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RESEARCH ARTICLE

Evaluating Corporate Financial Performance Using the DuPont System: A Case Study of PT Ophthalindo Jaya

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Abstract. This study aims to analyze the financial performance of PT Ophthalindo Jaya using the DuPont System through the Return on Assets and Return on Equity approaches over the 2015–2024 period. The DuPont framework examines the relationship among three key financial ratios, namely Net Profit Margin (NPM), Total Asset Turnover (TATO), and Equity Multiplier (EM), which are used to evaluate the components underlying the company's Return on Assets (ROA) and Return on Equity (ROE). This study employs a quantitative descriptive approach using secondary data obtained from the company's financial statements, including the statement of financial position and income statement. The results show that the three DuPont components fluctuated considerably throughout the observation period, resulting in substantial changes in the company's profitability indicators. NPM declined from 23% in 2015 to 0% in 2020 and subsequently recovered to 5% in 2024, while TATO decreased from 1.41 to 0.67 over the same period. ROA declined from 33% in 2015 to 0% in 2020 and reached only 3% in 2024. Similarly, ROE decreased from 55% to 0% and recovered to 9% in 2024. Overall, the findings indicate that the company's financial performance remained unstable, with profitability and asset utilization representing important areas for improvement. The company should therefore strengthen cost efficiency, optimize asset utilization, and maintain a sound capital structure to support sustainable financial performance.

1. INTRODUCTION

The development of the business sector in Indonesia has become increasingly dynamic and complex, as reflected in the growing number of newly established companies and the varying capabilities of firms in managing their financial resources. This situation requires companies to maintain financial stability, operational efficiency, and business sustainability amid increasingly competitive market conditions. In this context, financial performance represents a critical aspect of a company's ability to sustain its competitiveness and ensure long-term business continuity. Financial performance does not merely indicate the level of profitability achieved by a company but also reflects the effectiveness of its management of available resources, assets, and equity. Therefore, financial statement analysis plays a strategic role in providing comprehensive information regarding a company's financial condition over a specific period. Such information serves as an important basis for decision-making by internal stakeholders, particularly management, as well as external stakeholders, including investors, creditors, and regulators [1].

Given the importance of financial performance in assessing business sustainability, an appropriate analytical approach is required to evaluate a company's financial condition comprehensively. Financial ratio analysis is one of the most widely used approaches for assessing various aspects of corporate performance, including profitability, liquidity, and operational efficiency. Through financial ratio analysis, management can identify the financial strengths and weaknesses of a company and evaluate its operational effectiveness. However, conventional financial ratio analysis has certain limitations because individual ratios tend to provide partial information, with each ratio representing only a specific dimension of corporate performance. Consequently, examining individual ratios separately may make it difficult to understand the interrelationships among financial indicators and may result in an incomplete assessment of overall financial performance. This limitation highlights the need for an analytical framework capable of integrating multiple financial ratios to provide a more comprehensive and holistic evaluation [2].

The DuPont System is one analytical framework that can address these limitations by decomposing financial performance into several interconnected components. Under the conventional three-step DuPont framework, Return on Equity (ROE) is decomposed into three principal components: Net Profit Margin (NPM), Total Assets Turnover (TATO), and Equity Multiplier (EM). This decomposition enables the sources of changes in ROE to be identified more precisely by distinguishing the effects of profitability, asset utilization efficiency, and financial leverage. In addition, the DuPont System establishes a relationship between these components and Return on Assets (ROA), which measures the company's ability to generate profit from its total assets. Thus, the DuPont approach provides a more comprehensive understanding of the relationship between operational efficiency, profitability, asset utilization, and financial structure [3].

ROA and ROE are particularly important indicators because they provide different perspectives on corporate financial performance.

ROA emphasizes the company's ability to utilize its assets efficiently to generate profits, whereas ROE focuses on the return generated for shareholders from the equity invested in the company. The simultaneous assessment of these two indicators through the *DuPont System* provides a broader perspective on the sources of financial performance by linking profit margins, asset turnover, and capital structure. A deeper understanding of the relationship between ROA and ROE is therefore essential for identifying the underlying drivers of profitability and developing appropriate business strategies. Such an assessment can assist management in improving operational efficiency, optimizing asset utilization, and managing the company's financing structure to strengthen its competitive position. Accordingly, the *DuPont System* remains relevant not only as an analytical framework in academic research but also as a practical tool for contemporary financial decision-making [4].

Previous empirical studies have demonstrated the usefulness of the *DuPont System* in evaluating corporate financial performance. A study of PT Terminal Teluk Lamong Surabaya, for example, showed that the DuPont approach could reveal the interrelationships among profitability, asset utilization efficiency, and financial leverage in a more comprehensive manner [5]. Similarly, research on manufacturing companies included in the LQ45 index demonstrated that the *DuPont System* was effective in assessing the contribution of profit margins, asset turnover, and capital structure to overall profitability [6]. Another study focusing on the transportation sector found that NPM and TATO had significant relationships with ROE, while EM contributed to the variation in equity returns through the company's financial leverage structure [7]. Furthermore, research in the food and beverage industry indicated that companies with stronger profit margins, more efficient asset turnover, and higher leverage tended to achieve higher ROE [8]. These findings suggest that the *DuPont System* offers a more integrated perspective than conventional financial ratio analysis because it connects several dimensions of financial performance that are otherwise examined separately.

Despite the extensive application of the *DuPont System* across several industries, its application to companies operating in the ophthalmic medical equipment distribution sector remains relatively limited. The characteristics of this sector, including relatively high operating costs, the need for efficient asset management, and intense competition in the healthcare equipment market, make a comprehensive assessment of financial performance particularly relevant. PT Ophthalindo Jaya, a company engaged in the distribution of ophthalmic medical equipment, operates within this competitive environment and faces the challenge of maintaining sustainable financial performance while ensuring efficient resource utilization and service quality. Therefore, an integrated assessment of its profitability, asset utilization, and financial structure is necessary to identify the principal factors underlying its financial performance.

In this context, the application of the *DuPont System* to PT Ophthalindo Jaya is expected to provide more detailed information regarding the factors contributing to the company's financial strengths and weaknesses. Rather than merely presenting ROA and ROE as final performance indicators, the approach enables these outcomes to be interpreted through their underlying financial components. This information can provide a strategic basis for management to formulate appropriate policies aimed at improving profitability, enhancing asset utilization efficiency, and optimizing the company's financial structure. Therefore, this study aims to comprehensively analyze the financial performance of PT Ophthalindo Jaya using the *DuPont System*, with particular emphasis on *Return on Assets* (ROA) and *Return on Equity* (ROE). The analysis is expected to provide insights into the underlying determinants of the company's financial performance and support more effective financial and strategic decision-making.

2. METHODS

2.1. Data and Study Design

This study uses secondary data obtained from the internal financial statements of PT Ophthalindo Jaya. The dataset consists of the statements of financial position (balance sheets) and statements of profit or loss for the ten-year period from 2015 to 2024. The financial data were reviewed and verified for completeness and consistency prior to analysis. The validated data were subsequently used to evaluate the company's financial performance using the *DuPont System*, with particular emphasis on *Return on Assets* (ROA) and *Return on Equity* (ROE).

Table 1. Data

Year	Net Sales (IDR)	Net Income (IDR)	Total Assets (IDR)	Total Liabilities (IDR)	Total Equity (IDR)
2015	4.788.899.726	1.117.442.082	3.405.219.407	1.380.529.740	2.204.689.667
2016	9.509.445.679	1.479.990.831	9.287.378.780	2.224.729.080	7.062.649.700
2017	14.264.506.922	1.343.585.404	10.732.722.541	2.029.715.925	8.703.006.616
2018	15.933.111.207	956.402.057	11.831.561.360	2.391.036.606	9.440.524.754
2019	17.987.448.687	668.447.807	13.888.702.129	5.991.600.857	7.897.101.272
2020	11.932.797.811	10.831.073	14.028.383.590	6.131.282.317	78.971.012.723
2021	19.149.580.968	482.984.167	21.206.226.650	12.826.141.194	8.380.085.456
2022	25.786.762.140	787.140.650	22.356.288.421	13.132.415.553	9.223.872.868
2023	24.043.506.735	930.070.228	28.930.166.656	18.779.723.560	10.153.943.096
2024	20.345.963.667	960.466.944	30.357.197.777	19.242.787.737	11.114.410.040

Furthermore, the research procedure was conducted systematically through several sequential stages. First, the problem was identified by examining issues related to the financial performance of PT Ophthalindo Jaya and determining the focus of the analysis using the *DuPont System*. Second, the research objectives were formulated to assess the company's financial performance based on the components underlying *Return on Assets* (ROA) and *Return on Equity* (ROE). Third, the required secondary data were collected from PT Ophthalindo Jaya's financial statements, consisting of the statements of financial position (balance sheets) and statements of profit or loss for the period 2015–2024. Fourth, the collected data were processed by calculating the financial ratios within the *DuPont System*, namely *Net Profit Margin* (NPM), *Total Asset Turnover* (TATO), and *Equity Multiplier* (EM), which were subsequently used to derive ROA and ROE. Fifth, the calculated ratios were analyzed to examine the relationships among the financial components and to evaluate the company's overall financial performance. Finally, conclusions were drawn based on the analytical results to address the research objectives and provide an overall assessment of the financial performance of PT Ophthalindo Jaya.

2.2. DuPont System Methods

The *DuPont System* is a financial analysis method developed by the *DuPont Corporation* in the early twentieth century to evaluate corporate effectiveness and profitability [9]. The method emphasizes that financial performance cannot be adequately assessed using a single financial indicator. Therefore, the *DuPont System* integrates information from the statement of profit or loss and the statement of financial position

to examine the relationships among profitability, asset utilization, and financial structure. This approach enables companies to identify the underlying sources of strengths and weaknesses in their profit-generating activities.

To provide a structured assessment of financial performance, the *DuPont System* decomposes corporate returns into three principal financial ratios: *Net Profit Margin* (NPM), *Total Assets Turnover* (TATO), and *Equity Multiplier* (EM) [10]. These three ratios represent important dimensions of financial performance, namely the ability to generate profit from sales, the efficiency of asset utilization, and the role of financial leverage in supporting the company's assets. By analyzing these three ratios as components of *Return on Assets* (ROA) and *Return on Equity* (ROE), the *DuPont System* provides a clearer understanding of the factors underlying changes in corporate financial performance.

The primary objective of applying the *DuPont System* is to obtain a comprehensive understanding of a company's profitability, operational efficiency, and financial structure. This approach enables management to identify the financial components that have the greatest influence on changes in overall performance [11]. By decomposing financial performance into interconnected financial ratios, companies can identify the specific factors that contribute to their overall returns. Furthermore, the *DuPont System* can be used to compare financial performance across different periods or among companies operating within the same industry, as it provides an objective assessment based on measurable financial information.

2.3. Return on Assets (ROA)

Return on Assets (ROA) is a financial ratio used to measure a company's ability to generate net income from its total assets over a specific period [12]. It is an important indicator for assessing the efficiency of asset management in generating profits. ROA enables management and investors to evaluate how effectively a company utilizes its available resources to generate income. A higher ROA generally indicates that the company is using its assets more efficiently to generate profits, whereas a lower ROA may indicate potential inefficiencies in asset utilization that require further evaluation. Therefore, ROA serves as an important measure of asset efficiency in assessing a company's overall financial performance.

As a measure of asset efficiency, ROA provides an indication of the amount of profit generated from the assets employed by a company [13]. Continuous monitoring of ROA can assist management in evaluating investment and operational strategies and identifying opportunities to improve the efficiency of asset utilization. In addition, ROA can be used to compare a company's performance with industry benchmarks or competitors operating within the same sector. Such comparisons enable companies to assess their competitive position and formulate appropriate improvement strategies. Within the *DuPont System*, ROA is expressed as the product of *Net Profit Margin* (NPM) and *Total Asset Turnover* (TATO), as follows:

$$ROA = NPM \times TATO \quad (1)$$

This equation indicates that ROA is determined by both the company's profit margin and its efficiency in utilizing assets [12]. The relationship demonstrates that the return generated from assets is influenced by two fundamental factors: the ability to generate profit from sales and the efficiency with which assets are utilized to generate revenue. Consequently, changes in ROA can be analyzed by examining changes in NPM and TATO. The interpretation of ROA therefore provides insight into the extent to which the company is able to generate profitability through the effective utilization of its assets. Accordingly, ROA can serve as an indicator of management's effectiveness in optimizing available resources to generate sustainable profits. For the subsequent analysis, ROA values can be interpreted using general categories representing the effectiveness of assets in generating profits. The interpretation categories adopted in this study are presented in Table 2.

Table 2. Interpretation of ROA values

ROA Range	Category	Interpretation
< 5%	Low	Assets are relatively ineffective in generating profits
5% – 10%	Fair	Assets generate profits at a moderate level
10% – 20%	Good	Assets are effectively utilized to generate profits
> 20%	Very Good	Assets are highly productive in generating profits

The categories presented in Table 2 are used as a general reference for interpreting the effectiveness of the company in generating profits from its available assets based on its *Return on Assets* (ROA).

2.4. Return on Equity (ROE)

Return on Equity (ROE) is a financial ratio used to measure a company's ability to generate net income from the shareholders' equity invested in the company [12]. This ratio indicates the extent to which the capital provided by shareholders contributes to the generation of profits. A higher ROE generally indicates that the company is more effective in managing shareholders' equity to generate earnings, whereas a lower ROE may indicate reduced effectiveness in utilizing equity to create profits. Therefore, ROE is one of the key indicators for assessing corporate financial performance from the perspective of shareholders.

As a measure of profitability, ROE provides an indication of the return received by shareholders on the capital invested in the company [12]. ROE enables management to evaluate the extent to which the company's operational strategies and financing structure contribute to generating returns for shareholders. In addition, ROE can be used to compare the financial performance of companies operating within the same industry and may therefore provide useful information for investment decision-making. Within the *DuPont System*, ROE is decomposed into three fundamental components: *Net Profit Margin* (NPM), *Total Asset Turnover* (TATO), and *Equity Multiplier* (EM), as expressed in the following equation:

$$ROE = ROA \times EM \quad (2)$$

Equation (2) indicates that ROE can also be expressed as the product of ROA and EM [12]. This relationship demonstrates that the return on equity is influenced by the efficiency of asset utilization and the company's financial structure. When ROA is relatively high and the Equity Multiplier is maintained at an appropriate level, the return generated for shareholders can increase.

Therefore, ROE provides a comprehensive indication of the company's effectiveness in managing its available resources and shareholders' equity to generate profits. Consistent monitoring of ROE can assist management in evaluating business strategies, identifying potential weaknesses in financial performance, and strengthening the company's long-term competitiveness. To support the analysis presented in the subsequent section, ROE values can be classified into several categories to indicate the company's ability to generate profits from shareholders' equity. The general interpretation ranges adopted in this study are presented in Table 3.

Table 3. Interpretation of ROE values

ROE Range	Category	Interpretation
< 5%	Low	The return generated for equity holders is relatively low
5% – 15%	Fair	The company generates a reasonable return on equity
15% – 25%	Good	The return on equity indicates effective financial performance
> 25%	Very Good	Equity generates a high return and demonstrates strong profitability

The categories presented in Table 3 are used as a reference for interpreting the company's ability to generate returns for equity holders based on its *Return on Equity* (ROE).

2.5. Net Profit Margin (NPM)

Net Profit Margin (NPM) is a profitability ratio that measures a company's ability to generate net income from its net sales over a specific period (Rohkani, 2019). This ratio reflects the company's efficiency in controlling expenses and converting sales into net profit. A higher NPM indicates that the company is more effective in generating profit from its sales activities, whereas a lower NPM may indicate relatively lower profitability or reduced cost efficiency. The NPM is calculated as follows:

$$NPM = \frac{\text{Net income}}{\text{Net sales}} \times 100\% \quad (3)$$

NPM is an important indicator for assessing the effectiveness of the financial strategies implemented by management [14]. An increase in NPM indicates that the company is able to control its operating expenses and improve the efficiency of its sales activities. Conversely, a decline in NPM may indicate increasing costs, declining sales efficiency, or reduced effectiveness in managing the company's operations.

In addition to reflecting cost and operational efficiency, NPM provides useful information for investors in evaluating a company's long-term financial prospects. The ratio indicates the amount of net income generated from each unit of sales and therefore provides an indication of the company's ability to convert revenue into profit [15]. Consequently, NPM not only reflects the company's internal financial condition but may also influence the confidence of equity holders and potential investors in assessing the company's profitability.

Conceptually, NPM represents one of the fundamental components of the *DuPont System* because net income generated from sales constitutes the basis for evaluating subsequent measures of financial performance. Within the DuPont framework, an increase in NPM, *ceteris paribus*, directly contributes to an increase in ROA and subsequently strengthens ROE. Thus, changes in NPM can be used to identify the extent to which profitability from sales contributes to changes in the company's overall financial performance. To facilitate the assessment of profitability, NPM values can be classified into several categories. The general interpretation ranges adopted for this study are presented in Table 4.

Table 4. Interpretation of NPM values

NPM Range	Category	Interpretation
< 5%	Low	The company's ability to generate profit is very limited
5% – 10%	Fair	The level of profitability is within a reasonable range
10% – 20%	Good	The company operates efficiently and generates a healthy level of profit
> 20%	Very Good	The company is highly effective in generating profit

The categories presented in Table 4 are used as a reference for interpreting the company's level of profitability based on its *Net Profit Margin* (NPM).

2.6. Total Asset Turnover (TATO)

Total Asset Turnover (TATO) is an activity ratio used to measure a company's ability to utilize its total assets to generate sales revenue over a specific period [16]. This ratio reflects the efficiency of a company's operations in utilizing its available assets. A higher TATO indicates that the company is more effective in converting its assets into sales. The TATO is calculated as follows:

$$TATO = \frac{\text{Net sales}}{\text{Total assets}} \quad (4)$$

A high TATO indicates that the company's assets are being utilized productively to support its business activities [17]. Conversely, a low TATO may indicate potential inefficiencies in asset utilization, such as excess capacity or investments that have not yet generated optimal returns. Evaluating TATO enables management to identify opportunities to improve asset utilization, either by optimizing the use of fixed assets or by improving operational policies and resource allocation.

TATO also serves as an indicator of the company's asset productivity over time [18]. Changes in TATO can provide important signals for internal stakeholders to reassess the effectiveness of investment strategies and resource management. Within the *DuPont System*, TATO plays an important role in linking asset utilization efficiency with profitability. All else being equal, an increase in TATO contributes to higher ROA because assets are being utilized more efficiently to generate sales, which subsequently supports the generation of profits.

Thus, TATO has a strategic role within the *DuPont System* because it illustrates how effectively a company utilizes its assets to support sales generation and profitability. The combination of a favorable NPM and a high TATO indicates strong profitability and asset utilization

efficiency and, *ceteris paribus*, contributes to higher ROA. For the subsequent analysis, general interpretation criteria are required to assess the efficiency of asset turnover. In financial performance analysis, TATO values can be classified into several categories based on the effectiveness of assets in generating sales. The interpretation ranges adopted in this study are presented in Table 5.

Table 5. Interpretation of TATO values

TATO Range	Category	Interpretation
< 1 times	Inefficient	Assets have not been utilized effectively to generate sales
1.00–1.20 times	Fairly Efficient	Assets contribute to sales generation, although their utilization is not yet optimal
1.21–2.00 times	Efficient	Assets are effectively utilized to generate sales, indicating a healthy level of asset turnover
> 2.00 times	Highly Efficient	Assets are highly productive and demonstrate a high turnover rate

The categories presented in Table 5 are used as a reference for interpreting the efficiency of the company's asset utilization based on its *Total Asset Turnover* (TATO).

2.7. Equity Multiplier (EM)

Equity Multiplier (EM) is a financial leverage ratio that indicates the extent to which a company's assets are financed through shareholders' equity relative to external financing [19]. The ratio is an important indicator for assessing a company's financial structure and degree of leverage. A higher EM indicates that a larger proportion of the company's assets is financed through liabilities relative to shareholders' equity, whereas a lower EM indicates greater reliance on equity financing. The EM is calculated as follows:

$$EM = \frac{\text{Total assets}}{\text{Total equity}} \quad (5)$$

The EM provides management with an indication of the extent to which liabilities contribute to financing the company's total assets [19]. The use of debt at a reasonable level may increase potential returns through the leverage effect. However, excessive reliance on debt may increase the company's financial risk and debt-servicing burden. Therefore, maintaining an appropriate balance between internal and external financing is important for preserving financial stability.

Within the *DuPont System*, EM serves as a leverage multiplier that influences ROE [20]. When NPM and TATO remain favorable, an increase in EM can magnify the return generated on shareholders' equity. However, a higher EM does not necessarily indicate better financial performance because the benefit of financial leverage depends on the company's profitability and asset utilization efficiency. When profitability and operational efficiency decline, excessive leverage may increase financial risk and potentially reduce the sustainability of shareholders' returns.

Therefore, EM analysis is not limited to measuring the degree of financial leverage but also provides insight into how the company's financing structure affects shareholders' returns. An appropriate EM, when considered together with NPM and TATO, can contribute to a more balanced financial structure and support sustainable financial performance. For the subsequent analysis, EM values can be classified into several leverage categories. The interpretation ranges adopted in this study are presented in Table 6.

Table 6. Interpretation of EM values

EM Range	Category	Interpretation
≤ 1.00 times	Very Low Leverage	The company relies almost entirely on equity financing and has minimal liabilities
1.00–1.50 times	Low Leverage	The company uses a relatively small proportion of liability financing
1.51–2.50 times	Moderate Leverage	The use of liability financing remains within a moderate range
> 2.50 times	High Leverage	The company relies substantially on liability financing to support its assets

The categories presented in Table 6 are used as a reference for interpreting the company's degree of financial leverage based on its *Equity Multiplier* (EM).

3. RESULTS

3.1. Descriptive Statistics

Descriptive statistics were used to provide an overview of the financial characteristics of PT Ophthalindo Jaya during the 2015–2024 observation period. The analysis involved five financial variables, namely net sales, net income, total assets, total liabilities, and total equity. These variables constitute the fundamental financial information used to derive the ratios in the DuPont System. The minimum, maximum, mean, and standard deviation values are presented in Table 7.

Table 7 indicates considerable variation in the company's financial variables over the study period. Net sales ranged from IDR 4.79 billion to IDR 25.79 billion, with an average of approximately IDR 16.37 billion. Net income ranged from IDR 10.83 million to IDR 1.48 billion, with a mean of approximately IDR 873.74 million. The difference between the minimum and maximum values indicates substantial variation in annual operating outcomes.

Total assets ranged from IDR 3.41 billion to IDR 30.36 billion, with an average of approximately IDR 16.60 billion. Total liabilities ranged from IDR 1.38 billion to IDR 19.24 billion, while total equity exhibited a relatively large dispersion, as indicated by its standard deviation of approximately IDR 22.50 billion. Overall, the descriptive statistics demonstrate substantial changes in the company's operating performance, asset base, and financing structure during the observation period. These results provide the empirical basis for further analysis using the

Table 7. Descriptive statistics

Variable	Minimum (IDR)	Maximum (IDR)	Mean (IDR)	Standard Deviation (IDR)
Net Sales	4.788.899.726	25.786.762.140	16.374.200.000	6.491.107.000
Net Income	10.831.073	1.479.990.831	873.736.000	423.236.000
Total Assets	3.405.219.407	30.357.197.777	16.602.380.000	8.783.505.000
Total Liabilities	1.380.529.740	19.242.787.737	8.412.996.000	7.010.564.000
Total Equity	2.204.689.667	78.971.012.723	15.315.130.000	22.496.420.000

DuPont System, particularly to examine the development of profit margin, asset utilization, financial leverage, and their combined effects on ROA and ROE.

3.2. DuPont System

The DuPont System was applied to decompose the company's financial performance into three main components: Net Profit Margin (NPM), Total Asset Turnover (TATO), and Equity Multiplier (EM). These components were subsequently used to evaluate Return on Assets (ROA) and Return on Equity (ROE). The values of NPM, TATO, and EM are illustrated in Figure 1.

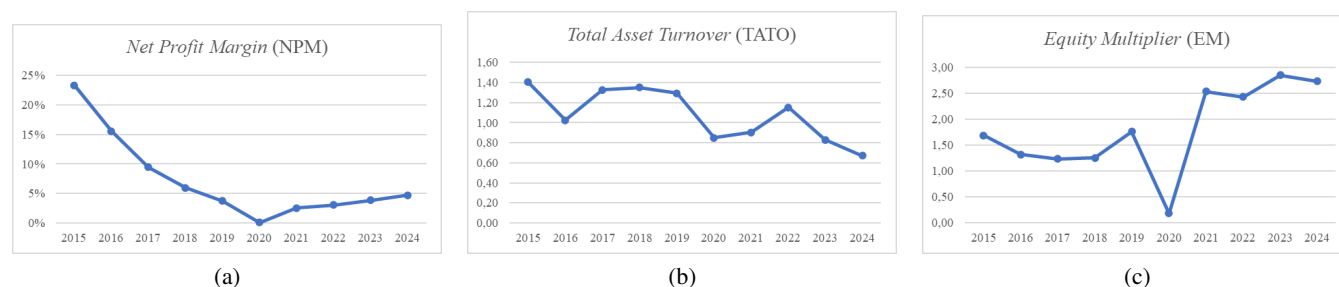


Figure 1. Values of NPM (a), TATO (b), and EM (c)

The annual movement of NPM is shown in Figure 1 (a). The values of NPM declined from 23% in 2015 to 16% in 2016 and continued to decrease to 9%, 6%, and 4% in 2017, 2018, and 2019, respectively. The ratio reached its lowest level in 2020, at approximately 0%. Following this decline, NPM increased to 3% in 2021 and 2022, 4% in 2023, and 5% in 2024. The overall pattern indicates a substantial decline in profit margin during the first part of the observation period, followed by a gradual recovery after 2020. However, the NPM recorded in 2024 remained considerably below the level observed in 2015. Moreover, the annual development of TATO is shown in Figure 1 (b). The values of TATO reached its highest value of 1.41 times in 2015. The ratio decreased to 1.02 times in 2016 before increasing to 1.33 times in 2017 and 1.35 times in 2018. TATO subsequently declined to 1.30 times in 2019 and 0.85 times in 2020. A partial recovery occurred in 2021 and 2022, when TATO increased to 0.90 and 1.15 times, respectively. The ratio then declined again to 0.83 times in 2023 and 0.67 times in 2024. Therefore, the lowest TATO was recorded at the end of the observation period. Furthermore, the development of EM is shown in Figure 1(c). The EM ratio remained within the range of 1.23–1.76 times during 2015–2019. A substantial change occurred in 2020, when EM decreased to 0.18 times. The ratio subsequently increased to 2.53 times in 2021 and 2.42 times in 2022. EM reached its highest recorded value of 2.85 times in 2023 before declining slightly to 2.73 times in 2024. The results indicate considerable variation in the asset-to-equity relationship over the study period. The most pronounced changes occurred between 2020 and 2021, followed by relatively high EM values during 2021–2024. The development of EM is illustrated in Figure 1(c).

Return on Assets (ROA) represents the return generated from the company's asset base. In the DuPont framework, ROA is obtained from the interaction between NPM and TATO. Meanwhile, Return on Equity (ROE) measures the return generated relative to shareholders' equity. Under the DuPont framework, ROE is determined by the interaction between ROA and EM. The values of ROA and ROE are illustrated in Figure 2.

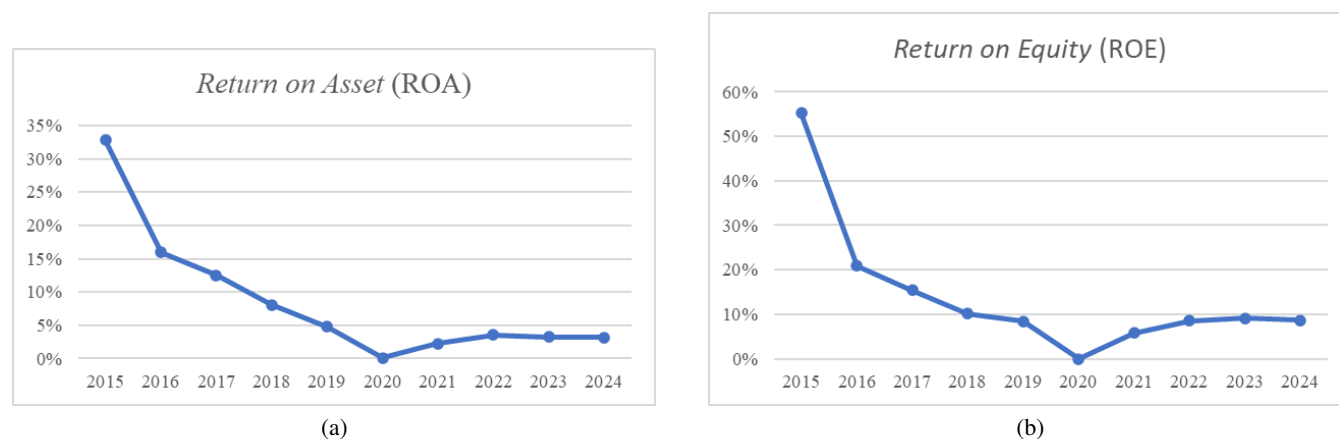


Figure 2. Values of ROA (a) and ROE (b)

The development of ROA is shown in Figure 2 (a). The ROA results show a downward movement from approximately 33% in 2015 to 5% in 2019. ROA reached its lowest level in 2020 at approximately 0%. Following this decline, the ratio increased to approximately 2% in 2021 and 4% in 2022. ROA subsequently declined slightly to approximately 3% in both 2023 and 2024. The pattern of ROA broadly follows the changes in NPM and TATO. The highest profitability based on assets was recorded at the beginning of the observation period, whereas the

lowest level occurred in 2020. Moreover, the development of ROE is shown in Figure 2 (b). The ROE decreased from approximately 55% in 2015 to 8% in 2019 and reached approximately 0% in 2020. The ratio subsequently recovered to 6% in 2021 and 9% in 2022. ROE remained approximately 9% in both 2023 and 2024. The results demonstrate that shareholder returns were substantially lower during the latter part of the observation period than at the beginning of the study period.

The results reveal substantial variation in all DuPont components throughout the observation period. NPM decreased from 23% in 2015 to approximately 0% in 2020 before recovering to 5% in 2024. TATO also exhibited considerable variation, with the highest value of 1.41 times in 2015 and the lowest value of 0.67 times in 2024. EM showed the most pronounced fluctuation, particularly between 2020 and 2021. After reaching 0.18 times in 2020, EM increased to above 2.4 times during 2021–2024. These changes were accompanied by corresponding movements in ROA and ROE. ROA decreased from approximately 33% in 2015 to 0% in 2020 and recovered to approximately 3% in 2024. Similarly, ROE declined from approximately 55% to 0% over the same period and subsequently recovered to approximately 9%. Overall, the results indicate that PT Ophthalindo Jaya experienced substantial changes in profitability, asset utilization, and financial leverage during 2015–2024.

4. DISCUSSION

The DuPont analysis indicates that profitability was the most prominent source of variation in the financial performance of PT Ophthalindo Jaya during the observation period. The NPM declined substantially from 23% in 2015 to approximately 0% in 2020 and subsequently recovered to 5% in 2024. This pattern indicates that the company's capacity to transform sales into net earnings weakened considerably during the first part of the observation period.

The sharp reduction in NPM implies that the growth in sales observed in several years was not consistently accompanied by proportional growth in net income. This distinction is important because increasing sales alone does not necessarily translate into stronger profitability. The company's profitability is also determined by its ability to control the costs associated with generating those sales. Therefore, the declining NPM suggests that the effectiveness of earnings conversion from revenue weakened during the observation period. The particularly low NPM in 2020 represents an important turning point in the company's financial performance. The year coincided with the COVID-19 pandemic, which generated substantial disruption across business activities and economic conditions. Nevertheless, the decline in NPM should not be attributed exclusively to the pandemic without further decomposition of operating expenses, financing costs, and other income components. The more appropriate interpretation based on the available evidence is that the company's profit-generating capacity was substantially weakened in 2020. The gradual improvement in NPM from 2021 onward indicates a recovery in profitability. However, the ratio remained considerably below its 2015 level. This finding suggests that the post-2020 improvement was not sufficient to restore the company's historical profitability position. From a managerial perspective, improving the quality of earnings requires not only increasing sales but also maintaining effective cost management and ensuring that additional revenue generates sufficient incremental profit.

The TATO results provide additional evidence of changes in the company's operating efficiency. Although TATO fluctuated throughout the observation period, the ratio declined from 1.41 times in 2015 to 0.67 times in 2024. The decline was particularly visible in the later years, indicating that the company's expanding asset base generated relatively less sales than in the earlier period. The movement of total assets and net sales provides an important context for interpreting this result. Total assets increased substantially during the observation period, while net sales did not maintain a comparable upward trajectory. In the later years, sales declined from IDR 25.79 billion in 2022 to IDR 20.35 billion in 2024, whereas total assets increased from IDR 22.36 billion to IDR 30.36 billion over the same period. This divergence is consistent with the decline in TATO. From an efficiency perspective, the finding suggests that the additional assets were not fully translated into additional sales. An expanding asset base can support future growth, but if asset growth occurs faster than revenue generation, asset productivity will decline. Consequently, improving TATO requires greater alignment between asset investment and the company's revenue-generating capacity.

The relationship between TATO and ROA is also important in the DuPont framework. A lower asset turnover reduces the contribution of asset utilization to ROA, particularly when it occurs simultaneously with a decline in NPM. Therefore, the deterioration in TATO during the latter part of the observation period reinforced the adverse effect of declining profitability on overall asset returns.

The EM results reveal a substantial change in the company's financing structure. EM remained within a relatively narrow range during 2015–2019 but changed sharply in 2020 and increased substantially during the subsequent years. This indicates that the relationship between the company's asset base and equity changed considerably over the observation period. The increase in EM after 2020 indicates a greater asset-to-equity ratio. Within the DuPont framework, a higher EM can amplify ROE when the company generates positive returns from its assets. However, leverage does not automatically improve financial performance. Its effect on shareholder returns depends on the company's ability to generate sufficient profitability from the assets financed through the associated capital structure.

The relatively high EM observed during 2021–2024 occurred simultaneously with relatively low ROA. This finding is important because it demonstrates that higher financial leverage did not restore ROA to its earlier level. Although the increase in EM contributed to the recovery of ROE, the improvement in shareholder returns remained constrained by the relatively weak underlying asset profitability.

The unusually low EM observed in 2020 should be interpreted carefully. Because the reported equity value for that year differs substantially from the surrounding observations, the underlying financial statement data should be verified before drawing a definitive conclusion about the company's financing policy. Once the equity figure is confirmed, the 2020 EM can be interpreted more reliably within the broader financing structure.

The DuPont decomposition demonstrates that ROA was strongly affected by the combined movement of NPM and TATO. ROA decreased from approximately 33% in 2015 to nearly zero in 2020 and recovered only partially thereafter. The simultaneous deterioration in profit margin and asset turnover provides a clearer explanation of the decline in asset-based profitability than either ratio considered independently.

During 2015–2019, the declining NPM was accompanied by relatively moderate TATO values. As a result, the reduction in profitability progressively translated into lower ROA. The situation became more pronounced in 2020, when NPM approached zero and TATO declined to 0.85 times. Since ROA is determined by the product of these two components, the near-zero profit margin resulted in an exceptionally low return on assets. The subsequent recovery of NPM contributed positively to ROA after 2020. However, the relatively weak TATO, particularly in 2023 and 2024, limited the extent of the recovery. This explains why ROA remained at approximately 3% in 2024 despite the improvement in NPM to 5%. These findings emphasize that improving ROA requires simultaneous attention to profitability and asset efficiency. An improvement in sales margin alone may not be sufficient if the company's asset base continues to generate relatively low sales. Similarly, improving asset turnover without sufficient profit margins may also have a limited effect on overall returns.

The ROE results demonstrate the additional role of financial leverage in determining shareholder returns. ROE declined sharply from approximately 55% in 2015 to nearly zero in 2020 and subsequently recovered to approximately 9% in 2024. Unlike ROA, however, ROE is directly affected by EM, meaning that changes in financial leverage can magnify the effect of asset profitability on shareholders' returns. The post-2020 increase in EM coincided with the recovery in ROE. For example, EM increased to 2.53 times in 2021 and remained above 2.4 times through 2024, while ROE recovered to approximately 6–9%. This pattern indicates that the higher asset-to-equity relationship supported the recovery of ROE even though ROA remained relatively low.

However, a higher ROE resulting from greater leverage should not automatically be interpreted as an improvement in fundamental operating performance. The DuPont framework demonstrates that ROE can increase through financial leverage while underlying asset profitability remains weak. Therefore, the recovery in ROE during 2021–2024 should be viewed together with the relatively low ROA and declining TATO.

This finding has an important managerial implication. Financial leverage can be beneficial when the return generated by assets is sufficiently strong, but excessive reliance on leverage may increase financial exposure if operating profitability deteriorates. Accordingly, the sustainability of ROE improvement depends on the company's ability to strengthen underlying profitability and asset productivity rather than relying solely on changes in capital structure. Taken together, the findings indicate that the financial performance of PT Ophthalindo Jaya during 2015–2024 was shaped primarily by changes in profitability and asset utilization, while financial leverage influenced the magnitude of shareholder returns. The decline in NPM reduced the company's ability to generate earnings from sales, while the weakening TATO indicated declining productivity of the asset base. These two factors jointly contributed to the substantial reduction in ROA.

The increase in EM after 2020 provided additional support for ROE recovery, but the effect of leverage was constrained by the relatively low level of ROA. Therefore, the improvement in ROE should not be interpreted independently from the company's operating performance. The DuPont framework demonstrates that sustainable improvement in shareholder returns requires a balanced improvement in profit margin, asset efficiency, and financing structure.

From a managerial perspective, the findings suggest three major priorities. First, the company needs to strengthen its profit margin by improving the efficiency of revenue generation and cost management. Second, asset utilization should be improved so that the expansion of the asset base is accompanied by adequate revenue growth. Third, changes in financial leverage should be managed carefully to ensure that the resulting increase in ROE is supported by stronger operating profitability rather than by leverage alone. Overall, the DuPont analysis provides a more comprehensive assessment of financial performance than a single profitability ratio. By decomposing ROE into profitability, asset efficiency, and financial leverage components, the analysis identifies the dimensions of financial performance that require greater managerial attention. The findings suggest that the long-term improvement of PT Ophthalindo Jaya's financial performance depends on strengthening operational profitability and asset productivity while maintaining a sustainable financing structure.

5. CONCLUSION

Based on the DuPont System analysis, the financial performance of PT Ophthalindo Jaya during 2015–2024 was characterized by considerable fluctuations in profitability, asset utilization, and financial leverage. Net Profit Margin (NPM) and Total Asset Turnover (TATO) were key components determining changes in Return on Assets (ROA), as variations in profit margins and asset utilization were reflected in the company's ability to generate returns from its assets. Meanwhile, the Equity Multiplier (EM) played an important role in determining Return on Equity (ROE) by reflecting changes in the company's financial leverage and capital structure. The results further indicate that ROA remained relatively suboptimal throughout the latter part of the observation period, particularly following the substantial decline in profitability in 2020, while ROE also fluctuated considerably as a result of changes in both ROA and EM. Overall, the DuPont analysis demonstrates that the company's financial performance was not consistently stable, highlighting the importance of improving profitability, strengthening asset utilization efficiency, and maintaining an appropriate capital structure to enhance sustainable returns to shareholders.

Author Contributions

Andi Fitriawati: Conceptualization; Data curation; Investigation; Writing-original draft; Visualization. Nurhayati: Conceptualization; Methodology; Formal analysis; Validation; Writing-review and editing; Supervision. Lintang Kinanti Putri Widodo: Data curation; Investigation; Software; Writing-review and editing. All authors reviewed and approved the final version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest.

AI Tools Usage Disclosure

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