ANALYSIS OF COMPANY FINANCIAL PERFORMANCE USING DU PONT SYSTEM METHOD AT PT. ANEKA TAMBANG (PERSERO) DURING THE PANDEMIC AND BEFORE THE COVID-19 PANDEMIC

Helmalia Hardiyanti[a] Tommy Kuncara[b] Herry Sussanto[c]

[a]Department of Accounting, helmaliasa15@gmail.com Gunadarma University
[b]Department of Accounting, tommy_kuncara@staff.gunadarma.ac.id Gunadarma University
[c]Economic Faculty, herry@staff.gunadarma.ac.id Gunadarma University

ABSTRACT

This study aims to measure the company's financial performance by using the Du Pont System at PT. Aneka Tambang (Persero) During the Pandemic and Before the Covid-19 Pandemic.

The method used in this study is the Du Pont System method using the ratio Net Profit Margin (NPM), Total Assets Turnover (TATO), Return On Invesment (ROI), Equity Multyplier (EM), dan Return On Equity (ROE) from secondary data obtained from www.antam.com/ which is the official site of PT. Aneka Tambang (Persero) Tbk.

Based on the results of calculations using *Du Pont System* shows that financial performance PT. Aneka Tambang (Persero) During the Pandemic and Before the Covid-19 Pandemic, it was considered not good because ROE which has decreased. ROE which decreased due to the value of ROI which decreased by 2,78% and the decreasing EM value by 0,08 time. ROI which decreased due to the decreasing NPM value and the decreasing TATO value by 0,22 time. While the declining value of EM is due to the fact that the company is less than optimal in generating total assets from total equity. In this case, the higher the value of Equity Multiplier the more external funds or debt the company uses to fund company activities.

Keywords: Du Pont System, Net Profit Margin, Total Assets Turnover, Return On Invesment, Equity Multyplier, Return On Equity, and Financial Performance.

1. INTRODUCTION

Companies in the business world have various goals, including making profits, increasing sales and improving services. Being in a Covid-19 pandemic situation as it is currently making the company experience a decline in its sales, the Covid-19 pandemic has had a bad impact on the economy. Many companies are forced to feel the fall, even to the point that there are companies that require them to close their businesses.

Companies must know financial performance to be able to compare and analyze financial performance by seeking true and accurate information. In financial performance, there are financial statements. Financial statement analysis is the process of examining prior and current financial data to determine the company's financial performance and predict future risks and capabilities.

The Du Pont System method has the advantage that it is a comprehensive financial analysis technique that can be used to measure the profitability of each product produced by the company, and to analyze financial statements using a more integrative approach.

PT. Aneka Tambang (Persero) realizes that the Covid-19 pandemic is a big challenge for the world economy, including PT. Aneka Tambang (Persero) throughout 2020. For this reason, the company continuously adapts to the market, as well as innovates in the field of production and sales with a focus on increasing product added value, optimizing production and sales levels as well as implementing strategic policies related to proper and efficient cost management.

2. LITERATURE REVIEW

2.1 Definition of Financial Statement Analysis

According to Harahap (2015: 190) financial statement analysis is to describe financial statement items into smaller units of information and see the relationship that is significant or has meaning between one another, both quantitative data and non-quantitative data with The aim is to find out deeper financial conditions which are very important in the process of making the right decisions.

Meanwhile, according to Munawir (2010:35) financial statement analysis is an analysis of financial statements which consists of studying or studying the relationships and tendencies or trends to determine the financial position and results of operations as well as the development of the company concerned.

2.2 Purpose of Financial Statements

According to Novdin M. Sianturi and Djahotman Purba in the book Analysis of Financial Statements for Engineering and Economics (2021), the objectives of financial statement analysis are:

1. For Screening

    Financial statement analysis is intended to read, understand, and filter various business activities that will be carried out in the future. Examples of activities such as mergers, investments, or others.

2. For Forecasting

    Financial statement analysis is intended to predict what the company's financial condition in the future will be like. In addition, this analysis also aims to find out how the company's current financial condition is, whether it is profit or loss.

3. For diagnosis

    Financial statement analysis is intended to see the possibility of problems in the scope of operations and finance midwives. So that companies or interested parties can make strategies to prevent these problems from happening.

4. For Evaluation

    Financial statement analysis is intended to identify and assess the performance of management, finance, operations, and others. This assessment is also intended to see employee performance and make improvements to things that are felt to be lacking.

2.3 Definition of Du Pont System Analysis

According to Syamsudin (2011:64), the Du Pont System analysis is the Return On Investment (ROI) generated by multiplying the profits from the sales components and the efficiency of the use of total assets in generating these profits.

According to Abdullah Faisal (2005:49), this ROI is often called Return On Total Assets (ROA) which is used to measure the company's ability to generate profits by using all of its assets.

Meanwhile, according to Harahap (1998), the Du Pont System Analysis provides information about various factors that cause the ups and downs of a company's financial performance The method is almost the same as the analysis of ordinary financial statements, but the income is more integrative and uses the composition of the financial statements as an element of the analysis.

2.4 Advantages and Disadvantages of Du Pont System

According to Munawir (2010: 91-92) the advantages of Du Pont System analysis are:

a. One of the more comprehensive financial analysis techniques.
b. Can compare the efficiency of the use of working capital of one company with similar companies.
c. Used as a measure of the profitability of each product produced.
d. Used as a measure of the efficiency of actions taken by the division.

The disadvantages of the Du Pont System analysis are:

a. ROI of one company with similar companies is difficult to compare.
b. There is a fluctuation in the value of purchasing power.
c. Using ROI alone cannot make a comparison of the two problems.

3. RESEARCH METHODS

3.1 Data Types and Sources

The type of data used in this study is quantitative data where the data measured is a statement in the form of numbers presented in the company's financial statements. The data source used is secondary data. Data obtained from https://www.antam.com which is the official website of PT. Aneka Tambang (Persero) Tbk. The data used is in the form of the financial statements of PT Aneka Tambang (Persero) which consists of a balance sheet and income

statement for the period 2018-2020. As well as the accounts needed to calculate Du Pont System, namely sales, total assets, total equity and net income after tax.

3.2 Data collection technique
The data collection technique in this study used a documentation study. Documentation studies are used to obtain or obtain data and information needed in research in the form of annual financial reports published by the company that is the research sample on the official website https://www.antam.com.

3.3 Analysis Techniques
The analytical tool used to perform calculations using the Du Pont System method is the calculation of five ratios according to Arief (2016), namely:

1. Net Profit Margin (NPM)

    Net Profit Margin is a ratio that shows how much net profit the company gets. This ratio can be calculated as follows:

$$NPM = \frac{Net\ Profit\ After\ Tax}{Net\ sales} X\ 100\%$$

2. Total Assets Turnover (TATO)

    Total Assets Turnover is a ratio that shows the company's ability to manage all assets/investments to generate sales. The formula used is as follows:

$$TATO = \frac{Net\ sales}{Total\ assets}\ x\ 1\ time$$

3. Return On Imvesment (ROI)

    Return On Investment is a return on investment serves to measure the rate of return of the business on all existing assets. The formula used is as follows:

$$ROI = NPM\ x\ TATO$$

4. Equity Multiplier (EM)

    Equity Multiplier is a ratio that describes how much equity or capital is compared to the company's total assets or how much assets are financed by debt. The formula used is as follows:

$$EM = \frac{Total\ Aktiva}{Total\ Ekuitas}$$

5. Return On Equity (ROE)

    Return On Equity is a ratio that measures the rate of return of the business on all existing capital. The formula for finding ROE is as follows:

$$ROE = ROI\ x\ EM$$

4. RESULTS AND DISCUSSION

List of Financial Statements of PT. Aneka Tambang (Persero)
Year 2018-2020 (In Thousands of Rupiah)

DESCRIPTION	2018	2019	2020
CURRENT ASSET	7.342.040.979	7.665.239.260	9.150.514.439
NON-CURRENT ASSETS	24.853.309.866	22.529.668.470	22.578.998.556
TOTAL ASSETS	32.195.350.845	30.194.907.730	31.729.512.995
TOTAL EQUITY	18.448.366.291	18.133.419.175	19.039.449.025
SALE	25.275.245.970	32.718.542.699	27.372.461.091
PROFIT AFTER TAX	1.636.002.591	193.852.031	1.149.353.693

Source: Financial Statements of PT Aneka Tambang (Persero) Tbk for 2018-2020.

Calculations Using the Du Pont System Method:
1. Net Profit Margin (NPM)

Calculation Net Profit Margin (In Thousands of Rupiah)

Year	Net Profit After Tax	Net sales	NPM
2018	1.636.002.591	25.275.245.970	6,47%
2019	193.852.031	32.718.542.699	5,92%
2020	1.149.353.693	27.372.461.091	4,2%
Average			5,53%

Source: Financial report of PT. Aneka Tambang (Persero) Tbk. and Processed Data.
Based on the calculation of the Net Profit Margin in 2018-2020 shows that the NPM at PT. Aneka Tambang (Persero) tends to decline. The most significant decline occurred in 2020 with a decrease of 1.72%. This was due to the increase in net profit after corporate tax which was not matched by net sales. This indicates that the company's ability to generate net profit from sales is not stable.

2. Total Assets Turnover (TATO)

Calculation Total Assets Turnover (In Thousands of Rupiah)

Year	Net sales	Total assets	TATO
2018	25.275.245.970	32.195.350.845	0,78 time
2019	32.718.542.699	30.194.907.730	1,08 time
2020	27.372.461.091	31.729.512.995	0,86 time
Average			0,91 time

Source: Financial report of PT. Aneka Tambang (Persero) Tbk. and Processed Data.

Based on the calculation of Total Assets Turnover PT. Aneka Tambang (Persero) Tbk experienced fluctuations. The increase occurred in 2019 by 0.3 times and decreased in 2020 by 0.22 times. This happened because the increase in the company's total assets was not matched by an increase in income. It can be seen that the increase in total assets is higher than the increase in sales. This is because the company's performance is not good in managing its assets so that the resulting sales are not optimal.

3. Return On Investment (ROI)

Calculation Return On Invesment (In Thousands of Rupiah)

Year	NPM	TATO	ROI
2018	6,47%	0,78	5,05%
2019	5,92%	1,08	6,39%
2020	4,2%	0,86	3,61%
Average			5,02%

Source: Financial report of PT. Aneka Tambang (Persero) Tbk. and Processed Data.

Based on the results of the calculation of Return On Investment PT. Aneka Tambang (Persero) Tbk. In 2018-2020 experienced fluctuations. The increase occurred in 2019 by 1.34% and again experienced a significant decrease of 2.78%. This is due to the inefficiency in the total assets that increase is not matched by an increase in sales value, resulting in a decrease in TATO.

4. Equity Multiplier (EM)

Calculation Equity Multiplier (In Thousands of Rupiah)

Year	Total assets	Total Equity	EM
2018	32.195.350.845	18.448.366.291	1,75 time
2019	30.194.907.730	18.133.419.175	1,67 time
2020	31.729.512.995	19.039.449.025	1,67 time
Average			1,70 time

Source: Financial report of PT. Aneka Tambang (Persero) Tbk. and Processed Data.

Based on the results of the calculation of the Equity Multiplier PT. Aneka Tambang (Persero) Tbk. It decreased in 2019 by 0.08 times and experienced stability in 2020 by 0.08 times which indicates that the company uses a lot of external funds or debt to fund the company's activities in making acquisitions.

5. Return On Equity (ROE)

Calculation Return On Equity (In Thousands of Rupiah)

Year	ROI	EM	ROE
2018	5,05%	1,75	8,84%
2019	6,39%	1,67	10,67%
2020	3,61%	1,67	6,03%
Average			8,51%

Source: Financial report of PT. Aneka Tambang (Persero) Tbk. and Processed Data.

Based on the results of the calculation of Return On Equity PT. Aneka Tambang (Persero) Tbk. in 2018-2020 experienced fluctuations. The increase occurred in 2019 by 1.83% and experienced a significant decline again

in 2020 by 4.64% due to the declining ROI value. The decrease in ROI is marked by a decrease in NPM and a decrease in TATO.

Summary of Research Results

Based on the research that has been done to determine the performance of the financial statements at PT. Aneka Tambang (Persero) Tbk. the 2018-2020 period, the results of data processing have been obtained which will be presented in tabular form. The following is a table that summarizes the results of research on the performance of financial statements at PT. Aneka Tambang (Persero) Tbk. period 2018-2020 using the Du Pont System Method.

Calculation Results of the Du Pont System Method

Description	Year			Average
	2018	**2019**	**2020**	
NPM	6,47%	5,92%	4,2%	5,53%
TATO	0,78 time	1,08 time	0,86 time	0,91 time
ROI	5,05%	6,39%	3,61%	5,02%
EM	1,75 time	1,67 time	1,67 time	1,70 time
ROE	8,84%	10,67%	6,03%	8,57%

Source: Processed Data, 2021

5. CONCLUSION AND SUGGESTION

Based on the results of data analysis of financial statements and discussions at PT. Aneka Tambang (Persero) During the Pandemic and Before the Covid-19 Pandemic regarding financial performance analysis using the Du Pont System analysis, the financial performance of PT. Aneka Tambang (Persero) for two years, namely the 2018-2020 period, was included in the poor category. This is because the company's ROE tends to decrease. The decreasing ROE is caused by the decreasing ROI value and the decreasing EM value. The declining ROI was due to the declining NPM value and the decreasing TATO value. Meanwhile, the decreasing value of EM is due to the fact that the company is less than optimal in generating total assets from total equity. This shows that the company is less efficient in managing its own capital to generate profits for shareholders. Companies use a lot of external funds or debt to finance their company's activities, the company should prefer to improve asset management and sales value rather than increase the value of its operational costs, so that the profit received is higher.

Based on the conclusions at PT. Aneka Tambang (Persero) During the Pandemic and Before the Covid-19 Pandemic, the authors can provide advice to companies as research objects as follows:

1. For Companies

   Companies need to optimize profits by using all of their assets by suppressing their operational costs. This is used to increase the ROE value of the company from the influencing factors, namely Net Profit Margin (NPM), Total Assets Turnover (TATO), Return On Investment (ROI) and Equity Multiplier (EM).

2. For Further Researchers

   Future researchers are expected to be able to increase the research period in order to better assess the company's performance broadly and completely. The author also suggests expanding the scope of the research by selecting more than one object of similar research to have a comparison.

REFERENCES

[1]   Abdullah, M. Faisal. (2005). *Dasar-dasar Manajemen Keuangan*, Edisi Kedua, Cetakkan Kelima. Malang : Penerbitan Universitas Muhammadiyah.

[2]   Agus Harjito dan Martono, 2011. *Manajemen Keuangan*, Edisi Kedua, Cetakan Pertama, Penerbit EKONISIA, Yogyakarta.

[3]   Agus Sartono. 2012. *Manajemen Keuangan Teori dan Aplikasi*. Edisi4. BPFE. Yogyakarta.

[4]   Ahmad Farid dan D.Amboningtyas, 2016. *Analisis Du Pont System untuk Menilai Kinerja Keuangan Perusahaan (Studi Kasus Pada PT. Ace Hardware Indonesia).* Universitas Pandanaran.

[5]   Arief Sugiono dan Edy Untung. 2016. *Panduan Praktis Dasar Analisa Laporan Keuangan.* Jakarta: PT. Grasindo.

[6]   Bambang, Riyanto. (2012). *Dasar-dasar Pembelanjaan*. Edisi 4. Yogyakarta:BPFE.

[7]   Brigham, E. F., & J. F. Houston. 2006. *Dasar – Dasar Manajemen Keuangan* Jakarta: Salemba Empat.

[8]   Budi, Rahardjo. 2009. *Dasar-dasar Analisis Fundamental Saham Laporan Keuangan Perusahaan.* Penerbit Gajah Mada University Press.

[9]   Dina Lestari Rasyid. 2020. *Analisis Kinerja Keuangan Berdasarkan Du Pont System Pada PT. Industri Kapal Indonesia (Persero) Makassar*. Universitas Muhammadiyah Makassar.

[10]   Fahmi Irham. 2012. *Analisis Laporan Keuangan.* Bandung : Alfabeta.

[11]   _____. 2018, *Pengantar Manajemen Keuangan,* Bandung: Alfabeta.

[12]   Hanafi, Mahduh dan Abdul Halim, 2012, *Analisis Laporan Keuangan*. Yogyakarta: (UPP) STIM YKPN.

[13]   Handono. 2009. *Inti Sari Manajemen Keuangan.* Jakarta: PT. Gramedia Widiasarana Indonesia.

[14]   Hani, Syafrida. 2015. *Teknik Analisa Laporan Keuangan*. Medan: UMSU PRESS

[15]   Hans Kartikahadi., dkk. 2016. *Akuntansi Keuangan Menengah Berbasis SAK Berbasis IFRS Buku 1.* Jakarta : Salemba Empat.

[16]   Harahap, Sofyan Syarif. 2009. *Analisis Kritis Atas Laporan Keuangan.* Jakarta : Raja Grafindo Persada.

[17]   _____. 2015. *Analisis Kritis atas Laporan Keuangan.* Edisi 1-10. Jakarta: Rajawali Pers.

[18]   Hery. 2015. *Analisis Laporan Keuangan.* Edisi 1. Yogyakarta: Center For Academic Publishing Services.

[19]   Ikatan Akuntansi Indonesia (2012), *Standar Akuntansi Keuangan*. Jakarta:Salemba Empat.

[20]   Irawati, S. (2005). *Manajemen Keuangan*. Bandung: Penerbit Pustaka.

[21]   James C. Van Horne dan John M.Wachowicz, Jr (2013). *Prinsip-Prinsip Manajemen Keuangan,* Quratul' Ain Mubarokhah. Jakarta: Salemba Empat.

[22]   Kasmir. 2013. *Analisis Laporan Keuangan*. Edisi 6. PT. RAJAGRAFINDO PERSADA : Jakarta.

[23]   _____. 2014. *Analisis Laporan Keuangan*. Jakarta:Rajawali Pers.

[24]   Lukman Syamsudin. 2007. *Manajemen Keuangan Perusahaan*. Jakarta: PT Raja grafindo Persada.

[25]   Munawir, S. 2001. *Analisis Laporan Keuangan,* Edisi Keempat, Yogyakarta, Liberty.

[26]   _____. 2007. *Analisis Laporan Keuangan*. Yogyakarta : Edisi Empat,Liberty.

[27]   _____. 2010. *Analisis laporan Keuangan*, Edisi keempat. Cetakan Kelima Belas. Yogyakarta: Liberty.

[28]   _____. 2012. *Analisis Informasi Keuangan*, Liberty, Yogyakarta.

[29]   _____. 2014. *Analisa Laporan Keuangan*. Yogyakarta: Liberty.

[30]   Novdin M.Sianturi dan Djahotman Purba dalam buku Analisa Laporan Keuangan untuk Teknik dan Ekonomi (2021)

[31]   Nur Fitriana. 2014. *Analisis Sistem Du Pont Sebagai Alat Untuk Mengukur Pertumbuhan Laba Perusahaan Tekstil.* Sekolah Tinggi Ilmu Ekonomi Indonesia Surabaya.

[32]   Prastowo D, Dwi. 2015. *Analisis Laporan Keuangan*. Yogyakarta: UPP STIM YKPN.

[33]   Rangga dkk. 2015. *Analisis Efisiensi Kinerja Perusahaan Melalui Pendekatan Sistem Du Pont Pada PT HM Sampoerna Tbk.* Jurnal Akuntansi dan Keuangan. Vol .4 No.1. Hal. 11-25.

[34]   Sawir, Agnes. 2003. *Analisis Kinerja Keuangan dan Perencanaan Keuangan Perusahaan.* Jakarta: PT Gramedia Pustaka Utama.

[35]   _____. 2008. *Analisis Kinerja Keuangan Perusahaan.* Jakarta: Gramedia Pustaka Baru.

[36]   Sony Yuwono dkk, (2008), *Petunjuk Praktis Penyusunan Balanced Scorecard Menuju Organisasi yang Berfokus Pada Strategi*. Jakarta : PT. Gramedia Pustaka Utama

[37]   Sudana, I. M. 2011. *Manajemen Keuangan. Surabaya*: Airlangga University Press.

[38]   Surono dkk, 2019. *Analisis Du Pont System Dalam Mengukur Kinerja Keuangan Perusahaan Yang Terdaftar Di Bursa Efek Indonesia (BEI). Jurnal Ekonomi Dan Perbankan Syari'ah*. Vol 11 (1) : 15-32.

[39]   Sutrisno. 2012. *Manajemen Keuangan Teori, Konsep dan Aplikasi.* Yogyakarta:EKONISIA

[40]   www.antam.com/ Diakses tanggal 17 Oktober 2021.