

CHANGES IN HIGH DIVIDEND STOCK YIELDS BEFORE AND AFTER DIVIDEND ANNOUNCEMENT: EVIDENCE FROM THE IDX HIGH DIVIDEND 20 INDEX

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Abstract

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This study examines changes in stock yields in the Indonesia Stock Exchange (IDX) High Dividend 20 Index in Indonesia before and after the dividend announcement. The purpose of this study is to analyze the impact of dividend announcements on market reactions and stock yields. The methodology used is an event study method, focusing on abnormal returns (AR) and cumulative abnormal returns (CAR) over 10 days before and after the dividend announcement. Data is collected from companies listed in the index, and analysis is carried out using the capital asset pricing model (CAPM) model to calculate expected returns. Key findings suggest that dividend announcements have a significant positive impact on stock prices, with companies that distribute higher dividends likely to get a more positive market reaction. The conclusion of this study confirms that the dividend announcement serves as a positive signal for investors regarding the company's financial health, as well as providing valuable insights for investors and analysts in making investment decisions in the Indonesian stock market. The study also suggests the need to pay attention to market dynamics that affect the reaction to dividend announcements.

Keywords: Stock Yield, Dividend Announcement, IDX High Dividend 20 Index, Indonesia Stock Market, Market Reaction, High Dividend

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1. INTRODUCTION

The dividend announcement is an important indicator for investors as it provides an overview of a company's healthy financial performance as well as the future growth prospects of a company in the stock market (Halife & Karroum, 2023). The important moment dividend announcement not only reflects the company's financial stability but also becomes a reference for investors to evaluate the passive income potential of investment (Soesanto et al., 2021). The information provided in the dividend announcement can affect investors' perception of the value of the stock and their confidence in the strategic direction taken by the company. Consistent and profitable dividend announcements are often taken as a sign of a company's confidence in future performance and ability to add value to shareholders (Ham et al., 2020). As an integral part of a company's cycle in the stock market, dividend announcements also play an important role in shaping market perceptions of a company's financial health and sustainability of growth (Akron et al., 2020).

The Indonesia Stock Exchange (IDX) High Dividend 20 Index stands out as a promising investment option for investors seeking income from high dividends. The presence of the index reflects market confidence in the stable and consistent performance of the companies included in it. The focus of research on the IDX High Dividend 20 Index shows great interest in understanding how changes in dividend announcements affect the stock returns of related companies (Ariesa et al., 2020). When the focus of research, the index becomes a rich and useful source of data to identify trends and patterns in the market reaction to dividend announcements. Research into changes in stock yields before and after dividend announcements on the IDX High Dividend 20 Index can provide an in-depth look at how capital markets respond to fundamental information such as dividend announcements (Krishnan & Periasamy, 2022).

Investments in high-dividend sectors show sustained interest from investors who value passive and stable income from dividends. A deep understanding of the market's reaction to dividend announcements provides valuable insight for investors in evaluating the growth potential of an investment portfolio (Li, 2020). Investors often use information from dividend announcements to gauge a company's performance and prospects. By understanding how the market responds to dividend announcements, investors can identify profitable investment opportunities and reduce investment risk. The focus on investment trends in the high dividend sector shows an awareness of the importance of maximizing long-term investment value by utilizing the large dividend potential of selected stocks (Prakash & Yogesh, 2021).

Although there has been a lot of research on the effects of dividend announcements, research that specifically examines changes in the yield of IDX High Dividend 20 Index stocks in Indonesia is still very (Hanif et al., 2021; Putri et al., 2022). By focusing on changes in stock yields in the index, this study aims to fill the knowledge void in the academic literature on the Indonesian stock market. This research promises to contribute significantly to further understanding of how Indonesia's capital market responds to dividend announcements, particularly for stocks with high

dividend characteristics included in the IDX High Dividend 20 Index (Robiyanto & Yunitaria, 2022). By broadening the horizons of the dynamics of the Indonesian stock market, this research can assist investors, market analysts, and regulators in making better and more informed decisions (Hashmi et al., 2021; Wang, 2013). This research can be the foundation for further research and more effective policies in managing the Indonesian capital market and increasing investor confidence in the face of market volatility (Khusna & Restuningdiah, 2021; Sugandi, 2022).

But in reality, there is a lack of consideration of recent changes in the composition of the IDX High Dividend 20 Index (Darma et al., 2022). Taking into account recent changes in index composition, the study can provide a more comprehensive insight into the relationship between dividend announcements and price changes (Robiyanto & Yunitaria 2022). Not considering other external factors that may affect the stock price other than the dividend announcement, such as overall market conditions, economic or political news, and other factors that may affect investor sentiment (Dwiantoro, 2021).

The dividend announcement reflects the company's financial stability and growth prospects. Despite many studies in developed markets, research on its impact in emerging markets, particularly on Indonesia's IDX High Dividend 20 Index, is limited. This study analyzes the effect of dividend announcements on stock performance, focusing on price changes before and after the announcement, using a market reaction theory that explains stock price adjustments based on investors' perceptions of new information (Akron et al., 2020). Using the capital asset pricing model (CAPM), the study analyzed stock returns 10 days before and after the dividend announcement. The findings show a significant positive impact of dividend announcements on stock yields, with higher dividends resulting in stronger market reactions. This research provides insights for investors in the Indonesian market (Kurnia et al., 2022).

This paper is organized into five sections. Section 1 introduces the research issues, objectives, and importance of analyzing dividend announcements in the context of the IDX High Dividend 20 Index. Section 2 reviews the related literature, focusing on previous studies. Section 3 describes the methodology, including data collection and financial models. Section 4 presents empirical results and discussions. Section 5 concludes the findings, implications, and suggestions for further research.

2. LITERATURE REVIEW

Dividend announcements are one of the important aspects of the financial world that have a great influence on the stock market and investor perception. Many studies have highlighted how dividend announcements can provide important signals regarding the company's condition and prospects. Research conducted by Meza et al. (2020) shows that dividend announcements can have a significant positive effect on stock prices. In the study, it was found that investors often perceive dividend announcements as a positive signal about the company's prospects, leading to an increase in the value of the stock after the dividend announcement.

One of the theories underlying the influence of dividend announcements on stock prices is

the signaling theory. This theory states that a company's decision to pay dividends can serve as a signal to investors regarding the company's financial health (Li, 2020). A higher-than-expected dividend announcement or an increase from the previous period is often seen as an indication that the company is in good financial shape and has bright growth prospects. Conversely, a decrease in dividends or a decision not to pay dividends can be a negative signal indicating financial difficulties or uncertainty in the future (AlGhazali et al. 2024).

In line with the signaling theory, research by Belinda and Dewi (2023) found that higher dividend announcements tend to be met with a more positive market reaction. This shows that investors give a higher valuation to companies that pay large dividends because they consider the company to be more stable and able to generate enough cash flow to provide profit sharing to shareholders. In addition to being a positive signal, dividend announcements can also have a stabilizing effect on stock prices. According to research by Tran (2024), companies that consistently pay dividends tend to have lower stock price volatility because regular dividend announcements provide certainty for investors. This reduces uncertainty regarding the company's prospects, increases investor confidence, and in turn reduces fluctuations in the company's stock price.

Dividend announcements affect investors' perception of the company's risks. Companies with consistent dividend policies are considered more stable and less risky, so they are valued higher by the market. A clear and consistent dividend policy increases the attractiveness of the company as a more reliable investment in providing returns (Busro et al., 2023). The dividend announcement not only serves as a signal regarding the current financial condition but also as an indicator of the company's performance and prospects. Research by Aamir and Shah (2011) shows that higher dividend announcements are often associated with better company performance and more positive growth prospects. This signals to investors that the company can generate sustainable profits and can allocate a portion of those profits to shareholders in the form of dividends.

The announcement of a larger dividend creates positive expectations about the company's prospects, encouraging investors to buy shares and increase the share price. The company's decision to raise its dividend is often greeted enthusiastically by the market, as it is considered to reflect good performance and increase investment attractiveness (Wei, 2020). The influence of dividend announcements on stock prices can also be seen in the context of certain stock markets, such as the Indonesian stock market. Research by Hanif et al. (2021) examined the effect of dividend announcements on stock returns in the Indonesian stock market and found that dividend announcements have a significant positive effect on the return of company shares in the Indonesian stock market. In the Indonesian stock market, investors responded to dividend announcements by increasing demand for shares of companies that announced larger dividends. Local factors, such as investor characteristics and preferences for dividend stability, influence market reactions. The Indonesian market, like other emerging markets, has different

dynamics from developed markets, so the local context is important in analyzing the impact (Sherine et al., 2022).

Research by Hasan and Al-Najjar (2024) shows that dividend announcements have a significant influence on stock returns in stock indices, such as the IDX High Dividend 20 Index which consists of companies with high dividend ratios. Higher dividends can lead to an increase in stock yields after the announcement. Investors pay attention to dividend policies in the context of stock indices, which affect the allocation of their investments. Indices that focus on high-dividend companies provide a clear picture of the impact of dividend policies on market performance. Positive dividend announcements can encourage investors to increase their exposure to stocks in the index, thereby increasing the overall return of the index (Busro et al., 2023).

Dividend announcements have a significant impact on stock prices and investor perceptions. Higher dividends tend to increase stock prices as a positive signal regarding the company's performance, as well as stabilizing price volatility and increasing stock returns, both in the Indonesian market and the international stock market.

3. METHODOLOGY

The study used a sample of companies listed in the IDX High Dividend 20 Index, which consists of stocks that have distributed cash dividends over the past three years and show high dividend returns. The IDX High Dividend 20 Index is a collection of companies selected based on their dividend return performance and market capitalization. According to the IDX website, the IDX High Dividend 20 Index consists of the top 20 stocks with the highest dividend yield among the components of the IDX composite index. These stocks are selected based on their ability to consistently distribute dividends to shareholders, making them an attractive option for investors seeking income. According to the criteria set by the IDX, the components of the IDX High Dividend 20 Index are selected based on the following criteria:

1. Selected shares must have cash dividends distributed over the last three years and have an average daily trading value for the previous three months, six months, and 12 months exceeding Rp. one billion each.

2. A further selection of selected stocks is based on average dividend yield, average daily trading value over the previous three months, six months, and 21 months, as well as mud-free market capitalization during the assessment period.

3. Method for calculating IDX High Dividend 20 Index using capped dividend yield adjusted free-float market capitalization weighted method. This method uses free-float market capitalization as an expense with adjustments using dividend returns. In addition, the weight of the stock is adjusted so that the highest weight for a single stock is capped at 15%.

4. IDX conducts two types of assessments of component stocks of the IDX High Dividend 20 Index:

- a) the primary valuation involves a component valuation and stock load adjustment at the end of January and becomes effective on the first trading day of February;

b) minor evaluation, which only involves adjusting loads at the end of July and becomes effective on the first trading day of August.

The sample for this study was taken from companies in the IDX High Dividend 20 Index that meet the above criteria, ensuring the selection of companies with strong dividend performance and market capitalization. Data for this study was obtained from the IDX website (<https://www.idx.co.id/id>), which provides a powerful dataset to analyze the relationship between each company's cash dividend in the IDX High Dividend 20 Index to the price change of each stock. In addition, the study considers the recent announcement from the IDX regarding the results of a major evaluation or re-balancing of the components of the IDX High Dividend 20 Index, which is valid from February 5, 2024, to February 5, 2025. This announcement demonstrates the importance of considering recent changes in index composition when analyzing the IDX composite's reaction to a company's ex-date cash dividend in the IDX High Dividend 20 Index.

This study uses an event study methodology to analyze the impact of dividend announcements on stock yields on the IDX High Dividend 20 Index, focusing on abnormal return (AR) and cumulative abnormal return (CAR) returns for 10 days before and after the announcement. The CAPM is used to calculate the expected return, which is compared to the actual return to identify deviations. While a time series model or panel regression can be used for long-term analysis, the event study approach is more effective at isolating the direct impact of dividend announcements. This method is suitable for short-term analysis, helping to understand the market's reaction to dividend news and providing insight into market efficiency as well as investor behavior in Indonesia's high-dividend stock market (Prakash & Yogesh, 2021).

Establish the analytical framework used in the study using several formulas to analyze the relationship between dividend announcements and stock returns, based on financial models (Marisetty, 2021):

CAPM

$$R_{it} = a + \beta R_{x,t} + \varepsilon_{i,t} \quad (1)$$

This equation models return (R_{it}) of each share in our dataset, where a represents the intercept term, β shows a stock's sensitivity to market returns ($R_{x,t}$), and $\varepsilon_{i,t}$ is an error term that captures unexplained factors that affect stock returns.

Expected return calculation

$$ER_{i,t} = a + \beta R_{x,t} \quad (2)$$

This equation is used to calculate the expected return of each stock based on the CAPM, which becomes the basis for understanding how the market expects each stock to perform given its sensitivity to market return ($R_{x,t}$).

AR calculation

$$AR_{it} = R_{it} - ER_{it} \quad (3)$$

This equation is used in analysis studies to calculate the AR of any stock, which represents the deviation of the actual return from the expected return. It allows researchers to identify stocks that are performing better or worse than market expectations, providing insight into the effectiveness of dividend announcements.

CAR calculation

$$CAR_{i,x,y} = \sum_{t=-y}^{t=x} AR_{i,t} \quad (4)$$

This equation is used to calculate the CAR of any stock over a given period surrounding the dividend announcement event. By accumulating AR during this period, this study assesses the overall impact of the dividend announcement of each High Dividend 20 Index company on the performance of each High Dividend 20 Index stock in Indonesia.

Using this formula to accumulate AR for 10 days before the dividend announcement and 10 days after the dividend announcement, allows us to assess the overall impact of the dividend announcement on stock performance.

4. RESULTS AND DISCUSSION

The findings of this study show that dividend announcements have a significant positive impact on stock returns in the IDX High Dividend 20 Index, especially for companies with higher dividend payouts. This is in line with the results of previous studies, such as Halife and Karroum (2023). This study shows a positive market reaction to dividend announcements, reinforcing the role of dividends as a signal of the company's financial health. In the IDX High Dividend 20 Index, dividend announcements encourage stock prices and yields to rise. These findings are consistent with emerging markets, where the impact of dividend announcements is stronger due to low market transparency.

However, there are some differences compared to studies conducted in more mature markets, where the reaction to dividend announcements is often less pronounced (Robiyanto & Yunitaria, 2022). In developed markets, better information and predictable dividend policies result in simpler responses. In Indonesia, the market reaction is stronger due to the volatility and sensitivity of emerging markets, influenced by external factors such as political and economic instability. Pinchuk's (2022) positive reaction in the study related to market stability during the analysis period. This study analyzes the changes in stock yields in the IDX High Dividend 20 Index for 10 days before and after the dividend announcement. The selection of this timeframe includes anticipatory behavior and market reactions, allowing for analysis of how investors adjust their positions. This approach provides insight into the efficiency of dividend announcements in influencing stock prices (Kim et al., 2021).

Therefore, to strengthen the analysis, the table below details the dividend per share (DPS) of stocks that experienced an increase in dividends:

Table 1. Dividend per share for dividend rise

No.	Code	Company name	Cash dividend	
			Previous	2023
1	AMRT	PT Sumber Alfaria Trijaya Tbk	18.7	24
2	ANTM	PT Aneka Tambang Tbk	38.7	79.5
3	BBNI	PT Bank Negara Indonesia (Persero) Tbk	73.1	196
4	BBRI	PT Bank Rakyat Indonesia (Persero) Tbk	57	231
5	BMRI	PT Bank Mandiri (Persero) Tbk	180	265
6	ITMG	PT Indo Tambangraya Megah Tbk	4128	6416
7	KLBF	PT Kalbe Farma Tbk	35	38
8	PTBA	PT Bukit Asam Tbk	689	1094
9	SMGR	PT Semen Indonesia (Persero) Tbk	173	245
10	TLKM	PT Telkom Indonesia (Persero) Tbk	150	168
11	TPIA	PT Chandra Asri Pacific Tbk	1.8	5.1
12	UNVR	PT Unilever Indonesia Tbk	69	71

Table 1 features selected companies that are members of the IDX High Dividend 20 Index, highlighting the cash DPS awarded for the previous year and 2023. The columns presented include a sequence number, stock code, company name,

previous year's cash dividend, and 2023 cash dividend. For example, PT Sumber Alfaria Trijaya Tbk (AMRT) increased its dividend from 18.7 to 24%, while PT Aneka Tambang Tbk (ANTM) increased its dividend from 38.7 to 79.5.

Table 2. Dividend announcement date for dividend rise

No.	Code	Company name	Dividend announcement date
1	AMRT	PT Sumber Alfaria Trijaya Tbk	22 May, 2023
2	ANTM	PT Aneka Tambang Tbk	19 June, 2023
3	BBNI	PT Bank Negara Indonesia (Persero) Tbk	17 March, 2023
4	BBRI	PT Bank Rakyat Indonesia (Persero) Tbk	14 March, 2023
5	BMRI	PT Bank Mandiri (Persero) Tbk	17 March, 2023
6	ITMG	PT Indo Tambangraya Megah Tbk	31 March, 2023
7	KLBF	PT Kalbe Farma Tbk	5 May, 2023
8	PTBA	PT Bukit Asam Tbk	19 June, 2023
9	SMGR	PT Semen Indonesia (Persero) Tbk	19 April, 2023
10	TLKM	PT Telkom Indonesia (Persero) Tbk	6 June, 2023
11	TPIA	PT Chandra Asri Pacific Tbk	22 May, 2023
12	UNVR	PT Unilever Indonesia Tbk	31 May 2023

Table 2 shows the dividend announcement dates for dividend increases of some companies listed in the IDX High Dividend 20 Index. There are 12 companies listed, each with a different stock code and company name. For example, PT Sumber Alfaria Trijaya Tbk with stock code AMRT announced a dividend increase on May 22, 2023, while PT Aneka Tambang Tbk (ANTM) announced it

on June 19, 2023. In addition, there are other large companies such as PT Bank Negara Indonesia (Persero) Tbk (BBNI) which was announced on March 17, 2023, and PT Unilever Indonesia Tbk (UNVR) which was announced on May 31, 2023. These dates indicate when the companies provided official information to the public about the increase in dividends.

Table 3. Dividend per share for dividend down

No.	Code	Company name	Cash dividend	
			Previous	2023
1	ADRO	PT Adaro Energy Indonesia Tbk	241	200
2	ASII	PT Astra International Tbk	552	98
3	BBCA	PT Bank Central Asia Tbk	170	42.5
4	BRPT	PT Barito Pacific Tbk	3.1	1.59
5	ICBP	PT Indofood CBP Sukses Makmur Tbk	215	188
6	INDF	PT Indofood Sukses Makmur Tbk	278	257
7	UNTR	PT United Tractors Tbk	6185	701

Table 3 shows data on cash DPS from several companies in the IDX High Dividend 20 Index that experienced a decrease in dividends in 2023 compared to the previous year. Each company shows the amount of dividend decline that occurs in 2023. For example, PT Adaro Energy Indonesia Tbk (ADRO) decreased from 241 to 200, and PT Astra International Tbk (ASII) decreased from 552 to 98. Likewise, other companies such as PT Bank Central

Asia Tbk (BBCA) recorded a decline from 170 to 42.5, and PT United Tractors Tbk (UNTR) from 6185 to 701. The table as a whole illustrates that all listed companies will experience a decrease in cash per share dividends in 2023, reflecting economic conditions or corporate strategies that influence those dividend distribution decisions (Robiyanto & Yunitaria, 2022).

Table 4. Dividend announcement date for dividend down

No.	Code	Company name	Dividend announcement date
1	ADRO	PT Adaro Energy Indonesia Tbk	18 December, 2023
2	ASII	PT Astra International Tbk	3 October, 2023
3	BBCA	PT Bank Central Asia Tbk	23 November, 2023
4	BRPT	PT Barito Pacific Tbk	14 June, 2023
5	ICBP	PT Indofood CBP Sukses Makmur Tbk	28 June, 2023
6	INDF	PT Indofood Sukses Makmur Tbk	27 June, 2023
7	UNTR	PT United Tractors Tbk	2 October, 2023

Table 4 is a table that lists information about the dividend announcement dates of several companies in Indonesia. Some of the companies listed in this table include PT Adaro Energy Indonesia Tbk (ADRO) which will declare its dividend on December 18, 2023, PT Astra International Tbk (ASII) on October 3, 2023, and PT

Bank Central Asia Tbk (BBCA) on November 23, 2023. In addition, PT Barito Pacific Tbk (BRPT) on June 14, 2023, PT Indofood CBP Sukses Makmur Tbk (ICBP) on June 28, 2023, PT Indofood Sukses Makmur Tbk (INDF) on June 27, 2023, and PT United Tractors Tbk (UNTR) on October 2, 2023.

Table 5. Dividend per share for dividend constant

No.	Code	Company name	Cash dividend	
			Previous	2023
1	INKP	PT Indah Kiat Pulp & Paper Tbk	50	50

Table 5 shows the information on cash DPS paid by PT Indah Kiat Pulp & Paper Tbk (INKP). The cash paid to DPS by PT Indah Kiat Pulp & Paper Tbk for the previous period was 50%, and the same

amount, which is 50, will also be paid for 2023. This indicates that the company's DPS remained constant between the two periods.

Table 6. Dividend announcement date for dividend constant

No.	Code	Company name	Dividend announcement date
1	INKP	PT Indah Kiat Pulp & Paper Tbk	19 May, 2023

Table 6 shows the dividend announcement date for PT Indah Kiat Pulp & Paper Tbk (INKP). With one entry, this table lists INKP's stock code, PT Indah

Kiat Pulp & Paper Tbk's company name, and dividend announcement date which is May 19, 2023.

Table 7. Average abnormal return and cumulative dividend per share rise

Event	AAR	Cumulative
E-10	0.001839	0.001839
E-9	0.002250	0.004088
E-8	0.003770	0.007858
E-7	0.004696	0.012554
E-6	0.007623	0.020178
E-5	0.005638	0.025816
E-4	0.002167	0.027983
E-3	-0.007639	0.020344
E-2	0.010148	0.030492
E-1	0.001423	0.031915
E	0.000581	0.032496
E+1	-0.001374	0.031122
E+2	0.007600	0.038722
E+3	0.009462	0.048184
E+4	-0.007363	0.040822
E+5	-0.019139	0.021683
E+6	-0.015797	0.005885
E+7	-0.004275	0.001610
E+8	-0.004975	-0.003364
E+9	0.009424	0.006060
E+10	-0.006060	0.000000

Table 7 shows the average abnormal return (AAR) and cumulative increase in DPS over a given period related to event E (dividend announcement).

A more detailed explanation will be given below the figure illustration.

Figure 1. Market reaction to dividend increase

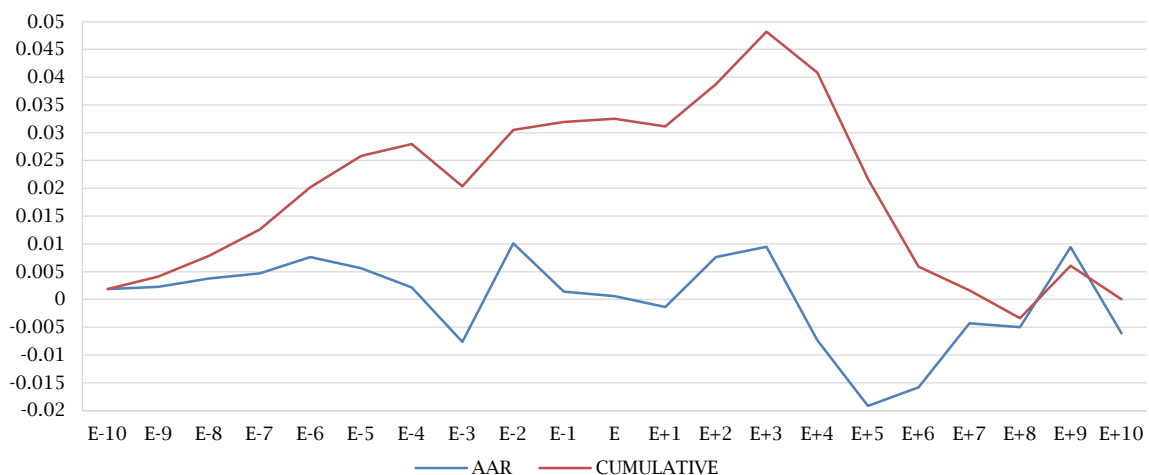


Figure 1 depicting AR and CAR for stocks that have increased DPS provides a dynamic picture of the market's reaction to dividend announcements. This timeline spans from 10 days before (E-10) to 10 days after (E+10) announcement (E), capturing market behavior before and after the event.

Ahead of the dividend announcement, there was a steady increase in AAR, starting at 0.001839 on E-10 and peaking at 0.010148 on E-2. A positive trend indicates that investors anticipate announcements and likely adjust their portfolios to the expectation of favorable news, resulting in a cumulative increase in returns up to 0.031915 on E-1. This bullish trajectory indicates strong investor confidence and speculative activity ahead of the announcement date (Martineau, 2022).

On the day of the announcement (E), an AAR positive of 0.000581, pushed CAR to the top 0.032496.

However, within a few days of the announcement (E+1 to E+10), the graph showed mixed reactions. There were periods of negative returns, particularly noticeable at E+5 and E+6 with AARs of -0.019139 and -0.015797 respectively, causing significant decreases in CAR. These declines may indicate profit action or adjustment as the initial excitement fades and investors reassess new information. Despite these fluctuations, the chart shows resilience, with AAR bouncing back positively at E+9 at 0.009424 before going neutral at E+10.

Overall, despite a post-announcement period of volatility and negative returns, the pre-announcement and stabilization gains finally highlight how the anticipated increase in DPS drives market behavior, resulting in an abnormally sustained cumulative uptrend of returns despite fluctuating (Xu et al., 2022).

Table 8. Average abnormal return and cumulative dividend per share down

<i>Event</i>	<i>AAR</i>	<i>Cumulative</i>
E-10	0.005069	0.005069
E-9	-0.005130	-0.000061
E-8	0.000944	0.000883
E-7	-0.007930	-0.007047
E-6	0.003687	-0.003359
E-5	0.001432	-0.001927
E-4	0.000427	-0.001500
E-3	-0.017285	-0.018785
E-2	0.015740	-0.003045
E-1	0.004775	0.001730
E	0.003479	0.005209
E+1	-0.003702	0.001507
E+2	0.001645	0.003152
E+3	0.001360	0.004512
E+4	0.000461	0.004973
E+5	-0.004396	0.000577
E+6	0.001095	0.001672
E+7	-0.011525	-0.009853
E+8	0.008205	-0.001648
E+9	-0.004226	-0.005874
E+10	0.005874	0.000000

Table 8 shows the AAR and cumulative decline in DPS over a given period related to event E (dividend announcement). A more detailed explanation will be given below the figure illustration.

Figure 2. Market reaction to dividend decrease

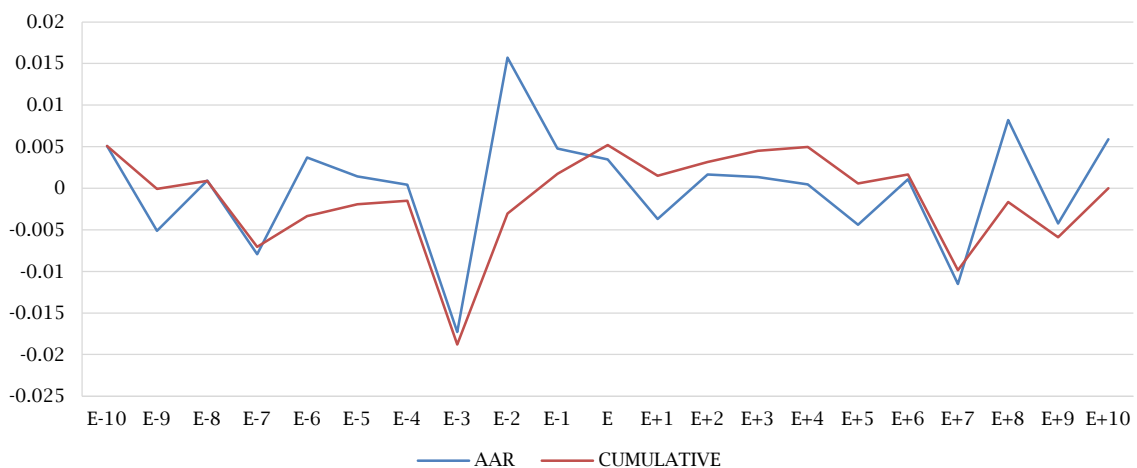


Figure 2 representing AR and CAR for stocks that have decreased DPS show a consistent pattern of the market. The analysis covers a timeline from 10 days before (E-10) to 10 days after (E+10) dividend announcement (E), providing insight into investor behavior in response to unfavorable dividend news.

Initially, there was a short period of positive AAR of 0.005069 on E-10. However, the figure quickly shows volatility and the predominance of negative returns. On E-9, AAR drops to -0.005130, causing a slightly negative CAR at -0.000061. This negative trend continued sporadically, with

significant declines in E-7 by -0.007930 and E-3 by -0.017285, reflecting a strong adverse reaction to the anticipation of lower dividends. This decline indicates investor disappointment and possible selling, pushing CAR lower (Halife & Karroum 2023).

Although there are occasional positive returns, such as in E-2 (0.015740) and E (0.003479), this is not enough to offset the overall negative trend. After the announcement, the market continued to show instability (Prakash & Yogesh, 2021). For example, on E+1, AAR was down to -0.003702, and despite a small positive rebound on days like E+2 and E+6, CAR did not recover substantially. Downward

pressure is particularly pronounced at E+7, with a sharp decrease in AAR of -0.011525, resulting in a CAR of -0.009853.

At the end of the observation period, CAR remained depressed, although it returned to zero at E+10 due to a positive AAR of 0.005874. This pattern illustrates that despite occasional positive returns, overall investor sentiment remains bearish in the face of falling DPS, maintaining the dominant negative path throughout the period. The consistent downward trend in CAR confirms the pessimistic market environment and declining confidence when companies declare lower dividends (Ran et al., 2019).

Table 9. Average abnormal return and cumulative dividend per share constant

<i>Event</i>	<i>AAR</i>	<i>Cumulative</i>
E-10	0.001781	0.001781
E-9	-0.012168	-0.010387
E-8	0.001806	-0.008581
E-7	0.015829	0.007248
E-6	0.015526	0.022774
E-5	-0.025444	-0.002670
E-4	0.005229	0.002559
E-3	-0.001715	0.000844
E-2	0.012078	0.012922
E-1	-0.015321	-0.002399
E	0.026993	0.024594
E+1	-0.024971	-0.000377
E+2	-0.020763	-0.021139
E+3	-0.001715	-0.022855
E+4	0.032265	0.009411
E+5	-0.011105	-0.001694
E+6	0.012503	0.010809
E+7	0.026322	0.037131
E+8	-0.019897	0.017234
E+9	0.002914	0.020148
E+10	-0.020148	0.000000

Table 9 shows the AAR and cumulative DPS that are constant over a given period associated with

event E (dividend announcement). A more detailed explanation will be given below the figure illustration.

Figure 3. Market reaction to constant dividend

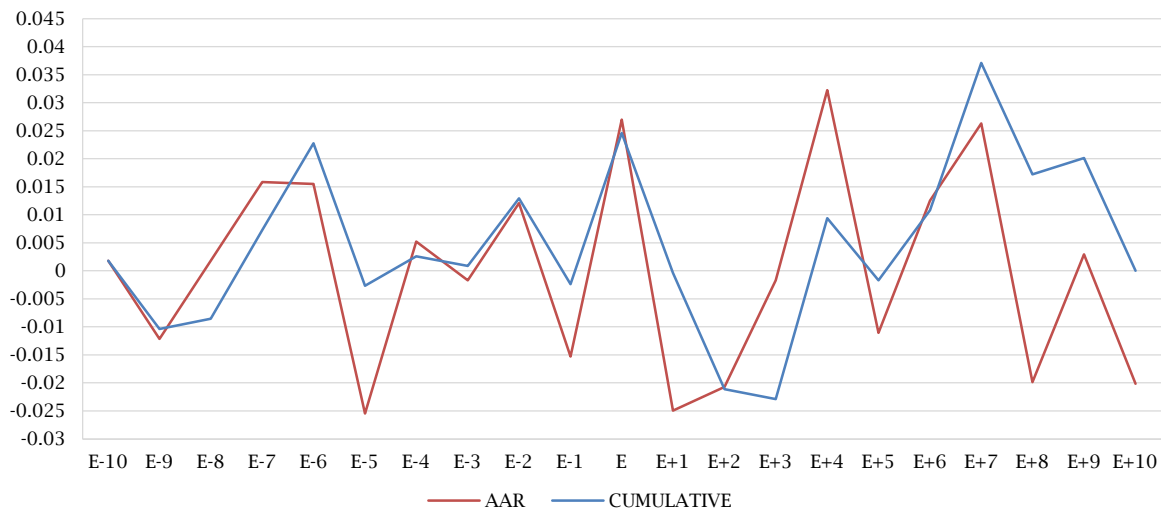


Figure 3 depicting AR and CAR for stocks with constant DPS shows a series of fluctuations that ultimately result in constant cumulative returns (Tran, 2024). The analysis covers the period from 10 days before (E-10) to 10 days after (E+10) dividend announcement (E), showing the market's reaction to a stable dividend announcement.

Initially, AAR started slightly positive at 0.001781 on E-10 but soon turned negative to -0.012168 on E-9, resulting in a decrease in

CAR to -0.010387. This initial volatility is typical as investors adjust their expectations (Drerup et al., 2023). The following days showed a mix of positive and negative AAR, with significant positive returns at E-7 (0.015829) and E-6 (0.015526), causing a temporary increase in CAR to 0.022774. However, this was followed by a sharp drop in E-5 by -0.025444, bringing the CAR down to -0.002670.

Despite these swings, the CAR remained relatively stable overall, oscillating around the zero

mark (Sun et al., 2023). For example, a small increase occurs in E-2 with an AAR of 0.012078, but this is offset by a decrease in E-1 of -0.015321. On the day of the announcement (E), the market reacted positively with an AAR of 0.026993, increasing the CAR to 0.024594. But again, this was followed by a negative return at E+1 (-0.024971) and E+2 (-0.020763), pushing CAR back down to -0.021139.

After the announcement, the chart continued to show variability with significant positive returns at E+4 (0.032265) and E+7 (0.026322), contrasted with

negative returns on other days such as E+8 (-0.019897). Finally, CAR returns neutral to zero at E+10 due to a negative compensatory AAR of -0.020148. Overall, this alternating pattern of positive and negative returns illustrates that the market responds to constant DPS announcements with a mixture of optimism and caution, resulting in balanced results. Cumulative returns are around a stable point, reflecting investor uncertainty and a lack of clear trends, consistent with dividend policy stability (Attig et al., 2021).

Table 10. Summary of abnormal return and cumulative abnormal return pre, and post-event

Event	Stock return	Pre-event	Post-event	Difference
Increase DPS	AR	0.003191	-0.002901	-0.006093
	CAR	0.021372	0.017339	-0.004034
Decrease DPS	AR	0.000173	-0.000157	-0.000330
	CAR	-0.002804	0.000385	0.003189
Constant DPS	AR	-0.000240	0.000218	0.000458
	CAR	0.004691	0.004424	-0.000266

Table 10 presents a stock return analysis around various events related to DPS changes: increase in DPS, decrease in DPS and constant DPS. The metrics analyzed are AR and CAR. Here is the breakdown of the table above:

Increase DPS:

- **AR:** Before the event, the AR was 0.003191, indicating a positive abnormality in stock returns. However, after the event, the AR decreased to -0.002901, indicating a negative abnormality. The difference between the AR before and after the event is -0.006093, indicating an abnormal decrease in return after the announcement of the dividend (Kadioglu & Kirbas, 2021).

- **CAR:** Before the event, the CAR was 0.021372, indicating a positive CAR leading up to the event. After the event, the CAR decreased to 0.017339, indicating a decrease in the CAR. The difference between the CAR before and after the event is -0.004034, indicating a decrease in the CAR after (El Ghouli et al., 2023).

Decrease DPS:

- **AR:** Before the event, the AR was 0.000173, indicating a slight positive abnormality in stock returns. After the event, the AR decreased slightly to -0.000157, indicating a more negative abnormality. The difference between the AR before and after the event is -0.000330, indicating an abnormal decrease in return after the announcement of the dividend (Lim & Tan, 2022).

- **CAR:** Before the event, the CAR was -0.002804, indicating a negative CAR leading up to the event. After the event, the CAR increased slightly to 0.000385, indicating a shift toward a positive CAR. The difference between the CAR before and after the event is 0.003189, indicating an increase in the CAR after the event (Szczygielski et al., 2022).

Constant DPS:

- **AR:** Before the event, the AR was -0.000240, indicating a slight negative abnormality in stock returns. After the event, the AR increased slightly to 0.000218, indicating a more positive abnormality. The difference between the AR before and after the event is 0.000458, indicating an abnormal increase in return after the announcement of the dividend (Kumar et al., 2023).

- **CAR:** Before the event, the CAR was 0.004691, indicating a positive CAR leading up to the event. After the event, the CAR decreases slightly to 0.004424, showing a slight decrease in CAR.

The difference between the CAR before and after the event is -0.000266, indicating a decrease in the CAR after the event (Szczygielski et al., 2022).

The table above provides a comprehensive overview of how various events related to DPS changes affect stock returns and CARs, offering insight into market reactions to dividend-related announcements and events (Asem & Alam, 2021).

The study found that dividend announcements had a significant positive impact on stock returns on the IDX High Dividend 20 Index. These findings are in line with previous research, such as those conducted by Prakash and Yogesh (2021), which also shows a positive market reaction to the dividend announcement. These results indicate that investors in the Indonesian market tend to view dividend announcements as a positive signal regarding the company's financial health and growth prospects. In this context, market reaction theory becomes relevant, where stock prices adapt based on new information received by investors (Sinha, 2023).

Further, the study confirms that companies that announce higher dividends tend to get a more positive market reaction. This is consistent with the findings of Wirama et al. (2024), which underscores the importance of dividend announcements as an indicator of company performance. In more developed markets, such as Indonesia, the market reaction to dividend announcements can be stronger compared to more mature markets, where investors already have better access to more predictable dividend information and policies (Prakash & Yogesh, 2021).

The findings also reflect the dynamics of more information-sensitive markets in developing countries, where uncertainty and volatility are higher. Thus, this study makes an important contribution to understanding how the unique characteristics of the Indonesian market affect investor behavior concerning dividend announcements. It also shows that while there is a lot of research on the impact of dividend announcements, there is still room for further exploration, especially in the context of specific indices such as the IDX high dividend (Ardelia et al., 2020; Baker et al., 2021).

5. CONCLUSION

This research demonstrates that dividend announcements significantly and positively impact the share prices of companies in the IDX High

Dividend 20 Index. Investors view dividend announcements as positive signals about a company's prospects, leading to increased share values, with higher dividends generating stronger market reactions. The announcements also provide insight into a company's performance, reducing price volatility. These findings offer valuable insights into how Indonesia's capital market responds to dividend announcements, especially in the context of high-dividend stocks.

The research has important implications for investors, market analysts, and regulators in making more informed decisions. It also enhances

understanding of how investors in emerging markets like Indonesia react to dividend news. Companies with higher dividend yields tend to see more favorable market reactions, suggesting that dividend announcements serve as indicators of financial health.

While the study is limited to a specific time frame in 2023 and focuses only on the IDX High Dividend 20 Index, it provides foundational insights for future research. Expanding the time frame and considering other high-dividend indices in emerging markets would offer a more comprehensive view of dividend-related stock movements.

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