



## Analysis of Stock Price Behavior on Ex-Dividend Date in the Indonesian Stock Market: Case Study of Kompas100 Index Shares (Year 2018-2023)

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### Abstract

This study aims to determine how the influence of Dividend Yield, Free float Percentage, Market Capitalization, and Volume affects Stock Price Changes on ex-dividend date. This research is quantitative descriptive research, the data analysis method used in this test is panel data regression analysis. The results of the research that have been carried out show that the Dividend Yield variable (X1) has a significant negative effect on Stock Price Changes (Y). Free float Percentage (X2) has no effect on Stock Price Changes (Y). Market Capitalization (X3) has no effect on Stock Price Changes (Y). Volume (X4) has a negative and significant effect on Stock Price Changes (Y). There is a significant joint (simultaneous) influence between Dividend Yield, Free float Percentage, Market Capitalization, and Volume on Stock Price Changes.

### Abstrak

Penelitian ini bertujuan untuk mengetahui bagaimana pengaruh Dividend Yield, Free float Percentage, Market Capitalization, dan Volume berpengaruh terhadap Perubahan Harga Saham pada ex-dividend date. Penelitian ini merupakan penelitian deskriptif kuantitatif, metode analisa data yang dipakai pada pengujian ini adalah analisis regresi data panel. Hasil penelitian yang telah dilakukan diperoleh hasil bahwa variabel Dividend Yield (X1) berpengaruh negatif signifikan terhadap Perubahan Harga Saham (Y). Free float Percentage (X2) tidak berpengaruh terhadap Perubahan Harga Saham (Y). Market Capitalization (X3) tidak berpengaruh terhadap Perubahan Harga Saham (Y). Volume (X4) berpengaruh negative dan signifikan terhadap Perubahan Harga Saham (Y). Terdapat pengaruh secara bersama-sama (simultan) yang signifikan antara Dividend Yield, Free float Percentage, Market Capitalization, dan Volume berpengaruh terhadap Perubahan Harga Saham.

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**Keywords:** Dividend Yield, Free float Percentage, Market Capitalization, Trading Volume, Stock Price, Ex-dividend

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### Introduction

The Indonesian capital market, as the main platform for companies to raise capital and investors to invest, reflects significant economic and financial dynamics. In it, the phenomenon of corporate dividend policy becomes an important focal point for shareholders and market participants. Dividends can be used as a reward for investors or to maximize firm value. (Kim, 2019). Dividend policy is one of the most important managerial decisions and has been widely researched in the financial literature. In the dynamics that develop in the stock market, information becomes one of the main factors that guide investors in achieving their goals, namely achieving investment returns.

The availability of a wide range of information allows investors to make smart decisions, including determining the right time to make stock purchases, maintaining an existing investment portfolio, and even determining when to sell owned stocks or refrain from making purchases. . Announcements related to a company's financial performance, such as earnings per share and revenue, can be an important determining factor in an investor's decision to buy or sell a stock. In addition, another vital piece of information that impacts investors' expectations and decisions regarding investments is the announcement of business expansion plans. In this context, dividend announcements are a crucial element of information for investors as they can provide clues about the company's future prospects (Bodie et al., 2021).

As a financial policy, dividend policy has a significant influence on firm value. Basically, stock prices react to dividend decisions. First, dividend payments are value-creating. Therefore, in theory, on the ex-dividend date, the share price will decrease by the amount of the dividend. In reality, the discount rate and the dividend rate are not the same due to tax obligations, short-term trading, and market structure. Investors will be indifferent to stock trading before and after the ex-dividend if they earn the same marginal return in both trading periods. Since the tax rates for dividends and capital gains are different, there is a difference between the amount by which the stock price decreases and the amount of dividends. In addition, if transaction costs are high enough, investors have a strong incentive to sell a stock until it is no longer profitable.

The end result of these short-term trades is the difference between the price drop and the dividend. In addition, this gap is caused by market microstructure factors such as limit orders, bid-ask spreads, and price discretion. Second, dividend announcements convey valuable information to outsiders. When a firm announces a dividend increase (cut), the stock price tends to rise (fall). Third, dividend policy has a negative relationship with stock price fluctuations. This negative relationship is explained by the duration effect, return effect, arbitrage realization effect, and information effect. There is empirical evidence of this relationship in many countries. Finally, dividend smoothing can also be seen as a signal of future earnings. As a result, companies with stable dividends have a higher market value. In other words, dividend stability has a positive impact on stock prices. (Tran, 2024). As a financial policy, dividend policy has a significant influence on firm value. Basically, stock prices react to dividend decisions. First, dividend payments are value-creating. Therefore, in theory, on the ex-dividend date, the stock price will decrease by the amount of the dividend. In reality, the discount rate and the dividend rate are not the same due to tax obligations, short-term trading, and market structure. Investors will be indifferent to stock trading before and after the ex-dividend if they earn the same marginal return in both trading periods. Since the tax rates for dividends and capital gains are different, there is a difference between the amount by which the stock price decreases and the amount of dividends.

Dividends come in two main forms: cash dividends and stock dividends. Cash dividends have a direct impact on stock prices by reducing the value of the company as the amount of dividends paid. In

addition, investors consider that cash dividend payments distributed by the company are a form of certainty that can reduce the risk of their investment. (Saldi et al., 2023). Stock dividends only affect the number of shares outstanding without changing the value of the company. Changes in stock prices during dividend distribution are the main focus in capital market analysis. One of the crucial moments that can have a big impact is when a company distributes dividends, especially on the ex-dividend date. This event often determines changes in stock price movements.

The ex-dividend date is the time when traded shares lose the right to receive dividends that have been declared. According to Dupuis (2019), stock prices tend to fall according to the amount of dividends declared. This happens because the money used to pay dividends is no longer owned by the company, so the value of the company must be reduced. This theory is in line with the concept of signaling theory which states that the share price will decrease by the amount of the dividend on the ex-dividend date, because the share value is reduced due to a reduction in the company's capital.

Signaling theory explains why stock prices can decline along with dividend payments. When a company pays dividends to its shareholders, funds that were previously kept in the company for investment or development are diverted to shareholders. This means that the company has less capital to carry out expansion, research, and other investments that can increase the value of the company in the future. This decrease in available capital is interpreted by the market as a signal that the company may not have large growth plans or may have difficulty finding profitable investments. In the view of investors, this could mean that the company's future growth prospects are low.

Therefore, for some investors, this may be a sign of declining company value which may lead to a fall in the share price. This effect is often seen on ex-dividend days, when stock prices tend to fall by the amount of the dividend. While dividend payments are essentially the result of a company's policy of distributing profits to shareholders, investors may view dividends as a signal regarding the company's status and future prospects, and ultimately have an impact on the stock price.

However, in reality, the Close Price on the Ex-dividend date is not always lower than the Close Price on Cum-Dividend. In the following table, it appears that there is an inconsistency in the ups and downs of the BBCA Stock Price when Ex-dividend.

Table 1. Historical Dividend Distribution of BBCA

| Dividend (Rp) | Cum Date  | Ex Date   | Close Price - Cum Date | Close Price Ex-Date (Rp) | Change (Rp) |
|---------------|-----------|-----------|------------------------|--------------------------|-------------|
| 42.5          | 1-Dec-23  | 4-Dec-23  | 8,950                  | 8,925                    | -25         |
| 170           | 28-Mar-23 | 29-Mar-23 | 8,675                  | 8,800                    | 125         |
| 35            | 1-Dec-22  | 2-Dec-22  | 9000                   | 8,900                    | -100        |
| 120           | 25-Mar-22 | 28-Mar-22 | 7950                   | 7,900                    | -50         |

Source: KSEI Data 2023

Based on Table 1, it appears that there is a misalignment of the decline in the share price at Ex-dividend compared to the Dividend to be distributed. On March 28, 2022, BBCA's share price closed down

smaller than the dividend. On December 2, 2022 and December 4, 2023, BBCA's stock price closed down more than the dividend. And on March 29, 2023, BBCA's share price actually increased compared to the previous close. This phenomenon is certainly contrary to signaling theory which says that the stock price will decrease by the amount of the dividend on the Ex-dividend date. This shows that there are other factors affecting stock price behavior on the dividend exdate date.

The phenomenon of stock price changes on Ex-dividend involves many important factors, such as Dividend Yield, Free float Percentage, Market Capitalization, and Trading Volume Transaction. In response to Ex-dividend events, investors seek to understand how a combination of these factors can moderate the volatility of a company's stock price. Market Liquidity Theory emphasizes the role of factors such as Free float Percentage and Trading Volume in determining the liquidity of a stock. Understanding these interactions can reveal how dividends can affect investment and stock trading. Firm Size Theory suggests that Market Capitalization is correlated with stock price performance. Understanding how firm size can moderate the impact of dividends provides a more comprehensive view of market dynamics.

Dividend Yield is a ratio that assesses how much dividend a company pays in relation to its share price. A high level of Dividend Yield reflects the potential for superior investment returns in the form of dividends. According to Dimson et al (2002), Dividend Yield has a positive influence on stock prices. A high dividend yield can also be interpreted as a sign of confidence in the management of a company in its future performance, which can generate confidence from investors and ultimately have a positive effect on stock prices.

Free float Percentage refers to the percentage of a company's shares that can be traded on the open market. The higher the free float percentage, the easier the stock is to trade. The free float percentage reflects the liquidity level of a stock as it shows the number of shares that can be easily traded in the market. (Brennan & Subrahmanyam, A., 1996).. According to Amihud (2002) Free float has a significant positive relationship with stock liquidity. Research shows that high free float makes it easier for investors to buy and sell shares, thus making the market more liquid.

Market Capitalization is the total market value of all shares owned by a company. Companies with large market capitalization tend to have better liquidity because there are many shares that can be traded. (Black, 1986). Large market capitalization is often interpreted as a larger size of the company. Investors often associate a large market cap with greater stability because larger companies tend to have more resources and financial strength. Large market capitalization tends to have better liquidity and is attractive to investors who want to place large amounts of funds. Interest from these investors can result in higher demand for the stock, which in turn can push the stock price up.

Trading Volume reflects the number of shares traded in the market. High Trading Volume has the potential to increase liquidity and open opportunities for investors to buy or sell shares more smoothly.

(Amihud, 2002). High Trading Volume creates good liquidity, allowing investors to easily buy and sell shares, so they can take advantage of price movement opportunities to make profits. In general, a high Trading Volume tends to have a positive impact on the stock price as it signals great interest from investors.

Table 2. Dividend Distribution Frequency 2018-2023

| Item   | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|------|------|------|------|------|------|
| Number of Listed Companies   | 619  | 668  | 713  | 766  | 825  | 903  |
| Dividend Frequency of all Issuers  | 299  | 304  | 273  | 305  | 370  | 417  |
| Dividend Frequency of Listed Companies that are consistent members of Kompas100 in 2018-2023 | 41   | 35   | 35   | 36   | 38   | 43   |

Source: KSEI Data 2023

Based on Table 2, it can be seen that the number of listed companies is increasing from year to year, as well as the number of dividend distribution frequencies each year. If investors can identify opportunities in each dividend distribution event, then investors can enjoy potential profits and mitigate the risk of fluctuating price changes that may be caused by dividend distribution.

A stock index is a statistical parameter that reflects the overall price movement of a group of stocks selected based on certain criteria and methodology, and evaluated regularly. The benefits of stock indices include measuring market sentiment, being used as passive investment products such as Index Mutual Funds and Index ETFs, and serving as benchmarks for active portfolios. Stock indices also serve as proxies in measuring and modeling investment returns, systematic risk and risk-adjusted performance. In addition, stock indices can be a proxy for asset classes in asset allocation. The Kompas100 Index is an index that assesses the price performance of 100 stocks with good liquidity and large market capitalization. Managed in partnership with Kompas Gramedia Group, a media company that publishes the Kompas daily newspaper, the Kompas100 Index was launched on July 13, 2007. With a Base Date of January 2, 2002 and an Initial Value of 100, the index provides a snapshot of share price movements in the financial markets. (Indonesia Stock Exchange, 2023).

Attention to stock price behavior on ex-dividend days arises because dividend announcements have a significant impact on investor decisions. A decline in stock price on ex-dividend day reflects a loss of entitlement to future dividends, and investors tend to be more skeptical of stocks that have announced dividends. Therefore, research on stock price behavior on ex-dividend days has great relevance in the context of the Indonesian stock market.

A number of studies show that the relationship between stock price behavior on ex-dividend days and liquidity levels is influenced by Dividend Yield. (Dupuis, 2019) Free float percentage, number of outstanding shares, risk (Kalay, 1982), market capitalization (Milonas et al., 2006), and Trading Volume on the Cum Dividend date (Dupuis, 2019).

## **Literature Review**

### **Efficient Market Hypothesis**

The Efficient Market Hypothesis is an important theory in finance that explains the relationship between information and stock prices. According to research conducted by Fama (1970) the Efficient Market Hypothesis has 3 forms: Weak Form, Half Strong Form, and Strong Form.

In the Weak Form, the stock price reflects all the information from historical price and Trading Volume data. (Malkiel, 2003). Technical analysis is not effective in generating abnormal returns consistently. Whereas in the Semi-Strong Form, stock prices reflect all public information, such as financial reports, news, and company announcements. Fundamental analysis is not effective in generating abnormal returns consistently. And in the Strong Form, stock prices reflect all information, both public and private. No strategy can generate abnormal returns consistently. (Fama, 1970).

The Efficient Market Hypothesis explains how new information affects stock prices (Fama, 1970) why it is difficult to beat the market consistently (Malkiel, 2003); why investors should be careful in choosing an investment strategy (Shiller, 2015). The Efficient Market Hypothesis is a complex theory and is still debated by experts. (Malkiel, 2003). There is evidence for and against the Efficient Market Hypothesis (Shiller, 2015). Investors should understand the Efficient Market Hypothesis and its limitations before making investment decisions. (Malkiel, 2003). Research by Martínez-Sánchez et al. (2023) shows that while some findings support the idea that markets have statistical properties that reflect the EMH, the presence of noise effects also suggests that not all aspects of the market may be fully efficient in accordance with the predictions of the EMH.

### **Dividend**

A Stock Dividend is a share of profit given to shareholders in the form of shares, while a Cash Dividend is a share of profit distributed to shareholders in the form of money. (POJK No. 27 of 2020, 2020).

If there is a resolution of the General Meeting of Shareholders (GMS) regarding the distribution of dividends in the form of money, Public Listed Companies are required to make cash dividend payments to eligible shareholders, at the latest within 30 (thirty) days after the announcement of the summary of the minutes of the GMS stipulating the decision to distribute cash dividends. (OJK Regulation No. 15 of 2020, 2020).

### **Liquidity**

Stock liquidity is the ability of a stock to be traded easily without causing large price changes. Stock liquidity is influenced by several factors, including: Number of Shares traded, Stock price spread, Frequency of stock turnover. Stock liquidity has an important meaning for investors, because liquid stocks make it easy for investors to buy or sell shares according to their wants and needs. Liquid stocks

also tend to have more stable prices and are reflective of market conditions (Kyle, 1985). (Kyle, 1985). Stock Liquidity is related to Stock Trading Frequency. (Le & Gregoriou, 2022)

### **Signaling Theory**

Signaling theory suggests that dividend policy can act as an information signal to the market about the condition and prospects of the company. Changes in dividend policy can signal future earnings forecasts and management policies towards investment. An increase in dividends is considered a positive signal indicating good company performance and prospects, while a decrease in dividends is considered a negative signal indicating poor company performance and prospects (Bhattacharya, 1979). (Bhattacharya, 1979). The application of this theory is based on the assumption that management has more information about company finances than shareholders, so dividends can reduce information asymmetry between the two (Chen et al., 1986). (Chen et al., 1986).

### **Company Size Theory (Size Effect)**

Firm Size Theory states that firm size, as measured by market value, can affect stock performance. Generally, companies with higher market value tend to have smaller price fluctuations and more consistent performance.

This theory is based on the assumption that companies with larger size have easier access to funding sources, have wider business diversification, and have a better reputation in the eyes of investors. Therefore, companies with larger size are considered more able to cope with market risk and generate higher profits. (Banz, 1981). Dividend policy is related to firm size and profitability. Larger and more profitable companies are more likely to pay dividends and can ensure the stability of dividend policy (Barros et al., 2020).

### **Free float Percentage**

Free float Percentage refers to the percentage of a company's shares that can be traded on the free market. The higher the free float percentage, the easier the stock is to trade (Ding et al., 2016). The free float percentage reflects the liquidity level of the stock as it shows the number of shares that can be easily traded in the market. (Brennan & Subrahmanyam, A., 1996)..

Research conducted Dupuis (2019) shows that liquidity reflected by high Free float Percentage has a statistically significant impact on price efficiency on ex-dividend days; a 1% increase in liquidity is associated with a 2.25% reduction in abnormal returns. In the Indonesian Capital Market, Free float Percentage can also affect the weighting of stocks in indices, such as JCI, LQ45, IDX30 and Kompas100.

### **Market Capitalization**

Market Capitalization is the market value of shareholders' equity when the company's shares are publicly traded, how to calculate it by multiplying the market price per share by the number of common shares

outstanding. (Higgins et al., 2023). Research conducted by Kalay & Michaely (2000) examined the effect of taxes, risk, and firm size on stock returns on the ex date dividend in the United States stock market. This study found that companies with large market capitalization tend to have lower stock returns than companies with small market capitalization on the day of the ex date dividend. This is because large companies are mostly owned by institutional investors who have higher taxes and are more sensitive to risk.

### **Trading Volume**

Trading Volume reflects the number of shares traded in the market. High Trading Volume has the potential to increase liquidity and open up opportunities for investors to buy or sell shares more smoothly. (Amihud, 2002).

Theory of Stock Price Changes and Trading Volume. This theory covers the relationship between stock price changes and Trading Volume. High Trading Volume may reflect intense market activity and increase stock price volatility. (Chan & Lakonishok, 1993)..

In 2012 on the French market, there was an abnormal Trading Volume and positive abnormal return at the time of ex-dividend, indicating a significant market reaction to the dividend payment event. High Trading Volume may indicate greater than normal trading interest and activity, while positive abnormal returns may reflect an unusual rise in share prices in the period. (Yang, 2014). Trading Volume is also a direct indicator of liquidity and can affect stock price changes. (Dupuis, 2019).

### **Hypothesis**

#### **Effect of Dividend Yield on Stock Price Changes on the Ex-dividend Date**

H1: Dividend Yield has a negative and significant effect on Stock Price Changes on Ex-dividend day.

#### **Effect of Free float Percentage on Stock Price Changes on Ex Dividend Date**

H2: Free float Percentage has a positive and significant effect on Stock Price Changes on Ex-dividend day.

#### **Effect of Market Capitalization on Stock Price Changes on Ex Dividend Date**

H3: Market Capitalization has a positive and significant effect on stock price changes on ex-dividend days.

#### **The Effect of Trading Volume on Stock Price Changes on the Ex Dividend Date**

H4: Trading Volume has a negative and significant effect on stock price changes on ex-dividend days.



## Research Methods

This research is a quantitative descriptive study that aims to see and analyze the effect of independent variables on the dependent variable. With details of the independent variables, namely Dividend Yield, Free float Percentage, Market Capitalization, and Trading Volume (X) to then be tested and analyzed for their effect on stock price changes on ex-dividend day (Y) as the Dependent variable in this study.

The data analysis method used in this test is panel data regression analysis. Panel data is a combination of time series data and cross section data, where the same cross data is measured at different times, in other words panel data is data from several of the same individuals observed within a certain period of time. The cross section data is observation data from several observation units at one point in time. The selection of panel data is because it uses a time span of several years and there are also many banks in this study. The time series used in this study is six years, namely from 2018-2022. For the use of day data (cross section) itself because this research takes data from many companies.

Sinulingga (2018) explains that descriptive statistical analysis is a data analysis method that provides an overview of the research data. First, the data is collected, then a hypothesis is formed, and the data is presented in the form of tables and graphs.

Next Gujarati (2019) argues that panel data analysis is a combination of time series and cross-sectional data and can provide cross-sectional information about differences between subjects as well as timeseries information that reflects changes in subjects over time. Panel data analysis is able to make the quality and quantity of data increase in a way that is not possible with just one type of data. The advantage of using panel data is that it provides a lot of information, variations, coefficients, and reduces collinearity between variables, making it suitable for studying the dynamics of change. Panel data analysis can be applied to various fields of science, including economics.

To identify the relationship between the variables covered in this study, the author utilized quantitative data analysis through the panel data regression method. Panel data refers to data collected through crosssector surveys and observed over a period of time. According to Ghozali & Ratmono (2017) The panel data approach involves combining cross section and time series data types as the analysis technique used.

## Analysis and Discussion

### Panel Data Regression Model

The panel data regression model formed using random effects in this study is as follows.

Table 5. Panel Data Regression Model - Random Effect

| Y            | Coefficient | Std. err. | t-statistic | Prob. |
|--------------|-------------|-----------|-------------|-------|
| Div. Yield   | -.6301242   | .058576   | -10.76      | 0.000 |
| FFP          | .011837     | .0127573  | 0.93        | 0.354 |
| MC           | 9.79e-18    | 7.40e-18  | 1.32        | 0.187 |
| Trading Vol. | -5.83e-11   | 2.87e-11  | -2.04       | 0.043 |
| _cons        | -.0031613   | .0049813  | -0.63       | 0.526 |

$$Y = -0.0031613 - 0.6301242 X_1 + 0.011837 X_2 + 9.799999 X_3 - 5.833333 X_4$$

Based on the panel data regression model above, it shows that

1. The constant value of -0.0031713 means that without the variable Dividend Yield (X1), Free float Percentage (X2), Market Capitalization (X3), and Volume (X4) then the variable Stock Price Changes (Y) will decrease by -0.31613%.
2. The beta coefficient value of Dividend Yield (X1) is -0.630124, if the value of other variables is constant and variable X1 has increased by 1%, the variable Stock Price Change (Y) will decrease by 63.0124%. Vice versa, if the value of other variables is constant and variable X1 decreases by 1%, then variable Y will increase by 63.0124%.
3. The Free float Percentage (X2) beta coefficient value is 0.011837, if the value of other variables is constant and the X2 variable has increased by 1%, the Stock Price Change (Y) variable will increase by 11.837%. Vice versa, if the value of other variables is constant and the X2 variable decreases by 1%, the Y variable will decrease by 11.837%.
4. The beta coefficient value of Market Capitalization (X3) is 9.79999, if the value of other variables is constant and variable X3 has increased by 1%, the variable Stock Price Change (Y) will increase by 979.999%. Vice versa, if the value of other variables is constant and the X3 variable decreases by 1%, the Y variable will decrease by 979.999%.
5. The beta coefficient value of Volume (X4) is -5.833333, if the value of other variables is constant and variable X4 has increased by 1%, the variable Stock Price Change (Y) will decrease by 583.3333%. Vice versa, if the value of other variables is constant and the X4 variable decreases by 1%, the Y variable will increase by 583.3333%.

### Hypothesis testing

#### Partial Test (t Test)

Partial regression test or t test is a test conducted to determine the effect of each independent variable individually on the dependent variable. If the significance value of the probability has a value  $< \alpha$  and

the value of  $t_{count} > t_{table}$ , it can be concluded that the independent variable partially has a significant effect on the dependent variable. Based on the statistical table, the  $t_{table}$  value for 5% significance is 1.97. The following are the results of partial regression testing (t test) in this study:

Table 6 Partial Regression Test Results (t Test)

| Y            | Coefficient | Std. err. | t      | P>t   |
|--------------|-------------|-----------|--------|-------|
| Div. Yield.  | -.6301242   | .058576   | -10.76 | 0.000 |
| FFP          | .011837     | .0127573  | 0.93   | 0.354 |
| MC           | 9.79e-18    | 7.40e-18  | 1.32   | 0.187 |
| Trading Vol. | -5.83e-11   | 2.87e-11  | -2.04  | 0.043 |
| _cons        | -.0031613   | .0049813  | -0.63  | 0.526 |

The effect of independent variables on the dependent variable partially is as follows:

- The t test results on the Dividend Yield variable (X1) obtained a t value of 10.76 >  $t_{table}$  1.97 and sig value. 0.000 < 0.05, it means that the Dividend Yield variable (X1) has a significant negative effect on Stock Price Changes (Y).
- The t test results on the Free float Percentage (X2) variable obtained a t value of 0.93 <  $t_{table}$  1.97 and a sig value. 0.353 > 0.05, it means that the Free float Percentage (X2) variable has no effect on Stock Price Changes (Y).
- The t test results on the Market Capitalization variable (X3) obtained a t value of 1.32 <  $t_{table}$  1.97 and a sig value. 0.187 > 0.05, it means that the Market Capitalization variable (X3) has no effect on Stock Price Changes (Y).
- The t test results on the Volume variable (X4) obtained a t value of 2.04 >  $t_{table}$  1.97 and sig value. 0.043 < 0.05, it means that the Volume variable (X4) has a negative and significant effect on Stock Price Changes (Y).

### Simultaneous Test (Test f)

The following are the results of partial regression testing (t test) in this study:

Table 7. Partial Regression Test Results (t Test)

|               |        |
|---------------|--------|
| Number of obs | 231    |
| F(4, 226)     | 32.49  |
| Prob > F      | 0.0000 |
| R-squared     | 0.3651 |
| Adj R-squared | 0.3539 |
| Root MSE      | .02258 |

The table regarding the simultaneous test above shows the probability F-statistics value of 0.000 is smaller than  $\alpha$  (0.05), therefore a decision to reject  $H_0$  is obtained with the conclusion that there is a significant joint influence between Dividend Yield (X1), Free float Percentage (X2), Market Capitalization (X3), and Trading Volume (X4) on Stock Price Changes (Y).

## Coefficient of Determination

The coefficient of determination ( $R^2$ ) measures the extent to which the independent variables in a model are able to explain variations in the dependent variable. The  $R^2$  value is in the range between zero (0) and one (1). The smaller the  $R^2$  value, which is close to 0, indicates that the ability of the independent variables to explain the dependent variable is very limited. Conversely, if the value of  $R^2$  is getting bigger, close to 1, it can be interpreted that the independent variables provide almost all the information needed to predict the variation in the dependent variable. (Ghozali & Ratmono, 2017).

Table 8. Coefficient of Determination

|               |        |
|---------------|--------|
| Number of obs | 231    |
| F(4, 226)     | 32.49  |
| Prob > F      | 0.0000 |
| R-squared     | 0.3651 |
| Adj R-squared | 0.3539 |
| Root MSE      | .02258 |

The table regarding the coefficient of determination above shows the adjusted R Square value of 0.3539 or 35.39%. The coefficient of determination shows that the independent variables consisting of Dividend Yield (X1), Free float Percentage (X2), Market Capitalization (X3), and Trading Volume (X4) are able to explain the variable Stock Price Changes (Y). by 35.39%, while the remaining 64.61% (100-value adjusted R Square) is explained by other variables that are not included in this research model.

## Discussion

### The Effect of Dividend Yield on Stock Price Changes on the Ex Dividend Date

The effect of Dividend Yield on Stock Price Changes based on the results of hypothesis testing has a significant negative effect on changes in stock prices on the ex-dividend date. This indicates that the higher the Dividend Yield, the more likely the stock price will fall. In other words, there is a tendency that investors react negatively to companies that have a high Dividend Yield. This can be explained by the assumption that Investors prefer companies that use profits for business growth rather than paying high dividends. If a company pays a large dividend, it means that part of the profit is not reinvested for growth, which lowers the expectation of future growth and leads to a decrease in the stock price.

A high dividend payout is considered a sign that the company does not have attractive growth opportunities in the future. This may reduce investor interest and lead to a decline in share prices. So when investors have received or are listed as dividend recipients, then on the day of the ex-dividend date investors will tend to sell their shares and buy other stocks that have better growth potential. This is what causes a decrease in stock prices on the day of the Ex-Dividend date.

The results of this study are in line with the results of research (Chan et al., 1991), Jegadeesh & Titman (1993), DeAngelo et al. (2004) and (Dupuis, 2019).

### **Effect of Free float Percentage on Stock Price Changes on Ex Dividend Date**

The effect of Free float Percentage based on the results of hypothesis testing above that there is no significant effect of Free float Percentage on Stock Price Changes on the Ex Dividend Date. The results of this study contradict the hypothesis which states that the Free float Percentage is significantly positive to Stock Price Changes on the Ex Dividend Date, so this hypothesis is rejected. This means that there is no significant effect of Free float Percentage on Stock Price Changes on the Ex Dividend Date. This means that the Free float Percentage does not reflect actual liquidity, even though the Free float Percentage is large, it could be that not many public investors are interested in trading their shares, it is likely that most choose to be long-term investors. These results are in line with El Nader's research (2018) Although the Free Float Percentage shows that stock liquidity and stock prices are related, the relationship is complex and is influenced by many other factors besides free float.

### **Effect of Market Capitalization on Stock Price Changes on Ex Dividend Date**

The effect of Market Capitalization on Stock Price Changes based on the results of hypothesis testing Market Capitalization has no effect on changes in stock prices on the ex-dividend date. This is because despite having a large Market Capitalization, it could be that most investors are not interested in buying and selling intensely. Although Market Capitalization reflects the total market value of a company, if investors do not buy and sell shares on the ex-dividend date, this variable may not have a significant impact on stock price changes. Investors who hold shares to earn dividends may not have an incentive to sell their shares before the ex-dividend date, as they want to hold the shares for the long term.

### **The Effect of Trading Volume on Stock Price Changes on the Ex Dividend Date**

The effect of volume on Stock Price Changes based on the results of hypothesis testing is that volume has a significant negative effect on Stock Price Changes on the ex-dividend date. This shows that the high trading volume on the ex-dividend date is monopolized by the volume with the dominant sell-off of investors. This can be caused by investors who sell shares before the ex-dividend date because their names have been recorded as stock dividend recipients. So that the high volume of sales causes a decrease in stock prices on the ex-dividend date. The results of this study are in line with the findings of (Asquith & Mullins, 1986), (Jegadeesh & Titman, 1993) and (Dupuis, 2019).

### **Effect of Dividend Yield, Free float Percentage, Market Capitalization and Trading Volume on Stock price Changes on Ex Dividend Date**

The effect of Dividend Yield, Free float Percentage, Market Capitalization and volume on Stock Price Changes based on the results of hypothesis testing is there is a significant influence together (simultaneously) between Dividend Yield, Free float Percentage, Market Capitalization, and Volume effect on Stock Price Changes . The interaction between Dividend Yield, Free float Percentage, Market Capitalization, and Volume on the stock price on the ex-dividend date involves complex dynamics that affect each other. First, a high Dividend Yield may attract investors seeking dividend income, which

may increase trading Volume on the day of the ex-dividend date. However, high Volume may also reflect the sell-off of investors who respond to high Dividend Yield by selling stocks after receiving dividends.

The balance between demand and supply of stocks can significantly affect stock prices. Second, the interaction between Market Capitalization and Free float Percentage plays an important role. Companies with large Market Capitalization and low Free float Percentage may have less liquid shares in the market, which may increase the impact of stock price changes. Conversely, companies with a high free float percentage may have lower price fluctuations due to greater availability for trading.

The relationship between Volume and Free float Percentage can also affect stock prices. High trading volume in stocks with a low Free float Percentage may have a greater impact on the stock price due to changes in supply and demand. Conversely, stocks with a high free float percentage may have lower price fluctuations due to greater availability for trading. By considering the complex interactions between these variables, we can gain a better understanding of market behavior and the consequences to stock prices on the ex-dividend date.

### **Conclusion**

This study aims to determine how the influence of Dividend Yield, Free float Percentage, Market Capitalization, and Volume affects Stock Price Changes on ex-dividend date. This research was conducted on all listed companies that were consistently in the Kompas100 Index during the 2018-2023 Period. The company has distributed dividends in 2018-2023, and financial data is available in the form of Dividend Yield, Free float Percentage, Market Capitalization and Trading Volume for the period 2018-2023.

Based on the results of research that has been done, the results show that the Dividend Yield variable (X1) has a significant negative effect on Stock Price Changes (Y). Free float Percentage (X2) has no effect on Stock Price Changes (Y). Market Capitalization (X3) has no effect on Stock Price Changes (Y). Volume (X4) has a negative and significant effect on Stock Price Changes (Y). There is a significant joint (simultaneous) influence between Dividend Yield, Free float Percentage, Market Capitalization, and Volume on Stock Price Changes.

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