

Analysis of The Effect of Economic Value Added and Market Value Added on Stock Return on the Indonesian Stock Exchange Case Study on Health Companies in 2019-2020

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Abstract

The emergence of the Covid-19 pandemic at the beginning of 2020 in Indonesia certainly had a very significant impact and change, especially the lifestyle and habits of people's lives. On the other hand, this pandemic provides opportunities for health companies to provide goods and services that are basic needs during the pandemic. Based on this incident, of course, investors will look to invest some of their funds in these companies. However, before investing, investors must pay attention to the addition or subtraction of the actual value of the company's real condition. Therefore, this study tries to analyze the company's performance using the Economic Value Added (EVA) and Market Value Added (MVA) methods which can become a reference for investors before investing. The purpose of this study is to determine the effect of EVA, MVA, and both on stock returns. The method used is a quantitative approach with descriptive and verification analysis methods. The data used in this study is secondary data from the company's financial statements. The samples analyzed were 16 health sector companies listed on the Indonesia Stock Exchange, the selection of this sample used a non-probability sampling method with purposive sampling technique. The results obtained from this study, namely: EVA has a negative effect on stock returns, MVA has a negative effect on stock returns, and both (EVA + MVA) simultaneously have a negative effect on stock returns. Based on the hypothesis test with Simultaneous Test (F-test) the F count value is 0.0099 with F table value 4.17 (F count < F table), meaning that all independent variables (EVA and MVA) have insignificant effect on stock returns. Hypothesis test with partial test (T test) shows for EVA obtained T count 0.0785 and T table value 2.04 (F count < F table) which means EVA has no effect on stock returns, while for MVA, the T count is 0.1460 and the T table value is 2.04 (F count < F table) which means that MVA also has insignificant effect on stock return prices.

Keywords: EVA, MVA, stock returns, health companies, Indonesia stock exchange

INTRODUCTION

The presence of the Covid-19 pandemic at the beginning of 2020 which spread very quickly, certainly, had a very large impact in almost all parts of the world, including Indonesia. The real effect of the impact of Covid-19 on the economy is the occurrence of layoffs, many employees are laid off and various companies are threatened with bankruptcy. A total of 114,340 companies have laid off workers and laid off workers with a total of 1,943,916 workers with a percentage of 77% from the formal sector and 23% from the informal sector (Ministry of Manpower, 2020).

On the other hand, Covid-19 also has positive impacts and benefits for business owners in the health and environmental hygiene sector, such as hand soap and wet tissue companies, as well as pharmaceutical companies (Rohmah, 2020). The health sector includes companies that provide health products and services, such as manufacturers of medical equipment and supplies, health service providers, pharmaceutical companies, and research in the health sector. Based on this incident, investors will be more interested in investing some of their funds in these companies. Therefore, stock trading is expected to continue to increase in the health sector. This is certainly interesting to study to find out the increase or decrease in the stock price of the health sector before and during the Covid-19 pandemic.

Before deciding to invest, investors need various information that will be useful in predicting the results of their investments in the capital market. Generally, there are two types of information needed, namely technical information and fundamental information. Technical information is information based on statistical data obtained from stock trading activities, such as stock prices and transaction or sales volume (Kasdjan et al, 2017).

Stewart and Stern, a financial analyst from Stern Stewart & Co. company, developed a new concept in 1993, namely EVA (Economic Value Added). EVA is a new approach in assessing company performance by considering investors' expectations. Unlike conventional performance measures, the EVA concept can stand alone without the need for comparative analysis with similar companies or making trend analysis.

Economic value added reflects the residual profit that remains after the cost of all capital, including equity capital has been deducted. The EVA calculation provides a good measure of the extent to which the company has added to investor value. Market Value Added (MVA) is the cumulative result of the company's performance generated by various investments that have been made or will be made. According to Sartono (2011 in Gulo and Ermawati, 2011), The main goal of the company is to maximize shareholder wealth as well as to ensure the company's resources and provide economic benefits. MVA is a company's success in maximizing shareholder wealth with the right allocation of resources (Gulo and Ermawati, 2011).

MVA explains how much wealth can be generated or reduced at this time, EVA also describes efficiency in a certain period (Winarto, 2005). From these two methods, the added value of EVA and MVA can be shown in the evaluation of public companies. Both explain how much wealth can be obtained or otherwise reduced by the company during its operational activities.

Therefore, these two methods can be used as a better reference for capital owners to consider whether a company will provide a profit or loss to the invested capital. The owners of capital can calculate the addition or subtraction of the actual value of the company's condition by using these two concepts. The aim of this study is to determine the effect of EVA, MVA, and both (EVA+MVA) on stock returns in the health companies.

Formulation of the Problem:

The formulation of the problem in this study consists of:

1. What is the effect of EVA on stock returns in health companies?
2. What is the effect of MVA on stock returns in health companies?
3. What is the effect of both (EVA+MVA) on stock returns in health companies?

LITERATURE REVIEW

A. The Investation

Investment is a commitment of an amount of money or other resources made at this time with the hope of obtaining benefits in the future. Investment is usually associated with various activities related to investing in various alternative assets, including real assets (land, gold, property) or financial assets (various forms of securities such as stocks, obligation, or mutual funds). The parties who invest are usually called investors. Investors can generally be classified into two, namely individual investors consisting of a person or individuals who carry out investment activities and institutional investors which usually consist of insurance companies, depository institutions (banks and financial institutions), pension fund institutions and investment companies (Tandelilin, 2012).

According to Hidayah (2007), investment classification is divided into two types, (1) temporary investments (marketable securities) are investments that can and will be sold soon, and long-term investments. In simple terms, the purpose of people investing is to 'make some money' in the future. However, the general investment goals are to improve investor welfare.

B. Stocks and Stock Returns

According to Samsul (2015) stocks are proof of company ownership. Shareholders are also known as stockholders. The evidence that a person or a party is considered a shareholder if that person is already registered as a shareholder in the shareholders' registry. In addition, other evidence that a person is a shareholder can also be seen on the back page of share sheet that has been registered by the company (issuer).

There are two types of shares (Samsul, 2015), (1) preferred stock is the type of stock that has the first right to receive profits and has rights to the company's profits. (2) Common stock is a type of stock that will receive profits after the share of preferred stock profits is paid. If the company goes bankrupt, the common stockholders will suffer first. The calculation of the stock price index is based on the price of the common stock.

The main reason for investing is to make a profit. In the context of investment management, the rate of return on investment is referred to as "return". The return that investors expect from their investment is compensation for the opportunity cost and the risk of decreasing purchasing power due to the influence of inflation (Tandelilin, 2012). Stock return is the rate of return on investment made by investors (Hartono, 2008 in Sunardi, 2010). The Source of stock return is from yield or dividend and capital gain (loss).

C. Economic Value Added

According to Gulo and Ermawati (2011) Economic Value Added is a method of measuring company performance that calculates the economic profit that has been generated by a company. Based on the results of the EVA calculation, the company obtains an overview of the increase or decrease in the value of economic profit that is created from its performance, so that investors can find out that the company has become a wealth creator or a wealth destroyer. EVA is a financial tool to measure the real profit of the company's operations. EVA has different from other conventional calculations because of capital costs in its calculations (Singgih, 2008).

EVA is calculated after all its constituent components are known, then it is calculated in the EVA formula according to Utama (1997). If EVA is positive, it indicates that the company has succeeded in creating value for the market and investors because the company can generate a higher rate of return than its capital cost. If EVA is negative, it indicates that the value of a company decreases because the return is lower than the level of the capital cost (Wiagustini, 2010).

The increasing value of EVA means that the investment will generate a profit above the capital cost so that it will be more attractive for investors to invest in the company (Wiagustini, 2010). According to Mirza (1997), the EVA method has several advantages, such as:

1. EVA focuses its assessment on added value by considering the cost of capital because of investment.
2. EVA can be used independently without the need for comparative data such as industry average standards or other company data as the valuation concept using ratio analysis.
3. The application of EVA shows that the concept is a practical measure, easy to calculate and use so it is one of the considerations in accelerating decision making.
4. EVA can also be used as a basis for giving bonuses to employees and staff from divisions that provide a positive EVA value.

D. Market Value Added

Market Value Added shows the market performance of a company. MVA describes how big the company's ability to capital is owned by investors because it involves stock prices as its main component (Gulo and Ermawati, 2011). MVA is a method that measures a company's ability to create wealth/added value for its investors. In other words, MVA shows the difference between what investors invest and what they can earn (Almaududi, 2016).

Rousana (1997) defines MVA as a cumulative measure of company performance that shows the capital market valuation at a certain time from the present value. The definition of MVA according to Ruky (1997) in Gulo and Ermawati (2011) is the cumulative result of company performance generated by various investments that have been made or are anticipated to be made.

MVA as a measure of wealth creation for investors shows the difference between company value and capital value because in company value and capital value there is the same debt component, then MVA is also the difference between the market value of equity and book value of equity (Almaudidi, 2016).

If the MVA is positive, then management has succeeded in providing added value to investors. On the other hand, if the MVA is negative, the company is unable to provide added value to investors. In the capital market, MVA is an indicator of a stock's future performance. This is because MVA could penetrate financial statements that adhere to financial accounting standards and can see the company's long-term potential (Almaudidi, 2016).

RESEARCH METHOD

This study uses a quantitative approach with descriptive and verification analysis methods in the form of an explanation of the results of quantitative analysis. This research was conducted on 16 health sector companies listed on the Indonesia Stock Exchange. The object of this research is obtained by using a non-probability sampling method with a purposive sampling technique. The data used in this research is secondary data. This secondary data is taken from evidence, notes, and reports that have been compiled in the annual financial statements of the health companies which are public groups listed on the Indonesia Stock Exchange. The data is accessed through the website www.idx.co.id during the 2019-2020 observation period.

The variables of this study consisted of the dependent and independent variables. The dependent variable in this study is stock return and the independent variable consists of EVA and MVA. The data analysis technique used is the descriptive and verificative analysis

The independent variable EVA tries to measure the added value generated by a company by reducing the capital cost from the investment made. The stages in calculating EVA are described as follows :

Table 1. Steps in calculating EVA (Utama, 1997)

No.	Steps	Formulas
1	NOPAT	NOPAT = Net Profit + Interest Cost
2	Kd*	$Kd = \frac{Interest\ Cost}{Liabilities}$ $Kd* = Kd (1-T)$
3	Ke	$R_f + \beta (R_m - R_f)$
4	Struktur Modal	$Wd = \frac{Liabilities}{Asset} \rightarrow We = \frac{Equity}{Asset}$
5	WACC	$[(Kd*Wd) + (Ke \times We)]$
6	IC	Asset – Non-Interest
7	CC	WACC x IC
8	EVA	NOPAT – CC

The independent variable MVA measures the difference between the market value of a company's equity and the book value presented in the balance sheet. Calculating MVA with the formula:

$$MVA = \text{Market Value Of Equity} - \text{Equity Capital Invested}$$

Based on several previous researchers and a literature review, a framework of thought is formulated that shows the relationship between EVA and MVA on stock returns. The framework of thought proposed in this study is shown in Figure 1 below.

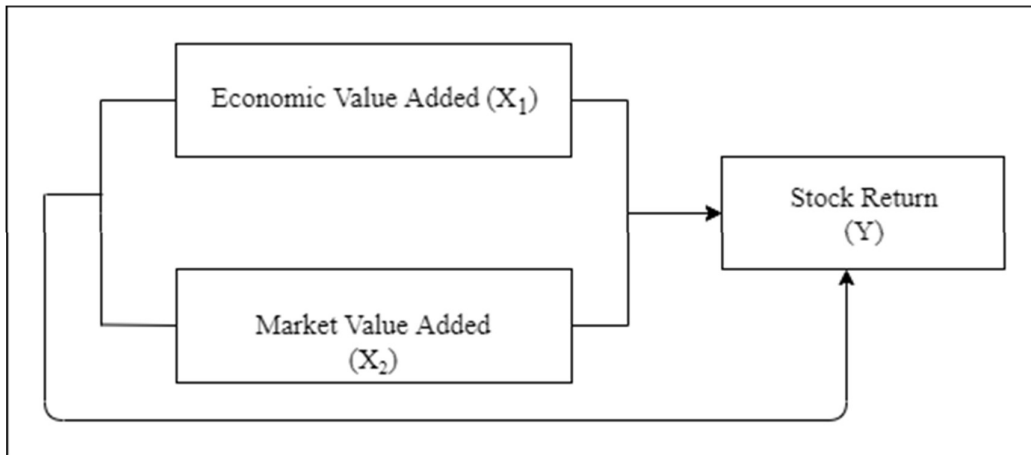


Figure 1 Conceptual Model

Based on the problem formulation and the conceptual model that has been described, the hypotheses developed in this study are:

- a. EVA has a positive and significant effect on the stock return price of health sector companies(H1).
- b. MVA has a positive and significant effect on the stock return price of health sector companies(H2).
- c. EVA+MVA has a positive and significant effect on the stock return price of health sector companies(H3).

RESEARCH RESULT

Before testing the hypothesis, a descriptive analysis was carried out to see the minimum, maximum, total, average, standard deviation, and variance values of the variables used. The results of the descriptive analysis are shown in table 2 below:

Table 2. Descriptive Statistics

Variable	N	Min	Max	Sum	Mean	Std. Deviation	Variance
Y	32	-0.27954	0.5692	2.35390	0.07356	0.186787	0.035
x1	32	-1.42E+12	2.72E+12	6.52E+12	2.04E+11	8.03E+11	6.45E+23
x2	32	-4.70E+11	5.92E+13	2.80E+14	8.76E+12	1.52E+13	2.31E+26

Based on the table above can be explained as follows:

1. Stock return (Y) shows a minimum value of -0.27954 which means that there are companies that experience a decrease in income - 0.27954, the maximum value is 0.5692 which illustrates that there are companies that have increased revenues by 0.5691 and an average of 0.07356.
2. EVA (x1) shows a minimum value of -1.42E+12, this means that the company does not experience additional economic value of the company, because the available profit does not show the expectations of shareholder). On the other hand, there are also companies that can increase the economic value of their business with a maximum value of 2.72E+12. The average EVA value is 2.04E+11.
3. MVA (x2) shows a minimum value of -4.70E+11 which means the company is not

successful in providing added value to investors. However, there are also companies whose management has succeeded in providing added value for investors because the maximum MVA value obtained is 5.92E+13. The average MVA value is 8.76E+12.

The analysis technique used is simple linear regression with the results shown in Table 3 below. Based on the results of simple regression processing with the SPSS version 25 application, the following results are obtained:

1. EVA has a negative effect on stock returns of health companies listed on the Indonesia Stock Exchange. The value of the estimated value is -0.027, meaning that if EVA increases by 1% then stock returns will decrease by 0.027, on the contrary if EVA decreases by 1%, stock returns will increase by 0.027, but this can't be said to have a significant effect, because the value of Sig. is 0.428, greater than 0.05.
2. MVA has a negative effect on stock returns of health companies. The value of the estimated value is -0.037, meaning that if the MVA increases by 1% then the stock return will decrease by 0.037, conversely if the EVA decreases by 1%, the stock return will increase by 0.037, but this can't be said to have a significant effect, because the value of Sig. is 0.278, greater than 0.05.
3. EVA + MVA has a negative effect on stock return prices with the estimated value is -0.018. This means that if EVA + MVA increases by 1%, the stock return will decrease by 0.018, contrarily if EVA + MVA decreases by 1%, the stock return will increase by 0.018, but this can't be said to have a significant effect, because the value of Sig. is 0.313, greater than 0.05.

Table 3. The Results of Simple Regression Analysis

Variable	Estimation	Standard Error	T	Sig.
Constant	0.074	0.033	2.215	0.034
EVA	-0.027	0.034	-0.804	0.428
MVA	-0.037	0.033	-1.106	0.278
EVA + MVA	-0.018	0.013	-1,027	0.313

Hypothesis and Correlation Testing

In this research, hypothesis testing used partial test (T test) and simultaneous test (F test). Based on the T-test and F-test, the result shown in Table 4 below:

Table 4. The Results of Hypothesis Testing

	EVA	MVA	EVA + MVA
T-count	0.078592	0.1460	
T-Table	2.04	2.04	
F-count			0.0099
F-Table			4.17

1. Based on T-test of EVA data, it is obtained T-count of 0.0785 and T-table is 2.04. The result shows that the T-count value is less than T-table, it means that the EVA variable does not have a significant effect on stock returns.
2. The T-test of MVA data results the T-count value is 0.1460 and the T-table value is 2.04. The outcome indicates that T-count value is less than T-table, it means that the MVA variable does not have a significant effect on stock return prices.
3. Simultaneous testing (F-test) of EVA and MVA has no significant effect on stock returns. The result shows that F-count 0.0099 less than F-table 4.17. It means all

independent variables (EVA and MVA) do not have a significant effect on stock returns.

The result of correlation analysis can be seen in Table 5 below. The correlation between EVA and stock returns has a weak correlation with a correlation value of 0.1886 and the correlation between MVA and stock returns also has a very weak correlation with a correlation value of -0.05828. But the correlation between the EVA and MVA has a strong correlation with a correlation value of 0.629 or in other words EVA has a strong relationship with MVA.

Table 5. The Correlation Results

	Stock Return	EVA	MVA
Stock Return		0.188684544	-0.058288992
EVA			0.629030659
MVA			

Source: SPSS Data Processing version 25, 2022

DISCUSSION

The result of EVA data processing in above shows that the EVA estimation result is 0.027, meaning that EVA has negative effect on stock return. if EVA increases by 1% then stock returns will decrease by 0.027, on the contrary if EVA decreases by 1%, stock returns will increase by 0.027. Besides that, T-count of EVA is 0.0785 and T-table 2.04 (T-count < T-table), it means that EVA variable has negative effect on stock return. The results of this analysis are supported by the research of Baharuddin, et.al. (2017).

EVA has the negative effect on stock returns, this is due to Indonesia's unstable social and economic conditions because of covid-19, resulting in high business risk and uncertainty income that will be received by investors.

Based on the results of the MVA calculation above, the EVA estimation result is -0.037, meaning that MVA has a negative effect on stock returns. If the MVA increases by 1%, the stock return will decrease by 0.037. But if the MVA decreases by 1%, the stock return will increase by 0.037. In addition, the calculated T-count of MVA is 0.1460 and T-table is 2.04 (T-count < T-table), it is mean that the MVA variable has no significant negative effect on stock returns. This is in line with the research of Silalahi and Manullang (2021). MVA has an insignificant negative effect on stock returns, this happens if the company's market value is smaller than the invested capital, it can reduce investor interest in reinvesting in the companies. Where market value is the price of shares that occur in the stock market which is determined by market participants. A negative MVA means a decrease in the value of shareholder capital, with a low MVA value, the company is unable to provide a return, or it can be said that the company's management is unable to increase the prosperity of the shareholders.

Based on the results of the EVA and MVA calculations above, the estimation result is -0.018, meaning that MVA and MVA have a negative effect on stock returns. EVA and MVA simultaneously and partially have no effect on stock returns. The calculated F-count of EVA+MVA is 0.0099 and the F-table value is 4.17. Because the calculated F value obtained is less than F table, all independent variables have no significant effect on stock returns. This research is supported by Badaruddin, et al (2017) and Silalahi and Manullang (2021).

The results of the correlation between MVA and MVA on stock returns show that EVA has a weak correlation on stock returns with a correlation value of 0.1886. The MVA variable has a very weak correlation on stock returns with a correlation value of -0.05828. But the EVA variable has a strong correlation on the MVA variable with a correlation value of 0.629 or in other words EVA has a strong relationship with MVA.

CONCLUSION

Based on the results of this study, the authors conclude as follows:

1. EVA has an insignificant negative effect on stock returns in health companies listed on the Indonesia Stock Exchange.
2. EVA has an insignificant negative effect on stock returns in health companies listed on the Indonesia Stock Exchange.
3. EVA and MVA simultaneously have an insignificant negative effect on stock returns in health companies listed on the Indonesia Stock Exchange

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