TATO was caused by an increase in total assets from the previous year.

The calculation results in 2019 showed an increase in Return On Investment. The increase in ROI was due to an increase in NPM from the previous year. NPM increased due to an increase in sales from the previous year and a decrease in cost of goods sold which resulted in an increase in total costs not proportional to the increase in sales. And for TATOs, it has decreased again as a result of the continued increase in company assets. The calculation results for 2020 show a decrease in Return On Investment. The decrease in ROI value was caused by a decrease in the value of TATO. The decrease was due to a decrease in sales and for NPM in that year it increased due to a decrease in total costs from the previous year.

The findings in this study indicate that analytical research ROI with Du Pont System in this study is in line with Kasmir theory (2018) which states that the Return On Investment value is influenced by Net Profit Margin and Total Assets Turn Over, the rise and fall of Net Profit Margin is strongly influenced by the company's income and the expenses borne by the company in a certain period. Likewise, the Total Assets Turn Over is influenced by the company's income and the company's total assets. Based on the calculation of ROI with the Du Pont System approach at the company PT. Mayora Indah Tbk., during the 2016-2020 period was in a healthy investment condition in terms of the rate of return on investment which was above the industry average. This research is also supported by an empirical study conducted by Sari, Fathur and Oktaviani (2019) which states that the higher the Return On Investment value, the better

the company's investment will be. And if the company experiences a decrease in ROI then the company will have difficulty developing and if continues to decline every year, the company will fail in the future. The decline in ROI will also reduce investor confidence to invest in the company.

### **CONCLUSION**

Return on Investment at PT. Mayora Indah Tbk., the period 2016-2020 is in good condition in terms of the rate of return on investment with the ROI analysis of the Du Pont System approach, which is above or greater than the industry average for that year. In other words, throughout 2016-2020 PT. Mayora Indah Tbk., was able to return the investment very well.

Financial performance of PT. Mayora Indah Tbk., in terms of the Net Profit Margin value throughout the 2016-2018 period, is fairly good, because it is above or greater than the industry average for that period. And for 2019 the financial performance of PT. Mayora Indah Tbk., is considered not good because it is below the industry average for that year. The NPM value returned to good in 2020 because it was greater than the industry average in 2020.

The asset turnover rate during the 2016-2020 period was in good condition in terms of the TATO value which was above or greater than the industry average for that period.



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# ANALYSIS OF RETURN ON INVESTMENT WITH THE DU PONT SYSTEM MODEL: CASE STUDY AT PT. MAYORA INDAH TBK., PERIOD 2016-2020

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GRADEMARK REPORT

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FINAL GRADE

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GENERAL COMMENTS

**Instructor**

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