Dividend Policy and Stock Price Volatility: A Study on Indonesian Manufacturing Companies

Rizkia Duwi Putri, Vitradesie Noekent, Siti Ridloah, Achmad Nauval Waliuddin

Department of Management, Faculty of Economics, Universitas Negeri Semarang, Semarang, Indonesia

Abstract

The purpose of this study was to examine and analyze the effect of dividend policy on stock price volatility in manufacturing companies listed on Indonesia Stock Exchange from 2019-2020. This study also examines other factors that are thought to have an effect on dividend policy and stock price volatility, such as: firm size, earning volatility, and leverage. This research method uses a quantitative approach, using secondary data derived from the company's annual financial report. Purposive sampling method uses in this study. The sample used was 62 companies with a total of 124 observations. This study uses multiple regression method. SPSS 16 is an analytical tool used in this study. The empirical findings of this study indicate that dividend policy has a negative effect on stock price volatility. If the dividends paid increases, the possibility of stock price volatility will decrease. The control variable of firm size dan leverage have no effect on stock price volatility. Furthermore, it is also found that there is a positive influence between the control variable of earning volatility and stock price volatility.

INTRODUCTION

There are several financial instruments traded in the capital market and one of the most popular is stocks (Rusiana & Kusumawati, 2019). Shares are evidence of a person's or business entity's investment in a company. One of the stocks that is considered to have a fairly good performance is the stock in the manufacturing industry sector (Winardi et al., 2017). According to the Central Statistics Agency (BPS) in 2019, the manufacturing sector was able to make a large contribution to increasing GDP. This is evidenced by the manufacturing sector is able to increase the value of GDP by 20.38% (Muslimah & Syarief, 2020).

Since the Covid-19 virus began to spread, causing the economy to experience a decline (Khatib & Nour, 2021). In addition, the COV-19 pandemic has also had an impact on the stock market and other industrial sectors, including the manufacturing industry (Ashraf, 2020). Before the COVID-19 pandemic entered Indonesia, the utilization of manufacturing companies could reach 72.69% (Anwar, 2020). After the COVID-19 pandemic began to enter Indonesia, the utilization of manufacturing companies decreased, and in October 2020 it increased again to 55.30% (Anwar, 2020). The existence of these events prompted the Minister of Industry to take steps to transform the manufacturing sector so that the sustainability of the manufacturing sector can continue to run and avoid volatility. The transformation step is carried out, using all existing capabilities (Silviani & Noekent, 2020).

An investor in carrying out investment activities will pay attention to risk factors and return of profits (Setiawan & Wijayanto, 2017). In the context of stock investment, the profit that will be received by the owner of the fund is capital gains and dividends distributed according to the size of...
the share ownership (Cahyaningdyah & Ressany, 2012). In addition to obtaining a return on profits, investors have the right to obtain information about the company’s growth and the company’s dividend policy (Khoiruddin & Faizati, 2014). Information about dividend policy is considered important because it can be used to predict the rate of return on profits (Noekent, 2018) and can indirectly affect stock prices (Clarensia et al., 2010).

Information about stock prices can be used by investors as a basis for making decisions when making investments, because it can describe the value of the company (Theresia & Arilyn, 2015). If the demand for shares increases, the share price will increase. Conversely, if investors trade stocks, the stock price will decrease (Ardiansyah & Isbahnah, 2017). In this case, the fluctuations in stock prices that occur are referred to as volatility (Anastassia & Firnanti, 2014).

According to Hashemijoo et al., (2012) stock price volatility (VHS) serves as the basis for measuring risk. In addition, VHS can be a guide in taking steps to be used when making investments (Dewi & Suaryana, 2016). Fluctuations in stock prices indicate uncertainty, if the VHS is high, the return that will be received is increasingly uncertain (Ardiansyah & Isbahnah, 2017). In addition, if a stock is said to be volatile, the company will have difficulty predicting the company’s share price in the future (Profilet & Bacon, 2013). This can cause companies to experience difficulties in increasing their capital in the capital market (Kartika, 2016). One aspect that can affect stock price volatility (VHS) is dividend policy (KD) (Selpiana & Badjra, 2018). Dividend policy is a policy related to the distribution of profits as dividends or withholding these profits as retained earnings (Hussainey et al., 2011). Retained earnings are the accumulated income earned by a company after deducting dividends (Kepramareni et al., 2021).

Information about dividend policy can attract investors to invest in the company so that the demand for shares will increase (Selpiana & Badjra, 2018). If the dividend paid increases, then the investment risk of the owner of the fund in the event of stock price volatility will decrease (Selpiana & Badjra, 2018).

For a manager, information about KD can be used to find out the risk of shares that will be faced and the benefits that will be received on the portfolio owned by investors (Anwar et al., 2015) the study has examined the effect of cash dividend announcements on stock returns (abnormal returns, if any KD can affect stock price volatility (VHS) because dividends will be a signal for investors (Yudiana & Yadnyana, 2016). In this study, the KD variable was calculated using the dividend yield (DY) indicator. DY is a financial ratio that reflects the amount of return on profit that will be obtained in line with the proportion of shares owned by investors (Khurmi & Raharja, 2013). If the value of dividends paid increases, then there is an indication that in the future the company will generate profits (Andiani & Gayatri, 2018) and the stock price will go up (Erflina & Ardiansari, 2016). The purpose of this study was to elaborate the effect of dividend policy on stock price volatility in manufacturing companies listed on Indonesia Stock Exchange from 2019-2020. The research novelty is discover dividend policy on stock price volatility in manufacturing companies.

Hypothesis Development

Based on the behavior of investors who need information related to the company’s prospects for investment purposes, the use of signal theory is very necessary (Harlina & Khoiruddin, 2018). A signal given by the company to investors is called a signal (Gumanti, 2009). Therefore, the given signal must contain an information (Gumanti, 2009).

According to Hashemijoo et al. (2012) signaling theory can be used to provide information to external parties related to the level of company profitability in the future. Therefore, the signal given needs to indicate that the company has good prospects or vice versa, that is, it has bad prospects (Gumanti, 2009). Information submitted by the company will get different reactions from investors (Dewi & Suaryana, 2016). The background for delivering this information is the information gap between management and stakeholders (Rokhlinasari, 2016).

The gap is a condition where the information held by a manager is more complete than that of investors (Gumanti, 2009). The occurrence of information asymmetry can generate uncertainty in ongoing transaction activities in a market and can indirectly cause market failure (Arkelof, 1970). So in this case giving a positive signal is needed to reduce the information gap (Gumanti, 2009). An information submitted by the company can be sourced from the value of dividends distributed by the company to investors (Bhattacharya, 1997) and can indirectly affect stock price movements (Rock & Miller, 1985). Therefore, and Arilyn (2015) and Prasetyo (2013) states that if a company’s dividend increases, it will be a signal for the owners of capital that in the future the company will have good prospects. On the other hand, if a company’s dividend decreases, it will be a signal for investors that the company will experience difficulties in the future.
Furthermore, stock price volatility occurs due to the entry of new information in the capital market (Dewi & Suaryana, 2016). The occurrence of stock price volatility is considered a risk by investors, this is because the greater the volatility, the greater the possibility of substantial gains or losses (Profilet & Bacon, 2013). If the dividend paid increases, the profitability ratio will strengthen and the possibility of stock price volatility will decrease so that the risk of investors in investing will be reduced. On the other hand, if the dividends paid are less, the profitability ratio will weaken and the possibility of stock price volatility will increase, so that the risk of investors in investing will increase (Selpiana & Badjra, 2018).

H1: KD as measured by the DY indicator has a negative correlation with VHS.

**Independent Variable**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DY</td>
<td>Dividend Yield</td>
</tr>
<tr>
<td>VHS</td>
<td>Stock price volatility</td>
</tr>
<tr>
<td>UP</td>
<td>Size</td>
</tr>
<tr>
<td>VL</td>
<td>Earning volatility</td>
</tr>
<tr>
<td>LEV</td>
<td>Leverage</td>
</tr>
</tbody>
</table>

**Dependent Variable**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DY</td>
<td>Dividend Yield</td>
</tr>
</tbody>
</table>

**Control Variable**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP</td>
<td>Stock price volatility</td>
</tr>
</tbody>
</table>

**Figure 1. Research Model**

Note:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DY</td>
<td>Dividend Yield</td>
</tr>
<tr>
<td>VHS</td>
<td>Stock price volatility</td>
</tr>
<tr>
<td>UP</td>
<td>Size</td>
</tr>
<tr>
<td>VL</td>
<td>Earning volatility</td>
</tr>
<tr>
<td>LEV</td>
<td>Leverage</td>
</tr>
</tbody>
</table>

**METHOD**

This research will utilize quantitative methods. Quantitative research method is an observation conducted using data in the form of numbers (Syahrum & Salim, 2019). The research data that will be used is secondary data in the form of financial reports published annually by the company and the IDX through the website www.idx.co.id. This research was conducted over a period of 2 years, namely 2019-2020. The population in this research are public companies operating in the manufacturing sector, which are listed on the IDX. The total population that will be used in this investigation is 194 companies. The sample is part of the total population (Syahrum & Salim, 2019). The sample used in this observation is the manufacturing sector company in 2019-2020. The following are the criteria for determining the sample using a purposive sampling technique: (1) manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2019-2020 (2) manufacturing companies that had an IPO before 2019 (3) manufacturing industries that regularly publish annual financial reports and have complete research information during 2019-2020 (4) not in delisted status or being suspended (5) distribute dividends regularly in the 2019-2020 period.

This research uses analysis of difference test and multiple regression. This research uses analysis of difference test and multiple regression. The difference test is carried out with the aim of detecting whether or not there is a difference in the average of two samples that are correlated with each other (Santoso, 2014). Hypothesis testing in this study using multiple regression analysis. This test is carried out with the aim of detecting the influence between the independent variables on the dependent variable, it is necessary to perform multiple linear regression tests (Ghozali & Ratmono, 2013).

**RESULT AND DISCUSSION**

**Descriptive Statistical Analysis**

This study uses descriptive statistical analysis to describe each variable individually with the results can be seen in table 1.

<table>
<thead>
<tr>
<th></th>
<th>DY</th>
<th>UP</th>
<th>VL</th>
<th>LEV</th>
<th>VHS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>2.208</td>
<td>23.679</td>
<td>3.678</td>
<td>0.849</td>
<td>14.485</td>
</tr>
<tr>
<td><strong>Std. Dev</strong></td>
<td>1.850</td>
<td>5.799</td>
<td>5.756</td>
<td>0.655</td>
<td>2.621</td>
</tr>
<tr>
<td><strong>Min</strong></td>
<td>0.013</td>
<td>11.780</td>
<td>-4.565</td>
<td>0.070</td>
<td>9.327</td>
</tr>
<tr>
<td><strong>Max</strong></td>
<td>7.910</td>
<td>30.920</td>
<td>13.271</td>
<td>4.020</td>
<td>19.840</td>
</tr>
</tbody>
</table>

| Table 1. Descriptive Statistical Analysis |
Based on table 1, it can be said that the minimum value of the DY (Dividend Yield) variable is owned by PT Unggul Indah Cahaya Tbk in 2019, while the highest DY score is owned by PT Phapros Tbk in 2019. The average value of UP (size) is higher than the deviation value, meaning that the possibility of data deviation is worth low. On the other hand, the mean value of VL (earning volatility) is lower than the standard deviation. This indicates that the data are not well distributed.

### Table 2. T Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>15.493</td>
<td>0.354</td>
<td>43.725</td>
<td>0.000</td>
</tr>
<tr>
<td>DY</td>
<td>-0.461</td>
<td>0.126</td>
<td>-3.673</td>
<td>0.000</td>
</tr>
</tbody>
</table>

### Table 3. T Test with Control Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>15.349</td>
<td>1.586</td>
<td>9.678</td>
<td>0.000</td>
</tr>
<tr>
<td>DY</td>
<td>-0.503</td>
<td>0.117</td>
<td>-4.320</td>
<td>0.000</td>
</tr>
<tr>
<td>UP</td>
<td>-0.012</td>
<td>0.058</td>
<td>-0.210</td>
<td>0.834</td>
</tr>
<tr>
<td>VL</td>
<td>0.173</td>
<td>0.057</td>
<td>3.008</td>
<td>0.003</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.132</td>
<td>0.318</td>
<td>-0.414</td>
<td>0.679</td>
</tr>
</tbody>
</table>

### Hypotheses Test

Based on the results of hypothesis testing without control variables presented in table 2, it can be seen that the value of the DY coefficient is negative. The conclusion that can be drawn is that KD has a negative effect on VHS. Furthermore, based on table 3 it can be concluded that DY has a negative effect on VHS. Furthermore, the control variables UP and LEV had no effect on VHS. Meanwhile, the control variable VL has a positive effect on VHS.

### The Effect of Dividend Policy (DY) on Stock Price Volatility (VHS)

The results of hypothesis testing indicate that DY and VHS influence each other negatively or inversely. That is, if the amount of dividends distributed is high, investor confidence will increase and the tendency to face risk will be low. Conversely, if the dividend distributed is low, the level of investor confidence will decrease and the tendency to face risk will be high so that it can cause stock price volatility. The results of this observation are in accordance with the theory which states that KD (DY) has a negative effect on VHS.

As happened to PT Indo Kordsa Tbk in 2019 the company's shares decreased due to the decline in automotive demand and the company's DY of 1,852 this value was lower than the previous year which was 2,103. Furthermore, in 2020 the performance of PT Indo Kordsa Tbk continued to decline. Based on the company's annual financial report, the company's DY value of 1,692 is lower than the previous year. In addition, the company's share price also decreased to Rp 5,200 per share. This value is lower than the previous year which was Rp 10,800. In this case, it can be said that if DY declines, then investor confidence will also decrease so that the possibility of VHS will increase and vice versa.

The results of this study are in accordance with the findings of Khurniaji and Raharja (2013), Shah and Noreen (2016) and Zainudin et al. (2018). The results of this study are different from the findings of Anastassia and Firnanti (2014) which states that if the dividend paid increases, the probability of VHS occurring increases.

### The Effect of Company Size (UP) on Stock Price Volatility (VHS)

Based on the results of the t-test presented in table 7, it can be said that the significance value of company size is > 5%. This means that the size of a company does not affect the volatility of stock prices, even though the company is large. These findings are supported by Khurniaji and Raharja (2013), Ardiansyah and Isbanah (2017), and Yulinda et al. (2020). There is no influence between UP and VHS because most investors have a tendency to only focus on the dividend value (Ardiansyah & Isbanah, 2017). The results of this study differ from the theory which states that UP has a positive effect on VHS.
The Effect of Earnings Volatility (VL) on Stock Price Volatility (VHS)

The results of the hypothesis test shown in table 7 show that the significance value of earnings volatility is < 0.05. This value means that earnings volatility and stock price volatility are related to each other. The VL coefficient is positive.

The resulting positive value means that if the profits are inconsistent, then investor confidence in the company will decrease, resulting in stock prices moving and causing stock price volatility. The results of this study are supported by Shah and Noreen (2016). Different findings were produced by Asghar et al. (2011) and Ilaboja and Aggreh (2013).

The Effect of Leverage (LEV) on Stock Price Volatility (VHS)

Based on table 7 it can be said that the significance value of leverage is greater than 5%. That is, LEV and VHS do not affect each other. This is because, in estimating stock prices, investors tend to use information related to the company’s ability to generate profits and not only look at the company’s DER value (Dewi & Sueryana, 2016). In addition, companies that have a higher debt value cannot be concluded that the company has a poor performance.

The results of this study are supported by Ardi ansyah and Isbanah (2017) which states that LEV has no effect on stock price volatility. Furthermore, different findings were found by Qudah and Yusuf (2015) which states that if the LEV of a company is high, the company’s share price will decrease. The results of the opposite study were found by Jannah and Hardidhi (2016) earnings volatility, and leverage on share price volatility of non-financing companies listed in Indonesia Stock Exchange in 2010-2014. Dividend policy variable using dividend payout ratio and leverage variable using debt to equity ratio. Secondary data were sourced from the financial statements, published by the capital market reference center at the Indonesia Stock Exchange. The research type used in this research is hypothesis testing, by using simple random sampling method. There are 195 samples of the data that become the object to be researched. This research uses multiple linear regression analysis to test the hypothesis. The results of this research show that simultaneous of dividend payout ratio, earnings volatility, and leverage have effect on share price volatility.

CONCLUSION AND RECOMMENDATION

After analyzing the data and obtaining the results of observations in the previous chapter, related to the effect of dividend policy on stock price volatility using the control variables of firm size, earnings volatility, and leverage in manufacturing companies listed on the IDX. The conclusions from the results of this study are as follows:

Dividend policy has a negative effect on stock price volatility. That is, if the amount of dividends paid increases, the volatility of stock prices will decrease. Conversely, if the dividend decreases, the possibility of stock price volatility will increase. Firm size control variable has no effect on stock price volatility. This means that large or small company size has no effect on VHS, even though a company is categorized as a large company but the volatility of stock prices will be fixed. Earnings volatility has a positive effect on stock price volatility. This means that when the profit generated by the company is constant (consistent), the investor’s confidence in the company will increase, causing the company’s share price to remain stable and reducing the possibility of VHS. Leverage has no effect on VHS. This means that the large or small amount of debt used by the company to finance its operational activities will not affect the volatility of stock prices. This is because if the company is able to generate a higher rate of return on debt than the interest paid, the company will generate profits.

Based on the findings of research that has been carried out using the KD variable, the control variable UP, VL, and LEV, the researcher provides suggestions for further researchers, who will examine stock price volatility to add other variables that have the possibility of influencing VHS in addition to the variables that have been used in this study.

REFERENCES


Siti Ridloah et al. / Management Analysis Journal 11(1) (2022)

bank Syari‘ah, 7(1), 1–11.