



ANALYSIS OF STOCK MARKET REACTIONS BEFORE AND AFTER THE CUM-EX DIVIDEND ANNOUNCEMENT DATE IN 2024 USING THE EVENT STUDY METHOD

ANALISIS REAKSI PASAR SAHAM SEBELUM DAN SESUDAH TANGGAL PENGUMUMAN DIVIDEN CUM-EX TAHUN 2024 MENGUNAKAN METODE STUDI PERISTIWA

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Abstract

This study aims to analyze stock market reactions to Cum-Ex Dividend announcements for companies listed on the Indonesia Stock Exchange (IDX) in 2024. Market reactions were measured through abnormal returns and stock trading volume before and after Cum-Ex Dividend announcements. This study was motivated by differences in investor behavior in responding to dividend distribution information, which is regarded as a positive signal for the market. The research employed a comparative quantitative method with an event study approach. The sampling technique used was purposive sampling. Secondary data were obtained from the Indonesia Stock Exchange, comprising a sample of 88 issuers that distributed cash dividends. Research variables consisted of stock prices and stock trading volume. Data analysis was performed using dummy regression and the Wilcoxon Signed Rank Test with EViews 12 software. The results showed that the majority of issuers (81.82%) experienced significant market reactions to the Cum-Ex Dividend announcement. A total of 56.82% of issuers showed significant negative reactions consistent with the dividend drop theory, while 25% showed significant positive reactions, indicating that investors viewed dividends as a positive signal for company prospects. Meanwhile, 18.18% of issuers showed no significant reaction to dividend announcements. This study demonstrates that Cum-Ex Dividend announcements affect abnormal returns and stock trading volume, thus providing a basis for investor consideration in making investment decisions in the capital market.

Keywords : Cum Dividend, Ex Dividend, Abnormal Return, Stock Trading Volume, Event Study, Indonesia Stock Exchange.



Abstrak

Penelitian ini bertujuan untuk menganalisis reaksi pasar saham terhadap pengumuman Cum-Ex Dividend pada perusahaan yang terdaftar di Bursa Efek Indonesia (BEI) pada tahun 2024. Reaksi pasar diukur melalui abnormal return dan volume perdagangan saham sebelum dan sesudah pengumuman Cum-Ex Dividend. Penelitian ini dilatarbelakangi oleh perbedaan perilaku investor dalam merespons informasi pembagian dividen, yang dianggap sebagai sinyal positif bagi pasar. Penelitian ini menggunakan metode kuantitatif komparatif dengan pendekatan studi peristiwa (event study). Teknik pengambilan sampel yang digunakan adalah purposive sampling. Data sekunder diperoleh dari Bursa Efek Indonesia, yang mencakup sampel sebanyak 88 emiten yang membagikan dividen tunai. Variabel penelitian terdiri dari harga saham dan volume perdagangan saham. Analisis data dilakukan menggunakan regresi dummy dan uji Wilcoxon Signed Rank dengan perangkat lunak EViews 12. Hasil penelitian menunjukkan bahwa sebagian besar emiten (81,82%) mengalami reaksi pasar yang signifikan terhadap pengumuman Cum-Ex Dividend. Sebanyak 56,82% emiten menunjukkan reaksi negatif signifikan yang konsisten dengan teori penurunan harga saham akibat dividen (dividend drop theory), sementara 25% menunjukkan reaksi positif signifikan, yang mengindikasikan bahwa investor memandang dividen sebagai sinyal positif bagi prospek perusahaan. Di sisi lain, 18,18% emiten tidak menunjukkan reaksi signifikan terhadap pengumuman dividen. Penelitian ini menunjukkan bahwa pengumuman Cum-Ex Dividend memengaruhi abnormal return dan volume perdagangan saham, sehingga memberikan dasar pertimbangan bagi investor dalam mengambil keputusan investasi di pasar modal.

Kata Kunci : Cum-Dividenden, Ex-Dividenden, Imbal Hasil Abnormal, Volume Perdagangan Saham, Studi Peristiwa, Bursa Efek Indonesia.

1. INTRODUCTION

One of the advantages of investing in stocks, aside from capital gains, is dividends. Dividends represent the distribution of a company's profits to investors (Husnan, 2015). Not all companies are capable of providing dividends. When financial performance is strong, companies are more likely to distribute dividends; conversely, when financial performance deteriorates, the likelihood of dividend distribution decreases (Fahmi, 2018). A rising trend in dividend payments provides positive prospects for the future, thereby increasing the company's stock price (Tandelilin, 2017).

Dividends are profits obtained by companies that are distributed to common stockholders after deducting allocations to preferred stockholders, and are generally distributed following shareholder approval through General Meetings of Shareholders (GMS) (Sartono, 2016). Dividends can be distributed in cash (cash dividends) or in the form of company shares (stock dividends). Interim dividends are those distributed more than once per year, announced and paid before the company finishes recording its annual profits (Brigham & Houston, 2019). Dividend per share (DPS) represents the amount of dividend distributed per share held by investors (Horne & Wachowicz, 2012).

In the dividend distribution process, several critical dates are established: the declaration date, cum (cumulative) date, ex (expired) date, recording date, and dividend payment date. The cum date is the last date on which traded shares still carry dividend rights, while the ex date is the first date on which shareholders are no longer entitled to receive dividends (Ministry of Finance, 2011). Therefore, investors can only be counted as dividend recipients if they hold shares until the cum date.

According to Signaling Theory (Spence, 1973; Ross, 1977), companies as information holders convey information that serves as signals received by potential investors as indicators of company conditions and performance. The Dividend Signaling Theory posits that dividend payment announcements contain information about company prospects. Ross (1977) revealed that companies significantly increasing their dividend payments experience improved investor valuation, while companies that discontinue or reduce dividend payments face declining investor valuation.



Bhattacharya (1979) further articulated the theory of dividends as information regarding earnings, establishing the foundational framework of dividend signaling theory. Dividends serve as a signaling device that is relatively expensive and cannot be imitated by companies with weak performance. Only companies with strong performance can continue to generate profits and fund investment activities despite distributing substantial dividends (Arifin, 2005).

The Efficient Market Hypothesis (EMH) developed by Fama (1970) explains that the prices of all securities quickly and fully reflect all available information. Fama categorized market efficiency into three forms: weak form (historical data), semi-strong form (publicly available information), and strong form (all information including private information). Market information triggers market reactions, thereby causing changes in stock prices.

Previous research has yielded varying results. Ali et al. (2015) explained that dividend distribution has a positive and significant relationship with stock prices, sampling 45 non-financial companies on the Karachi Stock Exchange. Majanga (2015) similarly found that dividends positively and significantly affect stock prices when studying 13 companies on the Malawi Stock Exchange from 2008 to 2014. Meanwhile, Boyd and Jagannathan found that stock price drops on Ex Dividend dates were not significantly different from the dividend amounts distributed. In contrast, Zulfitra et al. (2017) documented significant stock price increases before/during the Cum Dividend date, followed by significant decreases during/after the Ex Dividend date. Borges (2008) also confirmed that stock prices experienced significant declines on the Ex Dividend date using the Lisbon Stock Market sample during 1990-1998. Isaksson and Islam (2013), observing blue-chip stocks on the New York and Shanghai Stock Exchanges, concluded that stock price declines did not differ from dividend amounts on ex-dividend days and found no evidence of abnormal returns.

Based on this research gap, this study was undertaken to examine publicly listed companies in Indonesia. The year 2024 was selected as the research period due to its unique characteristics: post-pandemic economic dynamics and fluctuating macroeconomic conditions (including interest rates, inflation, and elections) that potentially influence market reactions to cum-ex dividend announcements. The research questions addressed are: (1) whether there are differences in abnormal returns before and after cum-ex dividend announcements; (2) whether there are differences in stock trading volume before and after cum-ex dividend announcements; and (3) whether these differences are statistically significant based on the Wilcoxon test.

2. RESEARCH METHOD

This study employed a comparative quantitative method with an event study approach to determine differences in stock returns on each trading day and to identify anomalies occurring during the dividend announcement event. According to Darmadi (2013) and Sugiyono (2009), a research method is a scientific approach to obtaining data for specific purposes. The data obtained through this research are empirical (observable) data possessing valid criteria that indicate the degree of accuracy between actual occurrences and data collected by the researcher.

The population of this study comprised all publicly listed companies on the Indonesia Stock Exchange (IDX) that distributed cash dividends during 2024, totaling 278 companies. From this population, 88 companies were selected through purposive sampling to serve as the research sample. The purposive sampling criteria ensured that selected companies had complete data availability, distributed cash dividends during the observation period, and had sufficient trading activity around the cum-ex dividend dates.

This study utilized secondary data obtained from the Indonesia Stock Exchange (IDX). Data were collected through official publications of audited financial reports, economic indices issued by government financial authorities, and comparative data from the IDX official website. The study also employed library research (literature review) encompassing books, lecture notes, internet sources, national and international journals, and news related to the research problems. The research was conducted from June to September 2025.



The research variables consisted of: (1) a dummy variable representing the before and after Cum-Ex Dividend periods (D), where D=0 indicates the period before cum-ex dividend and D=1 indicates the period after cum-ex dividend; and (2) the dependent variable, namely stock returns (Y). Abnormal return was calculated as the difference between actual return and expected return using the market-adjusted model:

$$ARit = Rit - E[Rit]$$

Where: ARit = abnormal return of security i in period t; Rit = actual return of security i in event period t; E[Rit] = expected return of security i for event period t.

$$\text{Actual return: } Rit = (Pit - Pit-1) / Pit-1$$

$$\text{Expected return using market-adjusted model: } Rmt = (IHSj - IHSj-1) / IHSj-1$$

Average Abnormal Return (AAR) was calculated to determine the presence or absence of abnormal return in the period before or after the announcement: $AARt = (1/k) \times \sum ARit$, where k is the number of securities affected by the event announcement (Hartono, 2014).

Data analysis was conducted using non-parametric statistical methods, specifically the Wilcoxon Signed Rank Test, followed by an event study using dummy regression to test for differences in stock returns based on Cum-Ex Dividend status (Gujarati, 2015). All statistical analyses were performed using EViews 12 software.

Wilcoxon Signed Rank Test: This non-parametric test was used to measure differences between two paired data groups on ordinal or interval scales when data are not normally distributed. Decision criteria: if asymptotic significance (2-tailed) < 0.05, then a significant difference exists; if > 0.05, no significant difference exists.

Dummy Regression Model: According to Gujarati (2014), dummy regression is a type of regression analysis where at least one independent variable is qualitative in nature, measured on a nominal or ordinal scale. The dummy variable assumes values of 0 (before cum-ex dividend) or 1 (after cum-ex dividend) to quantify the qualitative variable.

Coefficient of Determination (R^2): This was used to assess the goodness of fit between predicted values or regression lines and sample data. A value approaching 1 indicates a strong influence of the independent variable on the dependent variable, while a value approaching 0 indicates a weak influence.

3. RESULT AND DISCUSSION

Results

Descriptive statistics for the abnormal return variable before and after cum-ex dividend announcements revealed that each company exhibited varying mean, median, maximum, minimum, and standard deviation values. The mean values indicated the average level of abnormal returns obtained during the observation period, while standard deviations reflected the degree of deviation or volatility in abnormal return values.

Generally, average abnormal returns before cum-ex dividend announcements showed stock price fluctuations reflecting market reactions to investor expectations regarding dividend distribution. Several companies, including AALI, ADRO, AGII, and AKRA, exhibited relatively high mean abnormal return values, suggesting that investors had already begun responding to dividend-related information before the cum date. After cum-ex dividend announcements, the average abnormal return for most companies tended to decline, indicating that the market began adjusting stock prices once dividend information was realized and no longer provided informational surprise to investors.

Notably large standard deviation values for certain stocks, such as ITMG, UNTR, and INKP, indicated high price volatility around the cum-ex dividend period, potentially caused by high trading activity or diverse market reactions to these companies' dividend policies. The Jarque-Bera test results for most data showed probability values greater than 0.05, indicating that the data were normally distributed and thus met the normality assumption for subsequent paired sample testing.



Hypothesis Testing Results

Hypothesis 1: *Differences in Abnormal Returns Before and After Cum-Ex Dividend Announcements*

The analysis demonstrated that significant differences in abnormal returns exist before and after cum-ex dividend announcements. From the 88 sample issuers, 72 issuers (81.82%) showed statistically significant results, both positive and negative. Of these, 50 issuers (56.82%) exhibited significant negative results, while 22 issuers (25%) showed significant positive results. Meanwhile, 16 issuers (18.18%) displayed no significant differences.

Table 1. Summary of Abnormal Return Test Results (Stock Prices)

Category	Number of Issuers	Percentage	Avg. R ²
Significant Negative	50	56.82%	58.03%
Significant Positive	22	25.00%	50.70%
Not Significant	16	18.18%	3.75%

The dominance of significant negative results indicates that after cum-ex dividend announcements, stock prices tended to experience declining abnormal returns. This finding is consistent with the dividend drop theory, which posits that stock prices adjust to reflect the dividend amount distributed when entering the ex-dividend period. Investors purchasing shares after the ex-dividend date are no longer entitled to receive dividends, leading to decreased demand and price correction.

However, the presence of issuers with significant positive results demonstrates that not all stocks follow the negative correction pattern. Some companies conveyed positive signals through dividend distribution, which the market perceived as indicators of sound financial performance (signaling theory). Investors responded by continuing to purchase shares, resulting in rising abnormal returns. These inter-issuer differences were also influenced by external factors such as overall market conditions, individual company fundamentals, and investor sentiment.

Hypothesis 2: *Differences in Stock Trading Volume Before and After Cum-Ex Dividend Announcements*

The analysis of stock trading volume yielded the following results:

Table 2. Summary of Trading Volume Test Results

Category	Number of Issuers	Percentage	Avg. R ²
Significant Negative	12	13.64%	33.13%
Significant Positive	4	4.55%	31.50%
Not Significant	72	81.82%	4.79%

The majority of issuers (72 out of 88, or 81.82%) showed no significant differences in stock trading volume. This indicates that for most companies, the tested variable did not have a statistically proven influence on trading volume, suggesting that other factors are more dominant in determining trading volume for the majority of stocks.

For the 12 issuers (13.64%) showing significant negative results, the independent variable demonstrated an inverse and substantial relationship with trading volume, acting as a significant volume suppressor. AGII (Aneka Gas Industri Tbk) recorded the highest R² at 52.43%, indicating that over half of its trading volume variation could be explained by the tested variable. For the 4 issuers (4.55%) with significant positive results, the independent variable acted as a volume driver, with IKPM (PT Ikapharmindo Putramas Tbk) recording the highest R² at 35.16%.

Hypothesis 3: *Statistical Significance of Abnormal Return Differences Based on Wilcoxon Test*

The Wilcoxon test confirmed that the majority of companies (approximately 81.82%) experienced statistically significant differences between abnormal returns before and after cum-ex dividends, with most (56.82%) showing a negative direction after the announcement. This indicates that the market reacted substantively to dividend distribution events, with stock prices adjusting after the ex-dividend date. Consequently, cum-ex dividend announcements are proven to have a significant influence on stock price behavior and trading activity on the Indonesia Stock Exchange.



Discussion

Abnormal Return Analysis

The findings align with the semi-strong form of the Efficient Market Hypothesis (EMH), as the market reacted to public information in the form of dividend announcements, reflected in stock price changes. However, the dominance of significant negative abnormal returns among 50 issuers (56.82%) and significant positive abnormal returns among 22 issuers (25%) indicates the existence of relatively predictable price movement patterns. This condition suggests that the market is not fully efficient, as according to EMH, investors should not be able to consistently obtain abnormal returns after information is published. This phenomenon resembles other market anomalies, such as the week-four effect, where stock returns tend to be negative on Mondays of the fourth and fifth weeks of each month, which also contradicts the principle of efficient markets.

These findings are consistent with studies conducted by Husodo (2017) and Lestari (2020), who found differences in abnormal returns around cum-ex dividend announcements for issuers on the Indonesia Stock Exchange. Their results showed that investors responded to dividend announcements, though the direction of reactions varied depending on investor perceptions and company fundamentals. This study also supports the signaling theory proposed by Bhattacharya (1979) and Miller and Rock (1985), which states that dividend announcements can serve as positive signals to the market regarding a company's future prospects. Lintner (1956) further emphasized that dividend policy can be viewed as a means of management communication to investors regarding the stability and prospects of company earnings.

Trading Volume Analysis

The trading volume findings are consistent with EMH, showing that trading volume increases approaching the cum date and decreases after the ex date, meaning the market responds to dividend announcement information through changes in investor behavior (dividend hunting), as both price and volume reflect public information regarding the dividend distribution schedule. Husodo (2017) and Lestari (2020) demonstrated that stock trading volume experienced significant differences around cum-ex dividend dates, concluding that investors responded to dividend announcements with increased trading activity before the cum date, but after the ex date, trading activity weakened as shares no longer carried dividend rights. However, variations in results across issuers also demonstrate that factors such as company fundamentals, macroeconomic conditions, and investor sentiment continue to play roles in determining trading volume intensity.

Coefficient of Determination Analysis

The regression model demonstrated strong explanatory power for issuers showing significant test results, both positive and negative. For issuers with significant negative results on stock prices, the average R^2 was 58.03%, indicating that 58.03% of the variation in financial performance could be significantly explained by the dummy variable. For issuers with significant positive results, the average R^2 was 50.70%. In contrast, the model had very weak explanatory power ($R^2 = 3.75\%$) for issuers with non-significant results, confirming the absence of a meaningful relationship between the tested variable and stock price performance in that group. For trading volume, the significant negative category showed an average R^2 of 33.13%, while the significant positive category showed 31.50%, and the non-significant category showed only 4.79%.

4. CONCLUSION

First, significant differences in abnormal returns exist before and after cum-ex dividend announcements for companies listed on the Indonesia Stock Exchange. Abnormal return values fluctuated significantly around cum-ex dividend dates. Before the announcement, average abnormal returns tended to be positive as investors purchased shares to obtain dividend rights. After the announcement, abnormal returns declined and even became negative, reflecting market reactions to the loss of dividend rights. This aligns with signaling theory, which posits that dividend policies convey signals regarding company prospects.



Second, regarding stock trading volume, the Wilcoxon Test and Dummy Regression results showed that the majority of issuers (81.82%) were not significantly affected by the tested independent variable, supported by very low model explanatory power (R^2), indicating that other factors are more dominant in determining trading volume for most stocks. However, for the 18.18% of issuers that were significantly affected, the independent variable proved to be a strong predictor (average R^2 above 30%), where the impact was more frequently negative (volume suppression in 12 issuers, with AGII reaching 52.43%) than positive (volume increase in 4 issuers, with IKPM highest at 35.16%).

Third, the Wilcoxon test demonstrated that the majority of companies (approximately 81.82%) experienced statistically significant differences between abnormal returns before and after cum-ex dividends, with most (56.82%) showing negative direction after the announcement. This indicates that the market reacted substantively to dividend distribution events, where stock prices adjusted after the ex-dividend date. Consequently, cum-ex dividend announcements are proven to have a significant influence on stock price behavior and trading activity on the Indonesia Stock Exchange.

This study offers practical implications for investors, companies, and regulators. Investors should employ differentiated strategies: exercising caution with issuers showing negative significant reactions by considering profit-taking before cum dates, while viewing issuers with positive significant reactions as potential long-term investment targets. Companies should improve communication regarding dividend policies alongside long-term business strategies. Future research is recommended to explore additional factors influencing price declines, incorporate fundamental variables (ROE, EPS, earnings growth) and market sentiment, and examine industry-specific effects using additional variables.

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