



The Analysis of Financial Performance Using Economic Value-Added and Market value Added Methods Before and During the Covid-19 Pandemic

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Abstract. The purpose of this study is to assess the financial performance of PT Mustika Ratu, Tbk, which was listed on the Indonesia Stock Exchange before and during the Covid-19 pandemic, using the Economic Value Added (EVA) and Market Value Added (MVA) methods. The data source used in this study is secondary data in the form of financial statements from 2017 to 2021. Based on the results of research using the EVA and MVA methods, it is known that PT Mustika Ratu, Tbk before and during the COvid-19 pandemic procedure positive EVA and MVA values or (EVA>0) and (MVA>0) during the five-year research period. Positive EVA and MVA values mean that company managers can create for the company and wealth for shareholders. This study concludes that PT Mustika Ratu, Tbk has good financial performance..

Keywords: Financial Performance, EVA, MVA, Covid-19 pandemic.

1 Introduction

The success of a company depends on its performance, especially in the financial sector, which can be used as a basis for potential investors who want to invest their capital. Financial performance can be measured using financial statement (Husnan & Pudjiastuti, 2006). Financial reports are needed in decision-making for the benefit of the company. Financial performance is an analysis tool used to see whether the company has applied financial rules correctly and properly (Fahmi, 2011). Assessment of financial performance is a very important activity and each company has a different assessment depending on the business scope it runs. Financial statements are one way of knowing the company's performance because the financial statements shows the condition of the company's financial in a particular period (Fahmi, 2013). Several types of financial statements are an Income statement, a balance sheet; a Cash flow statement; a capital changes statements; and a notes to financial statements (Kasmir, 2010). Usually, to measure the financial performance of a company we can use financial ratio analysis, namely the liquidity ratio, profitability ratio, activity ratio and solvency ratio. However, the financial ratio analysis has a weakness in that it ignores the cost of capital whereas the capital cost is needed to determine whether the

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company's activities are feasible or not to operate and as a guide to external parties who want to invest (Kasmir, 2010). To overcome this weakness, the value-added method was developed as a measure of the financial performance (Ulfah, 2010). The value added developed is the Economic Value Added (EVA) and the Market Value Added (MVA) method (Ulfah, 2010). The EVA method was developed by Stewart & Stern, a financial analyst from the company Stern Stewart & Co in 1993. Besides EVA method, other methods to measure financial performance is the MVA method which is used to maximize wealth for shareholders (Kaba et al., 2018). By maximizing the difference between the market value of the company's equity and the capital that has been invested in the company, shareholder prosperity can be maximized (Kaba et al., 2018). The EVA and MVA methods can be used as the basis for appropriate benchmarks to assess the company's financial performance so it can be used as a guideline for the potential investors who want to invest their capital (Munawir, 2007). Parties that need financial reports include company owners; managers or leaders of the company concerned; funders or investors; creditors; bankers; the government where the company is domiciled and other parties again (Munawir, 2007).

During the coronavirus or COVID-19 outbreak, many companies were forced to close temporarily and some even had to close their business due to bankruptcy. One way for a company to continue operating is to improve its company performance by implementing new performance strategies so that it can continue to compete with other companies (Budiyanti, 2020).

Table 1. Financial Statements of PT Mustika Ratu, Tbk 2017-2021

Year	2017	2018	2019	2020	2021
Net Profit (loss)	(1.283.332.109)	(2.256.476.479)	131.836.668	(6.766.719.891)	357.509.551
Total Liabilities (Rp)	130.623.005.085	143.913.787.087	164.121.422.945	217.377.331.974	235.065.047.091
Total Equity (Rp)	366.731.414.004	367.973.996.780	368.641.525.050	342.418.605.477	343.195.928.497
Net Sales (Rp)	344.678.66.245	300.572.751.733	305.224.577.860	318.408.499.475	326.794.571.097

Data Source: <https://www.idx.co.id>

Table 1 shows that total profit (loss), total equity and net sales fluctuate while total liabilities increase every year. The 2020 has been a difficult year for entire world including Indonesia, because of the covid-19 pandemic. PT Mustika Ratu Tbk also had to stop some of its operations as a provider of cosmetic goods. Even so, the company managed to book net sales in 2020 worth Rp318.4 billion. This is due to

the company's strategy to survive the Covid-19 pandemic by improving the online sales system, assigning employees to participate as sales agents for Mustika Ratu products, diversifying products through the latest product innovations, and collaborating with state-owned pharmaceutical companies (Economy.okezone.com, 2020). In addition, in the same year, the company recorded a loss after tax because in accounting and reporting according to "PSAK 46 deferred tax" and according to the final tax ruling that the tax refund made by the Subsidiary in 2013 was partially and not fully accepted and was final (BeritaSatu.com, 2021). However, it is not yet known whether the EVA and MVA values at PT Mustika Ratu, Tbk have increased or decreased during the 2017-2021 period.

Based on the above description, this study is aiming to assess the financial performance of PT Mustika Ratu, Tbk (MRAT) before and during the COVID-19 pandemic which was assessed using the EVA and MVA methods for the 2017-2021 period.

2 Literature Review

2.1 Financial Report

Financial reports are defined as information records that describe the company's performance (Fahmi, 2011). Further, Munawir (2007) states that financial statements are a mandatory tool for gaining information about the financial position and financial results that have been achieved by the company concerned. The financial statements, it is hoped will assist in making economic decisions in a company (Fahmi, 2011). Financial reports are very important for every company, especially for companies listed on the stock market. Financial reports are used as a form of routine reporting and accountability for corporate governance to shareholders or investors. That way shareholders can find out whether the funds they invest can be profitable or not (Solehah, 2016).

In general, financial statements is aiming to provide information about finances and goals that the company owner and company management want to achieve (Kasmir, 2010). Preparation of financial statements can be prepared suddenly or periodically (routine). Parties who need financial reports are those who have a financial interest. Interest in the development of a company, for financial statements, is crucial for knowing the financial condition and financial position of the company (Munawir, 2007).

2.2 Financial Performance

The definition of Financial performance is the ability of a company in using its capital effectively and efficiently to achieve maximum results (Munawir, 2010). Methods used for financial performance assessment including the analysis of financial ratio, economic value added (EVA), and market value added (MVA) (Moeljadi, 2006).

Thus, in other word, the company management must do financial performance assessment to fulfill its obligations to the wealth of shareholders and to determine the level of health of the company to achieve the targets that have been set. Assessment

of company performance will assist management in making decisions and interacting with the environment both internal and external through information. This information can be used by external parties such as potential investors and creditors as guidelines for investment and lending decisions.

2.3 Financial Ratio Analysis

Financial ratio analysis is a technique used to analyze financial reports. Financial ratios are calculated by combining numbers on the balance sheet with / or numbers on the income statement (Hanafi, 2013). Five types of financial ratios are often used: liquidity ratios, activity ratios, solvency/leverage ratios, profit/profitability ratios, and market ratios.

2.4 Economic Value Added (EVA)

Financial experts, in the mid-1990s has developed a new concept as a performance measurement of EVA and MVA by an American management consulting firm, Stern Steward Management Services (Hanafi, 2013). Assessment of the company's financial performance based on added value is the definition of the Economic Value-Added method. The EVA method is the value added by company management to shareholders in a certain period (Brigham & Houston, 2006). The EVA method or what is known in Indonesia as the NITAMI (Economic Value Added) method is a method to measure the company's economic profit which must show prosperity and that the company can create expectations from fund providers (shareholders and creditors).

Some of the advantages and disadvantages of EVA include (Rudianto, 2006): EVA can align management objectives and the interests of shareholders; EVA provides a guideline for increasing operating profit without capital, exposing receivables, and investing fund to the management. EVA is also a system of financial management used to overcome the business problems from strategy to operational decisions. Besides having advantages, EVA also has weaknesses. Some of the weaknesses of EVA include (Rudianto, 2006): EVA is difficult to determine the accurate cost of capital, especially the cost of equity capital; EVA analysis only measures quantitative factors, if you want to measure performance optimally, it must be measured by quantitative and qualitative factors.

There are three (3) different categories to explain the results of the company's performance assessment with the EVA method (Rudianto, 2006):

EVA value > 0 or EVA is positive

This position describes that the management of the company has succeeded in creating economic added value of the company.

EVA value = 0

In this position, it means that the company's management is at a fixed point. This means that the company does not experience setbacks also there is no economic progress in similar time.

EVA value < 0 or EVA is negative

This position states that the economic value of the company does not increase.. It means that the income profit does not fulfill the creditors and company shareholders (investors) expectations.

EVA calculation formula (Tunggal, 2001):

EVA = Net Operating Profit After Tax (NOPAT) - Capital Charges

The steps to calculate EVA are as follows (Tunggal, 2001): Calculating NOPAT (Net Operating Profit After Tax); Identifying Invested Capital; Determining WACC (Weighted Average Cost of Capital); Calculating the company's EVA. Next, we will describe the components to calculate EVA:

NOPAT (Net Operating Profit After Tax) is the profit earned from the company's operations after deducting income taxes including financial costs and "non-cash bookkeeping entries" such as depreciation costs. NOPAT uses to measure the operational performance of a company's management. The results can increase or decrease which will be compared with the past or previous year (Husnan & Pudjiastuti, 2006), the formula for calculating NOPAT is as follows:

$$\text{NOPAT} = \text{EBIT} (1 - \text{income tax rate})$$

Invested Capital is the sum of all company loans outside of short-term interest-free loans such as accounts payable, taxes payable, customer advances, accrued expenses, and so on. The calculation of Invested Capital can be done in two ways, namely (Tunggal, 2001)

$$\text{Invested Capital} = \text{Total Debt \& Equity} - \text{Short-term Debt}$$

WACC (Weighted Average Cost of Capital) is the sum of the costs of each component of capital, such as short-term loans and long-term loans, and share capital deposits that are weighted according to their proportion in the company's capital structure (Tunggal, 2001). The formula to calculate WACC is described below (Husnan & Pudjiastuti, 2006):

$$\text{WACC} = [(D \times r_d) (1 - \text{Tax}) + (E \times r_e)]$$

Description:

D (Capital Level)

r_d (cost of debt)

Tax (Tax rate)

E (Equity Level) r_e (cost of equity)

Capital Charges are the cash flow required to reimburse investors for the business risk of invested capital (Tunggal, 2001). The Capital Charges formula is as follows:

Calculating EVA

Capital Charges = Invested Capital x WACC

EVA = NOPAT - Capital Charges

2.5 Market Value Added (MVA)

To measure the financial performance of the company based on market value is known as Market Value Added method. The MVA concept was also developed by Steward and CO which is used as a performance measurement tool of the company to overcome the weaknesses of the financial ratio method (E-Accounting.com, 2016). For companies listed on the stock exchange, the share price can be used as a reference for the prosperity of shareholders, by maximizing the difference between the market value of equity and equity (own capital) submitted to the company by the owners of the company (Husnan & Pudjiastuti, 2006). With the MVA approach, companies can increase corporate profits and shareholder wealth. MVA is known as the difference of market value of the company's equity and the book value. In balance sheet, the market value is determined by multiplying the share price by the number of outstanding shares (Brigham & Houston, 2010).

The advantage of MVA is that it is a single measure that can stand alone and does not require trend analysis so it is easier to use by management and shareholders in assessing the company's financial performance (Zaky & Ary, 2002). Meanwhile, the weakness of MVA is that it can only be applied to companies that go public (Zaky & Ary, 2002).

The results of the MVA calculation can be categorized as follows (Young & Byrne, 2001):

MVA > 0 or MVA value is positive

This position describes that the company is successful in increasing the capital that has been invested by funders or shareholders.

MVA value < 0 or MVA is negative

This position shows that the company is unable or fails to increase the capital that has been invested in the company. To assess MVA (Market Value Added), it can be calculated using the following formula (Brigham & Houston, 2006):

$MVA = (\text{Stock Price} - \text{Book Value}) \times \text{Outstanding Share}$

3 Research Methods

3.1 Research Type and Approach

The approach applied in this research is a quantitative approach with descriptive methods. This study aims to describe the financial performance conditions of PT

Mustika Ratu Tbk before and during the COVID-19 pandemic. To achieve this goal, quantitative methods are suitable for use in this study.

3.2 Research Variable

EVA (economic value added) is the value added by the company's management to shareholders in a certain period (Brigham & Houston, 2006).

= NOPAT - Capital Charges, so the scale is ratio.

MVA is known as the difference of market value of the company's equity and the book value. In balance sheet, the market value is determined by multiplying the share price by the number of outstanding shares (Brigham & Houston, 2010). MVA Indicator = (Stock Price - Book Value) x Outstanding, so the scale is the ratio.

3.3 Data Type and Source

In this study, quantitative data type is obtained in the form of financial statement data of PT Mustika Ratu Tbk which is listed on the IDX from 2017 to 2021 taken from the official website www.idx.co.id.

3.4 Data Analysis Technique

Data analysis technique was the time series method. Furthermore, to measure the financial performance of PT Mustika Ratu before and during the pandemic of COVID-19, the EVA and MVA methods are used as follows: The formula for calculating EVA;

NOPAT (Net Operating Profit After Tax)

Invested Capital

WACC (Weighted Average Cost of Capital):

Capital Charges

Calculating EVA

The formula for Calculating MVA;

Assessing the financial performance of PT Mustika Ratu Tbk with the calculation of EVA and MVA;

Comparing the financial performance of PT Mustika Ratu before and during the pandemic Covid-19 based on EVA and MVA calculations;

Draw conclusions based on the results of EVA and MVA calculations.

4 Research Results

PT Mustika Ratu, Tbk (MRAT) was established in 1975 by Mrs. BRA Mooryati Soedibyo. Originally, it was a home industry which started in the home garage of Mrs. BRA Mooryati Soedibyo. PT Mustika Ratu was established based on Deed of Establishment No. 35 dated March 14, 1978. PT Mustika Ratu Tbk (the Company) is

a well-known traditional modern cosmetic and Jamu company in Indonesia. Mustika Ratu has a very deep philosophy name which is taken from local cultural wisdom, *trahing kusumo rembesing madu, turuning sinatryo, tedak ing wong amoro topo, mustikaning ratu, mangayu hayuning bawono*, Those words means the struggle of chivalry through concerns so that something of value is created, namely the name Mustika Ratu, to continue the philosophical values that are shared with the wider community and carried according to technological developments and the progress of the times.

In 1995 the Company received effective approval from the Capital Market Supervisory Agency to do an initial public offering and list its shares on the Indonesia Stock Exchange with the stock code MRAT. This is done to strengthen the capital structure and to make visible its vision as the best high-tech natural cosmetics and herbal medicine company in Indonesia.

PT Mustika Ratu makes its company different from other competitors' cosmetics companies by always conducting business by adhering to the Company's philosophy and core values, namely Agility, Harmony, Speed, Accountability, Integrity, and Passion for winning. By these values, the Company is committed to always maintain the quality and beauty of its products as well as paying attention to health aspects so that the products meet the needs and are accepted by the wider community.

The number of employees at PT Mustika Ratu Tbk before the Covid-19 pandemic on December 31, 2019, was 1,989 people and now or during the Covid-19 pandemic the number of employees is 1,166 people.

4.1 Economic Value Added (EVA)

EVA is the value added by company management to shareholders in a certain period (Brigham & Houston, 2006). To calculate EVA, first calculate the components of EVA such as NOPAT; Invested Capital (IC); Weight Average Cost of Capital (WACC), and Capital Charges (CC).

Net Operating Profit After Tax (NOPAT)

The first step to calculating EVA is to calculate the amount of operating profit after tax (NOPAT). NOPAT can be calculated using the formula: $NOPAT = EBIT (1 - Tax)$. In the financial statements of PT Mustika Ratu Tbk in the years ending December 31, 2017, to December 31, 2021, it is known that the EBIT, Tax and NOPAT of PT Mustika Ratu Tbk are as follows

Table 2. NOPAT of Pt Mustika Ratu Tbk 2017-2021

Year	2017	2018	2019	2020	2021
EBIT	3.645.06 1.742	7.589.81 2.651	9.088.12 6.035	12.733.83 8.854	15.730.55 9.978
(1-Tax)	0,75	0,75	0,75	0,78	0,78
Up/Down n	2.733.76 9.307	5.692.35 9.488	6.816.09 4.526	9.932.394. 306	12.269.83 6.783
(%)	-	108,2	19,7	45,7	23,5

Source: Financial Statements of PT Mustika Ratu, Tbk, data processed.

From table 2, we can see that the value of NOPAT before and during the Covid-19 pandemic shows a significant increase. This is because EBIT is always increasing every year and taxes are changing. The NOPAT value which always increases every year shows good financial performance when compared to the previous year. The NOPAT value that shows the highest number is in 2021, namely 12,269,836,783, and the lowest number is shown in 2017 at 2,733,769,307. With the NOPAT value always increasing and being at a positive point from 2017 to 2021, it can be concluded that PT Mustika Ratu Tbk has a good performance.

4.2 Invested Capital (IC)

The second step in EVA is to calculate the invested capital (IC). IC can be counted using this formula: Invested Capital = Total debt & Equity - Short-term Debt. The calculation of IC at PT Mustika Ratu Tbk for 2017 to 2021 is as follows:

Table 3. Invested Capital of PT Mustika Ratu, Tbk 2017-2021

Year	2017	2018	2019	2020	2021
(Total Debt & Equity)	497.354. 419.089	511.887.783. 867	532.762. 947.995	559.795. 937.452	578.260. 975.588
Short-term Debt	106.813. 922.324	122.929. 175.890	142.931. 525.716	195.801. 413.331	215.622. 712.026
Invested Capital	390.540. 496.765	388.958. 607.977	389.831. 422.279	363.994. 524.121	362.638. 263.562
In-crease/Decrease (%)	-	-0,4	0,2	-6,6	-0,4

Source: Financial Statements of PT Mustika Ratu Tbk, data processed

Table 3 shows that during the 2017-2021 period, the value of Invested Capital at PT Mustika Ratu Tbk fluctuated but tended to decrease. This is due to the increasing amount of short-term debt and total debt and equity every year.

The results of the calculation of Invested Capital in 2018 showed poor financial performance when compared to the previous year. Meanwhile, in 2019 the Invested Capital value shows good financial performance when compared to the previous year. In 2020 and 2021 the value of Invested Capital shows poor financial performance when compared to 2019.

The Invested Capital value that shows good performance is in 2019, namely 389,831,422,279. The value of Invested Capital which shows the highest number was in 2017, namely 390,540,496,765, and the lowest number is shown in 2019, namely 389,831,422,279.

The year 2021 amounted to 362,638,263,562 therefore it can be concluded that from 2017 to 2021 it shows a positive value but has a poor performance.

4.3 Weight Average Cost of Capital (WACC)

WACC is counted using the formula (Husnan & Pudjiastuti, 2006):

$$WACC = [(D \times rd) (1 - Tax) + (E \times re)]$$

Follow the above formula, the WACC at PT Mustika Ratu Tbk for 2017 to 2021 was calculated as follows:

Table 4. WACC of PT Mustika Ratu, Tbk 2017-2021

Year	2017	2018	2019	2020	2021
(D x rd)	0,003	0,003	0,003	0,003	0,002

(1-Tax)	1,05	3,2	1,95	3,1	1,95
(E x re)	(0,003)	(0,004)	0,0002	(0,012)	0,001
WACC	0,001	0,005	0,006	(0,004)	0,005
Increase/Decrease (%)	-	4	0,2	-1,7	2,25

Source: Financial Statements of PT Mustika Ratu Tbk, data processed

Table 4 shows that the WACC value before the Covid-19 pandemic, namely from 2017 to 2019, showed an increase. This is due to the cost of equity and taxes that fluctuate. In 2020 it showed a significant decrease. This is due to the decreasing cost of equity and increasing taxes. In 2021 the WACC value again experienced a significant increase.

From the results of the above calculations, the WACC values in 2019 and 2021 show good financial performance when compared to the previous year. Meanwhile, 2020 shows poor financial performance when compared to the previous year. The numbers that show good financial performance are in 2018, 2019, and 2021. The highest WACC value is in 2019 with a WACC value of 0.006.

From the WACC calculation result, it can be said that during the 2017-2021 period, it shows a negative value in 2020, and positive in other years, and a fairly good performance.

4.4 Capital Charges (CC)

The next step is to calculate Capital Charges. The cost of capital or Capital Charges is the cash flow required to help investor financially from the business risk of invested capital (Tunggal, 2001). Capital Charges is counted by using the formula:

$$\text{Capital Charges} = \text{Invested Capital} \times \text{WACC}.$$

The calculation of Capital Charges at PT Mustika Ratu Tbk for 2017 to 2021 is as follows:

Table 5. Capital Charges of PT Mustika Ratu, Tbk 2017 -2021

Year	2017	2018	2019	2020	2021
Invest Capital	390.540.4 96.765	388.958.6 07.977	389.831.4 22.279	363.994.5 24.121	362.638.2 63.562
WACC	0,001	0,005	0,006	(0,004)	0,005
Capital Charges	307.793.5 17	1.962.179 .969	2.435.776 .344	(1.525.63 1.689)	1.708.033 .924
Up/Down (%)	-	537,5	24,1	-162,6	212

Source: Financial Statements of PT Mustika Ratu Tbk, data processed

Table 5 is showing that the value of Capital Charges before the Covid-19 pandemic from 2017 to 2019 showed a very significant increase. This is due to the increase in WACC and fluctuations in Invested Capital. Meanwhile, during the Covid-19 pandemic 2020 and 2021 experienced fluctuations. This is because there are fluctuations in WACC and the value of Invested Capital, which is decreasing every year.

The results of the calculation of Capital Charges in 2018 and 2019 show good performance when compared to the previous year. Meanwhile, the value of Capital Charges in 2020 shows poor performance when compared to the previous year. In 2021 the value of Capital Charges again shows good performance when compared to the previous year.

The value of Capital Charges that show good performance is shown in 2019 and 2021 because the value of Capital Charges in that year has increased from the previous Capital Charges. The highest figure is shown in 2019 with a Capital Charges value of 2,435,776,344. From the results of the calculation of Capital Charges at PT Mustika Ratu Tbk, it can be concluded that during the 2017-2021 period, it showed a negative value in 2020 and a positive in other years with fairly good performance.

4.5 Calculating Economic Value Added (EVA)

After completing the calculation of EVA components, namely NOPAT, Invested Capital, WACC, and Capital Charges, the final step can be taken in calculating EVA itself. EVA is a method used to calculate financial performance based on added value. The calculation of EVA can be done by subtracting the operating profit after tax from the cost of capital that the company has spent, which can be written in the formula:

EVA = NOPAT - Capital Charges. The calculation of EVA at PT Mustika Ratu Tbk from 2017 to 2021 is as follows:

Table 6. Calculating EVA of PT Mustika Ratu, Tbk 2017-2019

Year	2017	2018	2019	2020	2021
NOPAT	2.733.76 9.307	5.692.35 9.488	6.816.09 4.526	9.932.394. 306	12.269.83 6.783
Capital Charges	307.793. 517	1.962.17 9.969	2.435.77 6.344	(1.525.631 .689)	1.708.033. 924
EVA	2.426.00 2.789	3.730.17 9.519	4.380.31 8.182	11.458.02 5.995	10.561.80 2.859
Up/Do wn (%)	-	53,8	17,4	161,6	-7,8

Source: Financial Statements of PT Mustika Ratu Tbk, data processed

Table 6, it can be seen that EVA before the COVID-19 pandemic from 2017 to 2019 has increased. This increase was due to a significant increase in NOPAT and Capital Charges. During the Covid-19 pandemic, namely 2020, EVA still increased. This is due to an increase in NOPAT and a decrease in Capital Charges. Namin, in 2021 EVA decreased, this happened because NOPAT and Capital Charges increased.

The results of EVA calculations in 2018 show good performance when compared to the previous year. In 2019 the EVA value shows good performance when compared to the previous year. In 2020 the EVA value shows good performance when compared to the previous year. In 2021 the EVA value shows poor performance.

EVA values that show good performance are shown in 2018, 2019, and 2020 because the EVA value in that year shows an increase in EVA value from the previous year. The EVA value that shows the highest number is in 2020 with a value of 11,458,025,995 and the EVA value with the lowest number is shown in 2017 with a value of 2,426,002,789. Based on the calculation of EVA at PT Mustika Ratu Tbk it can be concluded that during the 2017-2021 period, it showed a positive value with good performance.

4.6 Market Value Added (MVA)

The first goal of corporate financial management is to maximize the wealth of shareholders. For companies that have been on the Indonesia Stock Exchange list, the share price is used as a reference to increase the company's prosperity from the external side or the stock market. MVA is the difference between the market value of the company's equity and the book value. In the balance sheet, the market value is determined by multiplying the share price by the number of outstanding shares (Brigham & Houston, 2010). The calculation of MVA can be done using the formula: $MVA = (\text{Stock Price} - \text{Book Value}) \times \text{Outstanding Share}$. The calculation of MVA at PT Mustika Ratu Tbk from 2017 to 2021 is as follows:

Table 7. Market Value Added of PT MUSTIKA Ratu, Tbk 2017-2021

Year	2017	2018	2019	2020	2021
Stock	206	179	153	169	276
Price	125	125	125	125	125
Value	428.000.000	428.000.000	428.000.000	428.000.000	428.000.000
Outstanding					
Share					
MVA	34.668.000.000	23.112.000.000	11.984.000.000	18.832.000.000	64.628.000.000
Up/Down (%)	-	-33,3	-48,1	57,1	243,2

Source: Financial Statements of PT Mustika Ratu Tbk, data processed

Table 7 shows that MVA before the COVID-19 pandemic in 2017 to 2019 experienced a significant decline. This is due to the decline in stock prices in the market. Meanwhile, during the Covid-19 pandemic in 2020 and 2021, MVA again experienced a significant increase. This increase is due to stock prices that have increased again in 2020 and 2021.

The results of the MVA calculation in 2018 and 2019 show poor performance when compared to the previous year. In 2020 and 2021, it showed good performance when compared to 2018 and 2019. The MVA number that shows the highest value is in 2021 with a value of 64,628,000,000 and the lowest number is in 2019 with a value of 11,984,000,000. Based on the results of the MVA calculation at PT Mustika Ratu Tbk, it shows that during the 2017-2021 period, MVA was positive with good performance.

4.7 Comparison of EVA and MVA Calculation Results

After calculating EVA and MVA, the next step is to compare EVA and MVA before and during the Covid-19 pandemic at PT Mustika Ratu Tbk which will be explained in the following table:

Table 8. Comparison of EVA and MVA of PT Mustika Ratu, Tbk 2017-2021

Year	2017	2018	2019	2020	2021
EVA	2.426.002.789	3.730.179.519	4.380.318.182	11.458.025.995	10.561.802.859
MVA	34.668.000.000	23.112.000.000	11.984.000.000	18.832.000.000	64.628.000.000

Source: Data processed, 2022

From the comparison of EVA and MVA before and during the COVID-19 pandemic at PT Mustika Ratu Tbk. EVA before the COVID-19 pandemic has increased while inversely proportional to MVA before the COVID-19 pandemic which has decreased. EVA which increased was influenced by the value of NOPAT and Capital Charges which also increased during the year before the Covid-19 pandemic. Meanwhile, the declining MVA is influenced by the declining stock price in the market.

During the Covid-19 pandemic, EVA in 2020 is still increasing and decreasing in 2021. Meanwhile, MVA during the Covid-19 pandemic has increased. The increasing MVA is influenced by the stock price which is also increasing again in the market.

5 Discussion

Based on research conducted at PT Mustika Ratu Tbk before and during the Covid-19 pandemic from 2017 to 2021, the following is a discussion of the research results: The company's NOPAT can be said to be good if the NOPAT generated exceeds the cost of capital of the company or is positive. The greater the profit (EBIT), the greater the NOPAT value that will be generated. With a greater NOPAT value, it means that the EVA that will be generated will also be greater. Capital Charges that are greater than NOPAT will have a bad impact on the value of EVA or it can be said that EVA will decrease and have a negative value. In the sense that the smaller the value of Capital Charges will increase the value of EVA. The EVA calculation table shows that Capital Charges fluctuate.

Positive EVA means that operating profit after tax exceeds the cost of capital needed to generate that profit (Brigham & Houston, 2010). EVA before the COVID 19 pandemic in 2017 to 2019 has increased every year. This increase was due to a significant increase in NOPAT and Capital Charges. Meanwhile, during the COVID 19 pandemic in 2020, EVA experienced a significant increase of 161.6%, this occurred due to increased NOPAT and decreased Capital Charges. In 2021 EVA decreased, although it had experienced a significant increase in NOPAT and Capital Charges.

Despite the decline, the EVA value is still at a positive point. The positive EVA result (EVA>0) indicate that during this period the company had good financial per-

formance. Further, it shows that the company's management had successful in adding economic value.

Market Value Added is the difference between the market value of the company's shares and the amount of equity capital provided by investors to the company. The results of the MVA calculation in Table 4.6 show that the MVA at PT Mustika Ratu Tbk is positive and fluctuates. MVA before the Covid-19 Pandemic in 2017-2019 decreased and then increased during the pandemic, namely in 2020 and 2021, this is due to the decline in stock prices before the pandemic of Covid-19 and increased during the pandemic at PT Mustika Ratu Tbk. Even though the share price has decreased, MVA can still be positive ($MVA > 0$), meaning that the company showing good performance so that it can fulfill wealth for funders.

The output of this research is similar to previous research by (Solehah, 2016) and (Hamid, 2016) and (Crysdianti, 2017) which showed positive EVA and MVA values during the five-year research period. This positive value means that there has been an increase in economic value the company has succeeded in creating wealth for funders and the company's overall financial performance is good. In addition, it is different from the results of previous studies studied by (Kaba et al., 2018) and (Malhamah and Octavera, 2018) which show that the value of EVA and MVA has positive and negative values in the period studied. This study differs from the previous study because this study was conducted in the COVID-19.

6 Conclusions and Suggestions

This study has found that financial performance using the Economic Value Added and Market Value Added methods before and during the Covid-19 pandemic at PT Mustika Ratu Tbk showed positive results ($EVA > 0$) and ($MVA > 0$) for 5 consecutive years. This shows that PT Mustika Ratu, Tbk as a whole has good financial performance.

The study results of the EVA calculation before the COVID-19 pandemic at PT Mustika Ratu Tbk, resulted in good financial performance. Conversely, inversely based on the calculation of MVA before the Covid-19 pandemic resulted in poor financial performance. Based on the calculation of EVA during the Covid-19 pandemic at PT Mustika Ratu Tbk, it produces quite good financial performance, and based on the calculation of MVA during the Covid-19 pandemic, it produces very good financial performance.

Based on the research results and conclusions that have been obtained, the researchers provide the following suggestions: For the company, researcher suggest the company must be able to maintain and increase higher value in the future therefore it attracts more potential investors to invest in the company. For other researchers, it is hoped that they can use this study as a reference in developing similar research on EVA and MVA in the future. In addition, the measuring instrument used for performance assessment in this study is not the only one there are still other measuring instruments such as financial ratios that can also be used or added. Recommendation for

others researchers is they should conduct further studies and add independent variables, samples and research time spans.

References

- BeritaSatu.com. (2021). Hit by the Pandemic, Mustika Ratu Reached a Net Profit of IDR 6.18 Billion in 2020. BeritaSatu.com.
<https://www.beritasatu.com/ekonomi/781377/dihantam-pandemi-mustika-ratu-reaches-net-profit-rp-618-billion-in-2020>
- Brigham, E. F., & Houston, J. F. (2006). *Fundamentals of Financial Management* (10th Edition). Salemba Empat, Jakarta.
- Brigham, E. F., & Houston, J. F. (2010). *Fundamentals of Financial Management* (11th Edition). Salemba Empat, Jakarta.
- Budiyanti, E. (2020). The Impact of Corona Virus on Indonesia's Trade and Tourism Sector. *Review of Economics and Public Policy*, XII(4), 19-24.
http://berkas.dpr.go.id/puslit/files/info_singkat/InfoBrief-XII-4-II-P3DI-February-2020-219.pdf
- Indonesia Stock Exchange. (2022). *Annual Financial Reports 2018, 2019, 2020 and 2021*.
<https://www.idx.co.id/>
- Crysdayanti, M. E. (2017). Financial Performance Analysis Using Economic Value Added (EVA) and Market Value Added (MVA) Methods at PT Telekomunikasi Indonesia (Persero) Tbk and Pt. Indosat Tbk Period 2013-2017. *Journal of Chemical Information and Modeling*, 21(2), 1689-1699. <https://www.oecd.org/dac/accountable-effective-institutions/Governance-Notebook-2.6-Smoke.pdf>
- E-Accounting.com. (2016). Market Value Added (MVA) Method to Assess the Company's Financial Performance and Overcome the Weaknesses of Traditional Accounting. e accounting.com. <https://www.e-akuntansi.com/metode-market-value-added-mva-terhadap-penilaian-kinerja-financial-company-and-overcome-the-weaknesses-of-traditional-accounting/>
- Economy.okezone.com. (2020, August 20). The Impact Experienced by PT Mustika Ratu Due to the Attack of Covid-19. economy.okezone.com.
<https://economy.okezone.com/read/2020/08/20/278/2265119/dampak-yang-dialami-pt-mustika-ratu-impact-of-covid-19-attack>
- Fahmi, I. (2011). *Financial Statement Analysis*. Alfabeta, Lampulo.
- Hamid, A. (2016). Analysis of the Company's Financial Performance Using the Economic Value Added (EVA) and Market Value Added (MVA) Approaches (Case Study on PT Astra International, Tbk. Period 2008-2012). *Business and Finance Journal*, 1(1), 61-76.

- Hanafi, M. M. (2013). *Financial Management* (1st ed.). BPFE-YOGYAKARTA. 14. Husnan, S., & Pudjiastuti, E. (2006). *Fundamentals of Financial Management* (7th Edition). UPP STIM YKPN, Yogyakarta.
- Jumping. (2006). *Financial Statement Analysis*. PT Bumi Aksara, Jakarta. 16. Kaba, T. M. A.
- Jati, H., & Ndoen, Wehelmina M. (2018). Assessment of Financial Performance with Economic Value Added and Market Value Added Approaches in State Owned Banks. Listed on the Indonesia Stock Exchange. *Journal of Management*, Vol. 6, No (1), 83-101.
- Cashmere. (2010). *Introduction to Financial Management* (2nd Edition). Prenadamedia Group, Jakarta.
- Malhamah, & Octavera, S. (2018). Financial Performance Analysis Using Economic Value Added (EVA) and Market Value Added (MVA) Methods (Empirical Study of Food and Beverage Sub-Sector Manufacturing Companies that Go Public on the Indonesia Stock Exchange for the 2011-2015 Period). *Dharma Andalas Journal of Economics and Business*, 20(1), 75-83.
- Moeljadi. (2006). *Financial Management Quantitative and Qualitative Approaches*. Bayu Media, Malang.
- Munawir, S. (2007). *ANALYSIS OF FINANCIAL STATEMENTS* (3rd ed.). Liberty Yogyakarta. Munawir, S. (2010). *Financial Statement Analysis* (4th Edition). Liberty, Yogyakarta.
- PT Mustika Ratu. (2018). The pioneer and preserver of Indonesian beauty care culture – Mustika Ratu. <https://mustika-ratu.co.id/>
- Rudianto. (2006). *Management Accounting*. PT Grasindo, Jakarta.
- Rudianto. (2013). *Management Accounting "Information for Strategic Decision Making."* 23. Erlangga, Jakarta.
- Solehah, A. F. (2016). Financial Performance Analysis Using Economic Value Added and Market Value Added Methods at PT Gudang Garam Tbk. *Scientific Journal of FEB Students*, 4 (2), 634. <https://hsgm.saglik.gov.tr/depo/birimler/saglikli-beslenme-hareketli-hayat-db/Yayinlar/kitaplar/diger-kitaplar/TBSA-Beslenme-Yayini.pdf>
- Tunggal, A. W. (2001). *Economic Value Added/EVA Theory, Problems, and Cases*. Harvindo, Jakarta.
- Ulfah, nani zaenatul. (2010). Differences in Financial Performance Using EVA (Economic Value Added) and MVA (Market Value Added) Methods. *مهم مهم*, 2)5(, 2. 29.
- Young, S. D., & O'Byrne, S. F. (2001). *EVA and Value-Based Management*. Salemba Empat, Jakarta.
- Zaky, B., & Ary, L. (2002). Association between EVA (economic value added), MVA (market value added), and Profitability Ratio to Stock Price. *Tema*, Vol III.

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