Effects of Eid Al Fitr and January Holidays on Stock Returns in LQ45 Company

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Abstract. Investors can use market anomalies to get high stock returns. The forms of market anomalies used in this study are the holiday and January effects. The holiday effect occurs if, before and after the holidays, there is an increase in stock returns compared to normal days. In contrast, the January effect is an increase in stock returns in the early weeks of January compared to the end of the month or months other than January. This study aims to determine the difference in average stock returns before and after the Eid al-Fitr holidays, as well as differences in average stock returns before and after January, in LQ45 index companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2021 period. The method used was descriptive and verification with a sample selection technique using a purposive sampling method. The total sample is 24 companies. The analytical tool used is the Wilcoxon Signed Ranks Test. The results prove significant differences in stock returns before and after the Eid al-Fitr holidays, although the pattern was irregular, while before and after January showed insignificant differences.

Keywords: Market anomalies, Stock return, Eid al Fitr Holiday Effect, January Effect, LQ45

1. Introduction

The number of new investors in the Indonesian stock market keeps increasing yearly. Based on the data processed by the annual report of the Indonesian Central Securities Depository (Kustodian Sentral Efek Indonesia, KSEI) and operational data of the Indonesian Stock Exchange (IDX), the number of capital market investors from 2017 to February 2021 increased by 3 million, which shows that the capital market in Indonesia has experienced rapid growth [1] accessed in April. The increase in investment interest is in line with the profits obtained because investors want an increase in returns on each transaction from the investment level. This can happen because investors only focus on the rate of return offered without paying attention to other important things. Stock investment does not only prioritize capital funds but also adequate knowledge.

Information about accurate timing for investors in buying or selling transactions and determining when to enter or exit the market to get maximum profit and minimize potential losses is one of the knowledge investors need to know, often referred to as market timing. This market timing can be used as a reference in deciding stock prices and profitable times to get returns and reduce the risk of loss. Investors can use market timing strategies to get high stock returns, one of which is by taking advantage of market anomaly phenomena. The efficiency Market Hypothesis (EMH) is a theory that explains behavior with the assumption of a perfect market, namely: (1) securities that are in a balanced position, (2) security prices that describe the complete available information, and investors who act quickly on the available information, (3) investors who do not need much time to search for securities that are not properly priced [2]. EMH reflects that the average stock price is almost the same as its intrinsic value [3].

EMH shows that all investors are rational, and information is available. However, sometimes, the market does not follow the EMH rules; it is called a market anomaly that can occur once and disappear or recur. Market anomaly is a form of strategy or technique that allows investors to get the opportunity to obtain abnormal returns by taking advantage of various events that occur in the capital market. There are four types of market anomalies based on the characteristics of events: firm anomalies, seasonal anomalies, event anomalies, and accounting anomalies. Seasonal (or calendar) anomalies are market anomalies whose conditions are highly dependent on the cycle time based on the calendar. Seasonal anomalies consist of the January effect, Monday effect, day-within-a-week effect, fourth-week effect, month-of-the-year effect, new year effect, holiday effect, and earnings management effect. Market anomalies affect security prices, volatility, volume, and bid-ask spreads. The calendar anomaly is one of several market anomalies that interfere with the weak form efficient market hypothesis. According to [4], there are two types of seasonality, namely (1) high-frequency seasonality, for example, *the day of the week effect*, *the turn of the month effect*, and (2) the *low-frequency seasonality*, namely the *January effect* and the *holiday effect*.

The causes of the seasonal anomaly put forward by [5] include new information that is not adjusted quickly, different tax treatments, cash flow adjustments, and constraints on investor behavior. The holiday effect is a market anomaly that associates certain holiday events with performance on the stock exchange. The holiday effect is a seasonal anomaly indicating an increase in stock returns before holidays, which is inconsistent with efficient market behavior. The indicator is a good investor mood for holidays [6].

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Stock return is remuneration for investment, which can be a motivating factor for investors to invest [7]. Stock return is a benchmark investors use as a reference for investing in shares in a company. Table 1 shows the stock returns of LQ45 companies before and after the Eid holidays.

Table 1. Stock Returns of LQ45 Companies Before and After Eid Holidays 2017-2021

Period	Stock Returns LQ45 Companies	
	Before	After
2017	-0,0010	0,0204
2018	-0,0266	-0,0263
2019	0,0239	0,0203
2020	0,0014	0,0252
2021	-0,0067	-0,0147

Table 1 shows that stock returns before the Eid al-Fitr holidays in 2017, 2018, and 2020 were smaller than stock returns afterward. This means that investors will experience the benefit of returning shares the day after the Eid Al Fitr holiday. This phenomenon occurs due to the tradition of celebrating Eid Al Fitr, which is synonymous with increased consumption; people prefer to hold cash before the Eid al-Fitr holiday so that the allocation of funds for investment will decrease, including investment in the stock market [8]. Investors will experience the benefit of returning shares the day after the Eid Al Fitr holiday. The results of study [6] prove that the phenomenon of the holiday effect on Eid holidays occurs in LQ45 index stocks for the period 2014 to 2018, in which negative returns occur before Eid holidays and positive returns occur after Eid holidays.

The January effect is one of the market anomalies that make stock returns in January tend to be higher than in the previous month or year. [9] stated that the January effect occurs because investors sell their shares at low prices at the end of the year to improve financial statements, reduce taxes, obtain capital gains, or for holidays. Recording of returns generally uses the closing price every month or the average bid-and-ask price if the stock is not actively traded. At the end of the year, the investment manager advises investors to sell shares that are experiencing losses, and at the beginning of the year, they will buy these shares. This action will create a tax loss for investors. The action of selling at the end of December and buying at the beginning of January causes prices to decrease at the end of the year and increase at the beginning of the year so that it will create high returns in January.

Table 1. Stock Return LQ45 Companies Before and After January 2017-2021

Period	Stock Return LQ45 Companies	
	Before	After
2017	-0,0034	-0,0011
2018	0,0084	-0,0028
2019	-0,0061	0,0020
2020	-0,0078	-0,0029
2021	-0,0116	0,0257

Table 2 shows that investors will experience stock returns in the first week of January, which has occurred in the LQ45 stock index in 2017, 2019, 2020, and 2021. [10] mentioned the causes of stock behavior anomaly in January: *tax loss selling, window dressing*, and *small stock's beta*. [11] found the January effect, where the highest average return occurs in January, and the lowest return occurs in other months in LQ45 companies. [12] succeeded in finding the January effect phenomenon, where there was a positive return in January.

The phenomena of the holiday effect and the January effect on the IDX still have various results and conclusions, and the concept of the efficient market hypothesis is still pro and con in the field of finance for both practitioners and academics. Based on these problems, this study is further carried out to discover more about the phenomenon of the holiday effect and the January effect on stock returns in LQ45 stock trading on the IDX.

2. Methods

The method used in this study is descriptive and verification, with a *Wilcoxon, signed ranked test* model, since the data does not have a normal distribution. Normality test uses One-Sample Kolmogorov-Smirnov. The variables used are stock returns, five days before and five days after Eid Al Fits, as well as five days before year-end closing and five opening days at the beginning of the year. Data processing uses SPSS 26 software. The population consists of companies listed on the LQ45 index on the IDX for the 2017-2021 period, 27 companies in total. The sample was determined using a non-probability sampling technique with a purposive sampling method and obtained from as many as 24 companies. The criteria used are: (1) consistently listed on LQ45 during 2017 – 2021 consecutively, (2) presenting financial reports in rupiah. A different test was conducted to determine whether there is a significant difference in stock returns before and after Eid Al Fitr, at the end of the year, and at the beginning of the year. The calculation of stock returns uses the following formula:

$$Return_t = \frac{P_t - P_{t-1}}{P_{t-1}} \quad (1)$$

3. Results and Discussion

The descriptive statistic result of stock return LQ45 companies before and after the Eid Al Fitr holiday is shown in Table 3.

Tabl*e* 2. The Descriptive Statistic of Stock Return LQ45 Companies Before and After Eid Al Fitr Holiday

	N	Minimum	Maximum	Mean	Std. Deviation
Before the Eid Al Fitr Holiday	120	-.0181	.0271	.001233	.0072910
After Eid Al Fitr Holiday	120	-.0308	.0513	-.000277	.0132708
Valid N (listwise)	120				

The number of observations made was the day before and after the Eid Al Fitr holiday. The *mean stock return* before Eid Al Fitr was 0.001233; after the holidays, it was -0.000277. This shows that investors respond negatively to the Eid Al Fitr holiday as seen from the decrease in the mean stock return from being positive before the holiday to negative after the Eid Al Fitr holiday. It contradicted research conducted by [8], which indicated that there was an effect of the Eid holiday when investors sold stocks before the holiday and purchased them back after. This study shows higher stock returns before holidays, meaning no selling action depresses stock prices. This shows that information on Eid al-Fitr does not interest investors, and there is no excessive market reaction after the holiday. Investors do not anticipate the information received in the capital market quickly or consider it not as good news and choose to postpone their investment plans while waiting for further stock developments. Investors are still waiting for future stock return patterns, analyzing phenomena, and not rushing to act to take profits in the capital market.

The results of descriptive statistics of stock return LQ45 companies before and after January are shown in Table 4.

Table 4. The Statistic Descriptive Results of LQ45 Companies Before and After January

	N	Minimum	Maximum	Mean	Std. Deviation
Before January	120	-.0192	.0326	.002238	.0091354
After January	120	-.0272	.0815	.005159	.0128476
Valid N (listwise)	120				

The number of observations made was before and after January. Observations were made of 24 issuers listed on the IDX. In the period before January, the mean value for stock returns is 0.002238, and after, it is 0.005159. This shows that investors positively responded in January, as seen from the increase in the mean return on stocks from those with a smaller value before January to be more significant after January.

The normality test uses Kolmogorov Smirnov because the data processed is more than 100. This test aimed to determine whether the sample used was distributed normally or not. The result showed that the average stock return before and after Eid Al Fitr and before and after January was not distributed normally. Furthermore, the different test used in this study is the Wilcoxon signed-rank test. The ranks result showed 74 observations with *the return* after the Eid Al Fitr holiday being smaller than those before the holiday; there are also 44 observations with *return* after the holiday higher than those before the holiday, as well as 2 observations which showed return equals to each other, both before and after holiday.

Table 5. Wilcoxon Statistic Test After and Before Eid Al Fitr Holiday

	Before – After Eid Al Fitr Holiday
Z	-2.120[b]
Asymp. Sig. (2-tailed)	.034

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

The result of data processing before and after the Eid Al Fitr holiday showed the value of Asymp. The sign (2-tailed) is 0,034 (Table 5). It means there are significant differences in the stock return average before and after the Eid Al Fitr holiday. Therefore, Eid Al Fitr's influence on stock return in LQ45 companies in IDX for the 2017-2021. The result showed significant differences between stock *return*s before and after the Eid Al Fitr holiday in LQ45 companies for 2017-2021. The result of this study is in line with research conducted by [13], [6], and [14], who found that Eid Al Fitr influenced stock *return*. The difference in stock *return* before and after the Eid Al Fitr holiday occurred because, before its holiday, investors choose to have cash ahead of the long holiday; therefore, they sell and cut the stocks off for a week to celebrate Eid Al Fitr. Investors will re-enter the market after Eid Al Fitr and repurchase the stocks; therefore, its price will increase and result in a higher rate of *return* after Eid than before Eid. Based on the study's results, it was found that the average stock *return* for LQ45 companies in 2017 – 2021 after Eid Al Fitr was smaller than before. The occurrence of an unusual pattern is suspected to be due to the influence of COVID-19 in 2020 and 2021, which limits the movement of people so that Eid al-Fitr does not result in an extraordinary increase in the need for funds. Besides that, the results of the study conducted by [15] showed that COVID-19 has a negative effect on company profitability.

The result of LQ45 stock return data processing using the Wilcoxon sign rank test before and after January. Output ranks showed the average comparison of stock return before and after January. There are 52 observation data with an average stock return after January, which is smaller than before. There are 68 observations with an average return after January, which is greater than before. There is no equal average return between before and after January. The results of secondary data processing before and after January show that the Asymp. The sign (2-tailed) value is 0.075, meaning there is no significant difference in the average stock return before and after January. This means there is no January effect on stock returns in LQ45 companies for 2017-2021 (Table 6).

Table 6. Wilcoxon Statistic Test After and Before January

	Before – After January
Z	-1.778[b]
Asymp. Sig. (2-tailed)	.075

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

Based on the calculation result of the average condition, the stock *return* of LQ45 companies in IDX from 2017 until 2021, it is found that the *return* average before January is 0,002238 and after January is 0,005159. This showed that the *return* average after January is higher than before but insignificant. It means the January effect did not occur in LQ45 companies during those years. This result aligns with research conducted by [16] who carried out the research at stock exchanges in developed countries (emerging stock markets). These results contradict [11], [6], and [17] research, which found that January affected stock returns. The difference in stock returns before and after January occurs because of investor reactions at the end of the year or in December during Christmas and New Year celebrations. In that month, investors need substantial funds. Such conditions make investors hold back their investments to meet these needs or even sell their stocks.

January *effect* phenomenon does not occur in LQ45 companies in 2017-2021 since the LQ45 Index is a group of companies that own the highest market capitalization and liquidity level, as well as have been actively traded; Hence, it makes the index susceptible to information coming into the market. [18] said this could occur due to cultural factors and most of the population's religion, which undoubtedly caused the January effect not to occur in Indonesia. In addition, the influence of COVID-19 has affected investment patterns and company performance. Stock *return* is also influenced by systematic risk (including variables of macro economy) and unsystematic risk (including company's specific factor) put forward by [19]. Factors influencing stock *return* include profitability [20], [21], [22], liquidity, market assessment [23], leverage [24], company size [25], systematic risk [26], earnings management [27], and growth [28]. Connected to the EMH and market anomaly, there is no effect of the Eid Al Fitr holiday and January effect in LQ45 companies in 2017-2021 because investors tend to be too pessimistic about companies with poor fundamental basic [29]. In an efficient market, no investment strategy can obtain an average *return* adjusted to the risk or obtain higher than the *return* average guaranteed by its risks.

4. CONCLUSION

The condition of the stock *return* average after the Eid Al Fitr holiday on stocks trading in LQ45 companies in IDX during 2017-2021 is smaller than before and significantly different. It can occur because the information on the Eid Al Fitr holiday achieved by the investors is considered uninterested, and so is before Eid Al Fitr. This indicates that investors did not quickly anticipate the information they achieved and chose to postpone the investment plan while waiting for further updates. The condition of the stock *return* average after January is higher than before, but it also showed no significant difference. This showed that many investors sell stocks at the end of the year to meet holiday needs and make transactions again at the beginning of the year. The conditions of the COVID-19 pandemic in 2020-2021 affected unusual patterns in stock trading, so the results of this study are against conflict with previous ones. In addition, stock *returns* are influenced by systematic and unsystematic risk, meaning that there is no effect on Eid Al Fitr and January holidays.

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REFERENCES

1. www.ksei.co.id. No Title. (2022).
2. Gitman, Lawrence J. and Zutter, C. J. *Principle of Management Finance*. (Pearson Education Limited, 2015).
3. Brigham, E. F. & Houston, J. F. *Fundamentals of Financial Management*. (Cengage Learning, 2019).
4. Xiao, B. The Monthly Effect and the Day of the Week Effect in the American Stock Market. *Int. J. Financ. Res.* **7**, 11–17 (2016).
5. Omer, A. A. Analysis of Market Efficiency and Market Anomies . *Course Intermed. Financ. Manag.* 1–34 (2018).
6. Sulistyaningrum, L., Wiyono, G. & ... Perbedaan Return Sebelum Dan Sesudah Hari Libur Nasional Di Saham Indeks Lq45. *J. Ilm. MEA ...* **5**, 1256–1270 (2021).
7. Tandelilin, E. *Pasar Modal. Manajemen Portofolio & Investasi*. (2017).
8. Hinawati, T. Efek Hari Libur Idul Fitri Terhadap Abnormal Return Saham di Bursa Efek Indonesia. *Cakrawala* **XI**, 34–50 (2016).
9. Susianti, N. Analisis Optimalisasi Prinsip Lembaga Keuangan Syariah Non-Bank "Anomaly Event Study January Effect Terhadap Abnormal Return Saham Syariah (Jii) Di Pasar Modal Indonesia". *Iqtishaduna* **8**, 23–36 (2017).
10. Yunita, N. K. E. & Rahyuda, H. Pengujian Anomali Pasar (January Effect) Di Bursa Efek Indonesia. *E-Jurnal Manaj. Univ. Udayana* **8**, 5571 (2019).
11. W Pradnyaparamita, N. M. & Rahyuda, H. Pengujian Anomali Pasar January Effect Pada Perusahaan LQ45 Di Bursa Efek Indonesia. *E-Jurnal Manaj. Univ. Udayana* **6**, 255225 (2017).
12. Aghnia, N. Fenomena Month of The Year Effect, January Effect, dan Rogalski Effect Terhadap Return Saham di IDX30 BEI Periode 2014-2018. *Sekol. Tinggi Ilmu Ekon. Perbanas, Surabaya* (2020).
13. Wahyu Pujiadi, B. & Indriani, A. Analisis Pengaruh Hari Libur Islam Terhadap Abnormal Return Saham. *Diponegoro J. Manag.* **6**, 1–12 (2017).
14. Nurbayasari, E. & Sulviani, A. Analisis Perbedaan Abnormal Return Sebelum dan

Sesudah Libur Idul Fitri serta Libu Tahun Baru (Studi Empiris Pada Perusahaan Indeks LQ46 Bursa Efek Indonesia Periode 2015 - 2018). *JAKSI J. Akunt. Keuang. dan Sist. Inf. Tahun* **3**, (2022).

15. Ediningsih, S. I. & Satmoko, A. Impact of the Covid-19 Pandemic on the Financial Performance of Consumer Goods Industry in 2019-2020 on the Indonesia Stock Exchange. *RSF Conf. Ser. Business, Manag. Soc. Sci.* **1**, 75–80 (2021).
16. Seif, M., Docherty, P. & Shamsuddin, A. Seasonal anomalies in advanced emerging stock markets. *Q. Rev. Econ. Financ.* **66**, 169–181 (2017).
17. Alhajraf, S. Research in Business & Social Science Return Anomalies in the Kuwaiti Stock Market. **10**, 212–216 (2021).
18. Audina, M. & Laturette, K. January Effect Pada Sektor Property, Real Estate, Dan Building Construction Di BEI. *J. Ris. Akunt. dan Keuang.* **5**, 1337–1348 (2017).
19. Reddy, Y. V & Narayan, P. Literature on Stock Returns : A Content Analysis. *AJF Amity J. Financ.* **1**, 194–207 (2016).
20. Wijesundera, A. A. V. I., Weerasinghe, D. A. S., Krishna, T. P. C. R., Gunawardena, M. M. D. & Peiris, H. R. I. Predictability of stock returns using financial ratios: empirical evidence from Colombo stock exchange. *Kelaniya J. Manag.* **4**, 44 (2016).
21. Abdullah, U., Muda, I. & Author, C. The Factors Which Influence Stock Return with Stock Price as Moderating Variable in Automotive Companies Listed in the Indonesia Stock Exchange. *Int. J. Res. Rev.* **5**, 421 (2018).
22. Mutiara, A. dan S. Pengaruh Rasio Keuangan terhadap Return Saham pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *J. Account. Fak. Ekon. Univ. Bangka Belitung* **1**, (2013).
23. Dika Parwati, R. & Merta Sudiartha, G. Pengaruh Profitabilitas, Leverage, Likuiditas Dan Penilaian Pasar Tehadap Return Saham Perusahaan Manufaktur. *E-Jurnal Manaj. Univ. Udayana* **5**, 253910 (2016).
24. Ozturk, H. & Altiok Yilmaz, A. Leverage and Stock Returns: Evidence from Istanbul Stock Exchange. *Account. Financ. Res.* **4**, 140–146 (2015).
25. Acheampong, P., Agalega, E. & Shibu, A. K. The Effect of Financial Leverage and Market Size on Stock Returns on the Ghana Stock Exchange: Evidence from Selected Stocks in the Manufacturing Sector. *Int. J. Financ. Res.* **5**, 125–134 (2014).
26. Wijaya, C. F. & Djajadikerta, H. Pengaruh Risiko Sistematis, Leverage, Dan Likuiditas Terhadap Return Saham Lq 45 Yang Terdaftar Pada Bursa Efek. *J. Manaj.* **9**, 62–76 (2018).
27. Rahayu, I. & Darmawati, D. Pengaruh Kualitas Audit Terhadap Hubungan Earnings Management dan Return Saham. *Media Ris. Akuntansi, Audit. dan Inf.* **11**, 1–29 (2011).
28. Ahmad, H., A. Fida, B. & Zakaria, M. The Co-determinants of Capital Structure and Stock Returns: Evidence from the Karachi Stock Exchange. *Lahore J. Econ.* **18**, 81–93 (2013).
29. Woo, K. Y., Mai, C., McAleer, M. & Wong, W. K. Review on efficiency and anomalies in stock markets. *Economies* **8**, (2020).