

THE EFFECT OF ECONOMIC VALUE ADDED (EVA), CURRENT RATIO (CR), AND DEBT TO EQUITY RATIO (DER) ON STOCK RETURNS IN HEALTHCARE SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE (IDX)

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Abstract: The purpose of the study is to determine the economic added value and financial ratios of the healthcare sector listed on the IDX. The financial ratios referred to here are Liquidity Ratios aimed at the current ratio (CR) and Solvency Ratios aimed at the Debt to Equity Ratio (DER). The population and samples were 13 from 23 healthcare sector companies for the 2018 – 2020 period with 39 samples. The sample collection method was through purposive sampling while collecting data with documentation taken from the IDX website and analyzing data with multiple linear regression analysis. The research output shows EVA contains a significance value of $0.54 > 0.05$ which reveals that there is no effect on stock returns, CR has a significance value of $0.075 > 0.05$ which means that there is no effect on stock returns, and DER partially does not affect stock returns. with a significance value of $0.971 > 0.05$.

Keywords: *Economic Value Added (EVA), Current Ratio (CR), Debt to Equity Ratio (DER), Stock Return, Healthcare*

1. Introduction

The Covid-19 pandemic has made several company sectors experience various impacts, mainly due to policy factors in preventing Covid -19 with the implementation of social distancing to a ban on going (lockdown) (Muliati, 2020). One of the sectors affected by the incident was the economic sector.

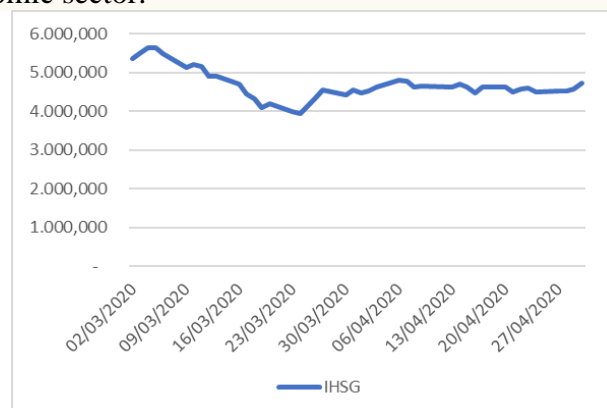


Figure 1. The movement of the Jakarta Composite Index (JCI) month

The weak economy caused almost all countries to have an impact on the capital market. The figure above represents the movement of the *Jakarta Composite Index* (JCI) which experienced a decline in March – April 2020. Recorded on March 2, 2020, the closing was at 5,361.00 and at the end of March the JCI closed at 4,538.93. However, the lowest decline was recorded on March 24, 2020, which was closing at 3,937.63. In April 2020 there were fluctuations. The factor causing the JCI to fluctuate is the *panic attack* (anxiety) caused by the Covid-19 pandemic on investors by simultaneously selling their shares and having an impact on the contraction of the JCI movement (Virtyani, 2021).

The Indonesia Stock Exchange is divided into various sectors, one of the sectors listed in the capital market is the health sector. Health shares are shares of issuers engaged in the medical sector. During the COVID-19 pandemic, hospital shares became an attraction for tycoon or conglomerate investors such as the Grub EMTEK (Elang Mahkota Teknologi) family belonging to the Sariaatmadja family. Through PT. Sarana Mediatama Metropolitan, Tbk (SAME), previously owned 0.49% shares in PT Kedoya Adyaraya, Tbk. However, on September 9, 2021, the company increased its share ownership to 18.49% in PT Kedoya Adyaraya, Tbk (RSGK) with a total of 167.34 million shares (Investor.id, 2021). Then on November 10, 2021, the EMTEK Grub again acquired 45% shares with a total ownership of 66% shares in PT. Kedoya Adyaraya, Tbk (market.bisnis.com, 2021).

Return is the return on a stock when invested in one or more groups of stocks in a portfolio. (Tarmizi, et al, 2018). The high selling price of shares above the purchase price affects the increase in the value of stock *returns* received by investors (Basalama, 2017). Expectations in obtaining the maximum rate of *return* so that it can be realized need efforts to measure or calculate the investment.

Economic Value Added is used in measuring the added value within a certain period. According to Sari (2019), *Economic Value Added* (EVA) is a parameter or benchmark for the prosperity of company management with the aim of obtaining added value (Nurdina, 2018). EVA is calculated on *profit after tax* minus the company's annual *cost of capital*. If EVA is worth more than 0, it means that the company is able to create wealth and vice versa (Puspitadewi, 2016). In addition, there are other alternative methods in measuring the level of success of company performance, there are 3 approaches in analyzing stock value, namely technical, fundamental, and informational analysis (Laksono, 2017). However, the proxy of this research is the fundamental analysis approach used as an instrument stock analysis.

Current Ratio (CR) is proxied as the ratio of liabilities in this study, because it can be used as an instrument for measuring the level of performance of the company's success in paying short-term obligations. *CR shows the company's functionality to satisfy the short term* (Amanda, 2021).

Debt to equity ratio (DER) is the ratio of debt to equity used to estimate a company's ability to be financed by debt, a high DER value indicates that the company is not doing well (Laksono, 2017). DER is a calculation of total debt divided by total equity (Harpono, 2019).

As previously mentioned, the focus of this study is on financial metrics and EVA, a tool used to measure the success rate of BEI-listed healthcare companies in generating profits.

2. Research Method

Purposive sampling method was used in collecting samples. This method is the basic technique in determining the criteria in order to get the appropriate sample (Sugiyono, 2016: 120). The following are the criteria for the research sample:

- 1) Healthcare sector companies listed on the IDX for three consecutive years

- 2) The existence of financial statement data that is complete and in line with the needs of the variables in the research.
- 3) Companies that publish annual financial reports for the years 2018-2020.
- 4) Companies that are still operating in the *healthcare sector* for the 2018-2020 period

3. Results and Discussion

3.1. Results

Descriptive Statistical Analysis

Table 1
Presentation of Research Data

| No | Company Code | Year | EVA | CR | DER | Stock Return |
|----|--------------|------|--------------|------|------|--------------|
| 1 | DVLA | 2018 | 7,884,739 | 2.88 | 0.4 | - 0.24 |
| | | 2019 | 49,702,282 | 2.91 | 0.4 | 0.12 |
| | | 2020 | 18,024,566 | 2.51 | 0.49 | 0.12 |
| 2 | KAEF | 2018 | 271,660,516 | 1.34 | 1.73 | 1.05 |
| | | 2019 | -323,732,605 | 0.99 | 1.47 | - 0.58 |
| | | 2020 | -578,325,132 | 0.89 | 1.47 | 2.48 |
| 3 | KLBF | 2018 | 305,003,224 | 4.65 | 0.18 | -0.11 |
| | | 2019 | 320,351,417 | 4.35 | 0.21 | 0.08 |
| | | 2020 | 395,500,556 | 4.11 | 0.23 | - 0.08 |
| 4 | MERCK | 2018 | 687,970,670 | 1.37 | 1.43 | 0.17 |
| | | 2019 | 103,477,559 | 2.5 | 0.51 | -0.38 |
| | | 2020 | 96,219,412 | 2.54 | 0.51 | 0.14 |
| 5 | MICA | 2018 | 45,768,912 | 7.75 | 0.14 | -0.41 |
| | | 2019 | 65,941,038 | 5.74 | 0.16 | 0.70 |
| | | 2020 | 84,875,948 | 5.45 | 0.15 | 0.05 |
| 6 | PRDA | 2018 | 17,564,997 | 7.31 | 0.23 | -0.63 |
| | | 2019 | 16,498,281 | 8.73 | 0.21 | 0.59 |
| | | 2020 | 28,196,211 | 6.47 | 0.25 | -0.10 |
| 4 | MERCK | 2018 | 687,970,670 | 1.37 | 1.43 | 0.17 |
| | | 2019 | 103,477,559 | 2.5 | 0.51 | -0.38 |
| | | 2020 | 96,219,412 | 2.54 | 0.51 | 0.14 |
| 5 | MICA | 2018 | 45,768,912 | 7.75 | 0.14 | -0.41 |
| | | 2019 | 65,941,038 | 5.74 | 0.16 | 0.70 |
| | | 2020 | 84,875,948 | 5.45 | 0.15 | 0.05 |
| 6 | PRDA | 2018 | 17,564,997 | 7.31 | 0.23 | -0.63 |
| | | 2019 | 16,498,281 | 8.73 | 0.21 | 0.59 |
| | | 2020 | 28,196,211 | 6.47 | 0.25 | -0.10 |
| 7 | PYFA | 2018 | 2,200,319 | 2.75 | 0.57 | -0.82 |
| | | 2019 | 2,237,968 | 3.52 | 0.52 | 0.05 |
| | | 2020 | 4,818,014 | 2.89 | 0.45 | 3.92 |
| 8 | SAME | 2018 | 13,602,074 | 3.51 | 0.94 | 0.37 |
| | | 2019 | -8,314,986 | 0.51 | 1.23 | -0.55 |
| | | 2020 | 57,683,784 | 0.84 | 2.46 | 0.64 |
| 9 | SCPI | 2018 | 39,337,369 | 2.68 | 2.25 | -0.02 |
| | | 2019 | 25,142,581 | 5.94 | 0.59 | -0.55 |
| | | 2020 | 92,370,595 | 1.5 | 0.92 | 0.17 |
| 10 | SIDO | 2018 | 72,067,987 | 4.2 | 0.14 | 0.54 |
| | | 2019 | 90,010,843 | 4.12 | 0.15 | 0.52 |

| | | | | | | |
|----|------|------|--------------|------|------|-------|
| | | 2020 | 56,471,956 | 5.88 | 0.10 | -0.37 |
| 11 | SILO | 2018 | -6,981,992 | 1.8 | 0.17 | -0.78 |
| | | 2019 | -412,295,236 | 1.34 | 0.29 | 0.95 |
| | | 2020 | 18,979,884 | 1.44 | 0.4 | -0.21 |
| 12 | SRAJ | 2018 | 41,534,215 | 0.7 | 0.48 | 0.03 |
| | | 2019 | 29,605.818 | 0.39 | 0.75 | 0.06 |
| | | 2020 | -248,948,455 | 0.53 | 0.14 | -0.19 |
| 13 | TSPC | 2018 | 121,312,473 | 2.62 | 0.44 | -0.23 |
| | | 2019 | 143.126.199 | 2.66 | 0.44 | 0.31 |
| | | 2020 | 191,034,890 | 2.95 | 0.42 | -0.01 |

Source: Processed Data (2022)

From the table data, the company with the highest EVA has a value of 687,970,670 which is in the company PT. MERCK in 2018, and the smallest is at PT. Kimia Farma, Tbk (KAFF) in 2020 with a score of -573,325,132. Companies with the highest CR have a value of 8.73% are in PT. Prodia Widiyahasada, Tbk (PRDA) in 2019, while the lowest CR value was at PT. Sejahtera Anugerahjaya by 0.39% in 2019. The company with the highest DER value is PT. Sarana Mediatama Metropolitan (SAME) of 2.46% in 2020, while the smallest value of 0.10% is at PT. Sido Herbal and Pharmaceutical Industry, Tbk (SIDO) in 2020. The company with the highest stock *return value* is PT. Pyridam Farma, Tbk (PYFA) in 2020 with a value of 3.92%, while the lowest score was at PT. Pyridam Farma, Tbk (PYFA) in 2018 with a value of -0.82%.

Normality Test Results

| Table 2 One-Sample Kolmogorov-Smirnov Test Understandardized Residual | | |
|---|----------------|---------------------|
| N | | 39 |
| Normal Parameters ^{a,b} | Mean | ,000000 |
| | Std. Deviation | 97,90811442 |
| Most Extreme Differences | Absolute | ,090 |
| | Positive | ,090 |
| | Negative | -,089 |
| Test Statistic | | ,200 ^{c,d} |
| Asymp. Sig (2-Tailed) | | |

Source: Processed Data (2022)

Looking at the normality test *output*, it can be seen that the values of Asymp.Sig. (2-tailed) is 0.200. This means that the survey data are normally distributed as the *significance* of the normality test is > 0.05.

Multicollinearity Test Results

Table 3

| Collinearity Statistics | | |
|-------------------------|-----------|-------|
| Model | Tolerance | VIF |
| EVA | ,996 | 1,004 |
| CR | ,992 | 1,009 |
| DER | ,990 | 1,010 |

Source: Processed Data (2022)

Based on table 3, it indicates that the EVA, CR, DER variables each have a VIF value < 10 and a Tolerance value > 0.10. It means that the regression model has no multicollinearity

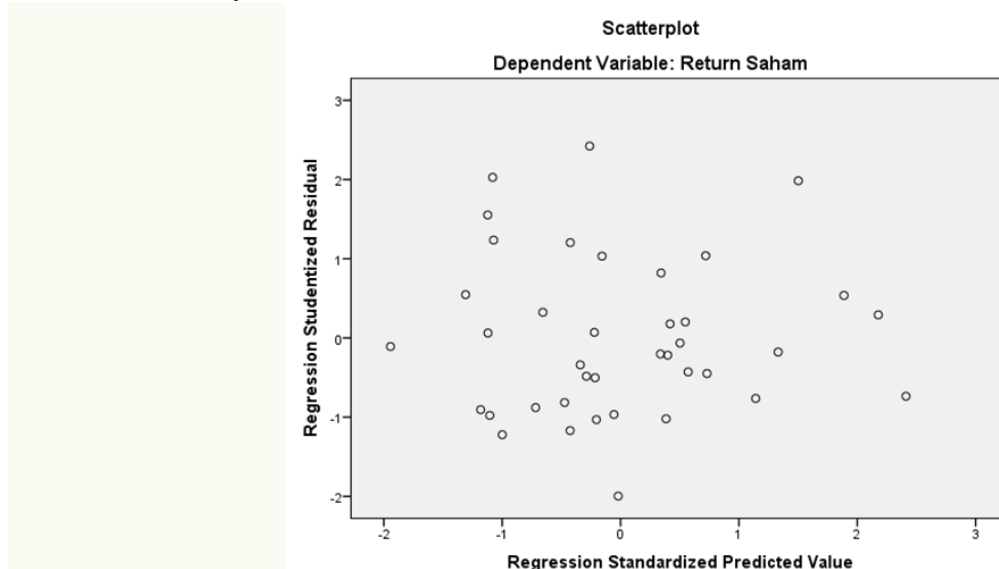


Figure 2.

Source: Processed Data (2022)

In the figure 2 above, the plot does not form a clear pattern, showing that the point locations are scattered above and below number 0 on the Y-axis. Regression model does not exhibit heteroscedasticity.

Autocorrelation Test Results

Table 4

| Model Summary ^b | | | | | |
|----------------------------|-------------------|----------|-------------------|----------------------------|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | ,641 ^a | ,411 | ,357 | 95,49963 | 2.147 |

Source: Processed Data (2022)

Seen in the value of Durbin Watson of 2.147. It means that the value if a positive autocorrelation is found, its value is $d > d_u$, or $2.147 > 1.651$ so we know there is no positive

autocorrelation. If negative autocorrelation was detected, the result was $(4 - d) > du$, namely $(4 - 1.774 = 1.853) > 1.651$, so it was concluded that there was no negative autocorrelation in this study. So the overall conclusion for testing the correlation assumption is that there is no autocorrelation, so the test can be continued.

Multiple Linear Regression Analysis

Table 5

| Coefficients ^a | | | |
|---------------------------|------------|-----------------------------|------------|
| Model | | Unstandardized Coefficients | |
| | | B | Std. Error |
| 1 | (Constant) | 346,032 | 467,124 |
| | EVA | -,115 | ,233 |
| | CR | ,207 | ,085 |
| | DER | -,452 | ,221 |

Source: Processed Data (2022)

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$

$$Y = 346.032 + (-0.115) X_1 + (0.207) X_2 + (-0.452) X_3 + e$$

1. Constant (a) = 346.032

Shows the value of the coefficient of the constant that is equal to 0.010. This means that the EVA, CR, and DER variables have not changed, then the *value of the Stock Return* variable is 346.032

2. Coefficient (X_1) = -0.115.

Shows that the increase in the EVA variable (X_1) then the *Stock Return* will be low and vice versa. This means that every indication of a decrease in the EVA variable by 1 unit will cause an increase *Stock Return* of 0.115 assuming other variables remain.

3. Coefficient (X_2) = 0.207

Variable CR (X_2) has a positive regression value of 0.207 which indicates indicating a one-way relationship between *Current Ratio* and *Stock*. It means an increase in the value of the *Current Ratio*, which also increase the return of the stock. In other words, an increase of 1 unit from the *Current Ratio* would increase the stock's return by 0.207.

4. Coefficient (X_3) = -0.452

The regression coefficient for the DER variable (X_3) is -0.452, meaning that as DER increases, stock returns decrease and vice versa. That is, a 1-unit decrease in the DER value increases *Stock Return* by up to 0.452 while the other variable arguments the same.

Coefficient of Determination (R^2)

Table 6

| Model Summary | | | | |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .641 ^a | .411 | .357 | 95.49963 |

Source: Processed Data (2022)

Table shows the Adjust R-Square value of 41.1 %. The meaning is 41.1% variation of *Stock Return* explained in EVA, CR, and DER variables. Meanwhile, the remaining 58.9% is explained in other variables.

Model Feasibility Test Results (Test F)

Table 7

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|----|-------------|-------|-------------------|
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 117203,274 | 3 | 39067,758 | 3,754 | ,019 ^b |
| | Residual | 364267,957 | 35 | 10407,656 | | |
| | Total | 481471,231 | 38 | | | |

Source: Processed Data (2022)

The result of the ANOVA test for the calculated F value was 3.752 with a significance value of $0.019 < 0.05$. So it is said that the regression model y of this research is feasible k.

Partial Test Results t

Table 8

| Coefficients ^a | | | |
|---------------------------|------------|-------|------|
| Model | | t | Sig. |
| 1 | (Constant) | ,741 | ,464 |
| | EVA | -,598 | ,554 |
| | CR | 1,836 | ,075 |
| | DER | -,037 | ,971 |

Source: Processed Data (2022)

1. *Economic Value Added (EVA)*

The output of the t-test, the significance value is known to be $0.54 > 0.05$. This means EVA has no impact on stock returns. In other words, the EVA variables are independent of stock returns, and the results of this study strengthens the proposed hypothesis. H_1 accepted.

2. *Current Ratio (CR)*

The calculation result shows the *significance value* is $0.075 > 0.05$. This means that CR has no impact on *Stock Return*. It indicates that the CR variable has no relationship with *Stock Return*, so the conclusion that the *Current Ratio (CR)* has an impact on *Stock Returns*. H_2 rejected.

3. *Debt to Equity Ratio (DER)*

Partial t test calculation *output is known to have a significance value* of $0.971 > 0.05$. This means that DER affects *Stock Return*. Thus, it is concluded that the DER variable does not contain a relationship with *Stock Return*, so that the research *output* does not support the proposed hypothesis. H_3 rejected.

3.2. Discussion

1. EVA cannot be used as a benchmark or reference to predict stock returns. This condition

shows that the size of the EVA value does not affect the movement of the share return value in healthcare companies listed on the IDX.

2. Some investors interpret that a high current ratio (CR) reflects a company's ability to optimize current assets in unfavorable conditions. This is because companies with high current ratios are not necessarily guarantee that the company's debts are due, due to the unfavorable proportion/distribution of current assets with a relatively high amount of inventory compared to the estimated level of future sales.
3. High DER indicates that the company is using more more debt than equity in exercising company operations and reflects the high the level of company risk that impacts stock returns low. Another possibility, investors are more focused on seeing the value of a company's assets compared to the value of its liabilities.

4. Conclusion

- 1) *Economic Value Added (EVA)* does not affect stock *returns in healthcare* sector companies listed on the Indonesia Stock Exchange for the period 2018 – 2020. This means that EVA cannot be used as a reference in predicting the value of stock *returns* for investors. This condition shows that the size of the EVA value does not affect the movement of the stock *return value*.
- 2) *Current Ratio (CR)* does not affect stock *returns in healthcare* sector companies listed on the Indonesia Stock Exchange for the 2018-2020 period. This means that the size of the CR value does not necessarily result in high stock *returns*. The low value of CR means that there will be minimal equity/ capital in paying off debt. However, if the *current ratio* measurement is high, the company's condition is not necessarily good. Because the assets may not be used effectively.
- 3) *Debt to Equity Ratio (DER)* does not affect stock *returns in healthcare* sector companies listed on the Indonesia Stock Exchange for the period 2018 - 2020. So it can be concluded that this variable cannot be used as a reference to predict the value of a company's stock *return*. Broadly speaking, the soaring use of debt in a company can weaken the value of the company concerned.

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