

THE ROLE OF THE DU PONT SYSTEM IN ASSESSING THE FINANCIAL PERFORMANCE OF PT. KEDOYA ADYARAYA, TBK

Clarifca Andya Sanostin¹, Andhira Putri Yusharyanto^{2*}

Management, Universitas Pamulang

*corresponding author's email address: clarifca22@gmail.com

Abstract

The purpose of this study is to determine the financial performance of PT. Kedoya Adyaraya Tbk. from 2020 to 2024 using the du pont system method. The data used in this study are financial statements from 2020 to 2024. The data analysis method used is descriptive analysis. From the data analysis conducted on the financial statements for the last five years using the du pont system method, PT. Kedoya Adyaraya Tbk. showed fluctuating financial performance during 2020-2024. This can be seen from the fluctuating Return on Equity during this period. This fluctuating Return on Equity was caused by several factors, including fluctuations in Return on Investment and Net Profit Margin. Inefficiency also occurred in Total Asset Turnover, which, despite an increase, was still below the industry standard. However, the Equity Multiplier was above the industry standard with fluctuating values, indicating dynamics in the total value of assets and equity.

Keywords: Financial performance, Du Pont System

Introduction

Companies are economic entities in the business sector that are constantly changing, aiming to continue operating in order to meet expectations. Companies are established with objectives such as increasing sales, improving services, maximizing value for shareholders, and generating profits. As a result, businesses that experience a continuous decline in revenue are considered incompetent because they have failed to meet their objectives.

Companies must perform well financially in order to attract investors or retain existing ones. This is a result of current commercial developments. To produce the actions and results desired by the organization, performance evaluations aim to motivate employees to achieve organizational goals and comply with pre-established standards of behavior, as well as to assess and evaluate the goals that the company has achieved within a certain period of time. The financial side of a company is very important. Finance will be a major focus for many companies, both large and small, especially in a more complex business world. Many companies have collapsed suddenly due to fierce competition between them and unstable economic conditions. Therefore, companies need to monitor their performance and condition carefully if they want to survive or even grow.

Company performance is a reflection of the company's financial condition, which can be analyzed using various financial analysis concepts to determine whether the company's financial condition is profitable or unprofitable based on its performance over a certain period of time. This is important to ensure that the company's resources are used effectively, efficiently, and optimally. Therefore, it is necessary to analyze the company's financial performance using the DuPont system analysis tool.

The DuPont system analysis provides a more in-depth assessment of financial performance. It shows how net profit margin, total asset turnover, and equity ratio affect the return on equity. This analysis provides details on the various variables that affect a company's financial performance through the DuPont system analysis. The DuPont system analysis method is almost identical to standard financial statement analysis; however, this method takes a more integrated approach, using the composition of financial statements as analytical elements. Specifically, this analysis analyzes financial ratios to help companies identify factors that influence how well they manage their resources, which ultimately improves the company's future financial planning. The goal is to determine how well a company manages its capital. Several ratios are discussed in the DuPont system analysis, including combining activity ratios with profitability ratios. Profitability ratios indicate overall performance and efficiency. The activity ratio used is Total Assets Turnover, which measures how well a company manages all of its assets. Other types of profitability ratios include Net Profit Margin (NPM), Return on Investment (ROI), and Return on Equity (ROE).

PT. Kedoya Adyaraya, Tbk is a company that provides healthcare services. The company provides information about its financial condition in financial reports that are presented in a logical, clear, and easy-to-understand manner. Due to fierce competition in the healthcare industry, PT. Kedoya Adyaraya, Tbk must continue to optimize its resources and improve the company's financial performance from year to year. One of the factors causing fluctuations in the financial performance of PT. Kedoya Adyaraya, Tbk is the influence of intense competition and movements in the rupiah exchange rate against the dollar. Based on the financial report data of PT. Kedoya Adyaraya Tbk, net profit/loss has experienced significant fluctuations or changes over the last 5 years. The inconsistent or unstable financial performance over the last five years indicates that the financial performance of PT. Kedoya Adyaraya Tbk is unstable. The trend in net profit/loss of PT. Kedoya Adyaraya Tbk is summarized in Table 1. Management must act immediately to improve the company's financial performance.

**Table 1. Net Profit/Loss of PT. Kedoya Adyaraya Tbk. 2020-2024
(presented in rupiah)**

Year	Profit/Loss	Change in Profit
2020	Rp 2.615.905.336	-
2021	Rp 52.939.563.963	Rp 50.323.658.627
2022	Rp 25.974.779.672	(Rp 26.964.784.291)

Year	Profit/Loss	Change in Profit
2023	Rp 25.092.662.838	(Rp 882.116.834)
2024	Rp 39.597.856.241	Rp 14.505.193.403

Source: <http://www.idx.co.id>

From the table, it can be seen that PT. Kedoya Adyaraya Tbk experienced a decline in net profit/loss from 2020 to 2024. From 2021 to 2023, PT. Kedoya Adyaraya Tbk suffered losses, and in 2024, PT. Kedoya Adyaraya Tbk again showed an increase in losses. Fluctuations in a company's financial performance can affect its overall financial performance. Therefore, financial performance analysis is needed to evaluate a company's performance from a financial perspective.

The objective of this study is to determine the financial performance of PT. Kedoya Adyaraya Tbk using the Du Pont System.

Theoretical Framework

Definition of Financial Performance

According to Fahmi (2012), financial performance is an assessment conducted to determine the extent to which a company has implemented financial implementation criteria. This involves preparing financial statements in accordance with the rules and guidelines set by GAAP (Generally Accepted Accounting Principles) and SAK (Financial Accounting Standards).

According to Rudianto in Laurent et al. (2015), financial performance is the result or achievement attained by business management in carrying out its duties to manage company assets efficiently during a certain period of time. Given the financial operations that have been carried out, financial performance is very important for businesses to determine and evaluate their level of success.

The Purpose of Assessing Financial Performance

The main component of financial performance is achieving a healthy balance between debt and equity. The economy is heavily dependent on debt. Many companies are financed by debt, which is used by governments, corporations, and even ordinary citizens.

Sucipto (2007) states that the objectives of a company's performance appraisal are as follows:

1. Increase employee motivation to manage organizational operations effectively and efficiently. Planning is the process by which business management sets goals to be achieved in the future.
2. Support decision-making related to issues such as transfers, promotions, and termination of employment. Decisions related to employees evaluated based on their performance can be made using data generated from performance evaluations.
3. Determine employee development and training needs, and establish program selection and evaluation standards. Management will find it difficult to assess and select employee training programs that suit employee needs if upper management does not understand their strengths and weaknesses.

4. Providing feedback to employees on how their managers evaluate their work. Lower-level management in corporate organizations receives some delegation of authority from upper-level management.
5. Providing a basis for incentive distribution. The results of this assessment can also be used as a tool to evaluate the effectiveness of management performance to date. They are considered to have met the objectives for a specific period or several periods if they are able to achieve the set objectives. On the other hand, if they fail to achieve or are unable to meet the set objectives, this will provide valuable lessons for management in the future. To identify the source of the error, this failure needs to be analyzed.

Stages in Analyzing Financial Performance

According to Fahmi (2015), there are five stages in analyzing the financial performance of a company in general, namely:

1. Analyzing data from financial statements.
To ensure the accuracy of financial statements, reviews are conducted to ensure that financial statements are prepared in accordance with generally accepted accounting principles.
2. Performing calculations.
In order for the calculations to produce conclusions that are consistent with the analysis, the calculation approach used here is tailored to the circumstances and issues at hand.
3. Compare the results of the calculations that have been made.
Next, the results of these calculations are compared with the results of calculations from other companies. The two most common approaches to identifying these similarities are as follows:
 - a. Time series analysis, which compares different times or periods, with the aim of presenting the results in graph form.
 - b. Cross-sectional approach, which involves comparing ratios between one company and another in a similar scope conducted simultaneously.From the results of using these two methods, it is hoped that a conclusion can be made stating that the company is in very good, good, fair/normal, poor, or very poor condition.
4. Analyze various problems encountered.
After completing the three phases, the analysis now focuses on the company's financial performance. Next, an analysis is conducted to identify the problems and challenges facing the business.
5. Identify and address various issues that arise.
To overcome the challenges and obstacles encountered, solutions were sought at this final stage, after identifying various problems.

Definition of the Du Pont System

According to Weston and Brigham in Tarmizi (2016), in 1919 Du Pont Corporation pioneered a method of analyzing company performance that is still known today as Du Pont Analysis. "Du Pont System analysis is an analysis that

covers all activity ratios and profit margins on sales to show how these ratios affect profitability.”

According to Lianto in Yolanda and Harimurti (2017), the du pont system is a method used to assess the operational effectiveness of a company, because du pont analysis covers the elements of sales, assets used, and profits generated by the company. Meanwhile, according to Hani (2015), the DuPont system is a comprehensive financial performance measurement tool, as it is able to directly break down the two main reports from the financial statements, namely the balance sheet and income statement.

Du Pont System Financial Ratios

According to Phrasasty, et al (2015), the financial ratios used in the Du Pont system are calculated as follows:

1. Profitability Ratio

The profitability ratio is a measure that shows a company’s ability to generate profits in a given period. The profitability ratio consists of:

a. Net Profit Margin (NPM)

NPM is a ratio used to measure the NPM after interest and taxes on net sales for a given period. The higher this ratio, the better the financial performance of a company. The industry standard for net profit margin is 20%. The formula for this ratio is as follows:

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

b. Equity Multiplier (EM)

EM is a ratio used to measure the level of capital turnover in meeting the company’s total assets. The higher this ratio is, the better the company’s financial performance. The industry standard for equity multiplier is 40%. The formula for this ratio is as follows:

$$\text{Equity Multiplier} = \frac{\text{Total Assets}}{\text{Total Equity}} \times 100$$

c. Return on Investment (ROI)

ROI shows that a company earns profits measured by the amount of profit after deducting interest and taxes compared to total assets. The higher this ratio, the better the company’s performance, especially in terms of return on investment. The industry standard for return on investment is 30%. The formula for this ratio is as follows:

$$\text{Return on Investment} = \frac{\text{Profit After Tax}}{\text{Total Assets}} \times 100$$

d. Return on Equity (ROE)

ROE is a ratio used to measure net income after tax against equity capital. A higher ratio indicates better financial performance by the company. The industry standard for return on equity is 40%. The formula for this ratio is as follows:

$$\text{Return on Equity} = \frac{\text{Profit After Text}}{\text{Total Equity}} \times 100$$

2. Activity Ratio

The activity ratio is a metric used to assess how well a business utilizes its resources. This ratio illustrates how management oversees all of its resources to increase profits and productivity. The activity ratio consists of total asset turnover (TATO), which is a ratio that measures the efficiency of a company's asset management in a given period. The industry average for this ratio is 2 times. TATO is a ratio found in the activity ratio, which itself is a ratio intended to measure the extent to which a company is effective in using its resources. This ratio illustrates how management oversees all of its resources to increase profits and productivity. The formula for calculating TATO is as follows:

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

Advantages and Disadvantages of the Du Pont System

According to Harahap in Fauziah (2016), the advantages and disadvantages of the Du Pont System are as follows:

1. As a comprehensive financial analysis technique, management can determine the level of efficiency in asset utilization.
2. It can be used to measure the profitability of each product produced by the company so that it is known which products have potential.
3. In analyzing financial statements, use a more integrative approach and use financial statements as elements of analysis.

Meanwhile, the weaknesses of the Du Pont System are as follows:

1. The ROI of one company is difficult to compare with the ROI of another similar company due to differences in accounting practices.
2. Using ROI alone will not be sufficient to compare two or more issues and arrive at a satisfactory conclusion.

Method

Data Types and Sources

The types of data used in this study are:

1. Qualitative data is data that cannot be measured on a numerical scale (Kuncoro, 2009). The results of this study are a general description of the company and theories related to this study.
2. Quantitative data is data that can be measured on a numerical scale (Kuncoro, 2009). The quantitative data in this study is the financial reports of PT. Kedoya Adyaraya Tbk for the period 2020-2024, obtained from the Indonesia Stock Exchange. The data source in this study is secondary data, which is data that has been collected by data institutions and published to the data user community (Kuncoro, 2009). Secondary data was obtained from company financial reports, books, journals, and theses related to this study.

Data Collection Methods

The data collection methods used in this study include:

1. Documentation is a record of past events in the form of writing, images, or monumental works by a person (Sugiyono, 2010). The data used in this study are financial data from PT. Kedoya Adyaraya Tbk that have been published on the official website of the Indonesia Stock Exchange, namely www.idx.co.id, from 2020 to 2024.
2. Literature Review (Literature Survey) is the systematic identification, location, and analysis of documents containing information related to research issues (Kuncoro, 2009). The data used in this study include books in libraries, journals, and theses related to this research.

Data Analysis Method

The data analysis method used in analyzing financial statements is descriptive. This study uses a quantitative method because the data used as a research source consists of numbers that will be calculated.

According to Phrasasty, et al. (2015), there are several stages to conducting data analysis using the du pont system, namely:

1. Conducting financial performance measurements of the company through the financial performance trends of PT. Kedoya Adyaraya Tbk for the years 2020-2024 in general.
2. Measuring the company's financial performance using financial ratios used in the DuPont system for 2020-2024, where the ratios used include:

Results and Discussion

The Du Pont System is a method for determining Return on Equity by showing how debt, asset turnover, and profit margin are related (Atmaja in Phrasasty, 2015). The benefit of the Du Pont System itself is to assess a company's financial performance by combining several ratios, including the Net Profit Margin ratio, Equity Multiplier, Return on Investment, Return on Equity, and Total Asset Turnover. The results of the data analysis in the previous section can be summarized in Table 2.

Table 2. Du Pont System Ratios of PT. Kedoya Adyaraya Tbk. 2020-2024

Year	Net Profit Margin	Equity Multiplier	Total Asset Turn Over	Return On Investment	Return On Equity
2020	0,89%	153,58%	0,39	0,35%	0,53%
2021	0,01%	111,99%	0,46	0,01%	0,01%
2022	7,23%	109,58%	0,40	2,91%	3,19%
2023	6,72%	110,34%	0,45	3,03%	3,34%
2024	8,98%	111,17%	0,50	4,46%	4,96%
Industry Standard	20%	40%	2 Times	30%	40%

Source: Processed data, 2025

Based on Table 2, it can be explained as follows;

1. Net Profit Margin (NPM)

PT. Kedoya Adyaraya Tbk.'s NPM from 2020 to 2024 continues to fluctuate, with the lowest point in 2021 at 0.01%. In 2022, the company improved its financial performance and experienced an increase until 2024 of 8.98% or a positive NPM. However, when compared to industry standards, the NPM ratio for 2020-2024 is still below the overall industry standard of 20%. In general, the NPM from 2020 to 2024 fluctuates, due to fluctuations in net profit after tax.

2. Equity Multiplier (EM)

The EM of PT. Kedoya Adyaraya Tbk. from 2020 to 2024 decreased from 153.58% in 2020 to 109.58% in 2022, then increased slightly in 2023 and 2024. Therefore, when compared to industry standards, the EM ratio for 2020-2024 is above the industry standard, which is above 40%. In general, the EM value of PT. Kedoya Adyaraya Tbk. in 2020-2024 fluctuates. The cause of the fluctuation in the EM is due to the fluctuation in the total asset value, accompanied by the fluctuation in the common equity value.

3. Total Asset Turn Over (TATO)

PT Kedoya Adyaraya Tbk.'s TATO from 2020 to 2024 continues to increase, indicating that PT Kedoya Adyaraya Tbk.'s financial performance is quite good, as it continues to improve every year. However, when compared to industry standards, financial performance based on TATO is still below industry standards, which is less than 2 times turnover per period. Nevertheless, the value of TATO from 2020 to 2024 has continued to increase, which is due to an increase in Net Sales.

4. Return On Investment (ROI)

The ROI of PT. Kedoya Adyaraya Tbk. from 2020 to 2024 initially declined and then increased after 2021. The lowest point of ROI occurred in 2021 at 0.01%. From 2022 to 2024, PT. Kedoya Adyaraya Tbk. improved its performance, as shown by the value of ROI, which continued to increase and was positive. However, when compared to industry standards, the value of ROI is still below industry standards, which is below 30%. The ROI value for 2020-2024 is also generally volatile, due to the fluctuating NPM value.

5. Return On Equity (ROE)

The ROE of PT. Kedoya Adyaraya Tbk. from 2020 to 2024 continues to experience a decline in financial performance, with the lowest ROE being in 2021 at 0.01%. From 2022 to 2024, PT. Kedoya Adyaraya Tbk. shows an improvement in financial performance. However, when compared to financial performance based on the ROE ratio, it is still far below the industry standard or below 40%. The ROE value from 2020 to 2024 tends to fluctuate, due to fluctuations in ROI, accompanied by fluctuations in ROE as well.

Conclusion

Based on the results of research and discussions conducted by researchers at PT. Kedoya Adyaraya Tbk., the researchers concluded that the financial performance analyzed using the Du Pont System method during 2020-2024 showed fluctuating performance. This can be seen from the fluctuating Return on Equity over the last

five years. This fluctuation in Return on Equity is caused by fluctuations in Return on Investment and Net Profit Margin, which have also undergone changes. Inefficiency is seen in the Total Asset Turn Over, which, despite an increase, is still below industry standards. In addition, the high and fluctuating Equity Multiplier indicates movements in the total value of assets and equity that affect the company's financial structure. However, since 2022, there has been an improvement in financial performance, indicating the company's efforts to increase profitability and operational efficiency.

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