

Comparative Analysis of Stock Returns, Abnormal Return and Trading Volume Activity for Christmas Event in 2022 LQ 45 Company on The Indonesian Stock Change

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Abstract

This research focuses on analyzing the impact of Christmas events on LQ 45 companies listed on the Indonesia Stock Exchange in 2022. The research background underlines the importance of capital markets in the economy, where investors seek to understand changes in stock returns, abnormal returns, and activity. trading volume in connection with special events such as Christmas. The aim of the research is to determine significant differences in stock performance, abnormal returns and trading activity before and after the Christmas event at LQ 45 companies during the 2022 period. The method used is event study analysis with a purposive sampling technique for 45 companies. The research results show that there is no significant difference in trading volume activity before and after Christmas, while stock returns and abnormal returns show significant differences during the 5 day period before and after Christmas. The conclusion of this research is that the Christmas event has a significant impact on stock returns and abnormal returns of LQ 45 companies on the Indonesia Stock Exchange in 2022, but does not make a significant difference in trading volume activity. The implication is that investors and decision makers may consider events such as Christmas in making their investment decisions, considering the impact it can have on stock performance.

1. Introduction

The capital market plays a pivotal role in the economy by simultaneously serving two functions: an economic function and a financial function. In its economic role, the capital market acts as a platform that brings together individuals with surplus funds (investors) and those in need of funds (issuers). Meanwhile, in its financial function, the capital market provides opportunities for fund owners to obtain returns based on the characteristics of selected investments (Nur'aidawati, 2018).

Investors in the capital market are consistently driven by the pursuit of profits (returns) from their capital activities. Their trading endeavors, involving the buying and selling of shares, aim to secure positive stock returns while avoiding negative ones. Investors engage in capital market investments to achieve profits at a certain level, recognizing that returns from their investments are commonly referred to as stock returns (Arista and Astohar, 2021). The event study is a research technique employed to assess and analyze the impact of specific events on stock price movements. It

involves estimating normal returns for a security, determining the direction and size of excess returns resulting from unforeseen information (Prawiro, 2021).

Christmas serves as an intriguing study event because stock trading activities cease on this day. Consequently, investors anticipate higher profits during the Christmas holiday compared to the days preceding and following the event. Abnormal returns reflect price changes, while trading volume activity indicates transaction volume. Abnormal return is the disparity between actual and expected returns (Simorangkir, 2019).

According to Handayani and Zulyanti (2018), stock returns represent the profits acquired by companies, individuals, and institutions through their investment policies. Market reactions can be measured by examining returns before and after event studies. Trading volume activity, as defined by Firmansyah and Agustin (2016), is a comparison of the number of shares traded at a specific time, reflecting investor behavior and the dynamics of supply and demand. Sri's

(2018) research indicates a significant difference in trading volume activity before and after Christmas on the LQ 45 index.

Figure 1 displays the average share prices of LQ45 companies on the Indonesian Stock Exchange during the five days leading up to and following the Christmas event in 2022. The fluctuating trends suggest active trading, with an overall positive trajectory. This study, titled "Comparative Analysis of Stock Returns, Abnormal Returns, and Trading Volume Activity for Christmas Events in 2022 in LQ 45 Companies on the Indonesian Stock Exchange," appropriately selects the LQ 45 stock index as the research population, reinforcing the accuracy of the research.

2. Literature Review

2.1 Signaling Theory

Signaling theory offers insights into how companies should communicate signals to users of financial reports, primarily in the form of information regarding managerial actions aligned with the owner's objectives. These signals may take the shape of promotional activities or other disclosures highlighting the company's superiority compared to its counterparts. Nuswandari (2019) defines Signaling Theory as the management's behavior in providing guidance to investors, shedding light on the company's future prospects.

As noted by Kasi (2022), published information serves as a crucial signal for investors in their decision-making process related to investments. Investors leverage this information to assess the associated risks of their investments and to gauge the amount of funds they should allocate to a particular company. Positive information, when conveyed effectively, is anticipated to prompt a favorable market reaction upon announcement, ultimately gaining acceptance among investors. The signaling process, therefore, plays a significant role in shaping investor perceptions and influencing market dynamics.

2.2 Stock Returns

According to Oroh, et al (2019), stock Returns, often termed as stock income, represent the alterations in the value of stock prices from period "t" to "t-1." Essentially, the magnitude of stock returns is directly correlated with the extent of changes in stock prices. According to Handayani and Zulyanti (2018), stock returns signify the profits accrued by companies, individuals, and institutions as outcomes of their investment policies. The interconnection between signaling theory and stock returns is elucidated by the notion that a company or entity's favorable financial performance can impact stock returns during the Christmas holiday.

In this scenario, the company serves as a signaling mechanism, conveying information to external parties and investors. The dissemination of information during this period triggers a response among market participants who interpret and analyze the information as either a positive signal (good news) or a negative signal (bad news). If the information is deemed favorable, signaling a positive outlook, stock returns are likely to witness an increase. Conversely, if the information is perceived as unfavorable, indicating potential challenges, stock returns are expected to decline. This dynamic relationship underscores the pivotal role of signaling in influencing investor perceptions and subsequently shaping the trajectory of stock returns during events such as the Christmas holiday.

2.3 Abnormal Returns

As per Silsia (2018), Abnormal returns can be interpreted interchangeably as abnormal gains or abnormal losses. The term "Abnormal return" is used to denote a return that deviates from the expected or normal return. The normal return represents the typical gain or loss derived from an investment under standard or routine conditions. Abnormal returns manifest when there is a manifestation of new information or occurrences that impact the company's valuation, leading to reactions from investors in the form of share price fluctuations,

either upward or downward. Abnormal returns, therefore, signify the returns acquired by investors that deviate from anticipated or customary outcomes.

In simpler terms, abnormal returns highlight the divergence between actual investment returns and the expected returns. This variance is attributed to the influence of unforeseen factors or events that disrupt the usual patterns of stock performance. Investors experience abnormal returns when market reactions, triggered by unexpected developments, lead to outcomes that do not align with their initial expectations. Thus, abnormal returns serve as indicators of the irregularities caused by unanticipated elements affecting the market, challenging conventional investment projections.

2.4 Trading Volume Activity

The data present in the capital market has the potential to impact the decision-making process of investors. The choices made by investors, serving as a manifestation of the capital market's responsiveness to information, can be assessed through the examination of trading volume activity. Trading volume in stocks serves as a gauge to observe how the market responds to specific events or information associated with a particular stock.

Particularly, when trading activities occur at exceptionally high volumes within an exchange, it is construed as an indication that the market is poised for improvement (Buana and Haryanto, 2017). This phenomenon suggests that heightened trading volume reflects the strength of market reactions to external stimuli, portraying the level of interest and participation among investors.

2.5 Research Methodology

a. Data collection technique

In the upcoming research endeavor, the chosen approach involves employing the documentation method, primarily due to the reliance on secondary data. Secondary data, as defined by Sugiyono (2019), constitutes a source of information that is not directly

conveyed to data collectors. Instead, this type of data is typically derived from various sources, such as documents or information relayed by other individuals. The utilization of the documentation method implies a reliance on pre-existing records, texts, or materials to gather insights and analyze the pertinent information required for the research.

b. Data types and sources

The research will primarily rely on documentary data, a category encompassing various forms of records such as invoices, journals, letters, meeting minutes, memos, or financial program reports, as articulated by Indriantoro and Supomo (2014). This type of data entails the extraction and analysis of information from existing documents and records relevant to the research objectives.

In terms of data source, the research will utilize secondary data, which refers to information not directly provided to data collectors but obtained from external sources, as explained by Jogiyanto (2018). In this context, the secondary data for the impending research will be derived from the Indonesian Stock Exchange through the official website www.idx.co.id, focusing on the observation period of 2022. This approach ensures access to reliable and comprehensive data pertinent to the research focus, allowing for a thorough and informed analysis of the selected variables.

3. Research Methods

3.1 Descriptive Statistics

Descriptive statistics, as defined by Ghazali (2018), serve as a statistical tool for analyzing data by presenting a summary or depiction of data, encompassing average, maximum, minimum, and standard deviation values. This analytical approach, according to Sugiyono (2018), involves describing or narrating the collected data as is, without the intention of drawing overarching conclusions or generalizations. In essence, descriptive statistics offer a detailed and comprehensive examination of data, facilitating a nuanced

understanding of its key features without extrapolating broader implications.

3.2 Paired Sample T-Test

As per Ghazali (2018), the Paired Sample t-test functions as an assessment of the disparity between two sets of paired samples, where the samples involve the same subjects subjected to distinct treatments. Specifically, this test is applied to scrutinize research models involving pre-post or before-and-after scenarios. Ghazali (2018) outlines decision-making criteria for various tests based on the following principles:

- a. If the significance probability value exceeds 0.05, the hypothesis is rejected. A rejected hypothesis implies that the independent variable lacks a significant impact on the dependent variable.
- b. If the significance probability value is below 0.05, the hypothesis is accepted. An accepted hypothesis signifies that the independent variable holds a substantial influence on the dependent variable.

3.3 Wilcoxon Sign Rank Test

The Wilcoxon signed rank test, as described by Sugiyono (2019), serves as a non-parametric method designed to assess the significance of distinctions between two correlated datasets on an ordinal scale, particularly when the data distribution deviates from normality. In making decisions regarding the acceptance or rejection of the null hypothesis (H_0) in the Wilcoxon signed rank test, the following criteria apply: Should the probability (Asymp.Sig) fall below 0.05, H_0 is repudiated, and the alternative hypothesis (H_a) is endorsed. Conversely, if the probability (Asymp.Sig) surpasses 0.05, H_0 is accepted, and H_a is dismissed.

3.4 Population and sample

a. Population

A population, as defined by Handayani (2020), refers to the complete set of elements sharing similar characteristics, encompassing individuals within a group, events, or subjects

under investigation. In the impending research, the identified population comprises companies listed as members of the LQ 45 on the Indonesian Stock Exchange during the year 2022. This specific selection ensures that the research targets a distinct and relevant group, allowing for a focused examination of the chosen entities within the LQ 45 category.

b. Sample

The sample, as elucidated by Handayani (2020), constitutes a subset of the population, serving as the data source in research endeavors. Population, in turn, denotes the entire set of characteristics shared by the entirety of the entities under scrutiny. Employing a purposive sampling technique, the research methodology for the forthcoming study is geared towards intentional and selective sampling based on predefined criteria, as outlined by Sugiyono (2018). The chosen samples for the impending research consist of 45 companies enlisted as members of the LQ 45 on the Indonesia Stock Exchange in 2022. The following conditions guide the sample selection process:

- 1) Selection of companies that remained members of LQ 45 without being delisted throughout 2022.
- 2) Inclusion of companies within LQ 45 possessing requisite data on stock returns, abnormal returns, and trading volume activity at both t-5 and t+5 periods.

3.5 Hypothesis Testing

a. Hypothesis testing using paired sample t-test

The paired sample t-test, as elucidated by Ghazali (2018), serves as a statistical method employed to examine whether there exists a disparity in the mean of two interconnected samples. In the context of proving hypotheses H_1 , H_2 , and H_3 , a two-sided paired sample t-test was conducted. The procedural steps for executing a two-sided hypothesis test encompass the following:

1) Determining the parameters to be tested is as follows:

- μ1: Stock returns before Christmas.
- μ2: Stock returns after Christmas.
- μ3: Abnormal return before Christmas.
- μ4: Abnormal returns after Christmas.
- μ5: Trading volume activity before Christmas.
- μ6: Trading volume activity after Christmas.

2) Determine the hypothesis

H0: $\mu = 0$, meaning there is no difference in the stock return, abnormal return and trading volume activity variables before and after Christmas.

Ha: $\mu \neq 0$, meaning that there are differences in the stock return variables, abnormal stock

returns, and trading volume activity before and after Christmas.

3) Testing Criteria

H1, H2, H3 are accepted and H0 is rejected, if the significance probability value is ≥ 0.05

H1, H2, H3 are rejected and H0 is accepted, if the significance probability value is < 0.05 .

4. Results And Discussion

4.1 Research Results

4.1.1 Normality Test Results Before the Natural Logarithm Method

The results of the normality test before the natural logarithm method can be seen in Table 1:

Table 1
 Normality Test Results

	R B	R A	AR B	ARA	TVA	TVA A
<i>Kolmogorov Smirnov</i>	0,215	0,400	0,215	0,400	0,352	0,307
<i>Asymp. Sig (2-tailed)</i>	0,000	0,000	0,000	0,000	0,000	0,000

Source: Processed data, 2023.

The SPSS output, presented in Table 1, reveals that the Asymp. Sig (2-tailed) for the Stock Return, Abnormal Return, and Trading Volume Activity variables before and after Christmas attains a significance level of < 0.05 . This suggests that the distribution of the research data is not normal.

4.1.2 Normality Test Results After the Natural Logarithm Method

The results of the normality test after the natural logarithm method can be seen in Table 2

Table 2
 Normality Test Results After Natural Logarithms

	R B	R A	AR B	ARA	TVA B	TVA A
<i>Kolmogorov Smirnov</i>	0,14	0,21	0,12	0,10	0,09	0,11
<i>Asymp. Sig (2-tailed)</i>	0,20	0,20	0,20	0,20	0,20	0,20

Source: Data processed 2023

Based on the test results in Table 2 it can be explained as follows:

- a. The Stock Return variable exhibited an Asymp. Sig (2-tailed) value of 0.200 before Christmas and 0.055 after Christmas. In both cases, these values exceed the threshold of 0.05, suggesting that the research data for Stock Return is normally distributed.
- b. Similarly, for the Abnormal Return variable, the Asymp. Sig (2-tailed) values were 0.200 before Christmas and 0.200 after Christmas. In both instances, the values are greater than

0.05, indicating that the research data for Abnormal Return follows a normal distribution.

- c. In the case of the Trading Volume Activity variable, the Asymp. Sig (2-tailed) values were 0.200 before Christmas and 0.198 after Christmas. In both scenarios, the values surpass 0.05, affirming the normal distribution of the research data. These findings imply that the assumptions of normality are met for the Stock Return, Abnormal Return, and Trading Volume

Activity variables, reinforcing the reliability of the statistical analyses conducted.

4.1.3 Hypothesis Test Results

The results of the Paired sample t-test can be seen as follows:

Table 3

Test Results Paired sample t-test

Variabel	Sig (2-tailed)	Concluisen
Return	0,007	accepted
AR	0,004	accepted
TVA	0,005	rejected

Source: processed data, 2023

The interpretation of the hypothesis test results presented in Table 3 is outlined as follows:

a. Results of the First Hypothesis Test (H1)

The initial hypothesis posits a substantial disparity in stock returns before and after Christmas among LQ 45 companies listed on the Indonesia Stock Exchange in 2022. The paired sample t-test in Table V.5 reveals a Sig. (2-tailed) value of 0.007, which is less than the 0.05 threshold. Consequently, the first hypothesis, asserting a notable difference in stock returns before and after Christmas for LQ 45 companies in 2022, is accepted. The research findings signify a significant contrast in stock returns during the specified periods.

b. Results of the Second Hypothesis Test (H2)

The second hypothesis contends that there exists a substantial distinction in Abnormal Returns before and after Christmas for LQ 45 companies listed on the Indonesia Stock Exchange in the 2022 period. The paired sample t-test in Table V.5 discloses a Sig. (2-tailed) value of 0.004, falling below the 0.05 threshold. Consequently, the second hypothesis, positing a significant difference in Abnormal Returns before and after Christmas for LQ 45 companies in 2022, is accepted. The research outcomes indicate a notable variation in stock returns across the specified periods.

c. Results of the Third Hypothesis Test (H3)

The third hypothesis asserts a significant difference in Trading Volume Activity before and after Christmas among LQ 45 companies

listed on the Indonesia Stock Exchange in the 2022 period. However, the paired sample t-test in Table V.5 indicates a Sig. (2-tailed) value of 0.399, surpassing the 0.05 threshold. Consequently, the third hypothesis, claiming a substantial difference in Trading Volume Activity before and after Christmas for LQ 45 companies in 2022, is rejected. Therefore, the research findings suggest no significant difference in stock returns before and after Christmas for the specified companies.

4.2 Discussion

a. The Effect of Stock Returns on Christmas Day

The outcomes of the initial hypothesis testing reveal notable distinctions in stock returns prior to and following Christmas. This suggests that the Christmas event prompted a response in the stock market, which was positively acknowledged by investors. The variations in stock returns are attributed to significant dissimilarities in the processed data. The data encompasses a period of 5 days before and after Christmas, signifying the substantial influence of Christmas Day on stock returns.

The heightened sales experienced by companies on Christmas Day contribute to an increase in share prices. Stock returns, calculated as the difference between the share price at time "t" and the share price before time "t," distinctly reflect the impact of Christmas on the stock market. These findings align with previous research conducted by Sri (2016), affirming the existence of a noteworthy difference in returns before and after Christmas for LQ 45 shares.

b. Influence of Abnormal Returns on Christmas Day

The findings from the second hypothesis testing indicate a substantial variance in abnormal stock returns preceding and following Christmas. This disparity in abnormal stock returns is evident in the data collected during the 5 days before Christmas and the 5 days after Christmas. The distinctions in abnormal returns during the Christmas period can be attributed to liquidity factors.

The reduced market liquidity characteristic of the Christmas holidays may amplify share price fluctuations owing to decreased trading activity. The Christmas events, acting as a magnet for investor capital, can lead to significant deviations. Essentially, abnormal return is construed as the distinction between the actual returns realized by investors and the anticipated returns. These research outcomes are consistent with Marisa's (2019) study, underscoring the significant distinction in abnormal returns both before and after Christmas for LQ 45 shares.

c. The Influence of Trading Volume Activity on Christmas Day

The outcomes of the third hypothesis examination reveal an absence of noteworthy divergence in stock prices before and after Christmas. This implies that the Christmas event did not elicit a positive response from potential investors. Trading Volume Activity (TVA) exhibits no discrepancy as the processed data is evenly distributed between the 5 days preceding Christmas and the 5 days succeeding Christmas, thereby failing to trigger any divergence. This research's findings align with Marisa's (2019) study, asserting the lack of a substantial difference in trading volume activity both before and after Christmas for LQ 45 shares listed on the Indonesia Stock Exchange (BEI).

5. Closing

5.1 Conclusion

Based On The Findings of the conducted research, the following conclusions can be drawn:

- a. A noteworthy distinction exists in the average stock returns before and after Christmas for LQ 45 companies listed on the Indonesia Stock Exchange during the 2022 period.
- b. A significant dissimilarity is evident in the average Abnormal Return before and after Christmas for LQ 45 companies listed on the Indonesia Stock Exchange during the 2022 period.
- c. No substantial difference is observed in the average Trading Volume Activity before and after Christmas for LQ 45 companies listed on the Indonesia Stock Exchange during the 2022 period.

5.2 Limitations and suggestions

In light of the outcomes from the conducted research, several limitations and recommendations are acknowledged in this study:

5.2.1. Limitations

- a. The study duration was confined to a narrow window of 5 days preceding and following Christmas.
- b. The entities under investigation encompass solely the LQ 45 firms enlisted on the Indonesia Stock Exchange during the 2022 timeframe.
- c. The research sample was limited to a mere 45 companies.
- d. This investigation exclusively incorporates three variables, namely stock returns, abnormal returns, and trading volume activity.

5.2.2. Suggestions

- a. Subsequent researchers are encouraged to incorporate additional pertinent research variables, thereby expanding the range of indicators available for consideration in investment decision research.

- b. Future researchers are urged to extend the observation period to enhance the precision of the findings.
- c. It is recommended for future researchers to diversify the research objects, considering indices, sectors, or subsectors to yield more specific research outcomes.

6. Thank-You Note

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