



Dividend Policy as a Moderating of the Effect of Dividend Announcement on Stock Price in Indonesian Firms

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ABSTRACT

This goal of this study is to investigate how dividend announcements affect the stock price of the company on the cum and ex-dividend dates. This study also explores the possibility of dividend policy reduce the effect of dividend announcements on stock prices on the cum and ex-dividend dates. The researcher used the unit analysis of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period of 2013-2018. The 2019-2021 period is not observed due to the present of COVID pandemic. The findings are that the dividend announcements at cum and ex-dividend dates have positive impact on stock prices. Dividend policy weakens the impact of dividend announcements on stock prices at cum and ex-dividend dates. The dividend announcement at cum and ex-dividend dates varies across companies. This study does not use the event study method. This study has a significant implication, not only for business officials and policy makers but also for investors who directly decide how to plan their portfolio in the future as consideration in making investment decisions. There is no research in Indonesia that moderates dividend policy for the effect of dividend announcements on the cum and ex-dividend dates on stock prices, so a descriptive study is required to fill this gap.

Keywords: Dividend Announcements, Dividend Policy, Dividend Payout Ratio, Stock Price

JEL Classifications: G10, G14, G32, G35

1. INTRODUCTION

Indonesia is a developing nation that both domestic and foreign businessmen are looking to invest in securities in order to increase their wealth. Through domestic investor funding activities, this contributes to improved company performance. In order to increase funding for sustainable development, such as business development, additional working capital, and business expansion, a capital market must exist. The existence of a capital market for business is also encouraging management to manage companies, creating a vehicle for investing in the short and long terms.

Currently, one of the most well-liked industries in Indonesia is manufacturing. This is consistent with Indonesia's situation, which is moving from an agrarian to a semi-industrial economy. With a positive growth rate, the manufacturing sector serves as one of

the pillars of the nation's economy in the face of global economic uncertainty. Even though the realization of the value of domestic investment absorbed in the industrial sector has consistently decreased over the 3 years from 2017 to 2019, the industrial sector is still the top sector targeted by domestic investors. The amount of investment that the industrial sector absorbed in 2017 fell by 25.45% in 2018, and another drop of 18.80% occurred in 2019 (BPS, 2020).

The decision to distribute dividends is a problem often faced by companies. In order to boost the company's growth, management struggles to decide whether to pay out dividends or keep profits to invest in successful projects. Decisions about dividend distribution must take the company's future growth and survival into account. Dividends play a significant part in the investment element that adds value to the business itself. The cum-date dividend

and the ex-date dividend are two crucial dates for companies when distributing dividends (Lestari et al., 2018), (Octaviani et al., 2019). The cum-dividend date is the last day for investors to purchase certain shares and still be eligible to receive the company's declared cash or stock dividends. Meanwhile, the ex-date dividend is the 1st day when shareholders are no longer entitled to receive dividends from a company.

The impact of dividends on value or price is crucial because it can have a significant impact on capital market regulation and supervision (Gunalp et al., 2011). Information is a desirable market component, and to ensure that it is accessible to all parties simultaneously, most capital markets and legal systems impose stringent disclosure requirements and sanctions. Trading with insider information is prohibited on almost all capital markets, despite the fact that when it is made public, the share price is greatly impacted. The impact of dividends is a crucial topic from the perspective of capital market regulation because if it affects company prices, it is considered insider information and must be disclosed to the public.

The relationship between dividends and stock prices has been the subject of extensive research for more than 50 years, and numerous theories have been put forth (Mehndiratta and Gupta, 2010); (Dhungal, 2013); (Kadioglu et al., 2015); (Hannon et al., 2016); (Harbi and Bujang, 2016); (Rosario and Chavali, 2016); (Ngoc and Cuong, 2016); (Mrzygłód and Nowak, 2017). Decisions regarding dividend payments are crucial to the success of the business (Salah and Jarboui, 2022). There is no agreement on the factors that determine payment policy, and recent research on dividend payments has produced inconsistent results (Amar et al., 2018); (Dewasiri et al., 2019); (Barros et al., 2020).

The objective of this study was to examine the impact of dividend announcements on the company's stock price on the cum-dividend and ex-dividend dates. This study also investigates whether dividend policy, as measured by the dividend payout ratio, can strengthen or weaken the impact of dividend announcements on stock prices on the cum-dividend and ex-dividend dates. During the 2013-2018 research period, the subjects of this study were manufacturing companies from all sectors that were listed on the IDX. Due to the 2019 COVID pandemic, the years 2019, 2020, and 2021 were not observed. Manufacturing firms were chosen as the unit of analysis because they are the most numerous on the IDX and also grow in a sustainable manner.

There is no research in Indonesia that moderates dividend policy by using the dividend payout ratio as a proxy for the effect of dividend announcements at cum-dividend date and ex-dividend date on stock prices, so a descriptive study is required to fill this gap. This study's significance differs from that of other studies conducted in Indonesia. Previous research has primarily focused on the role of dividend policy as a moderator of the effect of company financial ratios on stock abnormal returns. While this study employs dividend policy as a moderator in terms of the impact of dividend announcements at cum-dividend and ex-dividend dates on stock prices.

The findings of the study contribute to academics' interest in capital market performance evaluation, specifically understanding dividend announcements, dividend policies, and stock prices. The impact of dividend policy on stock prices is a significant contribution today, not only for business officials who determine optimal dividend policies to improve company performance and policymakers who assess how well the capital market is functioning, but also for investors who directly decide how to plan portfolios in the future as a material consideration in making investment decisions.

2. THEORETICAL BACKGROUND

2.1. Theoretical Background

The information content of dividends was proposed by (Lintner, 1956) and (Miller and Modigliani, 1961), which was later formalized by (Bhattacharya, 1979) and (Miller and Rock, 1985) as signaling theory. The first empirical study of dividend policy by conducting a survey of company managers with an observation period of 1947-1953 from 28 US public companies was conducted by (Lintner, 1956). The results of the study that dividend smoothing is a common thing. The dividend policy of the sample firms is stable. As a result, the corporation does not declare a new dividend each quarter. Companies instead consider changing the most recent dividend per share first, with earnings being the most important determinant of any dividend changes. The current dividend rate serves as a guideline for management. Company management is typically hesitant to reduce the standard dividend rate. Managers typically have fairly specific target payout ratios. The dividend is gradually increased at a fixed rate over time, bringing the actual payout ratio closer to the target payout ratio.

Miller and Modigliani (1961) introduced the idea of dividend irrelevance by arguing that dividend policy has no impact on firm value. Whether a company pays dividends or not has no bearing on how much future earnings are capitalized when determining a firm's value. This theory is predicated on the notion that there are no taxes, transaction costs, asymmetric information, or flotation fees, and that capital markets are perfect. Investors create their own dividends by selling or borrowing from their portfolio, so dividends are irrelevant. Companies that distribute dividends are also required to create new securities in order to maintain the best investment practices.

Dividend recipients are subject to taxation, whereas corporations can pay less tax by keeping and reinvested company profits. The current share price or the total return to shareholders are unaffected by an adjustment to the investment strategy that is followed by an adjustment to the dividend payout strategy. As a result, the share distribution and total return for any interval in between dividends and capital gains have changed. Firms that distribute dividends are also responsible for creating new securities to uphold ideal investment guidelines. Dividend recipients are subject to taxation, whereas corporations can pay less tax by keeping and reinvested company profits. The current share price or the total return to shareholders are unaffected by an adjustment to the investment strategy that is followed by an adjustment to the dividend payout

strategy. As a result, the share distribution and total return for any interval in between dividends and capital gains have changed.

Additionally, Miller and Modigliani (1961) stressed that such changes cannot affect market valuations if investors act rationally. Due to investors' perceptions of the informational value of dividends, changes in dividend rates frequently result in changes in stock market prices when there is uncertainty. Changes in share prices can reflect future earnings and growth opportunities; however, changes in share prices are not always the result of dividend rate changes. Investors are likely to interpret a change in the dividend rate as a change in management's assessment of the company's future profit prospects when a company adopts a dividend stabilization policy with a predetermined and generally accepted target payout ratio. Investors may, however, mistakenly attribute this interpretation to dividend changes in some circumstances, as management may simply alter the payout target or even attempt to manipulate prices.

Although Miller and Modigliani (1961) argued that under ideal market conditions, dividends have no impact on a firm's value or capital structure, dividends do provide information about a firm's potential future earnings and cash flows. Information asymmetry between managers and shareholders results from the fact that business managers have access to confidential information about the company's future prospects. Dividends are therefore used to lessen the amount of asymmetric information. Dividend announcements are one way of releasing private information to shareholders via the market because managers have more personal information about a company's future earnings and cash flows. By announcing an increase in the current dividend, managers reveal the rise in the company's future cash flows. In other words, changes in dividends convey significant and valuable information about long-term changes in a company's earnings, and the share price will reflect that information after it is announced.

According to Bhattacharyya (1979), dividends are a very good signal to market investors in the context of asymmetric information. Dividend signals have an impact on manager remuneration by imposing penalties in the form of indirect punishments. This penalty is reflected in the value loss that a company may suffer as a result of a dividend signal. Shareholders elect managers to represent their interests in the company. Managers' decisions are motivated by maximizing current shareholder wealth in these circumstances, and dividend announcements allow investors to determine the firm's value.

Bhattacharyya (1979) also claims that cash dividends are taxed at a higher rate than capital gains and that outside investors have limited knowledge of a company's profitability. It is clear that in these circumstances, the dividend acts as a sign of anticipated cash flows. The excess cash flows are reinvested in investment initiatives rather than being distributed to shareholders. Assuming that the assets owned by the company will last longer than the shareholders' investments. Sustainable projects are transferred to the following generation of investors by investors with limited time left. As a result, comparative static results are obtained that link the amount of dividend payments' balance to the investor's planning

horizon. The manager personally understands the project's ability to support cash flow distribution, and he or she informs the market of this understanding via dividend options. A higher dividend payout is given a higher support value in a signaling equilibrium. In other words, the dividend increases as the news gets better.

With unclear information content and communication of information through the company's announcement of dividends, it still raises questions. According to Miller and Rock (1985), stock prices reflect firm earnings and earnings opportunities, so dividend announcements appear to convey information about future earnings prospects. If dividend declarations do convey information about potential future earnings, then company managers are indirectly attempting to communicate about future prospects, because dividend announcements only serve to provide missing information. Additionally, Miller and Rock (1985) noted that while dividends contain significant information, they don't appear to have much predictive power for future earnings or the data in current and past earnings. The market shapes current expected earnings based on historical perceptions of dividend policy and corporate policies.

Dividends indicate both good and bad news. The good news is that dividend announcements (or financing) provide an abundance of resources, while corporate earnings are currently unobserved. Current earnings estimates in the market contribute to estimates of expected future earnings. The bad news is that dividend announcements cause information asymmetry and the firm to lose optimal investment, i.e. investing in real assets until the marginal internal return equals the risk-adjusted or risk-adjusted return on the security. While the market looks at declared dividends (or financing) as a proxy for unobserved earnings, there is an incentive to raise prices by paying more dividends (or engaging in less outside financing) than the market anticipates, even if it means reducing investment.

According to (Taleb, 2019), the dividend signaling model, which has the advantage of providing a new framework for studying the dividend problem, must be founded on clear intuition. Companies that increase dividends are overvalued by the market, and vice versa, companies that decrease dividends are undervalued by the market. As a result, the majority of dividend signaling models indicate the firm's quality, particularly its current and future profitability. Dividends are a good way to communicate good information about a company's quality, particularly its current and future profitability. Taleb (2019) draws the following conclusions from several studies that tested the hypothesis about the information content of dividends: (a) Empirical evidence does not allow fully validating the theoretical model of dividend signaling; (b) When a dividend change is declared, the share price usually changes in a similar manner. Thus, any increase (decrease) in dividends causes a positive (negative) abnormal return, and the market perceives this variation as good (bad) news; (c) The significance of the stock price reaction depends on the importance (size) of the observed dividend change; and (d) The market reaction when announcing dividend changes is asymmetrical whether there is an increase or decrease. Dividend reduction announcements have a greater impact than dividend increase announcements.

The free cash flow hypothesis employs agency theory to explain the dividend problem proposed by (Easterbrook, 1984) and (Jensen, 1986). Easterbrook (1984) questions whether dividends are a method of aligning managers' and investors' interests. Company insiders, in this case managers, are always confident that if the company pays more dividends, the stock price will rise in the market. Dividend payments, on the other hand, are associated with changes in investment policies implemented or planned by the company. This indicates that there are good prospects for the future, so dividends can be paid automatically as a signal or self-verification for investors. Only when insiders deliver trusted and accurate messages do investors rationally trust signals.

Dividends do not reveal a company's prospects directly, so the message may be ambiguous. Dividends are therefore not a good way to inform investors. Dividends can be an inaccurate predictor of future net income, and stock price can be an inaccurate predictor of future dividends. Nonetheless, an increase in dividends can be attributed to an increase in corporate profits, implying a high share price, or to the company initiating disinvestment because it has profitable opportunities, implying a lower share price. In addition, prosperous businesses always pay dividends from year to year but businesses that have enjoyed sustained prosperity do not require the available dividend signal verification. Rich companies are able to withhold dividends because internal financing is more cost-effective than issuing dividends and issuing new securities. Dividends do not distinguish between successfully managed and successful businesses and unsuccessfully managed businesses.

According to Jensen (1986), managers in businesses with significant cash flows will often choose to fund endeavors with low returns. Due to their desire for free cash flow within the business, management is reluctant to pay out dividends. The ability to invest in projects with a negative net present value and use the money for personal gain is made possible by management when there is more free cash flow. The use of dividends as a tool to reduce free cash flow under management's control and thereby lower agency costs makes them crucial. Instead of having shareholders directly participate in management decisions, dividends are used as a monitoring and disciplinary mechanism for management. As a result, an increase in dividends indicates that agency costs will go down and that future investment projects with negative net present values will be less likely. The free cash flow under management will eventually decline if the manager declares an increase in the dividend.

As a result, the declaration of a dividend increase implies that the company will perform better going forward. The behavior of management will therefore be more in line with the interests of shareholders, and managers are more likely to invest in projects that have a positive net present value. As a result, dividends have information content. Because each shareholder has a representative in management, shareholder preferences have an impact on the amount and frequency of dividend payments. However, due to the diversity of stakeholders, managers, debt holders, and suppliers are just a few of the claim holders who must bear the consequences of dividend payment decisions. Both shareholders and management have an agency relationship with debt holders. While debt holders

prefer to limit dividend payments to maximize the amount of funds the company has available to repay their loans, shareholders' interests in higher dividend payments and being the only recipients of dividends remain constant.

The free cash flow hypothesis contends that firms with large free cash flows and poor investment opportunities face greater primary agent conflict between shareholders and managers (Flint et al., 2010). This is because, with an excess of cash, the manager has an incentive to use the funds for additional consumption in order to increase managerial compensation. This can result in significant agency costs because the manager's decision to invest excess funds below the company's cost of capital or organizational inefficiency will result in a decrease in the company's value.

Some of the empirical implications of the signaling model and the free cash flow hypothesis are explained by (Bhattacharya, 2007). The higher the dividend, according to signal theory, the higher the firm value. As a result, a dividend increase should result in a positive abnormal return on dividend announcements. Furthermore, firm value is a function of dividend growth, all else being equal. Higher dividends, on the other hand, are contingent on cash availability and result in lower abnormal returns and firm value (*ceteris paribus*).

2.2. Hypotheses Development

2.2.1. *The impact dividend announcement of cum dividend date and ex-dividend date on stock prices*

Research by (Gordon, 1962); (Foster and Vickrey, 1978); (Chavali and Nusratunnisa, 2013); (Mrzygłód and Nowak, 2017) found that there is evidence of positive abnormal returns around the dividend announcement date, especially on the announcement date and 3 days after the announcement. The stock price then quickly adjusts to the information signaling a semi strong form of market efficiency. The research was conducted using the event study method with different time windows.

Stock prices react positively to an increase in dividend announcements at cum dividend date, and react negatively to a decrease in dividend announcements at ex-dividend date (Gunalp et al., 2011); (Kadioglu et al., 2015); (Poputra and Kalangi, 2016); (Ngoc and Cuong, 2016). Investors who want to benefit from capital gains choose not to buy shares, causing the stock price to fall in proportion to the lost return. When certain corporations declare cash dividends, shareholders begin selling ownership in order to avoid future tax increases, and the market price falls as a result. Other findings indicate that there was no statistically significant information leak prior to the announcement date, and it appears that market inefficiency decreases over time as prices adjust more quickly to new information.

According to signaling theory, when dividends rise, stock prices rise, and vice versa when dividends fall, stock prices fall. Dividend distribution is viewed by investors as a sign of the company's future prospects. When a company declares a dividend, it causes a capital market reaction. The market may view the announcement of a dividend increase as a positive signal because it raises investors' expectations of a company's future earnings. Investors

believe that the company's income will decline in the future, so dividend announcements that state that dividend distributions will be reduced are interpreted negatively. When the stock prices respond positively, information on dividend announcements at cum-dividend date increases. Investors prefer dividends to capital gains, so they will automatically buy these shares, causing share prices to rise due to high demand.

Based on previous research findings and the explanation provided above, this study proposes the following hypothesis:

Hypothesis 1: Dividend announcement at cum-dividend date has a positive effect on stock prices.

Meanwhile, other researchers discovered a positive effect between stock prices and dividend announcements at cum-dividend date and ex-dividend date (Asiri, 2014); (Octaviani et al., 2019); (Maisur and Nazariah, 2020); (Husni et al., 2022). This shows that there is no significant increase in dividend announcement at cum-dividend date and ex-dividend date. The corporate action of announcing the distribution of dividends carried out by the company is still considered unimportant information because the size of the distribution of dividends made is not a reference for the company when making an investment.

Dividend announcement at ex-dividend date encourages investors to automatically think that reducing dividends will have an impact on stock prices. Investors notice that the company has a sizable free cash flow, which prevents operations disruption. The business makes good investment projects in an effort to yield high returns.

Based on previous research findings and the explanation provided above, this study proposes the following hypothesis:

Hypothesis 2: Dividend announcement at ex-dividend date has a positive effect on stock prices.

2.2.2. The impact dividend announcement of cum-dividend date and ex-dividend date on stock prices with dividend policy as a moderating variable

A rise in dividend payments indicates that the company's future profits will rise, while a decline in dividend payments is frequently seen as a fall in future profits (Below and Johnson, 1996). The higher the dividend policy proxied by the dividend payout ratio, the smaller the available funds invested in the company, which affects the company's dividend announcement. Low dividend payout ratios are preferred by investors who anticipate realizing capital gains, and vice versa. The earnings made are used to calculate the dividend payments. High dividend rates can be supported by consistent profit streams. Companies that follow a high dividend payout ratio policy typically do income smoothing when there are profit fluctuations. In the absence of explicit restrictive clauses, the implicit agreement between shareholders and companies regarding dividend payments leads to more earnings manipulation (Eskandar and Bolori, 2021). On the other hand, dividend payments reduce a firm's cash flow, which limits managers' earnings management practices. Excess cash flow from small businesses that pay dividends encourages managers to use cash flow policies (Hussain et al., 2022).

Dividend payments send a positive signal about the company's future growth to shareholders or potential investors, which drives up share prices. A rise in share prices followed the increase in dividend payments (Mehndiratta and Gupta, 2010); (Labhane and Das, 2015); (Fahim et al., 2015); (Senata, 2016), (Yonatan et al., 2017); (Badruzaman and Kusmayadia, 2017); (Sharif et al., 2017); (Singh and Tandon, 2019); (Yanuarti and Dewi, 2019); (Bustani et al., 2021); (Permadi et al., 2022).

Larger, more profitable companies with fewer investment opportunities have higher dividend payout ratios than smaller, less profitable companies with more investment options (Labhane and Das, 2015). There is a link between dividend payout ratio and investment opportunities (Fahim et al., 2015). This means that increasing investment leads to an increase in dividend payout ratio. Companies with high investment opportunities pay higher dividends to shareholders in order to attract new investors and avoid negative shareholder reactions in order to maintain the company's goodwill. Stock prices will rise as a result of this.

According to several studies, the dividend payout ratio has no effect on stock prices because investors prefer to see company profits reinvested to increase production or invest in new ventures rather than being distributed as dividends (Barth et al., 2013); (Levina and Dermawan, 2019); (Latifah and Suryani, 2020); (Yonatan et al., 2017); (Hanryono et al., 2017).

Dividend policy weakens the influence of profitability on stock prices. Investors' perceptions of stock prices can be positively influenced by the level of profitability, but when profitability rises, investors' opinions of the company's shares are negatively impacted by the dividend policy (Astakoni et al., 2019) and (Yuliana et al., 2021).

According to (Miller and Modigliani, 1961), changes in stock prices following dividend payments are reactions of investors who prefer dividends to retained earnings. Investors only see information content indicating that the company's management is capable of managing the company's existing assets in order to earn a profit. Dividend policy cannot always strengthen or increase stock prices because investors do not see the size of dividends paid, but rather information that causes stock prices to rise. Although it depends on the profits generated and the assets owned, rather than how the profits are distributed between dividends and retained earnings, an increase in the value of dividends does not always result in an increase in the company's stock price. Additionally, dividend policy has no impact on stock prices, possibly as a result of symmetric information, in which managers and investors share the same perceptions of the company's actual state. Since their stock prices will be negatively impacted by dividend fluctuations (especially in the downward direction), many companies already have a stable dividend policy and do not want to change it.

Based on previous research findings and the explanation provided above, this study proposes the following hypothesis:

Hypothesis 3: Dividend policy weakens the effect of dividend announcements at cum-dividend date on stock prices.

Hypothesis 4: Dividend policy weakens the effect of dividend announcements at ex-dividend date on stock prices.

3. METHODOLOGY

3.1. Data and Sample Selection

The unit analysis of manufacturing companies listed on the IDX from 2013 to 2018 was used by the researcher. This study only uses data through 2018, because many Indonesian companies have lost money and have not distributed dividends due to the 2019 COVID pandemic. Secondary data on dividend announcement variables were obtained from data published on the websites of the IDX (www.idx.co.id) and PT Kustodian Sentral Efek Indonesia (www.ksei.co.id) for the period 2013-2018, which includes the cumulative dividend date and the ex-dividend date. Secondary data on dividend policy as a proxy for dividend payout ratio is available on the IDX website (www.idx.co.id) and the website www.duniainvestasi.com. The total population of manufacturing companies in 2013 was 141 companies, of which 4 companies were delisted. The number of samples selected was 138 companies with an observation period of 6 years so that 828 firm-year observations were collected.

3.2. Variables and Measurement

Stock prices are the dependent variable in this study. The researcher is interested in the closing price, which is the last price at the time of the stock trading transaction. The closing price is the last stock trading transaction before the exchange floor closes. The dividend payout ratio serves as a proxy dividend policy for the moderating variable which is to streng or weak for relationship independent and devendepent variable (Manurung et al., 2021, and Manurung, 2023). Dividend payout ratio is calculated by dividing dividends per share by earnings per share (Flint et al., 2010); (Hussainey et al., 2011); (Shah and Noreen, 2016) (Zainudin et al., 2018); (Camilleri et al., 2018); (Bustani et al., 2021). Earnings per share which is calculated by dividing total earnings by the total number of outstanding shares of a firm's stock at the end of the financial year (Singh and Tandon, 2019).

Data analysis in this study included descriptive statistical tests, classical assumption tests, and hypothesis testing. The standard assumption tests are the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. In addition to testing the hypothesis, multiple regression analysis was performed. The hypothesis testing used in the study was divided into a coefficient of determination test, F statistical test, t statistical test using multiple linear regression tests, and a moderated regression analysis.

3.3. Research model and Technique of Analysis

Four models are used in this study to evaluate the following 4 hypothesis as follows:

$$\text{Model 1: } CLPR_{i,t} = \beta_0 + \beta_1 ANCD_{i,t} + \varepsilon_{it} \quad (1)$$

$$\text{Model 2: } CLPR_{i,t} = \beta_0 + \beta_1 ANED_{i,t} + \varepsilon_{it} \quad (2)$$

$$\text{Model 3: } CLPR_{i,t} = \beta_0 + \beta_1 ANCD_{i,t} + \beta_2 DIVP_{i,t} + \beta_3 ANCD_{i,t} * DIVP_{i,t} + \varepsilon_{it} \quad (3)$$

$$\text{Model 4: } CLPR_{i,t} = \beta_0 + \beta_1 ANED_{i,t} + \beta_2 DIVP_{i,t} + \beta_3 ANED_{i,t} * DIVP_{i,t} + \varepsilon_{it} \quad (4)$$

where:

$CLPR_{i,t}$ = Share price of company i in period t

$ANCD_{i,t}$ = Announcement of dividends on the cum-dividend date of company i in period t

$ANED_{i,t}$ = Announcement of dividends on the ex-dividend date of company i in period t

$DIVP_{i,t}$ = *Dividend payout ratio* of the company is in period t

B_0 = Constant

β_1, β_2 & β_3 = Regression coefficient

ε_{it} = Error_{it}

4. EMPIRICAL RESULT AND DISCUSSION

4.1. Descriptive Statistics

Table 1 summarizes the descriptive statistics, minimum, maximum, mean, and standard deviation for the dependent and independent variables. The results of CLPR show an average mean of 6.4890, a minimum of 0, a maximum value of 83.370, and a standard deviation of 15.072. As for ANCD the results show an average mean of 34.296, a minimum of 0, a maximum value of 354.960, and a standard deviation of 66.318. The results of ANED show an average mean of 34.208, a minimum of 0, a maximum value of 349.280, and a standard deviation of 65.860. The results of DIVP show an average mean of 0.333, a minimum of 0, a maximum value of 5.900, and a standard deviation of 0.732. The standard deviation value of CLPR, AND, ANED, and DIVP is greater than the mean value. This indicates that the data are heterogeneous, the variable has an irregular data distribution, and the deviation is relatively high.

4.2. Coefficient of Determination

The coefficient of determination measures the model's ability to explain the variation of the dependent variable. The coefficient of determination has a value between 0 and 1. The small value of R² indicates that the independent variables' ability to explain the variation of the dependent variable is very limited. The adjusted R square value is used to calculate the coefficient of determination. Table 2 shows the adjusted R square values for the four models:

Table 2 shows that the adjusted R square for the impact of dividend announcements at cum-dividend date on stock prices is 0.700. This shows that differences in dividend announcements at cum-dividend date can account for 70% of changes in stock prices. Other factors or explanations than the model account for the remaining 30%. Additionally, the adjusted R square for the impact of dividend announcements ex-dividend date on stock prices is 0.693. This demonstrates that 69.3% of variations in stock price can be attributed to swings in dividend announcements ex-dividend date. The remaining 30.3% are explained by elements or theories other than the model. The following has an adjusted R square of 0.714 for the influence of dividend announcement cum-dividend date on stock prices with dividend policy as the moderating variable. This shows that fluctuations in dividend announcements at cum-dividend date can account for 71.4% of

changes in stock price. Other factors or explanations than the model account for the remaining 29.6%. Additionally, the adjusted R square for the effect of dividend announcement ex-dividend date on stock prices using dividend policy as the moderating variable is 0.707. This shows that fluctuations in dividend announcements ex-dividend date can account for 70.7% of changes in stock prices. Other factors or explanations than the model account for the remaining 29.3%.

4.3. Empirical Results

The regression results are presented in the following Table 3.

Hypothesis 1 claims that dividend announcements at cum-dividend date has a positive effect on stock prices. The effect of ANCD on CLPR is positive and significant, as shown in Table 3 which is shown by a beta value of 3.683 with a significant value of $0.000 < 0.005$, indicating that hypothesis 1 is accepted. As a result, dividend announcements at cum-dividend date has a positive impact on stock prices. The positive effect can be interpreted in terms of the announcement of dividend at cum-dividend date increases, the stock price also increases, and vice versa. Investors

or shareholders still have the right to receive cash dividends after the dividend announcement at cum-dividend date increases.

The results of this study support the signal theory, which holds that information about dividend announcements is useful for influencing stock prices; consequently, when the number of dividend announcements rises, so do stock prices. Investor behavior in capital ownership transactions has an impact on share prices, so corporate action will serve as a signal to investors. The findings of this study are consistent with those of (Gordon, 1962); (Foster and Vickrey, 1978); (Gunalp et al., 2011); (Chavali and Nusratunnisa, 2013); (Chavali and Nusratunnisa (2013); (Poputra and Kalangi, 2016); (Ngoc and Cuong, 2016); (Mrzygłód and Nowak, 2017); (Yonatan et al., 2017). Investor confidence is raised because the share price reflects how the market views the company's performance. Investors automatically purchase these shares because they would rather receive dividends than capital gains, and this high demand has an effect on share prices. The law of demand states that as demand increases, prices rise as well and vice versa.

Hypothesis 2 asserts that dividend announcements at ex-dividend date have a positive effect on stock prices. The effect of AECD on CLPR is positive and significant, as shown in Table 3 which is shown by a beta value of 3.636 with a significant value of $0.000 < 0.005$, indicating that hypothesis 2 is accepted. As a result, dividend announcements at ex-dividend date have a positive impact on stock prices. Positive influence is justified by the fact that, despite the small increase in stock returns, investors can still purchase stocks on the ex-dividend date. The results of this study are in line with those of (Asiri, 2014); (Octaviani et al., 2019); (Maisur and Nazariah, 2020); (Husni et al., 2022).

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CLPR	828	0	83.370	6.490	15.072
ANCD	828	0	354.960	34.296	66.318
ANED	828	0	349.280	34.208	65.860
DIVP	828	0	5.900	0.333	0.732
Valid N (listwise)	828				

(source: compiled by the authors)

Table 2: Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1 - Predictors: (Constant), ANCD	0.837a	0.700	0.700	36.31987
2 - Predictors: (Constant), ANED	0.832a	0.693	0.692	36.54053
3 - Predictors: (Constant), ANCD*DIVP, ANDV*DIVP	0.845a	0.714	0.713	35.53237
4 - Predictors: (Constant), ANCD*DIVP, ANED*DIVP	0.841a	0.707	0.706	35.73791

(source: compiled by the authors)

Table 3: Regression Results

Model	Unstandardized Coefficients Beta	Std. Error	Standardized Coefficients Beta	t	Sig.
1 - Dep. Var: CLPR (Constant)	10.396	1.480		7.024	0.000
ANDV	3.683	0.090	0.837	40.807	0.000 ***
2 - Dep. Var: CLPR (Constant)	10.607	1.489		7.123	0.000
ANED	3.636	0.091	0.832	40.053	0.000 ***
3 - Dep. Var: CLPR (Constant)	6.733	1.605		4.196	0.000
ANDV	3.890	0.114	0.884	34.145	0.000 ***
DIVP	15.355	3.286	0.169	4.673	0.000 ***
ANDV*DIVP	-0.337	0.058	-0.225	-5.800	0.000 ***
4 - Dep. Var: CLPR (Constant)	6.899	1.614		4.274	0.000
ANED	3.846	0.115	0.880	33.567	0.000 ***
DIVP	15.547	3.305	0.173	4.704	0.000 ***
ANED*DIVP	-0.341	0.058	-0.229	-5.836	0.000 ***

*** denotes significance at the 1% level.

(source: compiled by the authors)

If the returns obtained from dividends distributed are lower than expected by investors, then on the announcement of dividends at ex-dividend date, stock prices tend to increase as much as the returns obtained from these dividends (Siaputra and Atmadja, 2006). Investors who anticipated higher dividends are dissatisfied because the value of the dividends distributed to the majority of these shares is reduced. In the end, investors choose to maintain ownership of the shares (take a long position) at the ex-dividend date in the anticipation that the dividend will increase in value over the ensuing period. This process involves balancing investment gains and losses through stock prices while taking into consideration dividends received.

Hypothesis 3 asserts that dividend policy weakens the effect of dividend announcements at cum-dividend date on stock prices. $ANCD*DIVP$ has a negative direction, as shown in Table 3 which is shown by a beta value of -0.337 with a significant value of $0.000 < 0.005$, indicating that hypothesis 3 is accepted. This data shows that dividend policy can significantly weaken the relationship between dividend announcements at cum-dividend date and stock prices. This means that the dividend policy proxied by the dividend payout ratio as moderation is not able to increase stock prices. Although the dividends announcement at cum-dividend date can give investors a positive signal for the stock price, the dividend policy weakens the company's stock value when the stock price rises. Investors who expect capital gains prefer this low ratio. On the other hand, investors who favor dividends prefer a high ratio. Many businesses already follow a consistent dividend policy, so they do not desire dividend fluctuations (especially downwards) because it actually affects the stock price negatively. This suggests that dividend policy moderates the effect of dividend announcements at ex-dividend dates on stock prices.

Hypothesis 4 asserts that dividend policy weakens the effect of dividend announcements at ex-dividend date on stock prices. $ANED*DIVP$ has a negative direction, as shown in Table 3 which is shown by a beta value of -0.341 with a significant value of $0.000 < 0.005$, indicating that hypothesis 4 is accepted. This data shows that dividend policy can significantly weaken the relationship between dividend announcements at ex-dividend date and stock prices. It means that dividend policy as moderation are unable to increase share prices. This is consistent with the research of (Astakoni et al., 2019), which found that dividend announcements at the ex-dividend date can help investors gauge stock prices positively, but dividend policy can make investors less favorable toward a company's shares when stock prices rise. According to the theory put forth by (Miller and Modigliani, 1961), stock price changes following dividend payments reflect the reactions of investors who favor dividends over retained earnings. Investors only take note of information that shows how effectively management is managing the company's existing assets to enable it to turn a profit. Dividend policy cannot always strengthen or increase stock prices because investors do not see the size of dividends paid but rather information that drives up stock prices.

5. CONCLUSION

The purpose of this study was to analyze the effect of dividend announcements on the cum-dividend date and ex-dividend date

on the company's stock price in Indonesian firms. This study also examines whether dividend policy by proxy of the dividend payout ratio can strengthen or weaken the effect of dividend announcements on the cum-dividend date and ex-dividend date on stock prices. The following are the key empirical findings. To begin with, dividend announcements at cum-dividend date has a positive effect on stock prices. The positive effect can be interpreted in terms of the announcement of dividend at cum-dividend date increases, the stock price also increases, and vice versa. Second, dividend announcements at ex-dividend date have a positive effect on stock prices.

Positive influence is justified by the fact that, despite the small increase in stock returns, investors can still purchase stocks on the ex-dividend date. Third, dividend policy weakens the effect of dividend announcements at cum-dividend date on stock prices. This means that the dividend policy proxied by the dividend payout ratio as moderation is not able to increase stock prices. Fourth, dividend policy weakens the effect of dividend announcements at ex-dividend date on stock prices. It means that dividend policy as moderation are unable to increase share prices.

This study contributes to the body of knowledge and informs business officials who determine optimal dividend policies to improve company performance, as well as policymakers who assess how well the capital market functions. Today, the impact of a company's dividend policy on stock prices has a significant implication, not only for business officials but also for investors who directly decide how to plan their portfolio in the future as a material consideration in making investment decisions.

Several limitations apply to this study. First, not all companies have the same dividend announcement period at cum-dividend date and ex-dividend date. Second, because this study does not employ the event study method, the results are less accurate, given that corporate action in dividend announcements demonstrate how significant the impact of an event is because investors revise the value of a security. The event window, also known as the event period, is the time span during which events occur and their consequences occur. Further advice is required for the company to be able to determine the right time to announce dividends, so that the company's goal of making dividend announcements is to declare the company's performance achieved.

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