Analysis of Earning Per Share on Stock Prices with Dividend Yield as an Intervening Variable in LQ45 Companies in Indonesia Stock Exchange

Muhammad Fauzan Mirzaldi¹, Isfenti Sadalia², Nisrul Irawati²

¹,²Master of Management Study Program, Postgraduate School of University of Sumatera Utara

Corresponding Author: Muhammad Fauzan Mirzaldi

ABSTRACT

This study is conducted in The LQ45 Company on Indonesia Stock Exchange 2015 - 2019. This study aims to analyze The Effect of Dividend Yield on Stock Price with Earning per Share as Intervening Variable in The LQ45 Company on Indonesia Stock Exchange 2015-2019. The type of this study is comparative causal that analyze the causal relationship between two variables or more. The number of sample in this study is 22 companies. In accordance with the defined hypothesis in this study, statistical data analysis is measured using SmartPLS (Partial Least Square) software. Based on the result of the tests, the significance direct effect test result shows that independent variable (Dividend Yield) has negative and significant effect on dependent variable (Stock Price), however Dividend Yield has positive influence on intervening variable (Earning Per Share) but not significantly and intervening variable (Earning Per Share) positively and significantly affect the dependent variable (Stock Price) and intervening variable (Earning Per Share) is not significant as the mediator of the correlation between Dividend Yield and Stock Price. Dividend Yield capable of influencing Earning Per Share up to 0.9%, whereupon Dividend Yield and Earning Per Share are able to affect Stock Price up to 47.4%.

Keywords: Dividend Yield, Earning Per Share, Stock Price

BACKGROUND

LQ45 companies are 45 issuers that have gone through a selection process with high liquidity as well as several other selection criteria. These criteria can include consideration of market capitalization selected by the Indonesia Stock Exchange. The companies listed in LQ45 are 45 companies with the best stocks that are the target of investors. So in making the stocks contained in the LQ45 index as part of the population and sample, research can describe the state of the LQ45 stock price movements from 2015 - 2019.
LQ45 Stock Price Movement

From Figure 1, it is known that on April 6, 2015, the LQ45 companies experienced an increase in share prices by 955.69, then September 28, 2015 experienced a decrease of 699.01 and experienced an increase again on January 22, 2018 amounting to 1,120.49. Furthermore, it decreased on July 2, 2018, amounting to 898.74. After that on February 4, 2019, the share price increased to 1,030.15 and decreased on May 20, 2019 by 931.48, then increased again to 1,027.27 on July 15, 2019, then decreased again on October 7, 2019 amounting to 937.05 and closed at the end of the year, namely December 30, 2019 at 1,014.47. The development of the LQ45 share price has attracted investors to invest. Before investing, investors need to make a good and accurate assessment to find out and choose the company's shares. With stock price movements that tend to fluctuate from time to time, if the stock price rises, investors will get a profit and also increase investor confidence in the company for the increase in shares. A reflection of how to see the high and low levels of the company's stock price movements can use the Stock Price Index (IHS). The Stock Price Index (IHS) serves as one of the market trends, where the index movement describes market conditions at any one time, whether the market is active or sluggish.

Earning per Share is very important because it is an income for investors and a benchmark for investors to invest in the company. The high value of Earning per Share (EPS) will increase investors’ confidence to increase their investment which is needed by each company. High Earning Per Share (EPS) is a measure of a company's ability to earn a profit, so it can be said that the higher the profit of a company, the higher the amount of Earning Per Share (EPS) that will be distributed to investors who invest it.

Any change in Dividend Yield (DY) will affect stock prices. If these investors intend to keep the stock forever, the investor expects a stock dividend. If investors intend to sell at a later date, these investors will expect share dividends and profits due to an increase in share prices. This means that if the dividend yield of an efficient company is higher, the more likely it is that the share price will be valued high. This will make investors willing to invest in the company, so that the demand for these shares will increase which in turn will cause the stock price to rise as well. Based on the descriptions above, this study aims to determine the stock price, how much influence the earnings per share have on stock prices in increasing the dividend yield in LQ45 companies.

Stock price

In this study, the share price in question is the stock price recorded at the end of each year after the closing price. The price of a share at any given time will depend on the cash flow an investor is expected to receive in the future if an investor buys a stock. The share price is a reflection of the performance of a company. In a short period, the price of a stock can fluctuate greatly. The price fluctuates depending on the power of supply and demand. If a stock experiences excess demand, it will tend to rise, and vice versa. The end of the closing period of the stock price is an appropriate reference in comparing or analyzing a study.

Stock Price Indicator

The stock price indicator can be seen from the value of the stock price, according to Azis et al. (2015), namely:

1. Book Value is the value of shares according to the books of the issuing company. Book value per share is the net assets owned by shareholders by owning one share.
2. Market Value is the stock price that occurs on the stock exchange at a time determined by the demand and supply price of shares by market participants.
3. Intrinsic Value is the actual / supposed value of a stock.
4. The intrinsic value of an asset is the sum of the present value of the cash flows generated by the asset concerned.

**Dividend**

Dividends are the rights of common stockholders to receive a share of the company's profits. Dividends are cash flow set aside for shareholders, while retained earnings are one of the most important sources of funds to finance company growth. The size depends on the dividend policy and the results of the company's AGM. If the company has decided to share the profit, then all share owners will get the same rights according to their percentage of share ownership. However, the distribution of dividends for preferred stock owners will be prioritized over common stock owners.

**Dividend Yield**

According to Gumanti (2013), dividend yield implies a measure that a component of total return is contributed by dividends. This means that in calculating the total return, investors must include the element of the amount of dividends received in addition to the difference in share prices between the beginning and the end of ownership. Meanwhile, according to Fajrihan (2010), dividend yield is dividends paid divided by the current price. Based on the understanding of the experts above, it can be concluded that the dividend yield is a financial ratio that compares the amount of cash dividends distributed to shareholders with the share price, which is expressed as a percentage. Based on previous research that has been discussed, it can be concluded that dividend yield can be calculated by the formula:

\[
DY = \frac{\text{Dividend per Share}}{\text{Price per Share}}
\]

In general, dividend yield is a measure that must be considered. This is because dividend yield focuses on seeing how much profit per share is received. Some investors use this ratio as a measure of risk and as an investment filter. They will try to invest their funds in stocks that produce high dividend yields. Dividends are usually distributed annually and the dividend yield figure is obtained by means of the dividend value that will be given to the price of shares currently in circulation.

**Earning Per Share**

Investors will be more interested in companies that have high earnings per share, and if the earnings per share of a company are considered high by investors, the stock price will move up. According to Gitman and Zutter (2015), earning per share represents the amount of money earned per number of ordinary shares outstanding in a certain period where if it gets higher it has the potential to increase the amount of dividends received by shareholders.

It can be seen that the relationship between earnings per share and share price is very close. Tandelilin (2010) argues, Earning Per Share (EPS) can be formulated as follows:

\[
\text{EPS} = \frac{\text{Net Profit After Tax}}{\text{Number of Shares Outstanding}}
\]

Buying shares means buying the prospect of a company, which is reflected in earnings per share. If the earnings per share is higher, then the prospect of the company is better, meanwhile if the earnings per share is lower it means that it is not good, and negative earnings per share means it is not good (Samsul, 2006).

Rudianto's research (2019) with the title Effect of ROA (Return on Assets), EPS (Earning Per Share), DER (Debt to Equity Ratio), PER (Price Earning Ratio), DAR (Debt to Assets Ratio) and Rupiah Exchange Rate on Prices Shares in Insurance Companies Listed on the IDX in 2014 - 2017. It is known that the EPS variable has a positive and significant effect on share prices in insurance companies listed on the Indonesia Stock Exchange in 2014 - 2017. Research by Putra et al. (2016) entitled The Effect of Stock Buyback,
Profitability and Firm Size on Share Prices in Go Public Companies on the Indonesia Stock Exchange with Dividend Yield as a Mediating Variable in the 2012 - 2014 Period. It is known that partially the dividend yield variable has a positive and significant effect on price variables stock. This shows that a large dividend per share will make the company's shareholders feel happy because of the level of profits they get so as to increase the company's share price. Companies that share their profits each period illustrate that the company is good and can provide maximum profits for the company's shareholders.

CONCEPTUAL FRAMEWORK

Referring to research problems and theoretical studies regarding the analysis of earnings per share on stock prices with dividend yield as an intervening variable, the conceptual framework proposed for this study is as shown in Figure 2 below:

![Conceptual Framework Chart](image)

Figure 2: Conceptual Framework Chart

HYPOTHESIS

The hypothesis proposed is based on the theoretical basis and conceptual framework that has been made, the hypothesis to be tested in this study consists of:

1. Earning per share has a significant positive effect on dividend yield.
2. Earning per share has a significant positive effect on stock prices.
3. Dividend yield has a significant positive effect on stock prices.
4. Earning per share has a significant positive effect on stock prices through dividend yield.

RESEARCH METHODS

The type of research used in this research is comparative causal, which is to analyze the causal relationship between two or more variables. The variables used in this research are fundamental factors, namely earning per share as the independent variable, and stock price as the dependent variable. The independent variable is thought to affect the dependent variable, namely stock price, with dividend yield as the intervening variable. This research was conducted at the Indonesia Stock Exchange representative of North Sumatra. To analyze companies, the population for researchers in this study were all LQ45 companies on the Indonesia Stock Exchange (IDX) for the last 5 years in the 2015 - 2019 period, namely 45 companies. In this study, a non-probability sampling method was used with purposive sampling technique with a total sample size of 22 companies that met the criteria. The main method of analysis in this study was carried out by Structural Equation Modeling (SEM) using SmartPLS software, with the aim of knowing the relationship between variables.

RESEARCH RESULTS AND DISCUSSION

Inner Model Evaluation (Structural Model): Significance Test of Direct Effect (Direct Effect)

Furthermore, the direct effect significance test will be carried out. Inner model or inner measurement is also known as structural model. Table 4.4 presents the path coefficient values and the P-values for testing the significance of the direct effect.

<table>
<thead>
<tr>
<th>Table 1: Significance Test of Direct Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Earning Per Share -&gt; Stock Price</td>
</tr>
<tr>
<td>Earning Per Share -&gt; Dividend Yield</td>
</tr>
<tr>
<td>Dividend Yield -&gt; Stock Price</td>
</tr>
</tbody>
</table>
Based on Table 1 regarding the significance test of the direct effect, it is known:
1) The coefficient value of earning per share on stock price is 0.681 (original sample column), which is positive, which means that earning per share has a positive effect on stock prices. It is known that the P-Values value is 0.000 <0.05, it is concluded that earning per share has a positive and significant effect on stock prices.
2) The coefficient value of earning per share on dividend yield is 0.096 (original sample column), which is positive, which means that earning per share has a positive effect on dividend yield. It is known that the P-Values value is 0.371> 0.05, so it is concluded that earning per share has a positive effect on dividend yield, but not significant.
3) The dividend yield path coefficient value on the stock price is -0.185 (original sample column), which is negative, which means that dividend yield has a negative effect on stock prices. It is known that the P-Values value is 0.000 <0.05, it is concluded that dividend yield has a negative and significant effect on stock prices.

<table>
<thead>
<tr>
<th>Table 2: Coefficient of Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>Dividend Yield</td>
</tr>
<tr>
<td>Stock Price</td>
</tr>
</tbody>
</table>

Based on Table 4.5, it is known that the R-Square value of the Dividend Yield (DY) is 0.009, which means that Earning Per Share (EPS) is able to affect the Dividend Yield (DY) of 0.9%. Meanwhile, the R-Square value of the stock price is 0.474, which means that Earning Per Share (EPS) and Dividend Yield (DY) are able to affect the stock price by 47.4%.

**Mediation Testing (Indirect Effect)**

Furthermore, the indirect effect significance test (mediation test) will be carried out, namely testing whether the Dividend Yield (DY) is significant in mediating the relationship between Earning Per Share (EPS) on stock prices.

**Effect of Earning Per Share on Dividend Yield**

The results of hypothesis testing show that the independent variable (Earning Per Share) has a positive effect on the intervening variable (Dividend Yield) but it is not significant. A higher dividend yield means that the company is performing well for investors' assessment, so it will attract investors to buy shares from the company and cause the company's share price to rise. This is not in line with the results of research by Kusuma and Reza (2017) which state that there is a positive and significant relationship between earnings per share and dividend yield.

**Effect of Earning Per Share on Stock Prices**

After processing the data, a correlation coefficient of 0.681 is generated, which is positive, which means that EPS has a positive effect on stock prices and is significant with a P-Values value of 0.000

Based on the results of the mediation test in Table 3, it is known that the indirect effect of Earning Per Share (EPS) on stock prices, through Dividend Yield (DY) is -0.018, with a P-Values value of 0.414> 0.05, which means that the Dividend Yield (DY) is not significant as a mediator of the relationship between Earning Per Share (EPS) on stock prices.

**Table 3: Significance Test of Indirect Effects (Mediation Testing)**

| cc | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|----|---------------------|-----------------|---------------------------|---------------------|----------|
| Earning Per Share -> Dividend Yield -> Stock Price | -0.018 | -0.018 | 0.022 | 0.817 | 0.414 |

Effect of Earning Per Share on Dividend Yield

The results of hypothesis testing show that the independent variable (Earning Per Share) has a positive effect on the intervening variable (Dividend Yield) but it is not significant. A higher dividend yield means that the company is performing well for investors' assessment, so it will attract investors to buy shares from the company and cause the company's share price to rise. This is not in line with the results of research by Kusuma and Reza (2017) which state that there is a positive and significant relationship between earnings per share and dividend yield.
<0.05. This value means that Earning Per Share (EPS) has a high and positive relationship. High earning per share will attract investors to own the company's shares. This is possible because the company's performance is considered good, causing share prices to rise. Conversely, if the earning per share is low, it is possible that the dividends paid are also low, then the stock price will be lower, so that investors are not interested in owning the shares. This is in accordance with the results of research by Indriyani (2019) and Rudianto (2019) which state that Earning Per Share (EPS) has a significant positive effect on stock prices.

Effect of Dividend Yield on Stock Prices
Dividend Yield (DY) has a negative and significant effect on stock prices. A high dividend yield (DY) means that a company pays large dividends to its investors. Thus, investors get higher compensation for their investment when compared to companies that produce low Dividend Yield (DY). Basically, all investors want the highest possible Dividend Yield (DY) yield.

Dividend Yield (DY) is a portion of the total return that investors will get. Usually companies that have high growth prospects will have a low Dividend Yield (DY), because most of the dividends will be reinvested. Then, because companies with high prospects will have a high stock market price, which means that the distribution is high, the Dividend Yield (DY) for this kind of company will tend to be lower (Hanafi, 2004). The results of this study are not in line with research conducted by Prakoso (2016) and Putra et al. (2016) which states that dividend yield has a positive and significant effect on stock prices.

Effect of Earning Per Share on Stock Prices through Dividend Yield
Dividend Yield (DY) is not significant as a mediator of the relationship between Earning Per Share (EPS) and stock prices. Dividend Yield (DY) is used by investors to show how their investment generates cash flow in the form of dividends or an increase in asset value by stock appreciation. This Dividend Yield (DY) shows how much income can be generated by each Rupiah invested in the shares of a company. In general, investors will use this Dividend Yield (DY) ratio first before making an investment decision. Dividend Yield (DY) or investment yield can be considered as ROI (Return of Investment) for the income of investors who are not interested in the capital gain of a stock. This ratio is very important for investors who prioritize long-term investment and consistent returns each year. Companies that have a high dividend yield (DY) will generally increase their share price when dividends are announced. The greater the yield, which means the greater the level of investor returns.

Earnings Per Share (EPS) is a measure of profitability that is often quoted from financial reports. This measure is generally also reported in the income statement in the company's annual report. If a company issues only one type of share, then Earning Per Share (EPS) is calculated by dividing net income by the number of ordinary shares outstanding. If preferred stock and common stock are outstanding, then net income is deducted first from the dividend amount of the preferred stock (Warren et al., 2006).

CONCLUSION
Based on the results of research regarding the analysis of earnings per share on stock prices with dividend yield as an intervening variable in the LQ45 company on the Indonesia Stock Exchange, the following conclusions can be drawn:
1. Earning per share has a positive effect on dividend yield, but not significant.
2. Earning per share has a positive and significant effect on stock prices.
3. Dividend yield has a negative and significant effect on stock prices.
4. Dividend yield is not significant as a mediator for the relationship between earnings per share and stock prices.

REFERENCES
Muhammad Fauzan Mirzaldi et.al. Analysis of Earning Per Share on Stock Prices with Dividend Yield as an Intervening Variable in LQ45 Companies in Indonesia Stock Exchange.

37. www.idx.co.id.