THE ANALYSIS OF THE EFFECTS OF EARNING PER SHARE, PRICE EARNING RATIO AND DIVIDEND PER SHARE ON THE SHARE PRICES OF MANUFACTURING COMPANIES

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ABSTRACT

The research analyzed the effect of earnings per share, price earnings ratio, and dividend per share on the share prices of manufacturing companies listed on the Indonesian Stock Exchange 2018-2021. The hypothesis of this study is earning per share, price earnings ratio, and dividend per share positive effect on the share prices of manufacturing companies listed on the Indonesia stock exchange in 2018-2021. The number of samples in this study was 60 manufacturing companies listed on the Indonesia Stock Exchange in 2018-2021 using the sampling technique of purposive sampling. The data collection method used documentation, and the data analysis used the SPSS which included classic assumption test, multiple linear regression analysis, and hypothesis testing using t-test, F and R test. The results of the study show as follows: the independent variable of earning per share has a positive effect on the share prices; the price earnings ratio has a positive effect on the share prices; and the dividend per share does not have an effect on the share prices. Based on the values of the coefficient of determination, the test results show an Adjusted R square value of 0.266. It means that a change in the share price variable of 26.6% can be explained using the three independent variables (Earning Per Share (EPS), Price Earnings Ratio (PER), and Dividend Per Share (DPS). Then, the remaining 73.4% is explained by the other variables out of the independent variables such as net interest margin, net profit margin, and debt to asset ratio.

Keywords:
Earnings Per Share; Price Earnings Ratio; Dividend per Share; Share Price
INTRODUCTION

The share prices of several manufacturing companies from 2018 to 2021 decreased. For example, the share price of PT. Wijaya Karya Beton Tbk. in 2018 was IDR 825; in 2019 it was IDR 825 and decreased in 2020 to IDR 500. Then, the share price of PT. Tempo Scan Pacific Tbk. in 2018 was IDR 1,750; in 2019 it rose to IDR 1,970; and in 2020 it decreased to IDR 1,800. The research was conducted on the manufacturing companies listed on the Indonesia Stock Exchange in 2018-2021 because the JCI trend of the manufacturing companies during the Covid-19 pandemic had a decline.

Capital market is essentially a market that is not much different from traditional markets where there are traders and buyers, and there is also price bargaining. Capital market can also be interpreted as a vehicle that brings together the parties who need funds with those who provide funds according to established rules. Capital market is expected to be alternative funding for Indonesian companies and can also be considered as an alternative to investing (Lestari, 2014).

Investment is a commitment to determine funds in one or several investment objects with the expectation of gaining profit in the future. Two elements attached to any invested capital or funds are yield and risk. The two elements always have a proportional reciprocal relationship. In general, the higher the risk, the greater the yield obtained, and the smaller the risk, the smaller the yield to be obtained (Lestari, 2014). One area of investment that is quite interesting but high-risk is stock investment. Shares are ownership proofs of company’s assets that issues the shares (Tandelilin, 2012).

The first factor that affects Share Price is earnings per share. Earnings Per Share (EPS) is a ratio of net profit after tax and the number of shares (Darmadji and Fakhuddin, 2012). The information on a company's EPS shows the amount of the company's net profit that is ready to be distributed to all company shareholders. If a company's Earnings Per Share (EPS) is high, more investors want to buy these shares, and it makes the share price high (Dharmastuti, 2014).

The second factor that affects share price is Price to Earnings Ratio or usually abbreviated as PER is the ratio of market price per share to earnings per share. Price Earnings Ratio is a ratio of a company's current price valuation per share to its earnings per share. Price
Earnings Ratio is a ratio frequently used to evaluate prospective investments. The ratio is also used to assist investors in making decision whether to buy shares of a particular company. In general, traders or investors will take in to account PER to estimate the market value of a stock. A higher PER ratio shows that a market is willing to pay more for a company's income or profits and has high expectations for the future of the company, so it is willing to appreciate it at a higher price. On the other hand, lower Price Earnings Ratio indicates that a market does not have sufficient confidence in the future of the company's shares (Fahmi, 2011)

The next factor that affects share price is Dividend Per Share. Dividend Per Share (DPS) is a distribution of profits distributed to all shareholders proportionally according to the number of shares owned, and the more the Dividend Per Share distributed, the more the interest of investors in the shares issued by the company, so the company will increase the price of the shares issued (Fahmi, 2011).

The above opinion is supported by the research by Priananto et al (2021) and Pramesti and Mujiyono (2021) showing that Earnings Per Share has positive effect on share prices. Meanwhile, Labiba et al's research (2021) shows that Earnings Per Share does not affect share prices. Suryaman and Hindriani's research (2021) shows that Price Earnings Ratio has positive effect on share prices; Prastiko's research (2020) indicates that Price Earnings Ratio has negative effect on share prices; Nanda's research (2021) shows that Dividend Per Share has positive effect on share prices, and Octavianus and Sha's research (2021) shows that dividend Per Share has negative and insignificant effect on share prices.

The share price of manufacturing companies in the last three years has decreased. It is indicated by the share price of PT. Wijaya Karya Beton Tbk in 2018 at IDR 825, in 2019 it was IDR 825 and decreased in 2020 to IDR 500; the share price of PT. Tempo Scan Pacific Tbk. in 2018 was IDR 1,750, rose to IDR 1,970 in 2019, and dropped to IDR 1,800 in 2020; the share price of PT. Unilever Indonesia Tbk. in 2018 was IDR 37,000, rose to IDR 38,000 in 2019, and increased to IDR 55,000 in 2020. The research was conducted on the manufacturing companies listed on the Indonesia Stock Exchange in 2018-2021 because the JCI trend of the manufacturing companies during the Covid-19 pandemic had a decline.
Based on the phenomena and previous studies described above, the results are inconsistent. This study wanted to examine further to identify the effect of financial ratios on share prices.

**LIBRARY STUDY**

**Agency Theory**

Agency theory is a relationship based on a contract that occurs between company members; between the principal (owner) and agent as the main actors (Jensen & Meckling, 1976 in Ujiyantho & Pramuka, 2013). The research by Jensen & Meckling (1976) in Sundoro & Suhardjo states agency theory as a theory that explains the contractual relationship between principals and agents. The party of principals mandates agents to perform all activities on behalf of principals in their decision-making capacity. Principal is a party that mandates agent to act on behalf of principal, while agent is the party that is mandated by principal to run a company. In their research, Jensen & Meckling (1976) in Ujiyantho & Pramuka (2013) also state that agency relationships arise when one or more principal employ agent to provide a service and then delegate decision-making authority to agent. Thus, agent is obliged to account for the mandate given by principal to him.

**Earnings Per Share (EPS)**

Earnings Per Share (EPS) is one component that is considered in the analysis of a company. EPS information of a company shows the amount of the company's net profit that is ready to be distributed to all company shareholders. EPS is a ratio that shows how much profit (return) is obtained by investors or shareholders per share (Kasmir, 2012). In general, company management, ordinary shareholders, and prospective shareholders are very interested in Earnings Per Share (EPS) because this describes the amount of Rupiah earned for each common share and describes the prospects for future company earnings (Dwipratama, 2014).

\[
\text{EPS} = \frac{\text{Net profit}}{\text{Total Shares in Circulation}}
\]

**Price Earnings Ratio (PER)**
According to Hary (2016), Price Earnings Ratio is a ratio that shows the results of a comparison between market price per share and earnings per share. Through this PER ratio, company’s price per share is compared with the profit obtained from expanding shares within one year. By looking at PER results, investors can assess the fairness of the price per share of a company with the profit they generate, and by knowing the PER value, investors can estimate the Share Price of a company by future estimates. The following is the PER formula:

$$\text{PER} = \frac{\text{Price per share of common stock}}{\text{Earnings per share}}$$

**Dividend Per Share (DPS)**

According to Yuliani and Supriadi (2014), dividend per share is a distribution of company profits to shareholders with proportional size to the number of shares owned. The information on dividend per share is needed to find out how much profit each share received from shareholders. If the dividend per share received increases, it will affect the Share Price in the capital market because the rise in dividend per share is likely to attract investors to buy the shares of the company. The more the shares purchased, the higher the share price of a company in the capital market (Maryati 2012).

According to Fahmi (2011), DPS measurements are as follows:

$$\text{DPS} = \frac{\text{Cash Dividends}}{\text{Total Shares in Circulation}} \times 100\%$$

**Share Price**

Share price (Brigham and Houston, 2010) is the money spent to obtain proof of participation or ownership of a company. In the secondary market or daily stock trading activities, share prices fluctuate either in the forms of increases or decreases. The formation of share prices occurs because of demand and supply on these shares. The supply and demand occur due to many factors; both factors that are specific to these shares are the company's performance and the industry in which the company operates, as well as macro factors, such as the country's economic conditions, social and political conditions, and developing rumors (Fahmi, 2011).
The variables in this study are Earning Per Share, Price Earnings Ratio, and Dividend Per Share as the independent variables and Share Price as the dependent variable. Therefore, the framework proposed in this study, based on the description of the theory above, can be described in the variables in this study, such as Earning Per Share, Price Earnings Ratio, and Dividend Per Share as the independent variables and Share Price as the dependent variable. The framework used in this study based on the description of several theoretical studies and previous research can be described as follows.

**Figure 1 Framework of Mind**

![Diagram of the framework](source: Author processed data (2022))

**Effect of Earnings Per Share on Share Price**

Share Price is a factor that makes investors invest their funds in capital market because it may reflect the rate of return on capital (Kasmir, 2012). In principle, investors buy shares to get dividends and sell these shares at a higher price (capital gain). The issuers that can generate higher profits will increase the rate of return obtained by investors which is reflected in the company's Share Price. The information on a company's EPS shows the amount of the company's net profit that is ready to be distributed to all company shareholders. If company’s Earnings Per Share (EPS) is high, more investors want to buy these shares, causing the Share Price to be high (Fara Dharmastuti, 2011). Previous research state that Earnings Per Share has an effect on share prices as evidenced by Priantono et al (2021) and Pramesti and Mujiyono (2021) showing that Earning Per Share has a positive effect on share prices. Based on the explanation above, the formulation of the hypothesis proposed in this study is:

\[
\text{Earnings Per Share} (X_1) \rightarrow \text{Price Earnings Ratio} (X_2) \rightarrow \text{Share Price} (Y) \rightarrow \text{Dividend Per Share} (X_3)
\]
H1: Earning Per Share has positive effect on share prices.

**Effect of Price Earnings Ratio on Share Price**

Through this ratio, the Share Price of a company was compared with the net profit generated by the company in one year by considering whether the price of an issuer is reasonable or not by current conditions and not based on future estimates. In other words, PER shows the price per one Rupiah of company earnings. Besides, PER is also a relative measure of a company's stock; the higher the expected income growth, the higher the PER. In the research conducted by Riski Tampubolon (2014), it is stated that the PER variable has a significant effect on stock returns. Triadi and Suarmanayasa's research (2021) shows that Price Earning Ratio has a positive effect on share prices. Based on the explanation above, the formulation of the hypothesis proposed in this study is:

H2: Price Earnings Ratio has positive effect on share prices

**Effect of Dividend Per Share on Share Price**

Dividend Per Share (DPS) is a distribution of profits distributed to all shareholders proportionally according to the number of shares owned, and the more the Dividend Per Share distributed, the higher the interest of investors in the shares issued by the company, so the company will increase the price of the shares it issues (Fahmi, 2011). Nanda's research (2021) shows that Dividend Per Share has a positive effect on share prices. Based on the explanation above, the formulation of the hypothesis proposed in this study is:

H3: Dividend Per Share has a positive effect on share prices

**RESEARCH METHODS**

The type of data used in this research was quantitative data. The data was the secondary data obtained from the financial reports taken from the Indonesian Stock Exchange (IDX) website. The population selected in this study was the manufacturing companies listed on the IDX for 2018-2021 totaling 167 companies. The number of samples in this study was 42 manufacturing companies listed on the IDX in 2018-2021. The sampling technique in this study used a purposive sampling technique. The data collection method used in this...
research was the library and the documentation methods. The data analysis method used in this study included the classical assumption test, multiple linear regression analysis, and hypothesis testing using the t-test, and F and R tests.².

**RESULTS AND DISCUSSION**

1. **Normality test**

![Figure 2 Normality Test](image)

Source: the processed data of 2022

The test results show that the points spread not far from the diagonal line and follow the direction of the line, meaning that all data is normally distributed.

2. **Multicollinearity Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings per Share (EPS)</td>
<td>.289</td>
<td>3.458</td>
<td>not multicollinearity</td>
</tr>
<tr>
<td>Price Earnings Ratio (PER)</td>
<td>.791</td>
<td>1.265</td>
<td>not multicollinearity</td>
</tr>
<tr>
<td>Dividend per Share (DPS)</td>
<td>.312</td>
<td>3.208</td>
<td>not multicollinearity</td>
</tr>
</tbody>
</table>

Source: Data processed 2022

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The test results show that the VIF values of all independent variables have a value lower than 10. This means that the research variables do not show any signs of multicollinearity in the regression model.

3. Heteroscedasticity Test

Based on the scatterplots above, it can be seen that the points spread randomly and are spread both above and below the number 0 and the Y axis. It can be concluded that there is no heteroscedasticity in the regression model, so the regression model is feasible to use in conducting tests.

4. Autocorrelation Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.950</td>
</tr>
</tbody>
</table>

Source: Processed Data of 2022
The results of the autocorrelation test show that the calculated DW value is 1.950; the dl value is 1.7152 and the du value is 1.7861. There is no autocorrelation if du < d < 4-du. Thus, the calculation of autocorrelation is 1.7152 < 1.950 < 2.2139 or there is no positive or negative autocorrelation.

5. F Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Say.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>65.431</td>
<td>3</td>
<td>21.810</td>
<td>87.931</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>.000</td>
<td>168</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65.431</td>
<td>171</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed Data of 2022

Based on ANOVA data, the calculated F value is 87.931 > 2.66 (n-k-1 = 171-3-1 = 167) a = 0.05 with a significant number of 0.000 <0.05 (significant), so there are the effects of Earnings Per Share (EPS), Price Earnings Ratio (PER), and Dividend Per Share (DPS) on the Share Price together.

6. Coefficient of Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.496a</td>
<td>.288</td>
<td>.266</td>
<td>1.42211 1.950</td>
</tr>
</tbody>
</table>

Source: Processed Data of 2022

The test results show that the Adjusted R square value is 0.266. This means that a change in the Share Price variable of 26.6% can be explained by the three independent variables (Earnings per Share (EPS), Price Earnings Ratio (PER), and Dividend Per Share (DPS)), while the remaining 73.4% is explained by the other variables out of the independent variables, such as net interest margin, net profit margin, and debt to asset ratio.
7. t-test

Table 5 t-test

<table>
<thead>
<tr>
<th>Variable</th>
<th>t</th>
<th>Say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings per Share (EPS)</td>
<td>26523.410</td>
<td>.000</td>
</tr>
<tr>
<td>Price Earnings Ratio (PER)</td>
<td>28848.642</td>
<td>.000</td>
</tr>
<tr>
<td>Dividend per Share (DPS)</td>
<td>-.820</td>
<td>.413</td>
</tr>
</tbody>
</table>

Source: Processed Data of 2022

From the table above, it can be concluded:

1. Hypothesis Testing 1 (H₁): The Effect of Earning Per Share (EPS) on Share Price
   Based on the table above, the calculated t value is greater than the t table; 26523.410 > 1.97429 (n-k-1=172-3-1=167), with a significant value of 0.000 < 0.05 (significant). Thus, hypothesis 1 (H₁) that Earning Per Share (EPS) has a positive effect on share prices is proven.

2. Hypothesis Testing 2 (H₂): The Effect of Price Earnings Ratio (PER) on Share Price
   Based on the table above, the calculated t value is greater than t table; 28848.642 < 1.97429 (n-k-1=172-3-1=167), with a significant value of 0.000 < 0.05 (significant). Thus, hypothesis 2 (H₂) that Price Earnings Ratio (PER) has a positive effect on share prices is proven.

3. Hypothesis Testing 3 (H₃): The Effect of Dividend per Share (DPS) on Share Price
   Based on the table above, the calculated t value is greater than t table; -0.820 < 1.97429 (n-k-1=172-3-1=167), with a significant value of 0.413 > 0.05 (not significant). Thus, hypothesis 3 (H₃) that Dividend Per Share (DPS) has a positive effect on share prices is not proven.

8. Multiple Regression Analysis
Table 6 Regression Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Say.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>3.252E-5</td>
<td>.000</td>
<td>.430</td>
<td>.668</td>
</tr>
<tr>
<td>LN_EPS</td>
<td>1.000</td>
<td>.000</td>
<td>.963</td>
<td>26523.410</td>
</tr>
<tr>
<td>LN_PER</td>
<td>1.000</td>
<td>.000</td>
<td>.633</td>
<td>28848.642</td>
</tr>
<tr>
<td>LN_DPS</td>
<td>-2.381E-5</td>
<td>.000</td>
<td>.000</td>
<td>-.820</td>
</tr>
</tbody>
</table>

Source: Processed Data of 2020

Y = 3,252E-5 + 1,000X₁ + 1,000X₂ - 2.381E-5X₃ + and

1. The value of 3.252E-5 is a constant value, which means that if the independent variable is zero, the Share Price increases by 3.252E-5.
2. The value of the regression coefficient X₁ for the variable of Earnings Per Share (EPS) of 1,000 indicates that every time there is an increase in Earnings Per Share (EPS) by one score, it will increase the Share Price by 1,000.
3. The value of the regression coefficient X₂ for the variable of Price Earnings Ratio (PER) of 1,000 indicates that every time there is an increase in Price Earnings Ratio (PER) by one score, it will lower the Share Price by 1,000.
4. The value of the regression coefficient X₃ for the variable of Dividend Per Share (DPS) of -2.381E-5 indicates that every time there is an increase in the value of Dividend Per Share (DPS) by one score, it will increase the Share Price by 2.381E-5

**DISCUSSION**

**Effect of Earnings Per Share (EPS) on Share Price**

The research results show that Earnings Per Share (EPS) has positive effect on share prices. This is evidenced by the value of t count which is greater than t table; 26523.410 > 1.97429 (n-k-1=172-3-1=167), with a significant value of 0.000 <0.05 (significant).

The information on the companies’ EPS shows the amount of the companies’ net profit that is ready to be distributed to all company shareholders. If a company’s Earnings Per Share (EPS) is high, more investors want to buy these shares, causing the Share Price to
be high (Fara Dharmastuti, 2011). The results of the research are in line with the research conducted by Pramesti and Mujiyono (2021) which shows that Earnings Per Share has a positive effect on share prices.

**Effect of Price Earning Ratio (PER) on Share Price**

The research results show that the Price Earnings Ratio (PER) does not affect share prices. This result is evidenced by the t-count value that is greater than the t-table; 28848.642 < 1.97429 (n-k-1=172-3-1=167), with a significant value of 0.000 < 0.05 (significant). Through this ratio, the Share Prices of the companies were compared with the net profits generated by the companies in one year. Besides, PER is also a relative measure of a company's stock, the higher the growth of the expected income, the higher the PER. In the research conducted by Riski Tampubolon (2014), it is stated that PER variable has a significant effect on stock returns. The results of this study are in line with the results of the research conducted by Triadi and Suarmanayasa (2021) which show that price earnings ratio has a positive effect on share prices.

**Effect of Dividend Per Share (DPS) on Share Price**

The research results show that Dividend Per Share (DPS) does not affect share prices. This is evidenced by the value of t count that is greater than t table; -0.820 < 1.97429 (n-k-1=172-3-1=167), with a significant value of 0.413 > 0.05 (not significant). Dividend Per Share (DPS) is a distribution of profits distributed to all shareholders proportionally according to the number of shares owned, and the more the Dividend Per Share distributed, the more the investors will be interested in the shares issued by the company, so the company will increase the price of the shares issued (Fahmi, 2011). The results of this study contradict the results of research conducted by Nanda (2021) which shows that Dividend Per Share has a positive effect on share prices.

**CLOSING**

Based on the results of the tests and discussion above, it can be concluded that Earnings per Share (EPS) has a positive effect on share prices. This is evidenced by the value of t count which is greater than t table; 26523.410 > 1.97429 (n-k-1=172-3-1=167), with a

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significant value of 0.000 < 0.05 (significant). Price Earnings Ratio (PER) has a positive effect on share prices. This is evidenced by the value of t count that is greater than t table; -0.820 < 1.97429 (n-k-1=172-3-1=167), with a significant value of 0.413 > 0.05 (not significant). Dividend per Share (DPS) does not affect share prices. This is evidenced by the value of t count that is greater than t table; -0.820 < 1.97429 (n-k-1=172-3-1=167), with a significant value of 0.413 > 0.05 (not significant). The suggestions in this research are as follows: with the results that Divided Per Share (DPS) does not affect share prices, it is necessary to re-examine the causes of the variables in effect. Future research variables are expected to be able to examine other variables out of these variables to obtain more varied results which can describe the factors that can affect share prices. The future research period is expected to be further extended because the longer the period used, the more accurate the research will be. It is expected that future research populations will not only be the manufacturing companies listed on the Indonesia Stock Exchange (IDX) but also all manufacturing companies in Indonesia so that they can be used as a reference for all manufacturing companies.

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