# Analysis of Financial Performance Growth Using the Du Pont System at PT. Astra Agro Lestari Tbk

Yogi Resmawan<sup>1\*</sup>, M. Imam Sundarta<sup>2</sup>, Azolla Degita Azis<sup>3</sup>

1,2,3 Universitas Ibn Khaldun Bogor, Indonesia

#### **ABSTRACT**

Penelitian ini bertujuan untuk mengetahui kinerja keuangan serta pertumbuhan kinerja keuangan PT. Astra Agro Lestari Tbk periode 2016-2020. Untuk mengetahui kinerja keuangan tersebut dilakukan analisis menggunakan Du Pont System dengan melakukan perhitungan Net Profit Margin dan Total Assets Turnover untuk mencari Return On Investment, yang kemudian dari hasil Return On Investment tersebut dilakukan analisis pertumbuhan Return On Investment dengan menggunakan rasio pertumbuhan. Analisis Du Pont System digunakan untuk mengetahui sejauh mana efektif dan efisiensi perusahaan dalam mengelola aktiva nya untuk menghasilkan laba. Dalam penelitiannya dilakukan pengumpulan data, klasifikasi data, memasukan data kedalam tabel, analisis data menggunakan Du Pont System approach dan analisis pertumbuhan Return On Investment untuk mengetahui perkembangan kinerja perusahaan. Berdasarkan tahapan tersebut menunjukan bahwa Return On Investment tahun 2016-2017, 2017-2018, dan 2018-2019 mengalami pertumbuhan negatif atau menurun, yang di tunjukan dengan angka Return On Investment pada tahun 2016-2017 sebesar -10,16%, tahun 2017-2018 sebesar -22,73%, dan tahun 2018-2019 sebesar -100,32% sebaliknya pada tahun 2019-2020 mengalami pertumbuhan positif atau naik yang di tunjukan dengan angka Return On Investement mengalami kenaikan sebesar 85,5%.

Keywords: Analisis, Pertumbuhan Kinerja Keuangan, Du Pont System.

Corresponding author: Resmawan14@gmail.com1\*

History of Article: Received: Jan 2023. Revision: April 2023. Published: May 2023.

DOI Prefix 10.32832/

#### Introduction

Company performance is the overall evaluation of the company regarding revenue, costs, equity, liabilities, profitability, and assets as a whole. Meanwhile, financial performance is an analysis needed to assess the good or bad financial health of the company in a period, this is done so that it can be seen to what extent the company has implemented the rules of financial implementation properly and correctly, besides that performance is the result of an evaluation of the work that has been completed (Hutabarat, 2020).

Analysis of financial statements is needed for users of financial statements to see the level of financial health in the company mentioned. According to Wahyudiono (2014) argues that the purpose of analyzing financial statements is to assist users in estimating the future of the company by making comparisons, evaluating, and analyzing the tendency of the company's financial aspects.

The Du Pont System is one of several methods for analyzing financial statements, carried out to analyze the company's profitability and the level of equity retrieval. According to Saragih (2016), argues that if ROI is getting bigger, the financial performance is getting better because the company has a great ability to earn profits. The Du Pont System approach of ROI calculation can also be used to show financial performance in the company as a whole without the need to calculate each ratio in order to obtain overall results. The Du Pont System approach in ROI is obtained from the calculation of the Net Profit Margin. Net Profit Margin with Total Assets Turnover. Which will then be analyzed regarding the growth of financial performance using the ROI Growth Ratio.

PT Astra Agro Lestari Tbk is an Indonesian company in the plantation industry that has been established for more than 30 years and has now become a company that processes oil palm plantations on the islands of Kalimantan and Sulawesi with a managed area of 297,011 hectares having the best governance. This study will use financial statement data, namely the Balance Sheet and Income statement of PT Astra Agro Lestari Tbk as the object of research to determine the extent of the performance and financial growth of PT Astra Agro Lestari from 2016-2020.

This study aims to determine the performance of the financial statements of PT Astra Agro Lestari Tbk. from 2016-2020 using the DU Pont System method. According to Harahap (2015: 333) argues that the approach of the Du Pont System is more integrative and the composition of financial statements is used in its analysis as an element to assess the company's financial performance, the ROI figure is considered important by the Du Pont System therefore the Du Pont System starts based on the ROI figure. Then we will analyze the growth of financial performance using ROI Growth Ratio.

The Du Pont System analysis that will be made using Return On Investment (ROI) has advantages as explained by Mardiana, A. S. W., & Solihin, D. (2021), the importance of the growth of a Return On Investment (ROI) as an indicator of the company to determine how effective and efficient the company is to get profit, and become a comparative measure of the company's success in making a profit in carrying out its business activities. based on the explanations above, the researchers tried to conduct research on the analysis of financial performance growth using the Du Pont System at PT Astra Agro Lestari Tbk.

Du Pont System analysis is one of the financial statement analysis tools created by F. Donalson Brown of DuPont Corporation to analyze as a tool for analyzing the financial statements of Generals Motors. Du Pont System analysis is a combination of Total Asset Turnover (TATO) / Activity Ratio and Net Profit Margin (NPM) / Profitability Ratio which shows that the two ratios have a relationship to show the results of the Return On Investment (ROI) ratio.

According to Cashmere (2008, 104-105) financial ratios are dividing one number by another to make a comparison of the numbers contained in the financial statements. The compared figures come from figures in one period or more than one period, then the results are used as financial ratios to measure management performance in a period, have the targets set been achieved or not. The resulting performance results can also be used as evaluation material for various things that must be improved in the future so that management performance can be further improved or maintained according to the predetermined targets.

Based on the ratios mentioned, researchers will use the following ratios: 1) Activity Ratio is a ratio required by the company in measuring activities regarding the use of assets owned by the company when carrying out its operations either in sales, purchasing or other activities. The activity ratio used by researchers is Total Assets Turnover (TATO), which is the ratio between total sales and total company assets. 2) Profitability Ratio is a ratio to draw a picture of the company's effectiveness in obtaining profit. The following are classified as profitability ratios: a) Net Profit Margin, According to Harahap (2015, 304) this ratio shows how much percentage of net income is obtained from each sale. The greater this ratio the better because it is considered that the company's ability to earn profits is quite high. b) Return On Investment, According to Kasmir (2008: 202) Return on Investment (ROI) is a ratio that shows the results (return) on the amount used in the company. ROI is also a measure of the effectiveness of a management in processing its investment. The smaller the ratio is considered less good, and vice versa. 3) Growth Ratio, According to Cashmere (2008: 114-115), the Growth Ratio is a ratio that shows how capable the company is in maintaining its economic position in economic growth and its business sector.

in maintaining its economic position in the growth of the economy and its business sector. In this study, the growth ratio is used to measure the growth of Return On investment (ROI).

### **Research Method**

The object of this research is the financial statements, Balance Sheet and Income Statement of PT Astra Agro Lestari for the period 2016-2020. Using the Du Pont System method in analyzing financial performance and Growth Ratio to see the growth of the company's financial performance.

The type of research used is descriptive, research on certain objects in the company by collecting and presenting data from the object under study which then from the results of the research obtained information. And the approach used is a qualitative approach, because researchers will analyze the financial performance and financial performance growth that occurred at PT Astra Agro Lestari Tbk in 2016-2020 The formula used is as follows: Net Profit Margin (NPM) Calculations used in measuring the level of profit of a company from sales or income. Then compare the profit with the total of all the money the company makes.

$$Net Profit Margin = \frac{\text{Laba Setelah Pajak}}{\text{Penjualan}} \times 100\%$$

Total Asset Turnover (TATO)

Total asset turnover is a ratio used to describe asset turnover which is measured from sales volume. Then compare net sales with total assets for one period.

Return on Investment (ROI)

Return on Investment is a ratio used in measuring the level of profit generated from the company's total investment.

#### Growth ROI

ROI growth is a technique used to measure the company's ability to maintain or improve its financial statement performance.

$$Growth \text{ ROI} = \frac{\text{ROIt - ROIt-1}}{\text{ROIt-1}} \times 100\%$$

#### Result

The financial statements used in this study are the Balance Sheet and Income Statement for the period 2016 to 2020. PSAK No. 69 "Agriculture" is applied retrospectively for the first time, resulting in adjustments to the consolidated statement of financial position for the nearest comparative initial period (December 31, 2017 and January 1, 2017). It includes several accounts such as: (a) 'Agricultural product growth' amounting to Rp 234,718 million (01/01/2017: Rp 293,177 million) was recognized as 'Biological assets'; (b) Rp 50,535 million (01/01/2017: Rp 63,121 million) was deducted from 'Deferred tax assets, net'; (c) Rp 8,144 million (01/01/2017: Rp 10,174 million) was added as 'Deferred tax liabilities, net'; (d) Rp 169. 860 million (01/01/2017: Rp 212,165 million) was added to 'Retained earnings-unreserved'; (e) Rp 6,179 million (01/01/2017: Rp 7,717 million) was added to 'Noncontrolling interests'; (f) In the amount of Rp 24,909 million (01/01/2017: nil) 'Livestock inventories' was reclassified under 'Biological assets'.

There were also other adjustments in 2017, namely adjustments to the consolidated statement of profit or loss, as well as to the consolidated statement of other comprehensive income. The adjustment was in the form of recording a loss in the change in fair value of 'Agricultural growth products' amounting to Rp 58,459 million. Against the 'Other net' account, along with the related effects in 'Income tax expense' amounting to Rp 14,616 million and 'Non-controlling interests' amounting to Rp 1,538 million.

In this study, the financial statement data used in 2016 is financial statement data before adjustment, while the 2017 financial statement data uses financial statement data after adjustment in accordance with PSAK No. 69 'Agriculture' retrospectively, as well as the financial statements used in 2018-2020. Financial statement data can be seen in table 3 below:

Tabel 1. Data Laba Rugi dan Neraca (Disajikan dalam jutaan rupiah)

Description	2016	2017	2018	2019	202
Net Income	14.121.374	17.305.688	19.084.387	17.452.736	18.807
Cost of Revenue	(10.445.360	(13.160.438	(15.544.881	(15.308.230	(15.84
	)	)	)	)	)
Operating & Other Expenses	(1.467.236)	(1.265.204)	(1.332.426)	(1.483.646)	(1.500
Income tax expense	(94.479)	(810.260)	(686.357)	(417.231)	(568.
Other Comprehensive Income	65.488	(49.614)	151.293	(248.852)	(426
Net Profit	2.179.787	2.020.172	1.672.016	(5.223)	467.
Current Assets	4.051.544	4.480.448	4.500.628	4.472.011	5.937
Non-current Assets	20.174.578	20.639.161	22.356.339	22.502.113	21.843
Total Assets	24.226.122	25.119.609	26.856.967	26.974.124	27.781
Source: secondary data from IDX 2016-2020					

## Analysis of the Financial Performance of PT. Agro Lestari Tbk for the 2016-2020 Period with the Du Pont System Technique

Du Pont System analysis is a combination of Total Asset Turnover (TATO) / Activity Ratio with Net Profit Margin (NPM) / Profitability Ratio and shows that both ratios interact with each other to determine Return On Investment (ROI).

Table 2. List of NPM, TATO, ROI and Change in ROI

Tahun	Net Profit Margin	Total Assets Turnover	Return On Investment	ΔROI
(1)	(2)	(3)	$(4) = (2) \times (3)$	(5)
2016	15,44 %	0,58 kali	8,96 %	-
2017	11,67 %	0,69 kali	8,05 %	-0,91
2018	8,76 %	0,71 kali	6,22 %	-1,83
2019	-0,03 %	0,65 kali	-0,02 %	-6,24
2020	2,48 %	0,68 kali	1,69 %	1,71

Source: processed secondary data

Net Profit Margin: 1) In 2016 the total sales amounted to Rp. 14,121,374 (in millions of rupiah) the company generated a net profit of Rp. 2,179,787 (in millions of rupiah). With a profit rate of 15.44%. 2) 2017 experienced an increase in sales to Rp. 17,305,688 (in millions of rupiah) but the company experienced a decrease in net profit to Rp. 2,020,172 (in millions of rupiah) by only generating net profit of 11.67% of total sales. Decreased from 2016 to 2017 by 3.77%. 3) In 2018 sales again increased to Rp. 19,084,387 (in millions of rupiah) but the net profit generated also decreased again to Rp.1,672,016 (in millions of rupiah) so that it only generated a net profit of 8.76% of total sales. Again experienced a decline from 2017 to 2018 by 2.91%. 4) In 2019 sales decreased to Rp.17,452,387 (in millions of rupiah) and the company suffered a loss of Rp. 5,223 (in millions of rupiah) so that the result of the Net Progit Margin was -0.03%. Experienced a drastic decline from 2018 to 2019 by 8.79%. The reason for the decrease is because the expenses are greater than the revenue or sales obtained in 2019 so that the company experiences losses, to increase the net profit margin the company must reduce production costs and expenses or increase sales revenue. 5) In 2020 sales increased by Rp.18,807,043 (in millions of rupiah) and the net profit generated increased slightly by Rp. 467,253 (in millions of rupiah) and resulted in a net profit of 2.48% of total sales. Increased from 2019 to 2020 by 2.51%.

Total Assets Turnover: 1) In 2016 with total assets of Rp. 24,226,122 (in millions of rupiah) the company generated sales of Rp.14,121,374 so that the company was only able to manage assets with a turnover rate of 0.58 times. 2) In 2017 with total assets of Rp. 25,119,609 (in millions of rupiah) the company generated sales of Rp.17,305,688 so that the company was only able to manage assets with a turnover rate of 0.69 times. Experienced an increase from 2016 to 2017 of 0.11 times. 3) In 2018 with total assets of Rp. 26,856,967 (in millions of rupiah) the company generated sales of Rp.19,084,387 so that the company was only able to manage assets with a turnover rate of 0.71 times. Experienced an increase from 2017 to 2018 of 0.02 times. 4) In 2019 with total assets of Rp. 26,974,124 (in millions of rupiah) the company generated sales of Rp.17,452,387 so that the company was only able to manage assets with a turnover rate of 0.65 times. Down from 2018 to 2019 by 0.06 times. 5) In 2020 with total assets of Rp. 25,119,609 (in millions of rupiah) the company generated sales of Rp.17,305,688 so that the company was only able to manage assets with a turnover rate of 0.68 times. Increased from 2019 to 2020 by 0.03 times.

Return On Investment: 1) In 2016 with a net profit margin of 15.44% multiplied by a total assets turnover of 0.58 times resulted in a return on investment of 8.96%. That is, with an invested asset value of Rp. 24,226,122 (in millions of rupiah) only able to generate a net profit rate of Rp. 2,179,787 (in millions of rupiah). 2) Year 2017 with a net profit margin of 11.67% multiplied by a total assets turnover of 0.69 times resulted in a return on investment of 8.05%. That is, with an invested asset value of Rp. 25,119,609 (in millions of rupiah) only able to generate a net profit rate of Rp. 2,020,172 (in millions of rupiah). Experienced a decrease from 2016 to 2017 by 0.91%. 3) 2018 with a net profit margin of 8.76% multiplied by a total assets turnover of 0.71 times resulted in a return on investment of 6.22%. This means that with an invested asset value of Rp. 26,856,967 (in millions of rupiah) it is only able to generate a net profit rate of Rp. 1,672,016 (in millions of rupiah). Experienced a decrease from 2017 to 2018 by 1.83%. 4) 2019 with a net profit margin of -0.03% multiplied by a total assets turnover of 0.65 times resulted in a return on investment of -0.02%.. This means that with the value of assets invested of Rp. 26,974,124 (in millions of rupiah) the company suffered a loss of Rp. 5,223 (in millions of rupiah). ROI results decreased dramatically from 2018 to 2019 by 6.24%. 5) 2020 with a net profit margin of 2.48% multiplied by a total assets turnover of 0.68 times resulted in a return on investment of 1.69%. After experiencing a drastic decline from 2018 to 2019 the company experienced a slight increase in 2020 with an invested asset value of Rp. 27,781,231 (in millions of rupiah) resulting in a net profit of Rp. 467,253 (in millions of rupiah). Experienced an increase from 2019 to 2020 of 1.71%.

#### **Analysis of Return On Investment Growth using Growth ROI (Growth ROI)**

ROI Growth Ratio is used to measure the company's ability to maintain or improve the company's financial statement performance capabilities. Return On Investment Growth data can be seen in table 3 below:

Tabel 3. Daftar Return On Investment dan Growth ROI

Year	Return On Investment	Growth ROI
(1)	(2)	(3)
2016	8,96 %	-
2017	8,05 %	-10,16 %
2018	6,22 %	-22,73 %
2019	-0,02 %	-100,32 %
2020	1,69 %	85,5 %

Source: processed secondary data

1) Return On Investment (ROI) in 2016-2017 decreased by -10.16% due to falling net income, although the total assets owned by the company increased due to the percentage decrease in net income greater than the increase in total assets it was shown by a decrease in net profit margin and an increase in total assets turnover. So that in 2017 the efficiency and effectiveness of the company is lacking in utilizing existing total assets to generate net income, this can be shown by the growth of Return On Investment in 2016-2017 which experienced negative growth or decreased. 2) Return On Investment (ROI) in 2017-2018 also decreased by -22.73%, the cause is also almost the same as in 2016-2017, which is caused by a decrease in net profit even though there is an increase in total assets because the percentage decrease in net profit is greater than the increase in total assets, it is indicated by a decrease in the value of net profit margin and an increase in total assets turnover. So that in 2017 the efficiency and effectiveness of the company is lacking in utilizing existing total assets to generate net income, this can be seen by the growth of Return On Investment in 2016-2017 which experienced negative growth or decreasing. 3) Return On Investment (ROI) in 2018-2019 there was a drastic decrease of -100.32% caused by the losses experienced by the company in 2019, the cause of the decline was that the expenses

or decreasing. 3) Return On Investment (ROI) in 2018-2019 there was a drastic decrease of -100.32% caused by the losses experienced by the company in 2019, the cause of the decline was that the expenses were greater than the income or sales obtained in 2019 so that the company suffered losses, to increase Return On Investment the company must reduce production costs and expenses or increase sales revenue. So that in 2017 the efficiency and effectiveness of the company was lacking in utilizing existing total assets to generate net income, this can be shown by the growth of Return On Investment in 2016-2017 which experienced negative or decreasing growth. 4) Return On Investment (ROI) in 2019-2020 has increased by 85.5%, due to an increase in the company's total assets and net profit, this is indicated by an increase in the value of net profit margin and total assets turnover, although it has not increased significantly but the company has not experienced losses as in 2019. So that in 2017 the efficiency and effectiveness of the company is quite good in utilizing existing total assets to generate net income, this can be shown by the growth of Return On Investment in 2016-2017 which experienced positive growth or increased..

#### Conclusion

Based on the results of research and discussion carried out by researchers at PT Astra Agro Lestari Tbk. it can be concluded as follows: 1) Return On Investment (ROI) in 2016-2017 decreased by -10.16%, this caused the growth of Return On Investment in 2016-2017 to experience negative growth or decline. 2) Return On Investment (ROI) in 2017-2018 also decreased by -22.73%, this also caused the growth of Return On Investment in 2017-2018 to experience negative or decreasing growth. 3) Return On Investment (ROI) in 2018-2019 experienced a drastic decline of -100.32%, this caused the growth of Return On Investment in 2016-2019 to experience negative or decreasing growth. 4) Return On Investment (ROI) in 2019-2020 increased by 85.5%, 2019-2020 experienced positive or increased Return On Investment growth.

#### **Refrence:**

Harahap, S. S. (2015). Analisis Kritis atas Laporan Keuangan. Jakarta: PT RajaGrafindo Persada.

Hutabarat, F. (2020). Analisis Kinerja Keuangan Perusahaan. Banten: Desanta Muliavisitama.

Kasmir. (2015). Analisis Laporan Keuangan. Jakarta: PT RajaGrafindo Persada.

Mardiana, A. S. W., & Solihin, D. (2021). Analisis Pertumbuhan Return On Investment (ROI) pada PT. Kino Indonesia Tbk Sebelum dan Sesudah Go Public. EKONOMIA, 9(3), 152-161.

Saragih, F. (2016). Analisis Du Pont System Dalam Mengukur Konerja Keuangan pada PT. Milenium Primarindo Sejahtera.

Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

Wahyudiono, B. (2014). Mudah Membaca Laporan Keuangan. Jakarta: Raih Asa Sukses.

www.idx.com

www.astra-agro.co.id