## BUKTI KORESPONDENSI

## ARTIKEL JURNAL NASIONAL TERAKREDITASI SINTA 2

Judul Artikel : The Impact of A Stock Split and the Economic Value Added on Stock Return;
Jurnal : International Business and Accounting Research Journal (IBARJ);
Vol. 4 No. 2 (2020) Hal. 108-118;
Penulis : Penulis Ke-3 dari 3

| No. | Perihal | Tanggal |
| :---: | :--- | :--- |
| 1. | Bukti konfirmasi submit artikel dan artikel yang <br> disubmit | 23 Februari 2020 |
| 2. | Bukti konfirmasi review dan hasil review pertama | 25 Februari 2020 |
| 3. | Bukti konfirmasi submit revisi pertama, respon <br> kepada reviewer, dan artikel yang diresubmit | 28 Februari 2020 |
| 4. | Bukti konfirmasi review dan hasil review kedua | 3 Maret 2020 |
| 5. | Bukti konfirmasi submit revisi kedua, respon kepada <br> reviewer, dan artikel yang diresubmit | 15 Maret 2020 |
| 6. | Bukti konfirmasi artikel accepted |  |
| 7. | Bukti konfirmasi artikel published online | 10 May 2020 |

## International Business and Accounting Research Journal



International Business and Accounting Research Journal


International Business and

# The Impact of A Stock Split and the Economic Value Added on Stock 

## Return

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## Info Articles

History Articles:
Submitted 1 March XXXX
Revised 16 April XXXX
Accepted 28 June XXXX

## Keywords:

Stock Split. Economic
Value Added (EVA).
Stock Return


#### Abstract

Abstract: The purpose of this study is to analyse the impact before and after the stocks split on stock return and analyze the impact of the economic value added (EVA) on the stock return of financial service sector companies listed on the Indonesia Stock Exchange (IDX) who carried out a stock split between the period 2014-2019. To do this we used event studies and tested the information content of the market reaction of an announcement. We sampled 35 financial statements from a population of 250 financial statements of companies conducting a stock split listed on the Indonesia Stock Exchange and analyzed the data using simple Linear regression. We also tested whether there was a deviation of assumptions from test normality and autocorrelation. The results showed that no significant differences and negative stock returns before and after the stock split. And there is a significant and positive effect partially between the economic value added on returns


## INTRODUCTION

The capital market in an economy has two main important functions. namely the economic function and the financial function. The economic function because the market provides facilities that bring together two interests. namely, parties who have excess funds and parties who need funds. The financial function because it provides the funds required by the parties who have excess funds and the parties who need funds without having to be directly involved in the ownership of the real assets required for the investment (Suad Husnan. 2009). According to Abdul Halim (2005). investment is essentially the placement of some funds at one moment in time in the hope of obtaining future profits.

The main purpose of investors investing in the capital market is to gain profit. In the context of investment management. the investment profit level is called a return. Prospective investors seek the company's financial information through the respective financial statement. to determine whether the investment will provide the expected rate of return. According to Rusliati (2010). one important information to be observed by investors is the stock split. The stock split is an activity carried out by the company when going public to increase the stock volume in circulation. In addition to stock split information. investors also look at financial ratios. According to Horne (2005). the financial ratios are tools used to analyse the financial condition and performance of the company.

Measurements that only analyze financial statements based on ratio analysis have a major drawback. namely that of ignoring capital costs. Therefore. making it difficult to determine whether a company has managed to create value or not.

The focus of assessments used to measure economic profit in a company. which states that welfare can only be created if the company can meet all operating costs and cost of capital is known as the Economic Value Added (EVA). This is a measuring instrument to assess the performance of a company. using specific figures in the financial statements. EVA became relevant to measure performance based on the economical value generated by the company.

## LITERATURE REVIEW

## Stock Split

According to Jogiyanto (2013:561). the breakdown of stocks (stock split) was interpreted as to divide one share into ' $n$ ' shares. Stock split information is announced (in Indonesia) on the Indonesia Stock Exchange.

In terms of the signalling theory. according to Jogiyanto (2003:419). the stock split is considered to provide a good signal to the public in terms of good prospects for future profits. because the company that carries out the breakdown of stocks is a company that owns a highly-priced stock.

The Trading Range Theory states that stock splits will increase the liquidity of stock trading.

## Types of Stock Split

1. Forward Stock Split: commonly known as a stock split and is simply dividing a highly-priced share into multiple lower-priced shares to reduce their price.
2.Reverse Stock Split: reducing the number of shares by merging some shares into a single unit. This will appreciate their price automatically. This is not very common but is usually adopted under unfavourable market conditions when the share price continues to fall. It is a protection against delisting from the stock exchange if the share price is expected to fall beyond a listing required level.

The calculation of stock split formula as explained in Table 1:

$$
H T=H P / r
$$

Source: Tambunan (2010: 39)

## Economic Value Added

According to Brigham and Houston (2010:111), the EVA is an estimate of the actual business economic return for a given year. EVA shows the remaining profit after capital cost. Companies that have high EVA tend to be more attractive to investors to invest in these companies. "because the higher the EVA than the higher the value of the company".

The Calculation of EVA using the formula below as explained in Table 1:


Source: Rudianto (2006: 329).

## Stock Return

According to Jogiyanto (2010:205). Stock Return is the result obtained from the investment by calculating the difference between the current stock price period and that of the previous period ignoring the dividend.

Type of Stock Return

1. Realized Return is a return that has occurred calculated using historical data. Return realization is important because it is used as one of the financial performance measures of the company. This historical return is also useful as the basis for determining return expectations and future risks.
2. Expected Return is the expected return to be obtained by investors in the future. Unlike the actual return realised. return expectations have not occurred.

Sources Stock Return

1. Yield
2. Capital Gain/Loss

According to Jogiyanto (2010:206). the calculation of the stock return is as follows:

$$
\text { Stock Return }=\underline{\mathrm{Pt}-(\mathrm{Pt}-1)} \times 100 \%
$$

Description: $\mathrm{P}_{\mathrm{t}}=$ Stock Price Now

$$
P_{t-1}=\text { Before Period Stock Price }
$$

## Empirical Review

Stock Return of 20 days before and 20 days after Stock Split events

The actions undertaken by the Company in the form of the stock split can be interpreted as a signal given by the company about the good prospects in the future. where the high stock price is an indicator that the performance of the company is good. According to Fama. Fisher. Jensen. and Roll (in Jogiyanto. 2010:399). a stock split event. in addition to a cheaper stock price. led to increased activity in the number of transactions carried out. This can have a positive effect on the stock price and in turn, provide an
opportunity to obtain an abnormal return for the investor.

Griffin (2010) however notes. that the stock split indicates that the company's managers have more knowledge or information than investors.

Influence of Economic Value Added (EVA) on Stock Return

The return has a significant role in determining the value of an investment. According to Agus Pratiwi (2011:71). the factors that influence the stock return are EVA. Return on equity (ROE). and Return on Assets (ROA). Suharli (2005) mentions that the Return can be an indicator of the increase in the wealth of investors. EVA is a way to measure the profitability of actual operations Stewart (2010). EVA measures the value-added in a given period. This added value is created when the company earns profit (profit) above the cost of the capital company. The higher the capital gain and the dividend. the higher the stake held by the investor will also return. This shows EVA's positive influence on the return of the shareholders.

## Hypotheses Development

Based on the above thoughts. we draw the following hypotheses :
$\mathrm{H}_{1}=$ There are significant differences in stock return before and after a stock split.
$\mathrm{H}_{2}=$ Economic Value Added (EVA) significantly affects the stock return.

## METHODOLOGY

We use the event study method as suggested by Ball and Brown (1996) to test the information content of the market reaction of an announcement. Market reactions are indicated by the alteration of the securities price by using return as the value of change or abnormal Return. We do this to determine and analyze the stock split affect on stock return.

Meanwhile, we use a quantitative approach to analyse the effect of EVA on the stock returns.

The population for this study is of 250 annual financial reports consisting of income statements and annual stock return reports of 50 companies listed on the Indonesia Stock Exchange (IDX), that carried out the stock split between 2014 and 2019. We sampled 35 annual income statements of 7 companies in the
financial services sector. Specifically, Capitalinc Investment (MTFN), Bank of National Retirement Savings (BPTN), Bank of the Republic of Indonesia (BBRI), Bfi Finance Indonesia (BFIN), Kresna Graha Securindo (KREN), Trust Finance Indonesia (TRUS) Tania Insurance Services (ASJT).

All companies sampled were selected using
the following considerations:

1) Companies listed on the Indonesia Stock Exchange (IDX) that carried out stock splits from 2014 to 2019.
2) The financial sector services companies listed on the Indonesia Stock Exchange (IDX) that carried out a stock split from 2014 to 2019.

Table 1
Research variable operationalization

| Variable | Variable Conceptual | Indicator | Scale |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Stock Split } \\ & \left(\mathrm{X}_{1}\right) \end{aligned}$ | Issuance by a company of several shares in exchange for several shares previously owned by the shareholders (Bodie et al. 2006: 648) | $\square$ <br> Source: Tambunan (2010: 39) <br> Description: <br> HT: The new theoretical price of the stock after the stock split HP: The latest stock market price before the stock split. <br> r: Resolution ratio. <br> (Tambunan 2010:39) | Ratio |
| Economic <br> Value <br> Added <br> (EVA) <br> ( $\mathrm{X}_{2}$ ) | NET operating profit of the company after tax and profit obtained by the company from the operating operations (Net Operating Profit After Tax)/NOPAT minus the total cost of capital | VA = NOPAT - Capital Charge Source: Rudianto (2006: 329). NOPAT = Net Operating Profit After-tax Capital Charge = Invested Capital $x$ Cost of Capital | Ratio |
| Stock <br> Return <br> (Y) | Stock Return is the resultant return from the stock investments. (Jogiyanto. 2009:201) | $\mathrm{R}_{\mathrm{it}}=\frac{\mathrm{Pt}-\mathrm{P}_{\mathrm{t}-1}}{\mathrm{P}_{\mathrm{t}-1}}$ <br> Source:: Jogiyanto. (2009: 201) <br> Description: <br> Rit: Shares profit Level I in the T period. <br> Pt: Closing Price of the I in T period (closing/last period). <br> $\mathrm{Pt}-1$ : The closing price of the I share in the previous period | Ratio |

## Data Testing Methods

The test steps:

1. We carried out a normality test using the regression model on the data variables.
2. We then checked for autocorrelation to determine if there is a strong relationship (positive and negative) between the existing data variables.
3. We determined whether there was a difference between the average abnormal return and the stock trading volume. before and after the stock split
4. We used simple linear regression analysis to predict the influence of EVA on the stock return.
5. We checked for correlation to show the direction of the relationship between dependent variables and independent variables and measured their relationship.
6. We then looked at the determinants of the coefficient (KD) to show the effect of the Independent variable ( X ) on the dependent variable ( Y ) expressed in percentages.

## Data Analysis and Results

## Dependent Variable: Stock Split

Stock Split is one of the company's actions in the business of lowering the stock price by expanding the number of stocks in circulation. The aim of this action is to allow stocks to trade
on a more liquid market and make the stock price more affordable to as many investors as
possible.

Table 2
Increase or decrease in stock price
20 days before Stock Split \& 20 days after Stock Split

| No | Stock <br> Code | Before <br> $(H-20)$ | Stock Split <br> (H 0) | After <br> $(\mathrm{H}+20)$ | \% Increase/ <br> Decrease | description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | BBRI | 5.116 | 5.150 | 4.885 | $(0.05)$ | Decrease |
| 2 | BTPN | 2.282 | 2.500 | 2.496 | 0.09 | Increase |
| 3 | MTFN | 141 | 155 | 197 | 0.39 | Increase |
| 4 | BFIN | 1.881 | 2.000 | 1.797 | $(0.04)$ | Decrease |
| 5 | KREN | 227 | 225 | 222 | $(0.02)$ | Decrease |
| 6 | TRUS | 199 | 200 | 200 | 0.00 | - |
| 7 | ASJT | 143 | 140 | 143 | 0.00 | - |

Source: Financial Statement (Processed Data)

Table 2, shows the stock price data of each company carrying a stock split. We can note that 2 companies experienced a rise in the stock price after the stock split, 3 companies experienced a decrease in the stock price after the stock split and 2 companies did not experience any changes in the stock price. The major stock price increase after the stock split was seen in the MTFN stock (0.39) and BTPN (0.09). The 3 companies that suffered a decrease in the stock price after a large stock split include (BBRI) (0.05), BFIN (0.04) and KREN (0.02). On the other hand, the stock price of TRUS and (ASJT) did not undergo
any change ( 0.00 ) after the stock split.

> Dependent Variable: Economic Value Added (EVA).

> As already noted above. EVA is a new approach in assessing the company's performance by paying fair attention to the expectations of the funders. In fact. when investing. shareholders are now very interested in the EVA. EVA is used to determine investments that maximize the rate of return and minimize the cost of capital. EVA can be used to identify activities or projects that provide a higher return than the cost of capital.

Table 3
Economic Value Added (EVA) for Listed Company on Indonesia Stock Exchange in 2014-2019

| No | Code | TAHUN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| 1 | ASJT | 151.387.209.668 | -24.566.911.512 | -191.450.784.408 | 202.184.102.434 | -492.289.661.138 | -994.894.788.578 |
| 2 | BBRI | 101.065 .031 .672 .42 <br> 3 | -38.533.841.763.310 | 94.077.490.136.584 | 92.047.709.530.010 | 136.354.467.376.707 | 196.462.640.237.606 |
| 3 | BFIN | 25.458.063.626 | 164.648.726.186 | 197.016.197.127 | -192.818.674.048 | 211.109.422.343 | 273.788.986.295 |
| 4 | BTPN | 908.978.514.801 | -37.945.022.518 | 1.930.068.299.994 | 194.837.009.032 | -791.515.620.656 | 1.070.445.818.591 |
| 5 | KREN | -7.772.697.982 | 1.521.989.340.868 | 4.235.953.551.722 | 1.036.600.738.004 | 1.959.734.964.037 | 851.980.233.338 |
| 6 | MTFN | -117.899.547.776 | 204.103.945.805 | -2.500.794.568 | -22.083.604.402 | -75.756.646.089 | -1.230.117.581.349 |
| 7 | TRUS | 588.373.308 | 499.006.366 | 390.736 .936 | -341.138.198 | 3.314.657.587 | -983.098.652 |
| Maximum |  |  | 908.978.514.801 | 1.521.989.340.868 | 94.077.490.136.584 | 92.047.709.530.010 | 136.354.467.376.707 |
| Minimum |  |  | -101.065.031.672.423 | -38.533.841.763.310 | -191.450.784.408 | -192.818.674.048 | -791.515.620.656 |


| Average <br> Value | -14.300 .613 .108 .111 | -5.243 .587 .525 .445 | 14.320 .995 .334 .770 | 13.381 .430 .865 .603 | 19.595 .580 .641 .827 |
| :---: | :--- | ---: | ---: | ---: | ---: |

Source: Financial Statement (processed data)

According to table 3, the Bank of the Republic of Indonesia (BBRI) has a negative economic value for two consecutive years meaning that Bank Rakyat Indonesia was unable to create economic value for its company. It is seen net profit the tax is obtained smaller than the cost of the loan and equity costs so that the company is not able to produce a return of operating rates
exceeding the cost of capital. But the next year Bank Rakyat Indonesia was able to pursue its height proved from the value added positive economy for three consecutive years meaning Bank Rakyat Indonesia was able to create value added economies by generating net profit after large taxes.


Source: Economic Value Added (Processed data)
Figure 1: Average Economic Value Added (EVA)

From figure 1 The graph looks the higher the average value of economic added value, the state-owned banking company.

## Independent Variable: Stock Return

Stock Return is the resultant return on the stock received from the broker or the company by the investors. In calculating the return of the stock first calculates the actual return
during the event period, which is used in this study which is for 41 days, namely 20 days before the Stock Split event, 1 day that is the date of the Stock Split event and 20 days after the Stock Split event.
Based on the average return data of each sample company's stock for 20 days before Stock Split up to 20 days after Stock Split can be seen in the following table:

Source: Financial Statement (processed data)

Table 4, shows the calculation of stock return after a stock split. 5 companies experienced an increased stock return and 2 companies that experienced a decrease in the stock return. The highest increases in stock return after the stock split occurred in ASJT (1.58). The highest
decrease in stock return after the stock split was experienced by BFIN (1.93)
The following is presented a data overview of the return of shares of financial sector services companies listed on the Indonesia Stock Exchange for the period 2009-2014 as follows.

Table 5
Value Return on company shares
Listed on the Indonesia Stock Exchange period 2014-2019

| No | Code | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ |
| 1 | ASJT | 0.00 | 0.00 | 0.00 | 0.10 | -0.13 | -0.27 |
| 2 | BBRI | -0.25 | -0.31 | 0.29 | 0.03 | 0.04 | 0.61 |
| 3 | BFIN | 0.48 | 1.40 | 0.53 | -0.64 | 0.23 | 0.00 |
| 4 | BTPN | 0.48 | -0.32 | 0.29 | 0.54 | -0.18 | -0.08 |
| 5 | KREN | -0.78 | 0.51 | 0.23 | 0.47 | 0.35 | 0.31 |
| 6 | MTFN | -0.90 | 0.42 | -0.74 | -0.17 | -0.40 | 0.42 |
| 7 | TRUS | 0.65 | -0.04 | 1.19 | -0.35 | -0.15 | -0.03 |
| Maximum |  | $\mathbf{0 . 4 8}$ | $\mathbf{0 . 5 1}$ | $\mathbf{1 . 1 9}$ | $\mathbf{0 . 5 4}$ | $\mathbf{0 . 3 5}$ | $\mathbf{0 . 6 1}$ |
| Minimum |  | $\mathbf{- 0 . 9 0}$ | $\mathbf{- 0 . 3 2}$ | $\mathbf{- 0 . 7 4}$ | $\mathbf{- 0 . 6 4}$ | $\mathbf{- 0 . 4 0}$ | $\mathbf{- 0 . 2 7}$ |
| Average <br> Rating | $\mathbf{- 0 . 4 6}$ | $\mathbf{0 . 2 4}$ | $\mathbf{0 . 2 6}$ | $\mathbf{- 0 . 0 1}$ | $\mathbf{- 0 . 0 3}$ | $\mathbf{0 . 1 4}$ |  |
|  |  |  |  |  |  |  |  |

Source: Financial Statement (Processed Data)


Source: Value Return on company shares (processed data)
Figure 2 Annual Average Stock Return

## Classic Assumption Tests Verification Analysis

## Normality Test

Using the Kolmogorov-Smirnov test we obtain a probability value (Asymp. Sig.) of $(0.200)$ on share returns before the stock split and a (0.200) return on shares after the stock split. Moreover, for the EVA, because the probability value in the Kolmogorov-Smirnov test $(0.200)$ is still greater than the level of error $5 \%$ ( 0.05 ), it can
be concluded that the regression model is a normal distribution.

## Autocorrelation Test

Acquired Durbin-Watson $(D W)=2.148$ is larger than -4 . The DW value of the above statistic output of 2.148 is between -4 and +4 , or $-4<2.075<+4$. Therefore, it can be concluded that there is no autocorrelation in the regression equation.

## Variability Test

In Table 6, we can note an increase in the average return value 20 days after the stock split from 20 days before the stock split (judging from the size of standard deviation that describes the variation of the return value between the two events).

In Table 7, we can note the test paired sample $\mathrm{t}_{\text {test }}$ for a comparison of the average return 20 days after a stock split and 20 days before the stock split. This resulted in a statistical $t$ value of ( 0.191 ) with the probability level $\mathrm{P}_{- \text {value }}$ of $(0.855), \mathrm{P}^{\text {-value }}>0.05$. This means that $\mathrm{H}_{0}$ is accepted and that there is no significant difference between the average return 20 days after and 20 days before the stock split. This indicates that 20 days after the stock split returns tends to be equal to the return 20 days after a stock split.

Next, we analysed the results of the variability test obtained from the value Degree of Freedom (DF) and real level value. The DF value is 6 with a real level of $5 \%$ or 0.05 . The obtained $t$-value is $(0.191)$ which is < then 1.943 , therefore $\mathrm{H}_{0}$ is accepted meaning that there is no significant difference in the average return 20 days after and 20 days before the stock split. This difference indicates that 20 days after stock split, the stock returns tend to be equal to the 20 days before the stock split (Table 7).

## Simple linear regression analysis

In Table 8, we present the results of the regression, which can be written as follows:

$$
\mathrm{Y}=0.025+2.477 \mathrm{E}-15 \mathrm{X}
$$

## Description:

Y = Stock Return
$\mathrm{X}=$ Economic Value Added (EVA)

The simple linear regression equation above can be interpreted as follows:
a. Constants of 0.025 ; meaning that if the EVA value is 0 , then the stock return value is 0.025 .
b. For each EVA of 2.477E-15, we obtain an increase in the stock return of $2.477 \mathrm{E}-15$. Therefore EVA has a direct relationship with the stock return.

## Korelari Analysis

We take EVA as our constant to calculate the deviation between the EVA and the stock return.

In Table 9, we show that the correlation between EVA and share returns is 0.309 and a p-value < 0.05. This indicates a significant but low relationship between EVA and stock return.

## Coefficient of determination (KD) analysis

This indicates the size of the effect of EVA on the stock return.

Table 10 shows that the EVA has an impact of 0.096 or $9.6 \%$ on the stock return. The remaining $90.4 \%$ of the shares can be explained by other factors not researched by us. Example, fundamental factors such as Return on Equity (ROE) and non-economic factors such as domestic political events.

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Table 7
Paired Sample $\mathrm{t}_{\text {test }}$ average Variable Return (t-statistic \& Sig)


Table 8
Simple linear regression analysis results

| Coefficients |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. |
|  |  | B | Std. Error |  |  |  |
| 1 | (Constant) | . 025 | . 055 |  | .464 | . 645 |
|  | Economic Value Added | $2.477 \mathrm{E}-15$ | . 000 | . 309 | 2.056 | . 046 |

a. Dependent Variable: Stock Return

Table 9
Correlation of EVA with Share Returns Correlations

|  |  | Economic <br> Value Added | Stock Return |
| :--- | :--- | ---: | ---: |
| Economic Value Added | Pearson Correlation | 1 | $.309^{*}$ |
|  | Sig. (2-tailed) |  | .046 |
|  | N | 42 | 42 |
| Stock Return | Pearson Correlation | $.309^{*}$ | 1 |
|  | Sig. (2-tailed) | .046 |  |
|  | N | 42 | 42 |

*. Correlation is significant at the 0.05 level (2-tailed).

Table 10
Coefficient of determination
Model Summary ${ }^{\text {b }}$

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :--- | :---: | ---: | ---: | :---: |
| 1 | $.309^{\mathrm{a}}$ | .096 | .073 | .34628336 |

a. Predictors: (Constant). Economic Value Added
b. Dependent Variable: Stock Return

## Discussion of Findings

Our findings support the research of Yovita Vivianty Indriadewi (2012) showing that there is no significant abnormal return variance between the before and after of a stock split. The stock split announcement did not result in increased trade volumes and abnormal returns.

However, the return results 20days after the stock split, tend to increase and fluctuate when compared to the return 20 days before the stock split. This could have happened because information about the stock split by the issuer, had been anticipated by the investor. Therefore, the market reacted before the announcement of the stock split (Djajasaputra, 2012).
Thus one can say that the market between 2014 and 2019 did not react on the evidence of a stock split. This finding corroborates with what Surtikanti and Devi Rustendi (2010) found, that the stocks split had an insignificant influence on the stock return. Moreover, Erwin Indra Kusuma and Surtikanti (2017) found that there were no significant differences in the stock liquidation and the stock return before and after a stock split.

## Influence of Economic Value Added (EVA) on Stock Return

Since results indicate that we should reject Ho; meaning that an EVA has a significant influence on the stock return. However, there is a very low relationship between EVA and the stock return.

The results of this study support the theory that if the EVA increased, then the stock return will also increase. The high total net profit after tax is the main influence of EVA.

There is a large EVA influence on the stock return of $9.6 \%$. while the remaining $90.4 \%$ is the influence of variables not examined in this study such as Earnings Per Share (EPS), Price Earnings Ratio (PER), Market Value Added (MVA), Return on equity (ROE) and Return on Assets (ROA) and Debt Equity Ratio (DER).

This answers the phenomenon that has been put forward before as happened in Tania Service Insurance Company (ASJT), namely economic value added (EVA) $>0$ or positive value, but the return of the stock decreased, with this result showing that there are other factors that are not studied by the authors
greatly influence the return of the stock compared to the added economic value.

The main stock return can increase or decrease due to whether or not the company can maintain its profits and stock prices at the same level of the closing profit and prices of the year before, to have stable stock returns. This will ensure that investors will always be interested in investing in the company.

Therefore, it can be concluded that when the company can create EVA, there is a higher possibility for investors to receive an increase in the stock return and vice versa.

This research supports research conducted by Moh. Benny Alexandri. Surtikanti (2011) and Widiati. Putri Kurnia (2013). stating that economic value added (EVA). market value added (MVA) simultaneously influences on the stock return. Djamhuri and Susi Dwimulyani (2014). who stated that EVA was an economically added value created by the company of her activities or strategies over some time and is one way to assess financial performance and EVA significantly affect the stock return. The higher the value of EVA owned by a company. the higher the stock return. and vice versa. and Surtikanti. Dean Subhan Saleh (2018) found that economic value added influences on the stock return.

## CONCLUSION

Based on the results of research and hypothesis testing can be withdrawn as follows: (a) There is no difference in the decline between the stock return before the stock split and after the stock split so that this result shows the stock return in the financial sector services company listed on the Indonesia Stock Exchange which is expected to be not achieved. it is possible because of the long observation time (before the announcement. so that the market can already adapt to information. But some companies are experiencing the average stock return on increase. this is caused by the company intends to create a large return value to be able to attract many investors to invest in the company. (b) Economic Value Added (EVA) significantly affects the stock return in the financial sector services company listed on the Indonesia Stock Exchange period 2014-2019. But some companies experienced declining economic value added (EVA). this is due to a decrease in net profit after tax that the company acquired in the current year.

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International Business and

# The Impact of A Stock Split and the Economic Value Added on Stock 

## Return

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## Info Articles

History Articles:
Submitted 1 March XXXX
Revised 16 April XXXX
Accepted 28 June XXXX
Keywords:
Stock Split. Economic
Value Added (EVA).
Stock Return


#### Abstract

Abstract: The purpose of this study is to analyse the impact before and after the stocks split on stock return and analyze the impact of the economic value added (EVA) on the stock return of financial service sector companies listed on the Indonesia Stock Exchange (IDX) who carried out a stock split between the period 2014-2019. To do this we used event studies and tested the information content of the market reaction of an announcement. We sampled 35 financial statements from a population of 250 financial statements of companies conducting a stock split listed on the Indonesia Stock Exchange and analyzed the data using simple Linear regression. We also tested whether there was a deviation of assumptions from test normality and autocorrelation. The results showed that there were no significant differences in the stock returns before and after the stock split. Moreover, there are significant and partial positive influences between the economic value added (EVA) on the stock return.


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## INTRODUCTION

The capital market in an economy has two main important functions. namely the economic function and the financial function. The economic function because the market provides facilities that bring together two interests. namely, parties who have excess funds and parties who need funds. The financial function because it provides the funds required by the parties who have excess funds and the parties who need funds without having to be directly involved in the ownership of the real assets required for the investment (Suad Husnan. 2009). According to Abdul Halim (2005). investment is essentially the placement of some funds at one moment in time in the hope of obtaining future profits.

The main purpose of investors investing in the capital market is to gain profit. In the context of investment management. the investment profit level is called a return. Prospective investors seek the company's financial information through the respective financial statement. to determine whether the investment will provide the expected rate of return. According to Rusliati (2010). one important information to be observed by investors is the stock split. The stock split is an activity carried out by the company when going public to increase the stock volume in circulation. In addition to stock split information. investors also look at financial ratios. According to Horne (2005). the financial ratios are tools used to analyse the financial condition and performance of the company.

Measurements that only analyze financial statements based on ratio analysis have a major drawback. namely that of ignoring capital costs. Therefore. making it difficult to determine whether a company has managed to create value or not.

The focus of assessments used to measure economic profit in a company. which states that welfare can only be created if the company can meet all operating costs and cost of capital is known as the Economic Value Added (EVA). This is a measuring instrument to assess the performance of a company. using specific figures in the financial statements. EVA became relevant to measure performance based on the economical value generated by the company.

## LITERATURE REVIEW

## Stock Split

According to Jogiyanto (2013:561). the breakdown of stocks (stock split) was interpreted as to divide one share into ' $n$ ' shares. Stock split information is announced (in Indonesia) on the Indonesia Stock Exchange.

In terms of the signalling theory. according to Jogiyanto (2003:419). the stock split is considered to provide a good signal to the public in terms of good prospects for future profits. because the company that carries out the breakdown of stocks is a company that owns a highly-priced stock.

The Trading Range Theory states that stock splits will increase the liquidity of stock trading.

## Types of Stock Split

1. Forward Stock Split: commonly known as a stock split and is simply dividing a highly-priced share into multiple lower-priced shares to reduce their price.
2.Reverse Stock Split: reducing the number of shares by merging some shares into a single unit. This will appreciate their price automatically. This is not very common but is usually adopted under unfavourable market conditions when the share price continues to fall. It is a protection against delisting from the stock exchange if the share price is expected to fall beyond a listing required level.

The calculation of stock split formula as explained in Table 1:

$$
H T=H P / r
$$

Source: Tambunan (2010: 39)

## Economic Value Added

According to Brigham and Houston (2010:111), the EVA is an estimate of the actual business economic return for a given year. EVA shows the remaining profit after capital cost. Companies that have high EVA tend to be more attractive to investors to invest in these companies. "because the higher the EVA than the higher the value of the company".

The Calculation of EVA using the formula below as explained in Table 1:


Source: Rudianto (2006: 329).

## Stock Return

According to Jogiyanto (2010:205). Stock Return is the result obtained from the investment by calculating the difference between the current stock price period and that of the previous period ignoring the dividend.

## Type of Stock Return

1. Realized Return is a return that has occurred calculated using historical data. Return realization is important because it is used as one of the financial performance measures of the company. This historical return is also useful as the basis for determining return expectations and future risks.
2. Expected Return is the expected return to be obtained by investors in the future. Unlike the actual return realised. return expectations have not occurred.

## Sources Stock Return

1. Yield
2. Capital Gain/Loss

According to Jogiyanto (2010:206). the calculation of the stock return is as follows:

$$
\text { Stock Return }=\frac{\mathrm{Pt}-(\mathrm{Pt}-1)}{(\mathrm{Pt}-1)} \times 100 \%
$$

Description: $\begin{aligned} P_{t} & =\text { Stock Price Now } \\ P_{t-1} & =\text { Before Period Stock Price }\end{aligned}$

## Empirical Review <br> Stock Return of 20 days before and 20 days after Stock Split events

The actions undertaken by the Company in the form of the stock split can be interpreted as a signal given by the company about the good prospects in the future. where the high stock price is an indicator that the performance of the company is good. According to Fama. Fisher. Jensen. and Roll (in Jogiyanto. 2010:399). a stock split event. in addition to a cheaper stock price. led to increased activity in the number of transactions carried out. This can have a positive
effect on the stock price and in turn, provide an opportunity to obtain an abnormal return for the investor.

Griffin (2010) however notes. that the stock split indicates that the company's managers have more knowledge or information than investors.

## Influence of Economic Value Added (EVA) on Stock Return

The return has a significant role in determining the value of an investment. According to Agus Pratiwi (2011:71). the factors that influence the stock return are EVA. Return on equity (ROE). and Return on Assets (ROA). Suharli (2005) mentions that the Return can be an indicator of the increase in the wealth of investors. EVA is a way to measure the profitability of actual operations Stewart (2010). EVA measures the value-added in a given period. This added value is created when the company earns profit (profit) above the cost of the capital company. The higher the capital gain and the dividend. the higher the stake held by the investor will also return. This shows EVA's positive influence on the return of the shareholders.

## Hypotheses Development

Based on the above thoughts. we draw the following hypotheses :
$\mathrm{H}_{1}=$ There are significant differences in stock return before and after a stock split.
$\mathrm{H}_{2}=$ Economic Value Added (EVA) significantly affects the stock return.

## METHODOLOGY

We use the event study method as suggested by Ball and Brown (1996) to test the information content of the market reaction of an announcement. Market reactions are indicated by the alteration of the securities price by using return as the value of change or abnormal Return. We do this to determine and analyze the stock split affect on stock return.

Meanwhile, we use a quantitative approach to analyse the effect of EVA on the stock returns.

The population for this study is of 250 annual financial reports consisting of income statements and annual stock return reports of 50 companies listed on the Indonesia Stock Exchange (IDX), that carried out the stock split between 2014 and 2019. We sampled 35
annual income statements of 7 companies in the financial services sector. Specifically, MTFN, BTPN, Bank of the Republic of Indonesia (BBRI), BFIN, KREN, TRUS and Asuransi Jasa Tania Tbk (ASJT).

All companies sampled were selected using the following considerations:

1) Companies listed on the Indonesia Stock

Exchange (IDX) year 2014-2019.
2) Companies listed on the Indonesia Stock Exchange (IDX) that carried out stock splits from 2014 to 2019.
3) The financial sector services companies listed on the Indonesia Stock Exchange (IDX) that carried out a stock split from 2014 to 2019.

Table 1
Research variable operationalization

| Variable | Variable Conceptual | Indicator | Scale |
| :---: | :---: | :---: | :---: |
| Stock Split $\left(\mathrm{X}_{1}\right)$ | Issuance by a company of several shares in exchange for several shares previously owned by the shareholders (Bodie et al. 2006: 648) | $H T=H P / r$ <br> Source: Tambunan (2010: 39) <br> Description: <br> HT: The new theoretical price of the stock after the stock split <br> HP: The latest stock market price before the stock split. <br> r: Resolution ratio. <br> (Tambunan 2010:39) | Ratio |
| Economic <br> Value <br> Added <br> (EVA) <br> ( $\mathrm{X}_{2}$ ) | NET operating profit of the company after tax and profit obtained by the company from the operating operations (Net Operating Profit After Tax)/NOPAT minus the total cost of capital | VA = NOPAT - Capital Charge Source: Rudianto (2006: 329). NOPAT = Net Operating Profit After-tax Capital Charge = Invested Capital $x$ Cost of Capital | Ratio |
| Stock <br> Return <br> (Y) | Stock Return is the resultant return from the stock investments. <br> (Jogiyanto. 2009:201) | $\mathrm{R}_{\mathrm{it}}=\frac{\mathrm{Pt}-\mathrm{P}_{\mathrm{t}-1}}{\mathrm{P}_{\mathrm{t}-1}}$ <br> Source:: Jogiyanto. (2009: 201) <br> Description: <br> Rit: Shares profit Level I in the T period. <br> Pt: Closing Price of the I in T period (closing/last period). <br> Pt-1: The closing price of the I share in the previous period | Ratio |

Data Testing Methods
The test steps:

1. We carried out a normality test using the regression model on the data variables.
2. We then checked for autocorrelation to determine if there is a strong relationship (positive and negative) between the existing data variables.
3. We determined whether there was a difference between the average abnormal return and the stock trading volume. before and after the stock split
4. We used simple linear regression analysis to predict the influence of EVA on the stock return.
5. We checked for correlation to show the direction of the relationship between dependent variables and independent variables and measured their relationship.
6. We then looked at the determinants of the coefficient (KD) to show the effect of the Independent variable (X) on the dependent variable $(\mathrm{Y})$ expressed in percentages.

## Data Analysis and Results <br> Dependent Variable: Stock Split

Stock Split is one of the company's actions

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in the business of lowering the stock price by expanding the number of stocks in circulation.

The aim of this action is to allow stocks to trade on a more liquid market and make the stock

Table 2
Increase or decrease in stock price
20 days before Stock Split \& 20 days after Stock Split

| No | Stock <br> Code | Before <br> $(\mathrm{H}-20)$ | Stock Split <br> $(\mathbf{H} \mathbf{0})$ | After <br> $(\mathrm{H}+20)$ | \% Increase/ <br> Decrease | description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | BBRI | 5.116 | 5.150 | 4.885 | $(0.05)$ | Decrease |
| 2 | BTPN | 2.282 | 2.500 | 2.496 | 0.09 | Increase |
| 3 | MTFN | 141 | 155 | 197 | 0.39 | Increase |
| 4 | BFIN | 1.881 | 2.000 | 1.797 | $(0.04)$ | Decrease |
| 5 | KREN | 227 | 225 | 222 | $(0.02)$ | Decrease |
| 6 | TRUS | 199 | 200 | 200 | 0.00 | - |
| 7 | ASJT | 143 | 140 | 143 | 0.00 | - |

Source: Financial Statement (Processed Data)
price more affordable to as many investors as possible.

Table 2, shows the stock price data of each company carrying a stock split. We can note that 2 companies experienced a rise in the stock price after the stock split, 3 companies experienced a decrease in the stock price after the stock split and 2 companies did not experience any changes in the stock price. The major stock price increase after the stock split was seen in the MTFN stock (0.39) and BTPN (0.09). The 3 companies that suffered a decrease in the stock price after a large stock split include (BBRI) (0.05), BFIN (0.04) and KREN (0.02). On the other hand, the stock price of TRUS and (ASJT) did not undergo any change ( 0.00 ) after the stock split.

## Dependent Variable: Economic Value Added (EVA).

As already noted above. EVA is a new approach in assessing the company's performance by paying fair attention to the expectations of the funders. In fact. when investing. shareholders are now very interested in the EVA. EVA is used to determine investments that maximize the rate of return and minimize the cost of capital. EVA can be used to identify activities or projects that provide a higher return than the cost of capital.

## Independent Variable: Stock Return

Stock Return is the resultant return on the stock received from the broker or the company by the investors.

As an example, Table 3, shows that the (BBRI) has a negative economic value for two consecutive years (2015 and 2016). This means that the Bank Rakyat Indonesia was unable to create economic value for its company. Net profit before tax is less than the cost of the loan and equity. Therefore. the company was not able to produce a return on operations that exceeds the cost of capital. But the following consecutive 3 years (2017-2019) years Bank Rakyat Indonesia was able to create EVA by generating net profit after tax.

From figure 1 The graph shows a higher average value of EVA for the stateowned banking company.

Table 4, shows the calculation of stock return after a stock split. 5 companies experienced an increased stock return and 2 companies that experienced a decrease in the stock return. The highest increases in stock return after the stock split occurred in ASJT (1.58). The highest decrease in stock return after the stock split was experienced by BFIN (1.93). The average stock returns can be seen graphically in figure 2 .

Commented [SG3]: Why only BBRI ? there are other companies

Commented [SG4]: Is this the same as BBRI

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Table 3
Economic Value Added (EVA) for Listed Company on
Indonesia Stock Exchange in 2014-2019

| No | Code | TAHUN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| 1 | ASJT | 151.387.209.668 | -24.566.911.512 | -191.450.784.408 | 202.184.102.434 | -492.289.661.138 | -994.894.788.578 |
| 2 | BBRI | $\begin{array}{r} 101.065 .031 .672 .42 \\ \hline \end{array}$ | -38.533.841.763.310 | 94.077.490.136.584 | 92.047.709.530.010 | 136.354.467.376.707 | 196.462.640.237.606 |
| 3 | BFIN | 25.458.063.626 | 164.648.726.186 | 197.016.197.127 | -192.818.674.048 | 211.109.422.343 | 273.788.986.295 |
| 4 | BTPN | 908.978.514.801 | -37.945.022.518 | 1.930.068.299.994 | 194.837.009.032 | -791.515.620.656 | 1.070.445.818.591 |
| 5 | KREN | -7.772.697.982 | 1.521.989.340.868 | 4.235.953.551.722 | 1.036.600.738.004 | 1.959.734.964.037 | 851.980.233.338 |
| 6 | MTFN | -117.899.547.776 | 204.103.945.805 | -2.500.794.568 | -22.083.604.402 | -75.756.646.089 | -1.230.117.581.349 |
| 7 | TRUS | 588.373 .308 | 499.006.366 | 390.736 .936 | -341.138.198 | 3.314.657.587 | -983.098.652 |
| Maximum |  |  | 908.978.514.801 | 1.521.989.340.868 | 94.077.490.136.584 | 92.047.709.530.010 | 136.354.467.376.707 |
| Minimum |  |  | -101.065.031.672.423 | -38.533.841.763.310 | -191.450.784.408 | -192.818.674.048 | -791.515.620.656 |
| Average Value |  |  | -14.300.613.108.111 | -5.243.587.525.445 | 14.320.995.334.770 | 13.381.430.865.603 | 19.595.580.641.827 |

Source: Financial Statement (processed data)


Figure 1: Average EVA
Table 4
Increase or decrease Return
20 days before Stock Split \& 20 days after Stock Split

| No | Stock <br> Code | Before <br> $(\mathrm{H}-20)$ | Stock Split <br> $(\mathbf{H} \mathbf{0})$ | After <br> $(\mathrm{H}+20)$ | \% Increase/ <br> Decrease | description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | BBRI | $(0.00)$ | 0.01 | $(0.00)$ | 1.36 | Increase |
| 2 | BTPN | 0.01 | $(0.01)$ | 0.01 | 0.84 | Increase |
| 3 | MTFN | 0.01 | $(0.04)$ | 0.02 | 1.62 | Increase |
| 4 | BFIN | 0.01 | $(0.01)$ | $(0.01)$ | $(1.93)$ | Decrease |
| 5 | KREN | 0.00 | - | 0.00 | 0.74 | Increase |
| 6 | TRUS | 0.00 | - | - | $(1.00)$ | Decrease |
| 7 | ASJT | 0.00 | - | 0.00 | 1.58 | Increase |

Table 5
Value Return on company shares
Listed on the Indonesia Stock Exchange period 2014-2019

| No | Code | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ |
| 1 | ASJT | 0.00 | 0.00 | 0.00 | 0.10 | -0.13 | -0.27 |
| 2 | BBRI | -0.25 | -0.31 | 0.29 | 0.03 | 0.04 | 0.61 |
| 3 | BFIN | 0.48 | 1.40 | 0.53 | -0.64 | 0.23 | 0.00 |
| 4 | BTPN | 0.48 | -0.32 | 0.29 | 0.54 | -0.18 | -0.08 |
| 5 | KREN | -0.78 | 0.51 | 0.23 | 0.47 | 0.35 | 0.31 |
| 6 | MTFN | -0.90 | 0.42 | -0.74 | -0.17 | -0.40 | 0.42 |
| 7 | TRUS | 0.65 | -0.04 | 1.19 | -0.35 | -0.15 | -0.03 |
| Maximum |  | $\mathbf{0 . 4 8}$ | $\mathbf{0 . 5 1}$ | $\mathbf{1 . 1 9}$ | $\mathbf{0 . 5 4}$ | $\mathbf{0 . 3 5}$ | $\mathbf{0 . 6 1}$ |
| Minimum |  | $\mathbf{- 0 . 9 0}$ | $\mathbf{- 0 . 3 2}$ | $\mathbf{- 0 . 7 4}$ | $\mathbf{- 0 . 6 4}$ | $\mathbf{- 0 . 4 0}$ | $\mathbf{- 0 . 2 7}$ |
| Average <br> Rating | $\mathbf{- 0 . 4 6}$ | $\mathbf{0 . 2 4}$ | $\mathbf{0 . 2 6}$ | $\mathbf{- 0 . 0 1}$ | $\mathbf{- 0 . 0 3}$ | $\mathbf{0 . 1 4}$ |  |

Source: Financial Statement (Processed Data)

## Annual Average Stock F



Figure 2 Annual Average Stock Return

Classic Assumption Tests Verification
Analysis
Normality Tes
Using the Kolmogorov-Smirnov test we obtain a probability value (Asymp. Sig.) of (0.200) on share returns before the stock split and a $(0.200)$ return on shares after the stock split. Moreover, for the EVA, because the probability value in the KolmogorovSmirnov test ( 0.200 ) is still greater than the level of error $5 \%$ (0.05), it can be concluded that the regression model is a normal distribution.

## Autocorrelation Tes

Acquired Durbin-Watson $(D W)=2.148$ is larger than -4 . The DW value of the above

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Comment [SG7: Not rered in text
statistic output of 2.148 is between -4 and + 4 , or $-4<2.075<+4$. Therefore, it can be
concluded that there is no autocorrelation in the regression equation.

## Variability Test

In Table 6, we can note an increase in the average return value 20 days after the stock split from 20 days before the stock split (judging from the size of standard deviation that describes the variation of the return value between the two events).

In Table 7, we can note the test paired sample $t_{\text {test }}$ for a comparison of the average return 20 days after a stock split and 20 days before the stock split. This resulted in a statistical $t$ value of $(0.191)$ with the probability level P -value of $(0.855), \mathrm{P}$-value $>0.05$. This means that $\mathrm{H}_{0}$ is accepted and that there is no significant difference between the average return 20 days after and 20 days before the stock split. This indicates that 20 days after the stock split returns tends to be equal to the return 20 days after a stock split.

Next, we analysed the results of the variability test obtained from the value DF and real level value. The DF value is 6 with a real level of $5 \%$ or 0.05 . The obtained $t$-value is ( 0.191 ) which is < then 1.943 , therefore $\mathrm{H}_{0}$ is accepted meaning that there is no significant difference in the average return 20 days after and 20 days before the stock split. This difference indicates that 20 days after stock split, the stock returns tend to be equal to the 20 days before the stock split (Table 7).

## Simple linear regression analysis

In Table 8, we present the results of the regression, which can be written as follows:

$$
\mathrm{Y}=0.025+2.477 \mathrm{E}-15 \mathrm{X}
$$

Description:
Y = Stock Return
X = Economic Value Added (EVA)
The simple linear regression equation above can be interpreted as follows:
a. Constants of 0.025 ; meaning that if the EVA value is 0 , then the stock return value is 0.025 .
b. For each EVA of 2.477E-15, we obtain an increase in the stock return of $2.477 \mathrm{E}-15$. Therefore EVA has a direct relationship with the stock return.

## Korelari Analysis

We take EVA as our constant to calculate the deviation between the EVA and the stock return.

In Table 9, we show that the correlation between EVA and share returns is 0.309 and a p-value $<0.05$. This indicates a significant but low relationship between EVA and stock return.

## Coefficient of determination (KD) analysis

This indicates the size of the effect of EVA on the stock return.

Table 10 shows that the EVA has an impact of 0.096 or $9.6 \%$ on the stock return. The remaining $90.4 \%$ of the shares can be explained by other factors not researched by us. Example, fundamental factors such as Return on Equity (ROE) and non-economic factors such as domestic political events.

Table 6
Average variable Return (Mean. STD Deviation)

| Paired Samples Statistics |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | :---: |
|  |  | Mean | N | Std. Deviation | Std. Error Mean |  |
| Pair 1 | Before Stock Split | .0029656 |  | 7 | .00408206 |  |
|  | After Stock Split | .0035674 |  | 7 | .01023547 |  |

Table 7
Paired Sample $\mathrm{t}_{\text {test }}$ average Variable Return (t-statistic \& Sig)


Table 8
Simple linear regression analysis results

| Coefficients |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients <br> Beta |  | Sig. |
|  |  | B | Std. Error |  | t |  |
| 1 | (Constant) | . 025 | . 055 |  | .464 | . 645 |
|  | Economic Value Added | $2.477 \mathrm{E}-15$ | . 000 | . 309 | 2.056 | . 046 |

a. Dependent Variable: Stock Return

Table 9
Correlation of EVA with Share Returns
Correlations

| Correlations |  |  |  |
| :--- | :--- | ---: | ---: |
|  | Economic <br> Value Added | Stock Return |  |
| Economic Value Added | Pearson Correlation | 1 | $.309^{*}$ |
|  | Sig. (2-tailed) |  | .046 |
|  | N | 42 | 42 |
| Stock Return | Pearson Correlation | $.309^{*}$ | 1 |
|  | Sig. (2-tailed) | .046 |  |
|  | N | 42 | 42 |

*. Correlation is significant at the 0.05 level (2-tailed).

Table 10
Coefficient of determination
Model Summary ${ }^{\text {b }}$

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :--- | ---: | ---: | ---: | :---: |
| 1 | $.309^{\mathrm{a}}$ | .096 | .073 | .34628336 |

a. Predictors: (Constant). Economic Value Added

## b. Dependent Variable: Stock Return

## Discussion of Findings

Our findings support the research of Yovita Vivianty Indriadewi (2012) showing that there is no significant abnormal return variance between the before and after of a stock split. The stock split announcement did not result in increased trade volumes and abnormal returns.

However, the return results 20days after the stock split, tend to increase and fluctuate when compared to the return 20 days before the stock split. This could have happened because information about the stock split by the issuer, had been anticipated by the investor. Therefore, the market reacted before the announcement of the stock split (Djajasaputra, 2012).
Thus one can say that the market between 2014 and 2019 did not react on the evidence of a stock split. This finding corroborates with what Surtikanti and Devi Rustendi (2010) found, that the stocks split had an insignificant influence on the stock return. Moreover, Erwin Indra Kusuma and Surtikanti (2017) found that there were no significant differences in the stock liquidation and the stock return before and after a stock split.

Influence of Economic Value Added (EVA) on Stock Return

Since results indicate that we should reject Ho; meaning that an EVA has a significant influence on the stock return. However, there is a very low relationship between EVA and the stock return.

The results of this study support the theory that if the EVA increased, then the stock return will also increase. The high total net profit after tax is the main influence of EVA. The predicted results for the following year after the year of this study showed that EVA increased and stock return also increased.

There is a large EVA influence on the stock return of $9.6 \%$. while the remaining $90.4 \%$ is the influence of variables not examined in this study such as Earnings Per Share (EPS), Price Earnings Ratio (PER), Market Value Added (MVA), Return on equity (ROE) and Return on Assets (ROA) and DER

This explains the phenomena that has been stated earlier in the company's PT. As can be seen in (ASJT)'s EVA $>0$ or has a positive value, but the stock return decreased. This shows that other factors mention above, that are not studied here have a larger effect on the stock return than the EVA.

The main stock return can increase or decrease due to whether or not the company can maintain its profits and stock prices at the same level of the closing profit and prices of the year before, to have stable stock returns. This will ensure that investors will always be interested in investing in the company.

Therefore, it can be concluded that when the company can create EVA, there is a higher possibility for investors to receive an increase in the stock return and vice versa.

This research supports research conducted by Moh. Benny Alexandri. Surtikanti (2011) and Widiati. Putri Kurnia (2013). stating that economic value added (EVA). market value added (MVA) simultaneously influences on the stock return. Djamhuri and Susi Dwimulyani (2014). who stated that EVA was an economically added value created by the company of her activities or strategies over some time and is one way to assess financial performance and EVA significantly affect the stock return. The higher the value of EVA owned by a company. the higher the stock return. and vice versa. and Surtikanti. Dean Subhan Saleh (2018) found that economic value added influences on the stock return.

## CONCLUSION

Based on the results of research and hypothesis testing can be withdrawn as follows: (a) There is no difference in the decline between the stock return before the stock split and after the stock split so that this result shows the stock return in the financial sector services company listed on the Indonesia Stock Exchange which is expected to be not achieved. it is possible because of the long observation time (before the announcement. so that the market can already adapt to information. But some companies are experiencing the average stock return on increase. this is caused by the company intends to create a large return value to be able to

Commented [SG13]: What is this? In full first time - is this price at time t ?

Commented [SG11]: Is this correct and from where did we get this?
attract many investors to invest in the company. (b) Economic Value Added (EVA) significantly affects the stock return in the financial sector services company listed on the Indonesia Stock Exchange period 2014-2019. But some companies experienced declining economic value added (EVA). this is due to a decrease in net profit after tax that the company acquired in the current year.

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# The Impact of A Stock Split and the Economic Value Added on Stock Return 

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## Info Articles

History Articles:
Submitted 1 March 2020
Revised 16 April 2020
Accepted 28 June 2020

## Keywords:

Stock Splite; Economic Value Added (EVA); Stock Return


#### Abstract

The purpose of this study is to analyse the impact before and after the stocks split on stock return and analyze the impact of the economic value added (EVA) on the stock return of financial service sector companies listed on the Indonesia Stock Exchange (IDX) who carried out a stock split between the period 2014-2019. To do this we used event studies and tested the information content of the market reaction of an announcement. We sampled 35 financial statements from a population of 250 financial statements of companies conducting a stock split listed on the Indonesia Stock Exchange and analyzed the data using simple Linear regression. We also tested whether there was a deviation of assumptions from test normality and autocorrelation. The results showed that no significant differences and negative stock returns before and after the stock split. And there is a significant and positive effect partially between the economic value added on returns


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| :--- | ---: |
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## INTRODUCTION

The capital market in an economy has two main important functions. namely the economic function and the financial function. The economic function because the market provides facilities that bring together two interests. namely, parties who have excess funds and parties who need funds. The financial function because it provides the funds required by the parties who have excess funds and the parties who need funds without having to be directly involved in the ownership of the real assets required for the investment (Suad Husnan. 2009). According to Abdul Halim (2005). investment is essentially the placement of some funds at one moment in time in the hope of obtaining future profits.

The main purpose of investors investing in the capital market is to gain profit. In the context of investment management. the investment profit level is called a return. Prospective investors seek the company's financial information through the respective financial statement. to determine whether the investment will provide the expected rate of return. According to Rusliati (2010). one important information to be observed by investors is the stock split. The stock split is an activity carried out by the company when going public to increase the stock volume in circulation. In addition to stock split information. investors also look at financial ratios. According to Horne (2005). the financial ratios are tools used to analyse the financial condition and performance of the company.

Measurements that only analyze financial statements based on ratio analysis have a major drawback. namely that of ignoring capital costs. Therefore. making it difficult to determine whether a company has managed to create value or not.

The focus of assessments used to measure economic profit in a company. which states that welfare can only be created if the company can meet all operating costs and cost of capital is known as the Economic Value Added (EVA). This is a measuring instrument to assess the performance of a company. using specific figures in the financial statements. EVA became relevant to measure performance based on the economical value generated by the company.

## LITERATURE REVIEW

## Stock Split

According to Jogiyanto (2013:561). the breakdown of stocks (stock split) was interpreted as to divide one share into ' $n$ ' shares. Stock split information is announced (in Indonesia) on the Indonesia Stock Exchange.

In terms of the signalling theory. according to Jogiyanto (2003:419). the stock split is considered to provide a good signal to the public in terms of
good prospects for future profits. because the company that carries out the breakdown of stocks is a company that owns a highly-priced stock.

The Trading Range Theory states that stock splits will increase the liquidity of stock trading.

## Types of Stock Split

1. Forward Stock Split: commonly known as a stock split and is simply dividing a highly-priced share into multiple lower-priced shares to reduce their price.
2.Reverse Stock Split: reducing the number of shares by merging some shares into a single unit. This will appreciate their price automatically. This is not very common but is usually adopted under unfavourable market conditions when the share price continues to fall. It is a protection against delisting from the stock exchange if the share price is expected to fall beyond a listing required level.

The calculation of stock split formula as explained in Table 1:

$$
H T=H P / r
$$

Source: Tambunan (2010: 39)

## Economic Value Added

According to Brigham and Houston (2010:111), the EVA is an estimate of the actual business economic return for a given year. EVA shows the remaining profit after capital cost. Companies that have high EVA tend to be more attractive to investors to invest in these companies. "because the higher the EVA than the higher the value of the company".

The Calculation of EVA using the formula below as explained in Table 1:


Source: Rudianto (2006: 329).

## Stock Return

According to Jogiyanto (2010:205). Stock Return is the result obtained from the investment by calculating the difference between the current stock price period and that of the previous period ignoring the dividend.

## Type of Stock Return

1. Realized Return is a return that has occurred calculated using historical data. Return realization is important because it is used as one of the financial performance measures of the
company. This historical return is also useful as the basis for determining return expectations and future risks.
2. Expected Return is the expected return to be obtained by investors in the future. Unlike the actual return realised. return expectations have not occurred.

## Sources Stock Return

1. Yield
2. Capital Gain/Loss

According to Jogiyanto (2010:206). the calculation of the stock return is as follows:

$$
\text { Stock Return }=\underline{\mathrm{Pt}-(\mathrm{Pt}-1) \times 100 \%}
$$

Description: $\mathrm{P}_{\mathrm{t}}=$ Stock Price Now
$\mathrm{P}_{\mathrm{t}-1}=$ Before Period Stock Price

## Empirical Review

## Stock Return of 20 days before and 20 days after Stock Split events

The actions undertaken by the Company in the form of the stock split can be interpreted as a signal given by the company about the good prospects in the future. where the high stock price is an indicator that the performance of the company is good. According to Fama. Fisher. Jensen. and Roll (in Jogiyanto. 2010:399). a stock split event. in addition to a cheaper stock price. led to increased activity in the number of transactions carried out. This can have a positive effect on the stock price and in turn, provide an opportunity to obtain an abnormal return for the investor.

Griffin (2010) however notes. that the stock split indicates that the company's managers have more knowledge or information than investors.

## Influence of Economic Value Added (EVA) on Stock Return

The return has a significant role in determining the value of an investment. According to Agus Pratiwi (2011:71). the factors that influence the stock return are EVA. Return on equity (ROE). and Return on Assets (ROA). Suharli (2005) mentions that the Return can be an indicator of the increase in the wealth of investors. EVA is a way to measure the profitability of actual operations

Stewart (2010). EVA measures the value-added in a given period. This added value is created when the company earns profit (profit) above the cost of the capital company. The higher the capital gain and the dividend. the higher the stake held by the investor will also return. This shows EVA's positive influence on the return of the shareholders.

## Hypotheses Development

Based on the above thoughts. we draw the following hypotheses :
$\mathrm{H}_{1}=$ There are significant differences in stock return before and after a stock split.
$\mathrm{H}_{2}=$ Economic Value Added (EVA) significantly affects the stock return.

## METHODS

We use the event study method as suggested by Ball and Brown (1996) to test the information content of the market reaction of an announcement. Market reactions are indicated by the alteration of the securities price by using return as the value of change or abnormal Return. We do this to determine and analyze the stock split affect on stock return.

Meanwhile, we use a quantitative approach to analyse the effect of EVA on the stock returns.

The population for this study is of 250 annual financial reports consisting of income statements and annual stock return reports of 50 companies listed on the Indonesia Stock Exchange (IDX), that carried out the stock split between 2014 and 2019. We sampled 35 annual income statements of 7 companies in the financial services sector. Specifically, Capitalinc Investment (MTFN), Bank of National Retirement Savings (BPTN), Bank of the Republic of Indonesia (BBRI), Bfi Finance Indonesia (BFIN), Kresna Graha Securindo (KREN), Trust Finance Indonesia (TRUS) Tania Insurance Services (ASJT).

All companies sampled were selected using the following considerations:

1) Companies listed on the Indonesia Stock Exchange (IDX) that carried out stock splits from 2014 to 2019.
2) The financial sector services companies listed on the Indonesia Stock Exchange (IDX) that carried out a stock split from 2014 to 2019.

Table 1. Research variable operationalization

| Variable | Variable Conceptual | Indicator | Scale |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Stock } \\ & \text { Split } \\ & \left(\mathrm{X}_{1}\right) \end{aligned}$ | Issuance by a company of several shares in exchange for several shares previously owned by the shareholders (Bodie et al. 2006: 648) | $H T=H P / r$ <br> Source: Tambunan (2010: 39) <br> Description: <br> HT: The new theoretical price of the stock after the stock split <br> HP: The latest stock market price before the stock split. <br> r: Resolution ratio. <br> (Tambunan 2010:39) | Ratio |
| Economic <br> Value <br> Added <br> (EVA) <br> ( $\mathrm{X}_{2}$ ) | NET operating profit of the company after tax and profit obtained by the company from the operating operations (Net Operating Profit After Tax)/NOPAT minus the total cost of capital | VA $=$ NOPAT - Capital Charge <br> Source: Rudianto (2006: 329). <br> NOPAT $=$ Net Operating Profit After-tax <br> Capital Charge $=$ Invested Capital $x$ Cost of Capital | Ratio |
| Stock Return (Y) | Stock Return is the resultant return from the stock investments. (Jogiyanto. 2009:201) | $\mathrm{R}_{\mathrm{tt}}=\frac{\mathrm{Pt}-\mathrm{P}_{\mathrm{t}-1}}{\mathrm{P}_{\mathrm{t}-1}}$ <br> Source:: Jogiyanto. (2009: 201) <br> Description: <br> Rit: Shares profit Level I in the T period. <br> Pt: Closing Price of the I in T period (closing/last period). <br> Pt-1: The closing price of the I share in the previous period | Ratio |

## Data Testing Methods

The test steps:
a. We carried out a normality test using the regression model on the data variables.
b. We then checked for autocorrelation to determine if there is a strong relationship (positive and negative) between the existing data variables.
c. We determined whether there was a difference between the average abnormal return and the stock trading volume. before and after the stock split
d. We used simple linear regression analysis to predict the influence of EVA on the stock return.
e. We checked for correlation to show the direction of the relationship between depend-
ent variables and independent variables and measured their relationship.
f. We then looked at the determinants of the coefficient (KD) to show the effect of the Independent variable ( X ) on the dependent variable (Y) expressed in percentages.

## Data Analysis and Results <br> Dependent Variable: Stock Split

Stock Split is one of the company's actions in the business of lowering the stock price by expanding the number of stocks in circulation. The aim of this action is to allow stocks to trade on a more liquid market and make the stock price more affordable to as many investors as possible.

Table 2. Increase or decrease in stock price 20 days before Stock Split \& 20 days after Stock Split

| Stock Code | Before (H-20) | Stock Split (H 0) | After (H+20) | \% Increase/ Decrease | description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BBRI | 5.116 | 5.150 | 4.885 | $(0.05)$ | Decrease |
| BTPN | 2.282 | 2.500 | 2.496 | 0.09 | Increase |
| MTFN | 141 | 155 | 197 | 0.39 | Increase |
| BFIN | 1.881 | 2.000 | 1.797 | $(0.04)$ | Decrease |
| KREN | 227 | 225 | 222 | $(0.02)$ | Decrease |
| TRUS | 199 | 200 | 200 | 0.00 | - |
| ASJT | 143 | 140 | 143 | 0.00 | - |

Source: Financial Statement (Processed Data)

Table 2, shows the stock price data of each company carrying a stock split. We can note that 2 companies experienced a rise in the stock price after the stock split, 3 companies experienced a decrease in the stock price after the stock split and 2 companies did not experience any changes in the stock price. The major stock price increase after the stock split was seen in the MTFN stock (0.39) and BTPN (0.09). The 3 companies that suffered a decrease in the stock price after a large stock split include (BBRI) (0.05), BFIN (0.04) and KREN (0.02). On the other hand, the stock price of TRUS and (ASJT) did not undergo any change (0.00) after the stock split.


#### Abstract

Dependent Variable: Economic Value Added (EVA).

As already noted above. EVA is a new approach in assessing the company's performance by paying fair attention to the expectations of the funders. In fact. when investing. shareholders are now very interested in the EVA. EVA is used to determine investments that maximize the rate of return and minimize the cost of capital. EVA can be used to identify activities or projects that provide a higher return than the cost of capital.


Table 3. Economic Value Added (EVA) for Listed Company on Indonesia Stock Exchange in 2014-2019

| N | Code | TAHUN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| 1 | $\begin{gathered} \text { ASJ } \\ \mathrm{T} \end{gathered}$ | $\begin{array}{r} 151.387 .209 .66 \\ 8 \end{array}$ | 24.566.911.512 | $\begin{array}{r} 191.450 .784 .4 \\ 08 \end{array}$ | $\begin{array}{r} 202.184 .102 .4 \\ 34 \end{array}$ | $\begin{array}{r} 492.289 .661 .13 \\ 8 \end{array}$ | $\begin{array}{r} 994.894 .788 .57 \\ 8 \end{array}$ |
| 2 | $\begin{gathered} \mathrm{BBR} \\ \mathrm{I} \end{gathered}$ | $\begin{array}{r} 101.065 .031 .67 \\ 2.423 \\ \hline \end{array}$ | 38.533 .841 .763 .310 | $\begin{array}{r} 94.077 .490 .13 \\ 6.584 \end{array}$ | $\begin{array}{r} 92.047 .709 .53 \\ 0.010 \end{array}$ | $\begin{array}{r} 136.354 .467 .37 \\ 6.707 \end{array}$ | $\begin{array}{r} 196.462 .640 .23 \\ 7.606 \end{array}$ |
| 3 | $\begin{gathered} \mathrm{BFI} \\ \mathrm{~N} \end{gathered}$ | 25.458.063.626 | $\begin{array}{r} 164.648 .726 .18 \\ 6 \end{array}$ | $\begin{array}{r} 197.016 .197 .1 \\ 27 \end{array}$ | $\begin{array}{r} 192.818 .674 .0 \\ 48 \end{array}$ | $\begin{array}{r} 211.109 .422 .34 \\ 3 \end{array}$ | $\begin{array}{r} 273.788 .986 .29 \\ 5 \end{array}$ |
| 4 | $\begin{gathered} \text { BTP } \\ \text { N } \end{gathered}$ | $\begin{array}{r} 908.978 .514 .80 \\ 1 \end{array}$ | 37.945.022.518 | $\begin{array}{r} 1.930 .068 .299 \\ .994 \end{array}$ | $\begin{array}{r} 194.837 .009 .0 \\ 32 \end{array}$ | 791.515.620.65 | $\begin{array}{r} 1.070 .445 .818 . \\ 591 \end{array}$ |
| 5 | $\underset{\mathrm{N}}{\mathrm{KRE}}$ | -7.772.697.982 | $\begin{array}{r} 1.521 .989 .340 . \\ 868 \end{array}$ | $\begin{array}{r} 4.235 .953 .551 \\ .722 \end{array}$ | $\begin{array}{r} 1.036 .600 .738 \\ .004 \end{array}$ | $\begin{array}{r} 1.959 .734 .964 \text {. } 037 \end{array}$ | $\begin{array}{r} 851.980 .233 .33 \\ 8 \end{array}$ |
| 6 | $\begin{gathered} \text { MTF } \\ \mathrm{N} \end{gathered}$ | $\begin{array}{r} 117.899 .547 .77 \\ 6 \end{array}$ | $\begin{array}{r} 204.103 .945 .80 \\ 5 \end{array}$ | 2.500.794.568 | $\begin{array}{r} 22.083 .604 .40 \\ 2 \end{array}$ | 75.756.646.089 | $\begin{array}{r} 1.230 .117 .581 . \\ 349 \end{array}$ |
| 7 | $\begin{gathered} \hline \text { TRU } \\ \mathrm{S} \end{gathered}$ | 588.373.308 | 499.006.366 | 390.736.936 | -341.138.198 | 3.314.657.587 | -983.098.652 |
| Maxi- <br> mum |  |  | $\begin{array}{r} 908.978 .514 .80 \\ 1 \end{array}$ | $\begin{array}{r} 1.521 .989 .340 \\ .868 \end{array}$ | $\begin{array}{r} 94.077 .490 .13 \\ 6.584 \end{array}$ | $\begin{array}{r} 92.047 .709 .530 \\ .010 \end{array}$ | $\begin{array}{r} 136.354 .467 .37 \\ 6.707 \end{array}$ |
| Minimum |  |  | 101.065.031.67 2.423 | $\begin{array}{r} 38.533 .841 .76 \\ 3.310 \end{array}$ | 191.450.784.4 | $192.818 .674 .04$ | $\begin{array}{r} 791.515 .620 .65 \\ 6 \end{array}$ |
| Average <br> Value |  |  | $\begin{gathered} 14.300 .613 .108 \\ .111 \\ \hline \end{gathered}$ | $\begin{array}{r} 5.243 .587 .525 \\ .445 \\ \hline \end{array}$ | $\begin{array}{r} 14.320 .995 .33 \\ 4.770 \end{array}$ | 13.381 .430 .865 .603 | 19.595 .580 .641 .827 |

[^1]According to table 3, the Bank of the Republic of Indonesia (BBRI) has a negative economic value for two consecutive years meaning that Bank Rakyat Indonesia was unable to create economic value for its company. It is seen net profit the tax is obtained smaller than the cost of the loan and equity costs so that the company is not able to
produce a return of operating rates exceeding the cost of capital. But the next year Bank Rakyat Indonesia was able to pursue its height proved from the value added positive economy for three consecutive years meaning Bank Rakyat Indonesia was able to create value added economies by generating net profit after large taxes.


Source: Economic Value Added (Processed data)
Figure 1. Average Economic Value Added (EVA)

From figure 1 The graph looks the higher the average value of economic added value, the stateowned banking company.

## Independent Variable: Stock Return

Stock Return is the resultant return on the stock received from the broker or the company by the investors. In calculating the return of the stock first calculates the actual return during the event period,
which is used in this study which is for 41 days, namely 20 days before the Stock Split event, 1 day that is the date of the Stock Split event and 20 days after the Stock Split event.
Based on the average return data of each sample company's stock for 20 days before Stock Split up to 20 days after Stock Split can be seen in the following table:

Table 4. Increase or decrease Return 20 days before Stock Split \& 20 days after Stock Split

| Stock <br> Code | Before <br> $(\mathrm{H}-20)$ | Stock Split <br> $(\mathrm{H} 0)$ | After <br> $(\mathrm{H}+20)$ | \% Increase/ <br> Decrease | description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BBRI | $(0.00)$ | 0.01 | $(0.00)$ | 1.36 | Increase |
| BTPN | 0.01 | $(0.01)$ | 0.01 | 0.84 | Increase |
| MTFN | 0.01 | $(0.04)$ | 0.02 | 1.62 | Increase |
| BFIN | 0.01 | $(0.01)$ | $(0.01)$ | $(1.93)$ | Decrease |
| KREN | 0.00 | - | 0.00 | 0.74 | Increase |
| TRUS | 0.00 | - | - | $(1.00)$ | Decrease |
| ASJT | 0.00 | - | 0.00 | 1.58 | Increase |

Source: Financial Statement (processed data)

Table 4, shows the calculation of stock return after a stock split. 5 companies experienced an increased stock return and 2 companies that experienced a decrease in the stock return. The highest increases in stock return after the stock split occurred in ASJT (1.58). The highest decrease in stock return
after the stock split was experienced by BFIN (1.93).

The following is presented a data overview of the return of shares of financial sector services companies listed on the Indonesia Stock Exchange for the period 2009-2014 as follows.

Table 5. Value Return on company shares Listed on the Indonesia Stock Exchange period 2014-2019

| No | Code |  | Year |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |  |  |
| 1 | ASJT | 0.00 | 0.00 | 0.00 | 0.10 | -0.13 | -0.27 |  |  |
| 2 | BBRI | -0.25 | -0.31 | 0.29 | 0.03 | 0.04 | 0.61 |  |  |
| 3 | BFIN | 0.48 | 1.40 | 0.53 | -0.64 | 0.23 | 0.00 |  |  |
| 4 | BTPN | 0.48 | -0.32 | 0.29 | 0.54 | -0.18 | -0.08 |  |  |
| 5 | KREN | -0.78 | 0.51 | 0.23 | 0.47 | 0.35 | 0.31 |  |  |
| 6 | MTFN | -0.90 | 0.42 | -0.74 | -0.17 | -0.40 | 0.42 |  |  |
| 7 | TRUS | 0.65 | -0.04 | 1.19 | -0.35 | -0.15 | -0.03 |  |  |
| Maximum |  | 0.48 | 0.51 | 1.19 | 0.54 | 0.35 | 0.61 |  |  |
| Minimum |  | -0.90 | -0.32 | -0.74 | -0.64 | -0.40 | -0.27 |  |  |
| Average Rating | -0.46 | 0.24 | 0.26 | -0.01 | -0.03 | 0.14 |  |  |  |
| Source: Financial Statement (Processed Data) |  |  |  |  |  |  |  |  |  |

Source: Financial Statement (Processed Data)


Source: Value Return on company shares (processed data)
Figure 2. Annual Average Stock Return

## Classic Assumption Tests <br> Verification Analysis

## Normality Test

Using the Kolmogorov-Smirnov test we obtain a probability value (Asymp. Sig.) of ( 0.200 ) on share returns before the stock split and a $(0.200)$ return on shares after the stock split. Moreover, for the EVA, because the probability value in the KolmogorovSmirnov test (0.200) is still greater than the level of error $5 \%$ ( 0.05 ), it can be concluded that the regression model is a normal distribution.

## Autocorrelation Test

Acquired Durbin-Watson (DW) $=2.148$ is larger than -4 . The DW value of the above statistic output of 2.148 is between -4 and +4 , or $-4<2.075<+4$. Therefore, it can be concluded that there is no autocorrelation in the regression equation.

## Variability Test

In Table 6, we can note an increase in the average return value 20 days after the stock split from 20 days before the stock split (judging from the size of standard deviation that describes the variation of the return value between the two events).

In Table 7, we can note the test paired
sample $\mathrm{t}_{\text {test }}$ for a comparison of the average return 20 days after a stock split and 20 days before the stock split. This resulted in a statistical $t$ value of ( 0.191 ) with the probability level $\mathrm{P}_{\text {-value }}$ of ( 0.855 ), $\mathrm{P}_{\text {-value }}>0.05$. This means that $\mathrm{H}_{0}$ is accepted and that there is no significant difference between the average return 20 days after and 20 days before the stock split. This indicates that 20 days after the stock split returns tends to be equal to the return 20 days after a stock split.

Next, we analysed the results of the variability test obtained from the value Degree of Freedom (DF) and real level value. The $D F$ value is 6 with a real level of $5 \%$ or 0.05 . The obtained $t$-value is ( 0.191 ) which is < then 1.943 , therefore $H_{0}$ is accepted meaning that there is no significant difference in the average return 20 days after and 20 days before the stock split. This difference indicates that 20 days after stock split, the stock returns tend to be equal to the 20 days before the stock split (Table 7).

## Simple linear regression analysis

In Table 8, we present the results of the regression, which can be written as follows:

$$
\mathrm{Y}=0.025+2.477 \mathrm{E}-15 \mathrm{X}
$$

Description:

Y = Stock Return
X = Economic Value Added (EVA)
The simple linear regression equation above can be interpreted as follows:
a. Constants of 0.025 ; meaning that if the EVA value is 0 , then the stock return value is 0.025 .
b. For each EVA of $2.477 \mathrm{E}-15$, we obtain an increase in the stock return of 2. 477E-15. Therefore EVA has a direct relationship with the stock return.

## Korelari Analysis

We take EVA as our constant to calculate the deviation between the EVA and the stock return.

In Table 9, we show that the correlation between EVA and share returns is 0.309 and a pvalue $<0.05$. This indicates a significant but low relationship between EVA and stock return.

## Coefficient of determination (KD) analysis

This indicates the size of the effect of EVA on the stock return.

Table 10 shows that the EVA has an impact of 0.096 or $9.6 \%$ on the stock return. The remaining $90.4 \%$ of the shares can be explained by other factors not researched by us. Example, fundamental factors such as Return on Equity (ROE) and noneconomic factors such as domestic political events.

Table 6. Average variable Return (Mean. STD Deviation)
Paired Samples Statistics

| Paired Samples Statistics |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | Std. Error |
|  |  | Mean | N | Std. Deviation | Mean |
| Pair 1 | Before Stock Split | .0029656 |  | 7 | .00408206 |
|  | After Stock Split | .0035674 | 7 | .01023547 | .00154287 |

Table 7. Paired Sample $\mathrm{t}_{\text {test }}$ average Variable Return (t-statistic \& Sig)
Paired Samples Test

| Paired Samples Test |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Paired Differences |  |  |  |  | t | df | $\begin{gathered} \text { Sig. (2- } \\ \text { tailed) } \\ \hline \end{gathered}$ |
|  | Mean | Std. Deviation | Std. Error <br> Mean | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| Pair Before Stock Split 1 - After Stock | . 0006018 | . 0083544 | . 0031576 | . 0083284 | . 0071247 | -. 191 | 6 | . 855 |
| Split | - 6 |  |  | 5 | 2 |  |  |  |

Table 8. Simple linear regression analysis results
Coefficients

| Coefficients |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients Standardized Coefficients |  |  |  |  |
|  | B | Std. Error | Beta | t | Sig. |
| 1 (Constant) | . 025 | . 055 |  | . 464 | . 645 |
| Economic Value Added | $2.477 \mathrm{E}-15$ | . 000 | . 309 | 2.056 | . 046 |

a. Dependent Variable: Stock Return

Table 9. Correlation of EVA with Share Returns

Correlations

|  | Correlations |  |  |
| :--- | :--- | ---: | ---: |
| Economic Value Added | Economic Val- <br> ue Added | Searson Correlation | 1 |
|  | Sig. (2-tailed) |  | $.309^{*}$ |
|  | N | 42 | .046 |
| Stock Return | Pearson Correlation | $.309^{*}$ | 42 |
|  | Sig. (2-tailed) | .046 | 1 |
|  | N | 42 |  |
|  |  |  | 42 |

*. Correlation is significant at the 0.05 level (2-tailed).

Table 10. Coefficient of determination
Model Summary ${ }^{\text {b }}$

| Model Summary $^{\text {b }}$ |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Model | R | R Square | Adjusted R <br> Square | Std. Error of <br> the Estimate |
| 1 | $.309^{\text {a }}$ | .096 |  | .073 |

a. Predictors: (Constant). Economic Value Added
b. Dependent Variable: Stock Return

## Discussion of Findings

Our findings support the research of Yovita Vivianty Indriadewi (2012) showing that there is no significant abnormal return variance between the before and after of a stock split. The stock split announcement did not result in increased trade volumes and abnormal returns.

However, the return results 20days after the stock split, tend to increase and fluctuate when compared to the return 20 days before the stock split. This could have happened because information about the stock split by the issuer, had been anticipated by the investor. Therefore, the market reacted before the announcement of the stock split (Djajasaputra, 2012).
Thus one can say that the market between 2014 and 2019 did not react on the evidence of a stock split. This finding corroborates with what Surtikanti and Devi Rustendi (2010) found, that the stocks split had an insignificant influence on the stock return. Moreover, Erwin Indra Kusuma and Surtikanti (2017) found that there were no significant differences in the stock liquidation and the stock return before and after a stock split.

## Influence of Economic Value Added (EVA) on Stock Return

Since results indicate that we should reject Ho; meaning that an EVA has a significant influence on the stock return. However, there is a very low relationship between EVA and the stock return.

The results of this study support the theory that if the EVA increased, then the stock return will
also increase. The high total net profit after tax is the main influence of EVA.

There is a large EVA influence on the stock return of $9.6 \%$. while the remaining $90.4 \%$ is the influence of variables not examined in this study such as Earnings Per Share (EPS), Price Earnings Ratio (PER), Market Value Added (MVA), Return on equity (ROE) and Return on Assets (ROA) and Debt Equity Ratio (DER).

This answers the phenomenon that has been put forward before as happened in Tania Service Insurance Company (ASJT), namely economic value added $(\mathrm{EVA})>0$ or positive value, but the return of the stock decreased, with this result showing that there are other factors that are not studied by the authors greatly influence the return of the stock compared to the added economic value.

The main stock return can increase or decrease due to whether or not the company can maintain its profits and stock prices at the same level of the closing profit and prices of the year before, to have stable stock returns. This will ensure that investors will always be interested in investing in the company.

Therefore, it can be concluded that when the company can create EVA, there is a higher possibility for investors to receive an increase in the stock return and vice versa.

This research supports research conducted by Moh. Benny Alexandri. Surtikanti (2011) and Widiati. Putri Kurnia (2013). stating that economic value added (EVA). market value added (MVA) simultaneously influences on the stock return. Djamhuri and Susi Dwimulyani (2014). who stated
that EVA was an economically added value created by the company of her activities or strategies over some time and is one way to assess financial performance and EVA significantly affect the stock return. The higher the value of EVA owned by a company. the higher the stock return. and vice versa. and Surtikanti. Dean Subhan Saleh (2018) found that economic value added influences on the stock return.

## CONCLUSION

Based on the results of research and hypothesis testing can be withdrawn as follows: (a) There is no difference in the decline between the stock return before the stock split and after the stock split so that this result shows the stock return in the financial sector services company listed on the Indonesia Stock Exchange which is expected to be not achieved. it is possible because of the long observation time (before the announcement. so that the market can already adapt to information. But some companies are experiencing the average stock return on increase. this is caused by the company intends to create a large return value to be able to attract many investors to invest in the company. (b) Economic Value Added (EVA) significantly affects the stock return in the financial sector services company listed on the Indonesia Stock Exchange period 2014-2019. But some companies experienced declining economic value added (EVA). this is due to a decrease in net profit after tax that the company acquired in the current year.

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[^1]:    Source: Financial Statement (processed data)

