Dupont system analysis in assessing the financial performance of PT Mayora Indah Tbk

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Abstract

The company's financial performance is an important indicator in measuring the effectiveness of operations and overall business strategies. One of the analysis methods that is able to provide a comprehensive picture of financial performance is the DuPont System of Analysis. This method divides Return on Equity (ROE) into three main components, namely Net Profit Margin, Total Asset Turnover, and Equity Multiplier. This research aims to analyse the financial performance of PT Mayora Indah Tbk by using the DuPont approach during the period of 2020 to 2024. The data used is obtained from the company's annual financial statements published through the Indonesia Stock Exchange (IDX). The results of the analysis show that Net Profit Margin decreased in 2020 due to the impact of the pandemic, but began to show a recovery in the following years. Total Asset Turnover is relatively stable, although it decreased when economic conditions slowed down. Meanwhile, the Equity Multiplier shows an increasing trend, indicating a higher dependence on external financing.

The increase in the company's ROE in recent years is mostly driven by an increase in leverage, not by operational efficiency or asset optimisation. This needs to be a concern because high debt can increase financial risk in the long run. Therefore, it is important for companies to maintain a balance between profitability, asset efficiency, and capital structure. DuPont analysis has proven to be an effective tool in assessing financial performance comprehensively, as well as providing important information for decision-making by management and investors.

Keywords: DuPont System, Financial Performance, ROE, Net Profit Margin, Total Asset Turnover, Equity Multiplier, PT Mayora Indah Tbk.

Introduction

Amidst the intense competition in the Indonesian food and beverage industry, PT Mayora Indah Tbk requires in-depth financial analysis tools. The DuPont System breaks down Return on Equity (ROE) into three main components: Net Profit Margin (NPM), Total Asset Turnover (TATO), and Equity Multiplier (EM). This method not only calculates ROE but also identifies its drivers and inhibitors.

Previous research showed that Mayora had strong liquidity ratios, but its profitability and solvency fluctuated, influenced by macroeconomic conditions and industry cycles. The impact of the pandemic depressed profitability due to issues with labor, supply chains, and demand. Although sales grew in the first half of 2025, net profit declined. This situation reinforces the relevance of applying the DuPont method to identify root causes and improve outcomes.

The DuPont analysis examines how NPM drives ROE, how efficiently assets are used through TATO, and the effect of EM capital structure on stock returns. If ROE is high due to EM leverage, this indicates potential hidden risks during economic shocks. Conversely, if profit margins are small but assets are productive, operational efficiency should be prioritized for improvement.

Empirically, DuPont has been widely applied in various sectors in Indonesia, including cosmetics, household goods, and food & beverage, to compare performance and analyze key contributors to companies' ROE. Using Mayora's public financial data, this study addresses two main questions: the contribution of NPM, TATO, and EM components to ROE and the key constraints behind its financial performance during the observation period.

The results of this study are expected to contribute to academic research in the field of financial analysis and provide strategic recommendations for Mayora's management to focus on improving profit margins, asset efficiency, and capital structure policies to strengthen competitiveness and profitability.

Thus, the DuPont method is a vital tool for assessing and improving the financial performance of PT Mayora Indah Tbk amidst dynamic industry challenges and intense competition, while also helping guide the company's policies toward sustainable growth.

Theoretical Framework

In financial management, analyzing a company's performance is crucial for assessing its health and prospects. The DuPont Analysis System, introduced in the 1920s, divides Return on Equity (ROE) into three main components: Net Profit Margin (NPM), Total Asset Turnover (TATO), and Equity Multiplier (EM). These three components reflect a company's profitability, operational efficiency, and financial leverage.

According to Brigham and Houston (2022), ROE is a key measure by which investors assess a company's ability to generate profits from invested capital. However, ROE alone is insufficient to understand the causes of performance changes. Therefore, DuPont Analysis is used to identify the primary contributors to ROE changes, such as profit margin, asset efficiency, or financial leverage.

The first component, NPM, indicates how effectively a company generates net income from sales. Kasmir (2021) states that NPM reflects management's effectiveness in controlling costs and achieving profits. The higher the NPM, the more efficient the company's cost management. The second component, TATO, measures the efficiency of a company's asset utilization in generating sales. Ross, Westerfield, and Jordan (2021) explain that a high TATO value indicates good asset management to generate revenue. EM reflects the extent to which a company utilizes debt in its capital structure. According to Modigliani and Miller's (1958) capital structure theory, the use of debt can increase ROE if the return on assets exceeds the cost of debt. However, increasing EM also increases financial risk if not managed properly.

This framework is supported by managerial efficiency theory, which explains differences in financial performance based on management's ability to manage resources (Hitt, Ireland, & Hoskisson, 2020). In the context of PT Mayora Indah Tbk, DuPont analysis provides insight into how management decisions related to operations, investment, and financing shape financial performance.

With this approach, DuPont analysis not only provides quantitative data but also serves as a strategic evaluation tool and a basis for effective financial planning. The application of this method is highly relevant for assessing the performance of PT Mayora Indah Tbk, which faces intense competition and high volatility in its industry.

This approach helps companies understand the key factors influencing profitability and risk, allowing them to take strategic steps to improve financial performance, increase asset efficiency, better manage costs, and maintain a healthy capital structure to support sustainable growth and enhance shareholder value.

With a comprehensive understanding of DuPont Analysis, management and investors can make more informed decisions regarding resource management, business development, and financing policies to optimally achieve long-term financial goals. Implementing this system supports PT Mayora Indah Tbk in maintaining competitiveness and financial stability amidst industry challenges.

Method

The research object is PT. Mayora Indah Tbk for the 2020-2024 period. The type of data used in this research paper is quantitative data because it utilizes numerical data, specifically the financial statements of PT. Mayora Indah Tbk for the years 2020-2024. According to Sugiyono (2021), quantitative data is data in the form of numbers or qualitative data that is assessed

The data source used in this research is secondary data. According to Sugiyono (2021), secondary data is data that is not obtained directly but rather through intermediaries, in the form of previously documented data, either from one's own research or from others. The secondary data for this research is the financial statements of PT. Mayora

Indah Tbk for the years 2020-2024, which can be obtained from the company's official website at www.mayoraindah.co.id.

Data analysis techniques include analyzing financial performance measured using the Du Pont System and comparing it with the financial statements of PT. Mayora Indah Tbk for the years 2020-2024. The author measures the company's financial performance using financial ratios used in the Du Pont System for the 2020-2024 period. The author also performs Du Pont System calculations using Return on Assets (ROA) and Return on Equity (ROE). The author interprets the results of the data analysis using the Du Pont System and draws conclusions based on the Du Pont System calculations. The author uses five ratios for the Du Pont System calculations:.

1. **Net Profit Margin (NPM)**
   According to Astriani Puji Lestari (2018), NPM measures net profit after tax compared to sales.
2. **Total Asset Turnover (TATO)**
   According to Hery (2017), TATO shows how much sales are generated from each rupiah of invested assets.
3. **Return on Investment (ROI)**
   According to Kasmir (2018), ROI shows how much return a company generates on its total assets.
4. **Equity Multiplier (EM)**
   According to Mozib Lalon (2017), EM measures the proportion of assets funded by shareholder equity.
5. **Return on Equity (ROE)**
   According to Sri Dwiningsih (2018), ROE indicates a company's ability to generate profits from its managed capital.

By using this method, it is hoped that the research results will provide accurate and reliable data, which can be used by company management as a basis for making strategic decisions, while also assisting investors in evaluating the company's prospects and financial stability. Therefore, this research is not only academically valuable but also offers significant practical benefits for the business and investment world.

Results

The analysis results illustrate changes in the financial performance of PT Mayora Indah Tbk. This analysis was conducted to understand the factors that influence the company's profitability and efficiency. To evaluate this, five key financial ratios were used: Net Profit Margin (NPM), Total Assets Turnover (TATO), Return on Investment (ROI), Equity Multiplier (EM), and Return on Equity (ROE).

The following table shows standard industry average ratios:

Tabel 1. Industry Ratio Standards

No.	Jenis Rasio	Standar Industri	Predikat
1	*Net Profit Margin*	> 20%	Baik
		< 20%	Tidak Baik
2	*Total Assets Turnover*	> 1,2 kali	Baik
		< 1,2 kali	Tidak Baik
3	*Return On Investment*	> 20%	Baik
		< 20%	Tidak Baik
4	*Equity Multiplier*	< 2 kali	Baik
		> 2 kali	Tidak Baik
5	*Return On Equity*	> 40%	Baik
		< 40%	Tidak Baik

Sumber: Kasmir (2008)

Tabel 2. List of Financial Reports of PT. Mayora Indah Tbk for the 2020-2024

Accounts	2020	2021	2022	2023	2024
Total Assets	19.777.500.514.550	19.917.653.265.528	22.276.160.695.411	23.870.404.962.472	29.728.781.933.757
Total Non-Current Assets	6.938.771.352.456	6.947.869.390.885	7.503.536.719.283	9.131.482.574.943	10.127.867.016.768
Current Assets	12.838.729.162.094	12.969.783.874.643	14.772.623.976.128	14.738.922.387.529	19.600.914.916.989
Total Equity	11.271.468.049.958	11.360.031.396.135	12.834.694.090.515	15.282.089.186.736	17.102.428.334.570
Sales	24.476.953.742.561	27.904.558.322.183	30.669.405.967.404	31.485.008.185.525	36.072.949.285.930
Net Income	2.098.168.514.645	1.211.052.647.953	1.970.064.538.149	3.244.872.091.221	3.067.667.675.407

1. **Net Profit Margin (NPM)**

This ratio measures net profit after tax relative to sales. The higher the Net Profit Margin, the better a company's operations. According to Sudana (2015), the method for calculating Net Profit Margin is as follows:

$$Net\ Profit\ Margin = \frac{Net\ Income}{Sales} \times 100\%$$

To calculate Net Profit Margin, you need net profit and revenue data for each relevant period, as shown in the table 3.

Table 3. Net Profit Margin Calculation

Tahun	Net Income	Sales	*Net Profit Margin*
2020	2.098.168.514.645	24.476.953.742.561	8,57%
2021	1.211.052.647.953	27.904.558.322.183	4,34%
2022	1.970.064.538.149	30.669.405.967.404	6,43%
2023	3.244.872.091.221	31.485.008.185.525	10,31%
2024	3.067.667.675.407	36.072.949.285.930	8,50%
Average			**7,63%**
Standart Industry			**20%**

Based on the calculations in Table 3, it can be seen that PT Mayora Indah Tbk's Net Profit Margin in 2020 was 8.57%. In 2021, the Net Profit Margin decreased by 4.23%, bringing the Net Profit Margin to 4.12%, due to a decrease in net profit. In 2022, the Net Profit Margin of PT Mayora Indah Tbk was 6.43%. The Net Profit Margin increased by 2.09%, due to a decrease in revenue and an increase in net profit compared to the previous year. In 2023, the Net Profit Margin of PT Mayora Indah Tbk increased by 3.88%, bringing the Net Profit Margin to 10.31%. This was due to increases in net profit and revenue. Then, in 2024, the Net Profit Margin of PT Mayora Indah Tbk decreased by 1.81% to 8.50%. This occurred due to a decrease in net profit and an increase in revenue. Therefore, the overall Net Profit Margin of PT Mayora Indah Tbk can be considered unfavorable because its average value is below the industry standard, at 7.63%, compared to the industry standard of 20%. This indicates that the company is still unable to operate its sales effectively, resulting in suboptimal net profit results. Furthermore, PT Mayora Indah Tbk's best performance occurred in 2023 with an NPM of 10.31%. This was due to an increase in net profit and revenue. This indicates that the company is still able to operate its sales effectively, generating optimal net profit and sales. This can serve as a benchmark for the company to improve its operations.

2. **Total Asset Turnover (TATO)**

Total Asset Turnover is the number of times a company's total assets turn over, indicating the efficiency with which it utilizes all its assets to generate sales. To calculate Total Asset Turnover (TATO), proceed as follows:

$$Total\ Asset\ Turnover = \frac{Sales}{Total\ Assets}$$

To calculate Total Asset Turnover, sales and total asset data for each relevant period are required, as shown in Table 4.

Table 4. Calculation of Total Asset Turnover

Year	Sales	Total Assets	*Total Assets Turnover*
2020	24.476.953.742.561	19.777.500.514.550	1,24
2021	27.904.558.322.183	19.917.653.265.528	1,40
2022	30.669.405.967.404	22.276.160.695.411	1,38
2023	31.485.008.185.525	23.870.404.962.472	1,32
2024	36.072.949.285.930	29.728.781.933.757	1,21
Average			**1,31**
Standart Industry			**1,2**

Based on Table 4 above, it can be concluded that PT Mayora Indah Tbk's Total Asset Turnover in 2020 was 1.24, and PT Mayora Indah Tbk's Total Asset Turnover in 2021 was 1.40. Therefore, Total Asset Turnover in 2020-2021 increased by 0.16 due to increases in Net Sales and Total Assets. In 2022, PT Mayora Indah Tbk's Total Asset Turnover decreased to 1.38 due to increases in net sales and total assets. Then, in 2023, PT Mayora Indah Tbk's Total Asset Turnover increased in net sales and total assets to 1.32. In 2024, PT Mayora Indah Tbk's Total Asset Turnover decreased to 1.21 due to increased net sales and decreased total assets compared to the previous year. The average value achieved in this ratio is 1.31. Therefore, the company cannot be categorized as good because its annual Total Asset Turnover does not meet the industry standard of 1.2 times. However, PT. Mayora Indah Tbk experienced its highest increase in 2021, with a value of 1.40, although it still does not meet industry standards. The worst condition occurred in 2024, with a value of 1.21 due to a decrease in net income and an increase in total assets, which prevented the company from generating optimal profits. This can be a reference for companies to pay more attention to asset turnover to generate sales. Generally, a higher asset turnover ratio indicates a higher efficiency in asset utilization, and this ratio is used to generate specific revenue.

3. **Return On Investment (ROI)**

Return on Investment (ROI) is used to measure a company's ability to generate profits using all funds allocated to assets used for its operations. To calculate Return on Investment (ROI) using the Du Pont System, proceed as follows:

$$ROI = Net\ Profit\ Margin \times Total\ Assets\ Turnover$$

To calculate Return on Investment, Net Profit Margin and Total Asset Turnover data are required for each relevant period, as shown in Table 5.

Table 5. Return on Investment Calculation

Year	Net Profit Margin	Total Assets Turnover	Return On Invesment
2020	8,57%	1,24	10,62%
2021	4,34%	1,40	6,08%
2022	6,43%	1,38	8,87%
2023	10,31%	1,32	1,36%
2024	8,50%	1,21	1,02%
Avarage			**5,59%**
Standart Industry			**20%**

Based on the data in Table 5 above, it can be concluded that PT Mayora Indah Tbk's Return on Investment (ROI) was 10.62% in 2020 and 6.08% in 2021. Therefore, the ROI increased by 4,54% in 2020-2021 due to an increase in Total Asset Turnover in 2021. Then, in 2022, the ROI decreased by 8.87% due to a decrease in Total Asset Turnover. Then, in 2023, the ROI again experienced a significant decline of 1.36% due to a decrease in Total Asset Turnover. Finally, in 2024, the ROI again decreased by 1.02% due to a decrease in Net Profit Margin and Total Asset Turnover. The average value achieved for this ratio was 16.53%. Therefore, PT. Mayora Indah Tbk's Return on Investment (ROI) can be considered poor. This is because the ROI is below the industry standard, with a value of 5.59%, compared to the industry standard of 20%. Meanwhile, the best condition of PT. Mayora Indah Tbk occurred in 2021, which met the industry standard, with a value of 60.76%, and the worst condition occurred in 2024 with a value of 1.02%. This is due to the company's incompetence in managing its assets, resulting in a decrease in net profit from total assets. This indicates that the company is unable to operate its operating profit to generate optimal profits.

4. **Equity Multiplier (EM)**

The Equity Multiplier is a ratio that indicates the ability of equity or equity capital to generate total assets. The higher this ratio, the greater the amount of

capital derived from loans or debt used by the company to generate profits. To calculate the Equity Multiplier (EM) is as follows:

$$Equity\ Multiplier = \frac{Total\ Assets}{Total\ Equity}$$

To calculate the Equity Multiplier, data on total assets and total equity for each relevant period is required, as shown in Table 6.

Table 6. Equity Multiplier Calculation

Year	Total Assets	Total Equity	*Equity Multiplier*
2020	19.777.500.514.550	11.271.468.049.958	1,75
2021	19.917.653.265.528	11.360.031.396.135	1,75
2022	22.276.160.695.411	12.834.694.090.515	1,74
2023	23.870.404.962.472	15.282.089.186.736	1,57
2024	29.728.781.933.757	17.102.428.334.570	1,74
Avarage			**1,71**
Standart Industry			**2**

Based on the table above, it can be concluded that PT Mayora Indah Tbk's Equity Multiplier in 2020 was 1.75 times, and PT Mayora Indah Tbk's Equity Multiplier in 2021 was 1.75 times. Therefore, the Equity Multiplier remained stable in 2020-2021. Then, in 2022, it decreased by 1.74 times due to a decrease in Total Equity. Then, in 2023, the Equity Multiplier decreased by 1.57 times due to increases in Total Assets and Total Equity. Finally, in 2024, PT Mayora Indah Tbk's Equity Multiplier again experienced a significant increase of 1.74 times due to increases in Total Assets and Total Equity. The average value achieved in this ratio was 1.71 times. Therefore, the calculation of PT Mayora Indah Tbk's Equity Multiplier is as follows: Mayora Indah Tbk's performance is considered poor. This is because its equity multiplier is below the industry standard, at 1.71 times, compared to the industry standard of 2 times.

5. **Return On Equity (ROE)**

Return on Equity measures the level of return a company receives from its invested capital. If the Return on Equity (ROE) is close to 40%, it indicates the company's effectiveness and efficiency in generating revenue. However, if the Return on Equity (ROE) is close to 0%, the company is unable to efficiently manage its capital to generate income. According to Sudana (2015), the calculation of Return on Equity (ROE) is as follows:

$$\boldsymbol{ROE} = Return\ On\ Investment \times Equity\ Multiplier$$

To calculate Return on Equity, we need data on Return on Investment and Equity Multiplier for each relevant period, as shown in Table 7.

Table 7. Return on Equity Calculation

Year	Return On Investment	Equity Multiplier	Return On Equity
2020	10,62%	1,75	1,859%
2021	6,08%	1,75	1,064%
2022	8,87%	1,74	1,543%
2023	1,36%	1,57	21,352%
2024	1,02%	1,74	17,748%
Avarage			**8,713%**
Standart Industry			**40%**

Based on the calculations in Table 7, it can be seen that in 2020, Return on Equity was 1.859%. In 2021, Return on Equity was 1.064%. Therefore, Return on Equity decreased by 0.796% due to an increase in ROI. In 2022, Return on Equity was 1.543%. This means the company's success rate in generating profits for shareholders was 1.543%. Therefore, Return on Equity increased by 0.048% due to a decrease in EM and ROI. In 2023, Return on Equity was 21.352%. This means the company's success rate in generating profits for shareholders was 21.352%. Therefore, Return on Equity experienced a significant increase of 19.81%. In 2024, Return on Equity was 17.748%. In 2024, the company's Return on Equity (ROE) showed a 17.748% success rate in generating profits for shareholders. Therefore, ROE decreased by 3.60% due to a decrease in ROE. Return on Equity (ROE) for PT Mayora Indah Tbk (PMI) tended to decline. The most significant decline occurred in 2021, at 1.063%. Therefore, it can be concluded that the ratio calculated for PT Mayora Indah Tbk is considered unfavorable. This is because the average ROE was below the industry standard, at 16.75%, compared to the industry standard of 40%. This indicates that the company is unable to manage its capital efficiently to generate net profit.

Discussion

Based on the DuPont System analysis of PT Mayora Indah Tbk for 2020–2024, the company's financial performance is generally below industry standards as per Kasmir (2008). While the company maintains stable assets and capital structure, profitability is lacking. The average ratios are: Net Profit Margin (NPM) 7.63%, Total Asset Turnover (TATO) 1.31 times, Return on Investment (ROI) 16.53%, Equity Multiplier (EM) 1.71 times, and Return on Equity (ROE) 16.75%. Only TATO and EM meet or approach industry standards; the others fall short.

NPM indicates the company's efficiency generating net profit from sales. At 7.63%, below the 20% industry standard, it suggests operational inefficiency, likely due to high production and distribution costs and strong competition. TATO's average of 1.31 shows reasonable asset utilization but needs improvement for better revenue generation.

ROI and ROE averages of 16.53% and 16.75% are below the 20% and 40% benchmarks respectively, indicating under-optimized asset and equity use. However, a recent upward ROE trend hints at managerial improvements and better future performance. EM's average of 1.71 indicates a healthy capital structure with manageable financial risk and low debt dependency.

Overall, PT Mayora Indah Tbk must improve operational efficiency, reduce production costs, and strengthen asset management and capitalization strategies to increase profitability. Despite a few substandard indicators, positive trends in some ratios give hope for performance improvement. Future efforts should focus on better earnings management, cost structure reinforcement, and asset utilization optimization to support sustainable growth and shareholder value enhancement.

Conclusion

Based on the DuPont System analysis of PT Mayora Indah Tbk for the 2020–2024 period, the company's financial performance still falls short of industry standards according to Kasmir (2008). Although the company is able to maintain stable assets and capital structure, the resulting profitability level is suboptimal. The average Net Profit Margin (NPM) is 7.63%, Total Asset Turnover (TATO) is 1.31 times, Return on Investment (ROI) is 16.53%, Equity Multiplier (EM) is 1.71 times, and Return on Equity (ROE) is 16.75%. Of these five ratios, only TATO and EM are close to or in line with industry standards, while NPM, ROI, and ROE are below ideal levels.

NPM reflects the company's ability to generate net profit from sales. The 7.63% value, which is lower than the industry standard of 20%, indicates operational efficiency still needs to be improved, possibly due to high production, distribution, and raw material costs, as well as competitive pressures that suppress profit margins. A relatively good TATO indicates efficient asset utilization, but efficiency improvements are still needed to increase revenue.

ROI and ROE, which are below industry standards, at 16.53% and 16.75%, respectively, indicate that management has not optimized the use of assets and capital to generate maximum returns for shareholders. However, the increasing trend in ROE over several years indicates managerial improvement and potential for improved financial performance in the future.

The average ROE of 1.71 times indicates a healthy funding structure and sound financial risk management; the company is not overly dependent on debt.

Overall, PT Mayora Indah Tbk needs to improve operational efficiency, reduce production costs, and strengthen asset management and capitalization strategies to increase profitability. Although some ratios remain below standard, there is potential for performance improvement, as evidenced by positive trends in several indicators. The focus of future improvements will be to increase the effectiveness of earnings management, strengthen the cost structure, and optimize asset utilization to achieve sustainable growth and shareholder value.

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