The Effect of Dividend Policy, Profitability, and Leverage on Share Price Volatility of Service Sector Enterprise Indexed on the Indonesia Stock Exchange During 2015–2019

Shieryn Fiorenza, Liliana Inggrit Wijaya(✉), and Bertha Silvia Sutejo

University of Surabaya, Surabaya, Indonesia
liliana@staff.ubaya.ac.id

Abstract. This research analyzes the effect of dividend payout ratio, dividend yield, earnings volatility, and debt-to-equity ratio on share price volatility in service sector enterprise indexed on the Indonesia Stock Exchange during the 2015–2019 period. This study used a quantitative approach with multiple linear regression. The findings of this study indicate that observations on the Indonesia Stock Exchange show that the dividend payout ratio has a compelling positive effect on share price volatility. This is because the higher the dividend yield, or the more enterprise pay dividends each year, the more volatile the stock price will be because the demand for the company's shares increases [1]. However, the dividend yield has no compelling adverse effect on share price volatility because investors prefer capital gains over dividends. After all, the tax imposed on dividends is higher. Then earnings volatility has a compelling positive effect. This is because, traditionally, profit has been used as an indicator to measure a company's financial performance [2]. Enterprise with consistent earnings are less likely to surprise investors with unexpected earnings announcements. The debt-to-equity ratio has a marginally favorable impact on stock price volatility. This is because, according to the trade-off hypothesis, the company's decision to employ debt can be viewed as a way to avoid tax on loan interest payments and financial distress expenses produced by the growth of company debt.

Keywords: Share price volatility · Dividend payout ratio · Dividend yield · Return on equity · Debt-to-equity ratio

1 Introduction

Potential investors often invest because there are certain goals, such as to gain profits, security, and growth of invested funds [3]. However, to get a profit is not as easy as one might think. Not a few investors experience compelling losses at the beginning of their investment because they choose the wrong investment time. One way that can be used to analyze potential profit and loss is to look at stock price volatility statistics.

The higher the share price volatility, the higher the risk investors face in investing their funds. [4] However, some investors prefer stocks with a high level of volatility

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because the opportunities for getting capital gains are greater even though the risk is also greater. Share price volatility is defined as the risk of uncertainty that investors will face in the future [5]. Stock prices will experience movements due to market supply and demand, but several other influences can cause fluctuations, such as the company's policy in distributing dividends. The swift movement of share price volatility indicates that the stock has the most active trading frequency in the market.

Investments in the form of stocks actually have a high risk following the investment principle: low-risk low-return and high-risk high-return. An investor should understand stock prices and often conduct stock price analysis first to avoid making wrong investments because the stock price movement cannot be predicted. Fundamental analysis is used to assist investors in seeing whether the selected company shares are the right shares. The analysis could be the company's financial performance seen in the financial statements and becomes one of the considerations before potential investors enter the capital market. This ratio will perform a fundamental analysis of the company by comparing a financial statement account with other accounts that have a relevant and compelling relationship [6]. The company's share value is reflected through the financial performance. A better company's performance will bring a good sign to the market so that the stock price will tend to be more stable and attract the interest of potential investors.

According to Hartono [7], dividend policy will affect share price volatility. In accordance with the bird in hand theory put forward by Myron Gordon [8] and John Lintner [9], which states that investors like high dividend payments from the company because dividends have a smaller risk than future capital gains, so investors are willing to buy company shares that pay high dividends. Furthermore, there is a risk regarding the uncertainty of the company's cash flows, so this theory argues that the risk is also the company's cash flows uncertainty in the future. This theory also argues that cash in hand in the form of dividends is more valuable than wealth in other forms, with the term "investors view one bird in hand is more valuable than a thousand birds in the air". Therefore, this study mainly focuses on examining the effect of dividend policy on stock price movements.

The difference between dividend payout ratio and dividend yield is the difference in point of view between investors and enterprise. For enterprise, the dividend payout ratio is more important because it shows the results of the company's performance internally. However, the dividend yield is much more attractive for investors because it is directly related to the price of the shares owned. This is in accordance with the bird in hand theory and signaling theory. Due to the volatile nature of the market, Indonesian investors prefer enterprise that can provide more dividends than retain retained earnings for reinvestment. In addition to dividend policy, other ratios such as earnings volatility (EV) and debt-to-equity ratio (DER) are often used to predict stock prices. EV shows the stability of a company's stock price which can show the effectiveness of the management to earn profits from the funds that investors have invested. A higher EV indicates that a company is increasingly inefficient, gives a wrong signal to investors, and causes the company's stock price to become more volatile because the risks faced by the company increase. On the other hand, the lower the EV, the better the company's performance and the stability of the company's stock price [10]. Meanwhile, some investors see that they should pay attention to the DER to observe a company's debt and the interest that the

company needs to pay from the debt. Although debt is used to support the company's business activities, investors are bothered with debt, considering that debt has an interest that the company needs to pay regularly. If the debt and interest are too large, it can erode the company's profits [11].

2 Research Methods

This work is considered fundamental research because it aims to expand on earlier studies. This study is causal research, as it investigates the effects of the independent variables: dividend payout ratio, dividend yield, earnings volatility, and debt-to-equity ratio; the control variables: enterprise size and company growth on the dependent variables: share price volatility of services enterprise indexed on the Indonesia Stock Exchange from 2015 to 2019. Over the 2015–2019 period, this study examined secondary data in the form of financial reports from all service enterprise registered on the Indonesian stock exchanges. The following equation was used in this study:

$$\begin{aligned} SPV = & \propto + \beta 1.DPR_{i,t} + \beta 2.DY_{i,t} + \beta 3.EV_{i,t} \\ & + \beta 4.DER_{i,t} + \beta 5.Firm's\ Size_{i,t} + Company's\ Growth_{i,t} + e \end{aligned} \tag{1}$$

where:

$SPV_{i,t}$: *Share price volatility* enterprise i period t
$DPR_{i,t}$: *Dividend payout ratio* enterprise i period t
$DY_{i,t}$: *Dividend yield* enterprise i period t
β: Coefficient
e : Error

3 Results and Discussion

This research looked at a group of service enterprises that were indexed on the Indonesian stock exchanges between 2015 and 2019. For the Indonesian sample, the final sample consisted of 220 observational data. Table 1 shows the regression findings.

The dividend payout ratio (DPR) has a coefficient of 0.130292 and a signification level of 0.0004 based on the data in Table 1. This indicates that during the period 2015–2019, the dividend payout ratio variable has a indicative positive link with the share price volatility of service sector businesses indexed on the Indonesia Stock Exchange. These results contradict the research conducted by Zainudin et al. [12] and Surahmat et al. [13], who reveal a indicative negative relationship between dividend payout ratio and share price volatility. However, these results are consistent with Anggeris [14] and Priana & Muliartha [15].

According to Anggeris [14], a higher DPR will increase stock prices, but on the contrary, a decline in shares will decrease the share price. This is because investors prefer regular dividend distributions over uncertain capital gains in the future. This is also supported by the bird in hand theory which says that investors prefer earnings to be distributed in the form of dividends rather than retained earnings. Shareholders like high dividend payments from enterprise because dividends have a smaller risk than

Table 1. Sample of services enterprise

Variable	Coefficient	Prob.
C	23.93310	0.0000
DPR	0.130292	0.0004***
DY	−1.016310	0.1413
ROE	2.458293	0.0004***
DER	0.022457	0.5024
Enterprise's Size	−0.798147	0.0000***
EV	0.336832	0.0000***

future capital gains, so investors are willing to buy shares of enterprise that provide high dividends. In addition, Indonesian investors are generally risk-averse, so they tend to choose low-risk market instruments [16].

Based on the data in Table 1, it can be seen that the dividend yield (DY) has a coefficient of −1.016310 and a signification level of 0.1413. This shows that the dividend yield variable has an incompelling negative relationship with the share price volatility of service sector enterprise indexed on the Indonesia Stock Exchange during the 2015–2019 period. These results are in line with Aten & Nurdiniah [17], which postulate that dividend yields have no compelling negative effect on share price volatility.

Aten & Nurdiniah [17] conclude that dividend yield has no effect on share price volatility. This is because investors tend to pay more attention to how much return is received in capital gains than dividend payments. This is also supported by the tax preference theory, which says that some investors prefer capital gains over dividends because the tax imposed is smaller.

The DPR's inverse relationship with share price volatility and DY's relationship with share price volatility are caused by short-term and long-term investors' different perspectives and needs. Long-term investors, who are generally company owners, prefer to get large dividends in return and are not too concerned about stock prices. Therefore, long-term investors primarily focus on the company's dividend payments because dividend payments indicate the percentage of available income paid out as dividends [18]. On the other hand, short-term investors prefer to get capital gains that depend on the company's stock price.

Earnings Volatility (EV) has a coefficient of 2.458293 and a signification level of 0.0004 based on the data in Table 1. This indicates that during the period 2015–2019, the earning volatility variable has a compelling positive relationship with the share price volatility of service sector enterprise indexed on the Indonesia Stock Exchange. These findings are consistent with those of Zainudin et al. [12], who state a compelling positive relationship between earning volatility and share price volatility. However, these results are contrary to Surahmat et al. [13].

According to Zainudin et al. [12], earnings volatility has a positive and compelling effect on share price volatility. This is because traditionally, profit has been used as an indicator to measure the company's financial performance [2]. Enterprise with consistent

earnings are less likely to surprise investors with unexpected earnings announcements. The consistency of stock prices should make these equities' returns considerably more predictable. Higher earnings volatility will make investors panic, and they may seek to abandon their exposure to risky assets, including stocks. Based on the data in Table 1, it can be seen that DER has a coefficient of 0.022457 and a signification level of 0.5024. This shows that the debt-to-equity ratio variable has an incompelling positive relationship with the share price volatility of service sector enterprise indexed on the Indonesia Stock Exchange during the 2015–2019 period. These results are in line with Dewi and Suaryana [19] and Handayani et al. [20] who conclude an incompelling positive relationship between debt-to-equity ratio and share price volatility. However, these results are contrary to Priana & Muliartha [15] study, which shows that the debt-to-equity ratio has a compelling negative effect on share price volatility.

According to Dewi and Suaryana [19], the debt-to-equity ratio has no effect on share price volatility. This is because investors do not use DER to measure market performance to predict stock prices in the capital market. Investors do not always see the company's dependence on debt that must be considered in making investment decisions, but investors pay more attention to how big the company can generate income; thereby DER cannot provide information to investors whether the company's performance is good or bad.

Enterprise with much debt are not necessarily bad company performance. If the rate of return from additional debt is higher than the interest rate, then the additional debt has a beneficial financial effect [21]. This is also supported by the trade-off theory, which says that debt can benefit the company in the form of tax savings. Based on the data in Table 1, it can be seen that enterprise size (ENTERPRISE_SIZE) has a coefficient of − 0.798147 and a signification level of 0.0000. This shows that the enterprise size variable has a compelling negative relationship with the share price volatility of service sector enterprise indexed on the Indonesia Stock Exchange during the 2015–2019 period. These results are in line with research by Alan [22], Zainudin et al. [12] and Surahmat et al. [13] who show a compelling negative relationship between enterprise's size and share price volatility. However, contrary to research conducted by Handayni et al. [28].

According to Alan [22], enterprise size has a compelling negative relationship with share price volatility. As the company's size increases, the increase in the company's share price can stop because the share price of large enterprise tends to be high so that fewer investors make purchases, which then impacts the stability of the company's share price Atiase [23], Baskin [24] in Hashemijoo et al. [25] says that the stock prices of large enterprise are relatively more stable than small enterprise because large enterprise are generally more diversified. Large enterprise have widely distributed public information and tend to be more open, while small enterprise have limited public information, which can lead to investors' irrational reactions.

Based on the data in Table 1, it can be seen that the company's growth (GRO) has a coefficient of 0.336832 and a signification level of 0.0000. This shows that the company's growth variable has a compelling positive relationship with share price volatility of service sector enterprise indexed on the Indonesia Stock Exchange during the 2015–2019 period. These results are in line with Murhadi [26], who stipulates a compelling positive relationship between growth and share price volatility. However, contrary to research

conducted by Surahmat et al. [13]. According to Murhadi [26], there is a considerable positive association between growth and share price volatility. This is due to the fact that, when compared to established organizations, enterprise in the growth stage have higher stock prices. In theory, enterprise in the mature stage will reach the decline stage if no rejuvenation or rejuvenation is carried out. This will have an impact on future investor expectations. Enterprise at the high-growth stage will encounter a lot of market potential, but also a lot of competition. If the company can continue to exist in the future, it will mature, which will alter investors' expectations for the company's future. As a result, enterprise in the growth stage are likely to be riskier than those in the mature stage. These results are also in line with Lashgari and Ahmadi [27].

The coefficient of determination used in this study is adjusted-R2. In this research data, the adjusted-R2 value is 0.811959. This coefficient means that changes in the share price volatility variable can be explained quite well by the dividend payout ratio, dividend yield, earnings volatility, debt-to-equity ratio, enterprise size, and company's growth of 81.19%, while the remaining 18.81% explained by other variables not included in this study.

4 Conclusion

For enterprise in the service sector indexed on the Indonesia Stock Exchange, this research can be considered when making dividend payment policies. For service sector enterprise, dividend payout ratio and earnings volatility can increase investor confidence in viewing the company's good performance to reduce the risk of stock prices and make stock prices more stable.

This research can be used as reference material and consideration for investors by looking at the dividend payout ratio and earning volatility factors affecting share price volatility. Due to the volatile nature of the market, Indonesian investors prefer enterprise that can provide more dividends than retain retained earnings for reinvestment. Investors in Indonesia who expect higher income in the form of dividends can regularly invest in service sector enterprise that distribute dividend payout ratios.

This study can be utilized as a starting point for further research. The following limitations apply to this study: (1) the research period; (2) the research object, which is limited to service sector enterprise indexed on the Indonesia Stock Exchange; (3) other variables can be investigated for their impact on share price volatility; and (4) the results are not compelling. As a result, more research is expected to lengthen the research period, expand the research objects, and expand the research variables in order to improve the accuracy of the research findings.

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