

The Differences of Abnormal Return and Trading Volume Activity in Cum-Dividend Date Events

Anak Agung Dwiagita Ari Priestyaloka¹, I Ketut Suryanawa²

^{1,2}(Faculty of Economics and Business, Udayana University, Indonesia)

ABSTRACT: Dividend distribution is a signal that is deliberately given by company management to show the company's prospects in the future. This study aims to analyze the differences in abnormal returns and trading volume activity around the cum-dividend date which is the last trading day of stocks that still have the right to receive dividends. The population of this study are all companies listed on the LQ45 Index for the period February to July 2022 on the Indonesia Stock Exchange. The sample was determined using a non-probability sampling method with a purposive sampling technique so that 34 samples were obtained. The analytical method used in this study is the paired sample t-test. The results showed that there were differences in abnormal returns before and after the cum-dividend date. This study also shows that there is no difference in trading volume activity before and after the cum-dividend date.

KEYWORDS : *abnormal return, trading volume activity, cum-dividend date, event study*

I. INTRODUCTION

A capital market is a place that investors can use to invest some of the funds they have. According to the Indonesia Stock Exchange (IDX, 2019), the capital market is a market for various long-term financial instruments that can be traded, such as bonds, stocks, mutual funds, derivative financial instruments, and other instruments. The capital market is a means of funding for companies and other institutions (e.g., the government) as well as a means for investment activities.

The capital market is a medium for those who have excess funds (investors or prospective shareholders) and those who lack funds (companies). Investors can buy shares in the primary market and secondary market. Companies can sell new shares or sell shares that have been issued and fully paid, known as company listings. Investors in the capital market hope to get capital gains or dividends on their share ownership.

The process of determining or deciding whether to pay dividends is not always the same between companies and even between countries. Unlike in Western countries where the size of the dividend is determined by management, in Indonesia the decision on the size of the dividend is determined in the GMS (General Meeting of Shareholders). This difference has consequences for investor response where the uncertainty associated with sharing or not sharing in Western countries is higher than in Indonesia. Investors in Indonesia do not face too much uncertainty about dividends because the amount will be known at the GMS.

In an efficient market, all traded security prices reflect all available information. This information can be in the form of company profit reports, dividend payouts, stock splits, and reports from capital market analysts. The concept of an efficient capital market implies a process of adjusting security prices towards a new equilibrium price in response to perfect new information. The market is said to be efficient if it is able to react quickly and accurately to reach a new equilibrium price that reflects all available information (Suganda, 2018: 13).

When conducting transactions in the capital market, investors will use the information regarding the company's prospects contained in the announcement of dividends as a reference. Transactions that occur are a reaction from the market based on the entry of new information. Based on market efficiency theory, if an announcement has information content, it is expected that a market reaction will occur. The information used is information that is currently available so that the reactions that are generated are precise and fast and are not prolonged. However, if an announcement that has information content does not cause a reaction for the market or the reaction is slow, then the market is said to be inefficient.

Market reaction is reflected in changes in stock prices and stock trading levels. This market reaction can be measured by abnormal returns and stock trading volume. Abnormal return is an abnormal return which is the excess of the actual return over the normal return, namely the expected return. Stock trading volume is the number of shares traded during a particular trading day. Abnormal returns and stock trading volume are variables used to test the information content of an event so that market reactions can be identified.

Dividend distribution is a signal that is deliberately given by company management to show the company's prospects in the future (Seyedimany, 2019). Companies need sufficient cash so that the company's liquidity is not disrupted when distributing dividends. The signal will be successful if what is done by the company through dividend distribution cannot be followed by its competitors. The market reaction to an event produces different effects, some are in the same direction (positive) and some are in the opposite direction (negative), this difference has implications for different interpretations regarding market reactions to announcement events (Riyani, 2020). Investors with a capital gain orientation will tend to perceive dividend distribution as good news, where they hope that the stock price of the company paying the dividend will increase. If the stock price rises, investors not only get capital gains but also get cash dividends if they still hold company shares up to the day when the shares are non-dividend (ex-dividend date) (Lavista, 2019).

Good information or good news means that a company has good prospects and a good level of liquidity. Dividend distribution is an action that requires high costs, so not all companies are able to do it. The existence of trust in the company about the good prospects of this company, the market tends to react positively. Dividend distribution is carried out by companies to create market value and also build relationships with investors (Sekula and Socha, 2022). Investors consider that obtaining dividends is an additional alternative to getting returns from their investments besides capital gains (Robiyanto&Yunitaria, 2022).

There are several stages in dividend distribution. One of them is the cum-dividend date, which is the last date of buying shares that still have the right to receive dividends. Investors who buy shares and maintain their shares until the recording date will receive dividends. This cum-dividend date will attract investors who want to get dividends to buy shares immediately. Logically, there will be a price increase before or during the cum-dividend date and prices tend to fall the next day (Lavista&Sholihin, 2018).

This research was conducted on companies that are included in the LQ45 category in 2022. The LQ45 index is one of the stock indexes on the Indonesia Stock Exchange, where this stock index is a statistical measure that reflects the overall price movement of a group of stocks that are selected based on certain criteria and methodologies and are evaluated periodically. The LQ45 index measures the performance of 45 stocks that have high liquidity and large market capitalization and are supported by good company fundamentals (IDX, 2021). The LQ45 company was chosen because this type of company is actively traded so as to avoid the possibility of bias from the presence of sleeping shares.

Many previous studies regarding market reactions to the existence of cum-dividend dates have been carried out, both research conducted by domestic and foreign researchers. Research conducted by Lavista, et al (2018) shows that investors earn abnormal returns on days around the cum-dividend date. Stock trading volume activity on the day before the cum-dividend date tends to increase, but decreases on the day after the cum-dividend date. Meanwhile, Lavista and Sholihin (2018), who tested 38 blue chip companies, said that investors did not get abnormal returns on days around the cum-dividend date. Research from Sih (2019) also states that there are no abnormal returns and trading volume activity before the cum-dividend date, cum-dividend date, ex-dividend date, and after the ex-dividend date. There are still inconsistencies in previous research regarding market reactions arising from the cum-dividend date, which makes it necessary to carry out further research, taking into account certain conditions.

II. HYPOTHESES DEVELOPMENT

Information is an important thing that investors must know before making investment decisions. Events that contain good information will usually tend to be responded well by market participants. Based on the signal theory, dividend distribution is considered a good signal distributed by the company (Pandey and Kumari, 2022). Investors usually react to dividend distribution announcements quickly because they are considered a signal that the company has good performance and bright future prospects. In the announcement of dividend distribution, it will usually include some information. One of the pieces of information is the cum-dividend date, which is the date on which stock buying and selling activities are included in the calculation to receive dividends. As a result of this positive signal, stock prices will increase and the difference can be calculated through abnormal returns (Lavista and Sholihin, 2018). In a semi-strong efficient market, abnormal returns only occur around an announcement (publication) or an event as a representation of the market's response to the announcement.

Lestari (2018) found that stock prices on days with dividends were higher than days before and after days with dividends. Research conducted by Mutiara (2020) shows that investors get abnormal returns on the cum-dividend date and on the dividend payment date. Fabian and Santoso (2020) state that investors compete to buy shares before the cum-dividend date ends. This is done by investors to get dividends from issuers. In a study by Qadar et al (2023), which examined the Pakistan Stock Exchange, it was also found that there were positive abnormal returns before the ex-dividend date and negative abnormal returns after the ex-dividend date, indicating short-term trading.

Meanwhile, Novyarni and Handanti (2022) state that there is no difference in abnormal returns either before or after the ex-dividend date. Larasati and Nuraya (2018) found that there was no difference in abnormal returns before and after the ex-dividend date event in manufacturing companies, both of which declared dividends to increase or dividends to fall. Suhendi et al., (2021) also found that there was no significant difference in abnormal returns before and after the ex-dividend date event for IDX30 companies, both of which announced dividend increases and dividend decreases.

H₁: There are differences in abnormal returns before and after the cum-dividend date for companies listed on LQ45 in 2022.

The volume of trading activity is the ratio between the number of shares traded and the number of shares outstanding. Stock trading volume is one of the instruments that can be used to see the reaction of the capital market to information or events when the capital market is studied. The capital market can react to an event if the event contains information. An information considered to be able to influence investors' judgments will be able to cause trading activity to fluctuate (Sih, 2019). If the event contains positive information, it is hoped that the market will react when the announcement is received by the market. The volume of trading activity reflects the different views of investors regarding the value of shares, dividend announcements provide relevant information about the company so as to make investors rethink their views on the value of the company (Misir, 2017).

Lavista et al., (2018), said that stock trading volume activity on the day before the cum-dividend date to the cum-dividend tends to increase, but decreases on the day after the cum-dividend. Research conducted by Istahargyo and Wirakusuma (2019) shows that there is a significant difference between TVA before and after the ex-dividend date in companies that are members of the 2017 LQ45 index. Agung and Widodo (2023) also found that there is a significant difference between the volume of stock trading before and after the ex-dividend date in companies engaged in the manufacturing sector listed on the IDX in the 2016-2020 period.

In contrast to previous research, Suwendiyanti and Gantino (2022) said that there was no difference in trading volume activity before and after the ex-dividend date, both before and during the pandemic. Marsheilla (2021) states that there is no significant difference between trading volume activity before and after the ex-dividend date for companies listed on the IDX for the 2015-2019 period. Rezeki (2022) also states that there is no significant difference in trading volume before and after the ex-dividend date of companies that are members of the IDX High Dividend 20 index for the 2021 period. Based on this description, the researcher proposes the following hypothesis:

H₂: There are differences in trading volume activity before and after the cum-dividend date of companies listed on LQ45 in 2022.

III. RESEARCH METHOD

This type of research is quantitative research with an event study approach that examines the reactions of capital market players as a result of an event, namely cum-dividend date information. An event study is a study that studies market reactions to information on an event. The event in this study is the cum-dividend date, where the cum-dividend date is the date of the last purchase of shares that still have the right to receive dividends. If events contain information, it is hoped that the market will react when news about these events is received by the market. This reaction is measured using the variables abnormal return and trading volume activity. This research was conducted for all companies on the Indonesia Stock Exchange that are included in the LQ45 index for the period February to July 2022 by accessing the official website of the Indonesian stock exchange, namely www.idx.co.id and accessing other sites such as finance.yahoo.com.

The population in this study are all companies included in the LQ45 index on the Indonesia Stock Exchange from February to July 2022. The LQ45 index was chosen because the stocks included in it are stocks that have characteristics with a high level of liquidity making them easy to trade and have a relatively large market capitalization on the Indonesia Stock Exchange and are supported by good company fundamentals. The selection of stocks classified as LQ45 provides an accurate picture of changes in the market value of all shares (Fakhrudin, 2001: 203). Dividend dates vary by company, spreading from February to October, but most occur in April and May (Mujilan, 2022). Based on this, companies listed on the LQ45 index for the period February to July 2022 were selected as the study population.

Testing the hypothesis in this study was carried out using the mean difference test method for two paired samples, namely the paired sample t-test. This different test method is used to analyze the research model before and after or pre-post. This different test evaluates a particular treatment of the same sample in two different periods. Paired sample t-test is used to test the differences between two paired samples. The purpose of this study is to use a paired sample t-test to show whether there are significant abnormal returns and trading volumes around cum-dividend date events, namely before and after the event.

Decision making uses a 95% confidence level or $\alpha = 5\%$ with the following conditions (Ghozali, 2016):

1. If the asymp. Sig. (2-tailed) ≤ 0.05 , then H0 is rejected and H1 is accepted.
2. If the asymp. Sig. (2-tailed) > 0.05 , then H0 is accepted and H1 is rejected.

If the results of the Kolmogorov-Smirnov normality test show that the data is not normally distributed, then use the Wilcoxon signed rank test method on the research variables with the following criteria (Sunjoyo, 2013: 119):

1. If sig (p value) > 0.05 , then H0 is rejected and H1 is accepted.
2. If sig (p value) ≤ 0.05 , then H0 is accepted and H1 is rejected.

IV. RESULTS AND DISCUSSION

The sample determination method used in this study used a purposive sampling method with criteria for companies listed in the LQ45 index for the period February 1 to July 31 2022, which distributed dividends from February 1 to July 31 2022. From this selection, 34 companies that distributed dividends were sampled in this study. As many as 11 out of 45 companies were not selected because they did not distribute dividends during that period.

First Hypothesis Test Results

The first stage was carried out to test the first hypothesis, namely the normality test. The normality test used in this study is the one-sample Kolmogorov-Smirnov test with a confidence level of 95% or $\alpha = 5\%$. The normality test in this study was used to determine if the average abnormal return data is normally distributed or not as a condition for conducting a paired sample t-test. If the data is normally distributed, then it can proceed to the parametric test, namely the paired sample t-test, whereas if the data is not normally distributed, it will proceed to the non-parametric Wilcoxon signed rank test. The results of the normality test can be seen in Table 1. below.

Table 1. Average Abnormal Return Normality Test Results

Event	Variable	Sig. (2-Tailed)	Information
Cum-Dividend Date Event	AAR Pre	1,000	Normal
	AAR Post	0,688	Normal

Source: Secondary data processed, (2023)

Based on Table 1, the asymp. Sig (2-tailed) average abnormal return before the cum-dividend date event is 1.000 greater than 0.05, this means that the average abnormal return before the cum-dividend date event is normally distributed. Likewise, the average abnormal return after the cum-dividend date event is 0.688 greater than 0.05, this means that the average abnormal return after the cum-dividend date event has a normal distribution. Based on the normality test, the hypothesis test can be continued using the paired sample t-test. The results of the paired sample t-test can be seen in Table 2 below.

Table 2. Results of the Paired Sample T-test Average Abnormal Return

Event	N	t-count	Sig. (2-Tailed)	Information
AAR Pre – AAR Post	34	2,989	0,005	Significant

Source: Secondary data processed, (2023)

Based on Table 2, the test results show the t-count of 2.989 is greater than the t-table of 2.035 and the asymp value. Sig (2-tailed) of 0.005 is smaller than 0.05. This value states that the first hypothesis is accepted. So it can be concluded that there is a difference in the average abnormal return before and after the cum-dividend date event for companies listed on the LQ45 index in the period 1 February to 31 July 2022.

Second Hypothesis Test Results

The first stage was carried out to test the second hypothesis, namely the normality test. The normality test used in this study is the one-sample Kolmogorov-Smirnov test with a confidence level of 95% or $\alpha = 5\%$. The normality test in this study is used to determine whether the average trading volume activity data is normally distributed or not. If the data is normally distributed, then it can proceed to the parametric test, namely the paired sample t-test, whereas if the data is not normally distributed, it will proceed to the non-parametric Wilcoxon signed rank test. The normality test results can be seen in Table 3 below.

Table 3. Normality Test Results of Average Trading Volume Activity

Event	Variable	Sig. (2-Tailed)	Information
Cum-Dividend Date Event	ATVA Pre	0,393	Normal
	ATVA Post	0,999	Normal

Source: Secondary data processed, (2023)

Based on Table 3, the asymp. Sig (2-tailed) average trading volume activity before the cum-dividend date event is 0.393 greater than 0.05, this means that the average trading volume activity before the cum-dividend date event is normally distributed. asymp value. Sig (2-tailed) average trading volume activity after the cum-dividend date event is 0.999 greater than 0.05, this means that the average trading volume activity after the cum-dividend date event is normally distributed. Based on the normality test, the hypothesis test can be continued to the paired sample t-test. The results of the paired sample t-test can be seen in Table 4 below.

Table 4. Results of the Paired Sample T-test Average Trading Volume Activity

Variable	N	t-count	Sig. (2-Tailed)	Information
ATVA Pre - ATVA Post	34	1,410	0,168	Not significant

Source: Secondary data processed, (2023)

Based on Table 4, the test results show a t-count value of 1.410 which is smaller than the t-table value of 2.035 and the asymp value. Sig (2-tailed) of 0.168 is greater than 0.05. This value states that the second hypothesis is rejected. From the results of the paired sample t-test it can be concluded that there is no significant difference in average trading volume activity between before and after the cum-dividend date event in companies that are members of the LQ45 index category in the period February 1 to July 31 2022.

Abnormal Return Before and After Cum-Dividend Date Events in Companies Registered on LQ45 in 2022

Cum-dividend date events can be said to contain information if they are able to trigger certain actions such as investor reactions in the capital market. Abnormal return is one of the variables used to measure the investor's reaction. The first hypothesis states that there are differences in abnormal returns before and after the cum-dividend date event at LQ45 2022 companies is accepted. The test results show that there are differences in abnormal returns around the cum-dividend date. The significance value resulting from the paired sample t-test is 0.005 which is smaller than the predetermined significance value of 0.05. This shows that in general cum-dividend date events are considered as events that can be considered in transactions in the capital market.

The existence of a significant value indicates that there is an influence of cum-dividend date events on abnormal returns in companies that are members of the LQ45 index. The finding of differences in abnormal returns before and after the cum-dividend date event indicates that this event contains significant information that can affect stock prices. Stock prices on the market always fluctuate, if the company's performance increases, the stock price will also increase (Oktavia, 2018). Investors assume that companies that pay dividends are companies with good performance so that the stock prices of these companies increase. The results of the study show that the market when the cum-dividend date event is in a semi-strong form can be seen from the rapid response by the market as seen from the price fluctuations that occur and changes in abnormal returns before and after the cum-dividend date event.

This is in line with research conducted by Qadar et al (2023) which examined the Pakistan Stock Exchange which also found that there were differences in abnormal returns, where there were positive abnormal returns before the ex-dividend date and negative abnormal returns after the ex-dividend date. Likewise, with the results of research conducted by Lavisa et al (2018) which stated that there were differences in abnormal returns on days around the cum-dividend date.

Trading Volume Activity Before and After Cum-Dividend Date Events in Companies Registered on LQ45 in 2022

The cum-dividend date, which is the last date for buying shares that still have the right to receive dividends, will attract investors to make transactions. The second hypothesis states that there are differences in trading volume activity before and after the cum-dividend date event for companies listed on LQ45 in 2022. The test results show a significance value of 0.168 greater than 0.05 so the second hypothesis is rejected. This shows that in general cum-dividend date events are not considered as events that can be considered in conducting transactions in the capital market.

The absence of a significant value indicates that there is no effect of cum-dividend date events on trading volume activity in LQ45 index companies. No differences were found in trading volume activity before and after the cum-dividend date event, indicating that this event does not contain significant information for investors. Investors do not consider cum-dividend date events to be profitable.

The results of this study are in line with the tax preference theory developed by Brigham and Houston (2006). The theory of tax preference states that because long-term capital gains are less taxable than dividends, investors prefer companies to retain their profits rather than pay them out as dividends. Investors who do not like taxes will tend to avoid dividends due to high taxation (Rokhayati, 2021). Based on the clientele effect, there are several groups of investors with different interests and assessments of dividend policy. This group is investors who prefer current income in the form of dividends and there is also a group of investors who prefer their income because this group is in a fairly high tax rate.

This is in line with the results of research conducted by Silalahi and Sianturi (2022). His research conducted on financial companies listed on the Indonesia Stock Exchange shows that there is no significant difference in trading volume activity before and after the announcement of cash dividends. Likewise with research conducted by Rezeki (2022) which also states that there is no significant difference in trading volume before and after the ex-dividend date of companies that are members of the IDX High Dividend 20 index for the 2021 period.

V. CONCLUSION

The results of the analysis show that there are differences in abnormal returns but there are no differences in trading volume activity before and after the cum-dividend date events. This shows that the movement of stock prices is strongly influenced by good company performance, in this case indicated by the distribution of dividends by the company so that stock prices increase without having to be accompanied by an increase in stock trading volume. This study also obtained results indicating a clientele effect.

For investors who want capital gains, they can take advantage of cum-dividend date events. This study found that there was an abnormal return before the event where the return obtained before the cum-dividend date was higher than after the event. Investors can get capital gains because there is an increase in the stock price of companies paying dividends. Future researchers are expected to be able to improve this research by expanding the research sample so that they are able to describe the condition of the capital market in Indonesia more accurately. In addition, future researchers can also complement this research by grouping cum-dividend date events based on the announcement of dividend increases and dividends decreases.

REFERENCES

Journal Papers:

- [1] Agung, D., & Widodo, H. (2023). Analysis of Abnormal Returns and Trading Volume Activities Before and After Ex-Date Dividends in the Manufacturing Sector Listed on the IDX 2016-2020 Period. *Academia Open*, 8, 10.21070/acopen.8.2023.4019. <https://doi.org/10.21070/acopen.8.2023.4019>
- [2] Alwi, M. J. (2022). *Analisis Reaksi Pasar Modal Indonesia Pada Perusahaan Sub Sektor Otomotif Dan Komponen Yang Terdaftar Di Bursa Efek Indonesia Pada Masa Pandemi Covid-19* (Doctoral dissertation, Universitas Hasanuddin).
- [3] Amir, Suaryana. (2019). Reaksi Pasar Modal Terhadap Pengumuman Right Issue pada Perusahaan yang Terdaftar di Bursa Efek Indonesia Pita Qurnia Amir. *E-Jurnal Akuntansi*, 28, 159-187. <https://doi.org/10.24843/EJA.2019.v28.i01.p07>
- [4] Azizah, A. (2020). Reaksi Pasar Saham Terhadap Kebijakan Dividen Sebelum dan Sesudah Ex-Dividend Date. *Jurnal Riset Inspirasi Manajemen dan Kewirausahaan*, 4(1), 16-23. <https://doi.org/10.35130/jrimk.v4i1.75>
- [5] Binekasari, R. (2022). Fakta - Fakta IHSG & Pasar Modal RI Sepanjang 2022. *CNBC Indonesia*. Diakses dari <https://www.cnbcindonesia.com/market/20221230172435-17-401622/fakta--fakta-ihsg-pasar-modal-ri-sepanjang-2022>.
- [6] *Bursa Efek Indonesia*. 2019. *IDX Stock Index Handbook*. Jakarta: BEI.
- [7] *Bursa Efek Indonesia*. 2021. *IDX Stock Index Handbook*. Jakarta: BEI.
- [8] Dewi, K. Y., & Rahyuda, H. (2020). Pengaruh profitabilitas, likuiditas dan kebijakan dividen terhadap nilai perusahaan sektor industri barang konsumsi di BEI. *E-Jurnal Manajemen Universitas Udayana*, 9(4), 1252.
- [9] Diansari, N., Abdullah, M. F., & Syaifullah, Y. (2021). Analisis Perbedaan Return Saham Dan Volume Perdagangan Saham Saat Pandemi Dibanding Sebelum Pandemi Covid-19 Di Indonesia. *Jurnal Ilmu Ekonomi*, 5(1), 155-170. <https://doi.org/10.22219/jie.v5i1.14134>
- [10] Fabian, A., & Santoso, E. B. (2019). Dividend Announcement Effect To Market Reaction in Non-Financial Companies Listed on Indonesia Stock Exchange: English. *Journal Of Accounting, Entrepreneurship And Financial Technology (JAETF)*, 1(2), 167-180. <https://doi.org/10.37715/jaef.v1i2.1467>
- [11] Faiq, G. M., & Mahardika, D. P. K. (2019). Analisis January Effect pada Perusahaan Indeks LQ45 di Bursa Efek Indonesia Periode 2014-2018. *eProceedings of Management*, 6(2), pp. 2916-2923.
- [12] Fakhrudin, M. & M. S. Hadianto. (2001). *Perangkat dan Model Analisis Investasi di Pasar Modal (Edisi Pertama)*. Jakarta: PT. Elekmedia Komputindo Kelompok Gramedia.
- [13] Fama, E.F. 1970. Efficient Capital markets: A review of theory and empirical work. *Journal of Finance*, 25(2): 383-417.
- [14] Fauzi, I. (2020). *Dividen Saham Preferen Dalam Perspektif Ekonomi Syariah*. Tesis. Institut Agama Islam Negeri Palangka Raya.

- [15] Frensidy B, Josephine I, Ignatius. (2019). Price Formation Around Dividend Announcement Date: Empirical Evidence in Indonesian Stock Exchange. *European Research Studies Journal* XXII(3), pp. 106–118. <https://doi.org/10.35808/ersj/1460>.
- [16] Ghozali, H. I. (2016). *Aplikasi Analisis Multivariat dengan Program IBM SPSS 23*. Universitas Diponegoro.
- [17] Harjito, A., dan Martono. 2007. *Manajemen Keuangan*. Edisi Pertama. Cetakan Pertama. EKONISIA, Yogyakarta.
- [18] Hartono. (2017). *Teori Portofolio dan Analisis Investasi*. Yogyakarta: BPFE.
- [19] Ikatan Akuntan Indonesia. 2009. *Standar Akuntansi Indonesia*, Jakarta : Salemba Empat.
- [20] Indonesia, R. (1995). *Undang-Undang No. 8 Tahun 1995 tentang Pasar Modal*. Lembaran Negara RI Tahun, 64.
- [21] Istahargyo, B., & Wirakusuma, M. G. (2019). Analisis Volume untuk Perbandingan Minat Investor Disekitar Ex-Dividend Date pada Emiten Kategori LQ-45 Tahun 2017. *E-Jurnal Akuntansi Universitas Udayana*, 26(1), pp. 175-190.
- [22] Iswanto. 2016. *Pengaruh Ex-Dividend Date terhadap Abnormal Return pada Saham LQ 45*. Fakultas Ekonomi dan Bisnis. Jurusan Manajemen Keuangan. Sekolah Tinggi Ilmu Ekonomi Perbanas. Surabaya.
- [23] Jati, D. P. (2014). Kebijakan dividen dan risiko perusahaan. *Sustainable Competitive Advantage (SCA)*, 4(1).
- [24] Jogiyanto, H. (2010). *Teori portofolio dan analisis investasi*. Edisi Ketujuh. BPFE. Yogyakarta.
- [25] Jogiyanto, H. (2017). *Teori portofolio dan analisis investasi*. Edisi Kesebelas. BPFE. Yogyakarta.
- [26] Kurniati, I. 2020. *Analisis Harga Saham Sebelum dan Sesudah Ex-Dividend Date (Studi Pada Perusahaan Manufaktur Subsektor Keuangan Yang Terdaftar Pada Bursa Efek Syariah Periode 2014-2018 Perspektif Ekonomi Islam)*. Fakultas Ekonomi Dan Bisnis Islam. Jurusan Perbankan Syariah. Universitas Islam Negeri Raden Intan. Lampung.
- [27] Lavista, E. (2019). Stock Price Behaviour Around Cum-Dividend Date Of Indonesia Blue Chips Stocks. *Review of Management and Entrepreneurship*, 2(1), 49–60. <https://doi.org/10.37715/rme.v2i1.952>.
- [28] Lavista, E., & Sholihin, M. R. (2018). Reaksi Harga Saham Sekitar Cum-Dividend Date Pada Perusahaan LQ45 di Bursa Efek Indonesia. *Progress Conference*, 1(1), 539–544. <https://proceedings.itbwigalumajang.ac.id/index.php/progress/article/view/107>.
- [29] Lavista, E., & Utami, E. (2017). Stock Price Reactions Around Cum-Dividend Date in Indonesia Stock Exchange. *Journal Of Accounting, Business And Management (JABM)*, 24(1), 64-73. <http://journal.stie-mce.ac.id/index.php/jabminternational/article/view/318>.
- [30] Lavista, E., Utami, E. S., & Puspitasari, N. (2018). Perubahan Abnormal Return dan Volume Perdagangan Pada Hari Sekitar Cum-Dividend Date di Bursa Efek Indonesia. *BISMA: Jurnal Bisnis dan Manajemen*, 12(3), pp. 403-413.
- [31] Lestari, A. R., Arif, A., & Wijayantini, B. (2018). *Relevansi Cum-Dividend Date Dengan Perubahan Harga Saham Pada Sektor Manufaktur Di Bursa Efek Indonesia*. *BALANCE: Economic, Business, Management and Accounting Journal*, 15(02), pp. 73-84. <http://dx.doi.org/10.30651/blc.v15i02.1279>
- [32] Marsheilla, J. H. (2021). *Pengaruh Peristiwa Pengumuman Pembagian Dividen Terhadap Abnormal Return Dan Trading Volume Activity Pada Perusahaan Go Public Di Bursa Efek Indonesia Tahun 2015-2019* (Doctoral dissertation, Universitas Katholik Soegijapranata Semarang).
- [33] Misir, M. A. (2017). Reaction Of Trading Volume And Prices Of Stocks Of The Firms Listed With Dhaka Stock Exchange Ltd.: The Effects Of Predisclosure Information Asymmetry. *Jagannath University Journal of Business Studies*, 5(1&2), pp. 1-20.
- [34] Mujilan, A. (2022). Stock Price Behaviour around the Announcement Date of Cash Dividend on the Indonesia Stock Exchange. *Stock Price Behaviour around the Announcement Date of Cash Dividend on the Indonesia Stock Exchange. Jurnal Akuntansi dan Keuangan*, 24(1), pp. 10-23.
- [35] Mutiara, F. A., & Wardhana, L. I. (2020). Reaksi Pasar atas Pengumuman Dividen: Sebuah Tinjauan Ulang. *Performance: Jurnal Personalia, Financial, Operasional, Marketing dan Sistem Informasi*, 27(2), pp. 23-38.
- [36] Nabella, Septa D. *Monograf Kebijakan Dividen Perusahaan*. Edited by Winarni, Dwi, Eureka Media Aksara, 2022.
- [37] Novyarni, N., & Handanti, R. (2022). Ex-Dividend Date: Abnormal Return dan Trading Volume Activity. *Konferensi Ilmiah Akuntansi IX*, 9(1), pp. 104-114.
- [38] Nuraya, A. S., & Larasati, Y. (2020). Analisis Perbedaan Abnormal Return Sebelum Dan Sesudah Pengumuman Ex-Dividend Date Pada Perusahaan Manufaktur Di Bursa Efek Indonesia

- PeriodeTahun 2011-2016. *JurnalEkonomi, Manajemen Dan Perbankan (Journal of Economics, Management and Banking)*, 4(2), pp. 56-65.
- [39] Octaviani, S. (2019). *Analysis of Comparison of Stock Return before and After Ex-Dividend Date in Industrial Property, Real Estate and Building Construction in Indonesia Stock Exchange Period 2013*. *East African Scholars Journal of Economics, Business and Management* 2(8), 447-451.
- [40] Oktavia, I., & Nugraha, K. G. S. (2018). Faktor-Faktor Yang Mempengaruhi Harga Saham. *UNEJ e-Proceeding*.
- [41] Pandey, D. K., & Kumari, V. (2022). Do dividend announcements override the pandemic impacts? Evidence from the BSE 500 constituent firms. *Asia Pacific Management Review*, 27(3), 210-219. <https://doi.org/10.1016/j.apmr.2021.09.002>.
- [42] Paramitha Diah. 2019. *Analisis Reaksi Pasar atas Pengumuman Stock Split (Studi pada Perusahaan yang Terdaftar dalam Bursa Efek Indonesia)*. Fakultas Ekonomi dan Bisnis. Jurusan Akuntansi. Universitas Udayana. Denpasar.
- [43] Putra. (2022). Ini Penyebab IHSG Jatuh 6 Hari Beruntun. *CNBC Indonesia*. Diakses dari <https://www.cnbcindonesia.com/market/20220705012047-17-352906/ini-penyebab-ihsg-jatuh-6-hari-beruntun>.
- [44] Putri, H. T. (2020). Covid 19 dan harga saham perbankan di Indonesia. *Eksis: Jurnal Ilmiah Ekonomi Dan Bisnis*, 11(1), pp 6-9. <http://dx.doi.org/10.33087/eksis.v11i1.178>.
- [45] Qadar, A., Rehan, A., & Hussain, M. A. (2023). An Examination of Stock Price Behavior And Trading Volume Around Ex-Dividend Day: Empirical Evidence From Pakistan. *International Journal of Social Science & Entrepreneurship*, 3(1), pp. 129-143.
- [46] Rahayu, T. N. (2019). *Pengaruh Tingkat Suku Bunga, Nilai Tukar Rupiah Dan Volume Perdagangan Saham Terhadap Harga Saham Perusahaan Manufaktur*. *PARADOKS: Jurnal Ilmiah Ekonomi*, 2(2), 35-46.
- [47] Republik Indonesia, Undang-undang Tentang Perseroan Terbatas, UU Nomor 40 Tahun 2007, Lembaran Negara Republik Indonesia Tahun 2007 Nomor 106, Tambahan Lembaran Negara Nomor 4756.
- [48] Reynaldi, R. Y. 2019. *Reaksi Pasar Terhadap Pengumuman Dividen Tunai Pada Perusahaan Yang Terdaftar Di LQ45 Tahun 2017 – 2018*. Fakultas Ekonomi Dan Bisnis. Jurusan Manajemen. Institute Informatics & Business Darmajaya. Bandar Lampung.
- [49] Rezeki, R. P. (2022). *Analisis Perbedaan Harga Saham, Abnormal Return Dan Volume Perdagangan Saham Sebelum Dan Sesudah Ex Dividend Date Pada Perusahaan Yang Terdaftar Di Indeks Idx High Dividend 20 Periode 2021* (Doctoral Dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau).
- [50] Riyani, Y., Mardiah, K., & Andriana, S. (2020). *Reaksi Pasar Modal Indonesia terhadap Kemenangan Presiden Republik Indonesia dalam Pilpres 2019*. *Eksos*, 16(1), 84-94.
- [51] Riyano, Y. A., Purwoto, L., & ER, C. W. (2019). *Pengujian Hipotesis Pasar Efisien Bentuk Lemah: Studi Empiris Pada Saham-Saham Sektor Telekomunikasi Di Bursa Efek Indonesia*. *Procuratio: Jurnal Ilmiah Manajemen*, 7(2), 140-151.
- [52] Robiyanto, R., Yunitaria, F. Dividend Announcement Effect Analysis Before and During the COVID-19 Pandemic in the Indonesia Stock Exchange. *SN Bus Econ* 2, 20 (2022). <https://doi.org/10.1007/s43546-021-00198-8>.
- [53] Rokhayati, I., Harsuti, H., & Lestari, D. (2021). Analisis Karakteristik Perusahaan Terhadap Kebijakan Dividen pada Perusahaan Manufaktur Sektor Industri Dasar dan Kimia yang Terdaftar Di BEI. *Jurnal Ilmiah Akuntansi Dan Keuangan*, 10(1), 51-57. <https://doi.org/10.32639/jiak.v10i1.595>.
- [54] Rusdianto. 2012. *Pengantar Akuntansi Konsep & Teknik Penyusunan Laporan Keuangan*. Penerbit: Erlangga. Jakarta.
- [55] Santia, T. (2023). Sri Mulyani: 2022 adalah Tahun yang Brutal dan 2023 Adalah Tahun Ujian. *Liputan6*. Diakses dari <https://www.liputan6.com/bisnis/read/5169382/sri-mulyani-2022-adalah-tahun-yang-brutal-dan-2023-adalah-tahun-ujian>.
- [56] Sari, L, G, H, P. 2017. *Perbedaan Abnormal Return Sebelum dan Sesudah Pemilihan Umum Gubernur DKI Jakarta Tahun 2017*. Fakultas Ekonomi dan Bisnis. Jurusan Akuntansi. Universitas Udayana. Denpasar.
- [57] Sekuła, P., & Socha, B. (2022). The Effects Of Cash Dividend On Stock Prices During the COVID-19 Pandemic : Evidence from Poland. *European Research Studies Journal*, 25(3), 145-155.
- [58] Seyedimany, A. (2019). Stock Price Reactions On Nasdaq Stock Exchange For Special Dividend Announcements. *Emerging Science Journal*, 3(6), pp. 382-388. <https://doi.org/10.28991/esj-2019-01200>.

- [59] Sih, T., Gumanti, T., &Paramu, H. (2019). Analisis Perbedaan Abnormal Return dan Trading Volume Activity Pada Sekitar Cum Dividend Date. *E-Journal Ekonomi Bisnis Dan Akuntansi*, 6(2), pp. 159-163. doi:10.19184/ejeba.v6i2.11161.
- [60] Silalahi, E. R., &Sianturi, R. I. (2021). Pengaruh Pengumuman Dividen Tunai Terhadap Abnormal Return Dan Trading Volume Activity Pada Perusahaan Keuangan Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Riset Akuntansi & Keuangan*, 7(1), pp. 42-48. <https://doi.org/10.54367/jrak.v7i1.1131>
- [61] Simanjuntak, J. 2022. *Analisis Kebijakan Dividen Selama Pandemi Covid-19*. Skripsi, Fakultas Ekonomi dan Bisnis Universitas Airlangga, Surabaya.
- [62] Handini, M. M. S., & Erwin Dyah Astawinetu, M. M. (2020). *Teori portofolio dan pasar modal Indonesia*. Scopindo Media Pustaka.
- [63] Suganda, T. R. (2018). *Teori dan Pembahasan Reaksi Pasar Modal Indonesia*. Puntadewa.
- [64] Sugiyono. (2015). *Metode Penelitian dan Pengembangan Pendekatan Kualitatif, Kuantitatif, dan R&D*, (Bandung: Alfabeta, 2015), 407 1.
- [65] Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabet
- [66] Sugiyono. (2017). *Metode Penelitian Bisnis*. Bandung: Alfabeta.
- [67] Suhendi, K. S. P., Desmintari, D., & Yetti, F. (2021). Analisis Abnormal Return Sebelum dan Sesudah Ex-Date Dividen pada Perusahaan IDX30 di BEI. *Konferensi Riset Nasional Ekonomi Manajemen dan Akuntansi*, 2(1), pp. 564-580.
- [68] Sunjoyo, R. S., V. Carolona, N. Magdalena, & A. Kurniawan. (2013). Aplikasi SPSS untuk SMART Riset (Program IBM SPSS 21.0). Bandung: Alfabeta.
- [69] Suryani, Ni Made Ayu Mirah. 2022. *Reaksi Pasar Modal Terhadap Pengumuman Kebijakan Insentif Pajak Penjualan atas Barang Mewah*. Fakultas Ekonomi dan Bisnis. Jurusan Akuntansi. Universitas Udayana. Denpasar.
- [70] Suwendiyanti, R., & Gantino, R. Analysis on Ex-Dividend Phenomenon before and During COVID-19 Pandemic in Indonesia (Study on Index IDX High Dividend 20). *East African Scholars Journal of Economics, Business and Management*, 5(1), pp. 1-10.
- [71] Tandelilin, E. 2010. *Portofolio dan Investasi Teori dan Aplikasi*, Edisi Pertama. Yogyakarta: Kanisius.
- [72] Tharmizi, M. T. J., Azis, M. I., Juliana, A., Lahengke, J. M., & Malik, A. D. (2021). Studi Efisiensi Pasar Modal Indonesia Bentuk Setengah Kuat Pada Masa Pandemi Covid-19 (Perusahaan Transportasi Di Bursa Efek Indonesia Tahun 2019-2020). *Jurnal Akuntansi Keuangan dan Bisnis*, 14(2), 201-210.
- [73] Yasa, G.E. 2020. *Analisis Reaksi Pasar Terhadap Pelemahan Wall Street (Studi Empiris pada Indeks Saham LQ45 di Bursa Efek Indonesia)*. Fakultas Ekonomi dan Bisnis. Jurusan Akuntansi. Universitas Udayana. Denpasar.