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Short-term Overreaction of the Indonesian Islamic Stock Market to Specific Events during the Covid-19 Pandemic

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The COVID-19 pandemic is a rare and unexpected occurrence. Everyone has felt the global economic impact of the health crisis, including the Indonesian Islamic stock market. The shock in the Islamic stock markets has created uncertainty and a shift in investor behavior, potentially leading to an overreaction abnormality. The aim of this research is to look into a phenomenon in Indonesia's Islamic stock market. Analytical methods include the event study approach and cross-sectional regression. This study discovered that Joe Biden's election as President of the United States during the COVID-19 pandemic (Event 8) and the increase in daily COVID-19 deaths (Event 11) overreacted to the winner category stocks using the Jakarta Islamic Index (JII). A component that drives such overreactions is market capitalisation, which has a substantial influence on it. Furthermore, trading volumes influenced overreaction significantly.

Keywords: Overreaction; Islamic Stock Market; COVID-19; Cross-Sectional Regression; Indonesia

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INTRODUCTION

The capital market is a place where money is invested in order to make a profit. Stocks carry higher risks and higher returns than other investment products such as bonds or deposits. High yields over direct risks. Stock prices can fluctuate dramatically in a short period of time. Various factors influence it, including corporate performance, global market conditions, and government policies. Market information influences an investor's decision to buy or sell stocks. The higher the risk level, the more market information an investor can gather in order to achieve optimal investment returns. As a result, having information about the company and the market as a basis for analysis before deciding to buy or sell shares of a company becomes critical for investors. Fama (1970) proposed the Efficiency Market Hypothesis (EMH) theory, which states that stock prices accurately interpret market information. In the case of efficient markets, all public and private information impacting stock values is represented in market prices. An efficient capital market is one that can react rapidly and accurately to new information to generate a new price equilibrium.

In Indonesia, the supervision and regulation of the implementation of Sharia principles in the capital markets are regulated by the National Shariah Council (DSN) – Indonesian National Assembly (MUI). The principle of Shariah prohibits marketers from engaging in behaviors that contain prohibited elements such as riba, tadlis, ihtikar, maisir, dharar, bai al-ma'dum, and so on. The Sharia principle makes the Islamic stock market more efficient than conventional stock markets because the prohibition of deviating behavior from the principle prevents the occurrence of misleading information, insider trading, front-running, and other deviant practices that lead to inefficiency in the market. This is in line with a study conducted by Ali et al. (2018), which found that Islamic stocks in nine countries, including Malaysia, Turkey, and the UK, have better market efficiency than conventional stocks. Therefore, the concept of the Efficiency Market Hypothesis (EMH) should be met. However, efficiency in capital markets is not always achieved because there may be market anomalies triggered by investor irrationality and other aspects.

De Bondt et al. (1985) first analyzed the overreaction market anomaly. The findings show that unexpected information in the markets causes investors to overreact so that the stock price can become extreme at certain times. The market will set an overvalued price on information that is considered good and an undervalued one on information that is considered bad. After that, there is a price reversal when investors realize their overreacted reaction as a market correction. This leads to a decline in the price of shares that have had a winner in the previous period, while shares with a loser in the preceding period have a price rise. The phenomenon of overreaction can occur when extreme events such as an economic crisis, a health crisis, natural disasters, other abnormal condition, to political events occur.

The extreme event in 2020-2022 is the health and economic crisis caused by the severe acute respiratory syndrome coronavirus-2 virus. (SARS-CoV-2). The disease that causes SARS-CoV-2 is called coronavirus disease-19. (COVID-19). COVID-19 cases were first on December 31, 2019, in Hubei Province, China. The disease spread rapidly to become a pandemic in the region. Within a month, the disease also spread to several countries around the world including Thailand, Japan, Spain, France, America, and Australia with a total of 2,015 cases and 42 deaths as of January 31, 2020. (WHO 2020). Because of its rapid and widespread spread, on March 11, 2020, the World Health Organization (WHO) later declared COVID-19 a pandemic. In addition to medical measures such as treatment and vaccine development, governments across the country have implemented non-medical policies including lockdowns, closing of schools and factories, travel cancellations, gathering bans, and so on. Although this policy has contributed to preventing the spread of COVID-19, unfortunately, it has caused tremendous damage to global economic activity and triggered the worst recession since the Great Depression (Chen et al. 2021).

The Covid-19 pandemic has ruined all aspects of the world's economy such as the decline in Gross Domestic Product (GDP) and the rise in unemployment due to the termination of employment contracts. The International Monetary Fund (IMF) predicts global economic growth to decline by 6.6% while the World Bank publishes a 5.7% decline in global growth by 2020. In addition, the International Labour Organization predicts that world unemployment will rise from 187 million (2019) to 220 million. (2020). At the same time, the COVID-19 pandemic also affected the stock market. Previous research shows that events such as terrorist attacks, the spread of infectious diseases, natural disasters, and political events caused shocks in the stock markets (Bash, 2020).

Indonesia's first COVID-19 case was confirmed on March 2, 2020. The presence of this pandemic has caused stock price movements to become more volatile, so daily returns have experienced sharp fluctuations. Jakarta Islamic Index returns can be seen in the data. Daily returns continued to decline to -7.84% by March 9, 2020. However, in just 12 days there was a sharp rise on March 26, 2020 of 12.81%. High price volatility and high return in a short time indicate overreaction. According to M De Bondt et al. (1985) in their study, overreaction occurs when there is an extreme price movement followed by an opposite or reversal price movement.

During the COVID-19 pandemic, the Islamic stock market, like conventional markets, faced significant volatility and challenges, including in Indonesia. The initial phase of the pandemic saw a sharp decline in stock prices across global markets, including Islamic stocks. Investor uncertainty and economic disruptions led to a sell-off. Overall, while the Islamic stock market faced significant challenges during the COVID-19 pandemic, its inherent principles provided some resilience. The market's performance varied across regions and sectors, with some areas showing faster recovery and growth compared to others.

Anomaly of overreaction on the Islamic stock markets was found in Indonesia in a study conducted by Mujadiddah et al. (2020). The results of the research showed that the shares listed in the JII have been overreacting to specific events such as the bombings in Surabaya and the election of Donald Trump as President of the United States. In addition, Syafitri et al. (2022) found there was an overreaction in JII to specific events of COVID-19 that occurred during the period January 2020 – June 2020. Research results show that the announcement of COVID-19 pandemic transmission and lockdown by the Chinese government significantly led to an overreaction on Indonesian Islamic shares and stock market.

METHODOLOGY AND DATA

This study uses secondary data from the period December 31, 2019 to December 31, 2022. The sampling of stocks in this study uses a purposive sampling method with stock-share criteria that are consistently included in the Jakarta Islamic Index (JII). The data used is the daily closing price of the indices and shares of Islamich during the research period of each event. Corporate financial data is also used to estimate the factors that influence overreaction. The data is taken from Yahoo Finance (https://finance.yahoo.com) and BEI (http://www.idx.co.id). The sample of specific events related to COVID-19 in this study is 12 which are:

Table 1 Events during the COVID-19 pandemic

Event	Event	Date
Event 1	Announcement of First COVID-19 Case in Indonesia	March 2, 2020
Event 2	Announcement of COVID-19 as a pandemic by WHO	March 11, 2020
Event 3	Announcement of Large-Scale Social Restriction Policy (PSBB)	April 6, 2020
Event 4	Announcement of Stimulus by the United States Government	March 24, 2020
Event 5	PEN Rule Publication	May 11, 2020
Event 6	The Invention of the Pfizer-BioNTech Vaccine	November 9, 2020
Event 7	The arrival of Stage 1 COVID-19 vaccine in Jakarta	December 7, 2020
Event 8	Appointment of Joe Biden as President of the United States	January 20, 2021
Event 9	Announcement of COVID-19 Alpha, Beta, and Delta cases in Indonesia	May 4, 2021
Event 10	Announcement of COVID-19 variants of Omicron in Indonesia	June 7, 2021
Event 11	Highest daily deaths	July 27, 2021
Event 12	Highest Daily Case	February 16, 2022

The event study approach is used to identify the occurrence of overreaction. This approach is used to see the impact of an event on a stock or a group of stocks. The analysis is done by dividing the period before and after the event. The period used is 100 trading days before the event (t-100) and 100 trading days after the incident (t+100). In addition, a trading day when an event occurs is used to analyze the factors that influence the occurrence of an overreaction. The determination of this period is based on studies conducted by Mujadiddah et al. (2020) and Irfan et al. (2021). The period at each selected event during covid-19 pandemic in this study is shown in Table 2.

Table 2 Research Period for each Event

Event	Pre-Event Period	The period during the Event	Post-Event Period
	t-100	t=0	t+100
Event 1	October 8, 2019	March 2, 2020	July 30, 2020
Event 2	October 17, 2019	March 11, 2020	August 11, 2020
Event 3	November 11, 2019	April 6, 2020	September 8, 2020
Event 4	October 30, 2019	March 24, 2020	August 27, 2020
Event 5	December 11, 2019	May 11, 2020	October 8, 2020
Event 6	June 11, 2020	November 9, 2020	April 8, 2021
Event 7	July 9, 2020	December 7, 2020	May 6, 2021
Event 8	August 19, 2020	January 20, 2021	June 21, 2021
Event 9	December 3, 2020	May 4, 2021	October 1, 2021
Event 10	January 6, 2021	June 7, 2021	October 29, 2021
Event 11	February 25, 2021	July 27, 2021	December 17, 2021
Event 12	August 24, 2021	February 16, 2022	July 22, 2022

To identify the factors that influence overreaction, five variables are used, namely abnormal returns, information leakage, market capitalization, trading volume, and leverage. These variables refer to research by Farag and Cressy (2010), Mujadiddah et al. (2020), and Syafitri et al. (2022). Market capitalization data will be transformed into a natural logarithm (Ln) because the data has large units and to avoid violating classical assumptions. The software used is Microsoft Excel 365 and SPSS 22.

Model Development

Based on research conducted by Farag dan Cressy (2010), Boubaker et al. (2015), Musnadi et al. (2018), and Mujadiddah et al. (2020), there are two stages in this study, namely determining indicators of overreaction and analyzing the factors that influence it.

Determine the category of winner shares and loser shares

1. Determine the daily stock return

   According to Lobe dan Rieks (2011) Daily stock returns can be calculated using the following formula:

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}}$$

   R_{it} : stock return i- th at time t
   P_{it} : the price of the i- th stock at time t
   P_{it} : the price of the i -th stock at time t-1

2. Determine an abnormal stock return

   Abnormal return is calculated by subtracting the daily stock return from the expected return. The market adjusted model method is used in this study, meaning that the expected rate of return is the market return index value for the same period. This approach is consistent with research by Musnadi et al. (2018). This equation can be written as:

$$AR_{it} = R_{it} - Rm_t$$

$$Rm_t = \frac{Pm_t - Pm_{t-1}}{Pm_{t-1}}$$

   AR_{it} : abnormal return of stock I at time t
   Rm_{it} : market return on day t
   Pm_t : stock market price index at time t

3. Determine the cumulative abnormal return (CAR)

   Cumulative abnormal return (CAR) is the accumulation of the i- th abnormal return in the study period. Abnormal returns before events occur are used to determine stock categories while abnormal returns after events occur are used to test the effect of overreaction. Here are the similarities:

$$CAR_{it} = \sum_{a=1}^{t} AR_{it}$$

   CAR_{it} : cumulative abnormal return of stock i at time t
   AR_{it} : abnormal return of the i-th stock in the t-period

Determine indicators of overreaction

1. Test the sample with a different test t

   A different test was carried out using the average abnormal return (AAR) value of Islamic

stocks in the win n er and loser stock portfolios in the period before and after event happened . Here's the calculation formula (Musnadi et al., 2018):

$$AAR_{it} = \frac{\sum_{i=1}^{I} AR_{it}}{I}$$

AAR_{it} : average abnormal return at time t
AR_{it} : abnormal the ith stock return at the t-time
I : number of shares

2. Calculating the cumulative average abnormal return (CAAR)

According to Boubaker et al. (2015), the determination of the cumulative average abnormal return (CAAR) is used to determine indicators of information leakage (leak). This information leak was obtained from the CAAR value three days before the event occurred which caused the market to be inefficient. The following is the equation for determining the CAAR value:

$$CAAR_t = \sum_{t=1}^{I} \frac{CAR_{it}}{I}$$

$CAAR_t$: cumulative average abnormal return in the t-period
CAR_{it} : cumulative abnormal return of the i-stock at the t-th time
I : number of shares

Analysis Model of Factors Influencing Overreaction Phenomena

In addition to analyzing the overreaction phenomenon, this study also aims to analyze what factors influence this phenomenon. The model used is a multiple regression model with the category of cross-sectional regression, which means that this study has no effect of time on the model, but is influenced by the type of company stock studied. The use of the model in this study is based on research conducted by Farag dan Cressy (2010), Boubaker et al. (2015), and Mujadiddah et al. (2020). The research model is:

$$CAR_i = \alpha + \beta_1 AR_{i(0)} + \beta_2 Leak_i + \beta_3 Ln\_Mcap_i + \beta_4 LTV_i + \beta_5 Lev_i + e_i$$

CAR_i : cumulative abnormal return on stock i
$AR_{i(0)}$: abnormal return of stock i when the event occurs
$Leak_i$: leakage of information on stock i when the event occurred
Ln_Mcap_i : natural logarithm of stock market capitalization i at t-1
LTV_i : trading volume of stock i with a value of TV_t/TV_{t-1}
Lev_i : company leverage with long term debt/total equity value
α : model intercept
$\beta_1,\beta_2,\beta_3,\beta_4,\beta_5$: parameter estimated
e_i : residual

RESULTS AND DISCUSSION

Overreaction Analysis

This study uses 12 events that occurred during the COVID-19 pandemic with a data period of 201 days for each event. The period is divided into three parts, namely 100 days before the event to determine the winner-loser portfolio, 1 day during the event, and 100 days after the event are used to get the CAR or Cumulative Abnormal Return value. The stock samples analyzed at each event are stocks that are consistently included in JII each research period of the event. In each event, there are two stock portfolios, namely winner stocks and loser stocks to identify overreaction which is indicated by a reversal. Portfolio grouping according to research Musnadi et al. (2018) by taking 10 stocks with the largest CAR value for the winner stock portfolio and 10 stocks with the smallest CAR value for the loser stock portfolio.

In line with the research publication by Mujadiddah et al. (2020) and also Syafitri et al. (2022), testing the hypothesis of overreaction in this study using the average abnormal return (AAR) value. To see the occurrence of overreaction in Islamic stock market, a different test was carried out with the AAR value before and after the event occurred for each type of winner-loser stock portfolio. The different test method used depends on the normality of the data distribution. The Kolmogorov-Smirnov test is used to identify the normal distribution of data for each portfolio. After that, a different test was carried out on each portfolio. Paired sample t-test is used for normally distributed data, while the Wilcoxon Signed Rank test is for data that is not normally distributed.

Table 3 Results of Differential Tests for Important Events related to COVID-19

No	Event	Event Description	P-value	
			Winner	Loser
1	Event 1	Announcement of First COVID-19 Case in Indonesia	0,533	0,496
2	Event 2	Announcement of COVID-19 as a pandemic by WHO	0,530	0,238
3	Event 3	Announcement of Large-Scale Social Restriction Policy (PSBB)	0,538	0,182
4	Event 4	Announcement of Stimulus by the United States Government	0,739	0,161
5	Event 5	PEN Rule Publication	0,370	0,479
6	Event 6	The Invention of the Pfizer-BioNTech Vaccine	0,662	0,466
7	Event 7	The arrival of Stage 1 COVID-19 vaccine in Jakarta	0,316	0,331
8	Event 8	Appointment of Joe Biden as President of the United States	0,022*	0,723
9	Event 9	Announcement of COVID-19 Alpha, Beta, & Delta in Indonesia	0,130	0,986
19	Event 10	Announcement of COVID-19 variants of Omicron in Indonesia	0,571	0,543
11	Event 11	Highest daily deaths	0,090**	0,256
12	Event 12	Highest Daily Case	0,724	0,418

Source: Yahoo Finance dan Bursa Efek Indonesia (BEI) 2023 (data processed)
Note: * and ** significant at 5% and 10%

The results of the different test show that there are two significant events at the 95% and 90% confidence levels that there is an overreaction in the Indonesian Islamic stock market, namely Event 8 and Event 11. Overreaction occurs in winner portfolio stocks which have a more positive return value. Events 8 is the event of Joe Biden's inauguration as president of the United States during the COVID-19 pandemic. The stimulus plan designed by Joe Biden affected investor sentiment. Therefore, investors anticipate and overreact to this political event. Event 11 was an event when Indonesia was reported to have experienced the highest daily death cases since the pandemic took place. This can be considered a bad event (bad news). Investors responded by selling shares in the winner's portfolio. The different test results for each event can be seen in Table 3.

The occurrence of overreaction during the COVID-19 pandemic in Indonesia shows that the Indonesian Islamic stock market is still not efficient according to the theory of the Efficient Market Hypothesis put forward by Fama (1970). The Islamic stock market in Indonesia has not been efficient in describing the information on the market perfectly which is reflected in stock prices. DSN MUI Fatwa Number 40 of 2003 states that stock prices must accurately describe the conditions that occur in terms of the issuer, economy, and politics so that investors get a fair share price. The regulatory fatwa is expected to make the Islamic stock market more efficient and avoid market anomalies. Therefore, the results of testing the overreaction hypothesis in this study are not in accordance with this.

The presence of a fatwa that regulates the operation of the Islamic stock market should have made the market reach a condition where investors know with certainty the cause of the rise or fall of stock prices from all available information both from a technical and fundamental standpoint. This condition is called disclosure. DSN MUI Fatwa No. 80 of 2011 prohibits the occurrence of various behaviors in the stock market that do not comply with sharia, such as misleading information and insider trading. Both of these behaviors illustrate that there are parties who illegally obtain market information that is not known by other investors, resulting in speculative reactions that affect stock prices and cause overreactions. Mujadiddah et al. (2020) in their research found that there was an overreaction caused by information leaks in the stock market during the election of Donald Trump as president of the United States. Likewise, the research conducted by Syahfitri et al. (2022) showed that there was an overreaction to the announcement of the transmission of COVID-19 and the lockdown. The overreaction is influenced by market capitalization, trading volume, and company leverage. Therefore, further testing of what factors influence the overreaction of Islamic stocks to events during the COVID-19 pandemic is carried out.

Data Exploration

The variables of this study consist of cumulative abnormal returns (CAR), abnormal returns (AR), information leakage (Leak), market capitalization (Mcap), trading volume (LTV), and leverage (Lev). Data exploratory analysis by looking at descriptive statistics has the aim of seeing the condition of the sample at the time the event occurred which is adjusted to the data.

Table 4 Descriptive Statistics

Variable	Minimum	Maximum	Mean	Standard Deviation
CAR	-0.1944	0.1359	-0.0440	0.1133
AR	-0.0237	0.1575	0.0183	0.0554
Leak	-0.0230	0.0194	-0.0019	0.0137
Ln_Mcap	29.6109	33.4535	31.5021	1.0081
LTV	0.3938	5.5013	1.2622	1.5094
Lev	0.1845	1.1560	0.5372	0.3668

Source: Yahoo Finance dan BEI 2023 (data processed)

The first variable is the cumulative abnormal return (CAR). be an indicator of investor reaction to an information or event as well as an indicator of overreaction. The CAR value is obtained from the accumulation of abnormal return values during the study period. At the inauguration of Joe Biden as president of the United States (Event 8), the winner's stock portfolio has an average of -4.4% with the lowest value of -19.4% owned by the issuer PT. Surya Citra Media Tbk. (SCMA) and the highest value of 13.5% is owned by the issuer PT. Merdeka Copper Gold Tbk. (MDKA). A negative average value shows that overreaction occurs because investors react excessively to information on events so that they sell shares in the winner portfolio in the estimation period. As a result, the stock price has decreased so that the return obtained becomes negative. The standard deviation of 11% (greater than the average) means that the data distribution varies.

The variable abnormal return (AR) is the first variable to be studied as a variable that influences the overreaction phenomenon. The AR value is obtained by calculating the difference between the stock returns of each issuer and market return as measured from JII at the time the event occurred (t=0). The average value of AR is 1.8% with the lowest value reaching -2.3% owned by PT. Surya Citra Media Tbk. (SCMA) while the highest value is 15.7% owned by PT. Aneka Tambang Tbk. (ANTM). A positive average value indicates that at the time of Joe Biden's inauguration event, the performance of winner's stocks was still positive, however, after the incident occurred there was a downward reaction to the stock price due to overselling which can be seen from the average CAR. The distribution of AR values in event 8 is quite large which can be proven by the large difference between the standard deviation value of 5.5% and the average value of 1.8%.

Next is the Leak variable which describes the occurrence of information leakage. This value is obtained from the cumulative average abnormal return (CAAR) for three days before the event occurs for each winner stock . The results of descriptive statistics show an average value of -0.1% with the lowest value reaching -2.3% which is owned by PT. Aneka Tambang Tbk. (ANTM) and the highest score of 1.9% by PT. Wijaya Karya (Persero) Tbk. (WIKA). The data distribution is quite wide as can be seen from the standard deviation value of 1.3% which is greater than the average of -0.1%.

Market capitalization (Mcap) is a measure of the size of a company. Market capitalization is obtained from multiplying the stock price by the number of shares issued at the time of the event (t=0). At the time of Joe Biden's inauguration as president of the United States, the average value of the winner's stock market capitalization was IDR 31.5 trillion with the smallest value of IDR 29.6 trillion while the largest value was IDR 33.4 trillion. The issuer with the lowest market capitalization is PT. Surya Citra Media Tbk. (SCMA) while the issuer with the largest market capitalization is PT. Telekomunikasi Indonesia (Persero) Tbk. (TLKM).

Trading volume is the number of shares traded by a company at a certain time. The LTV variable represents the ratio between the amount of trading volume at the time the event occurred (TV_t) and the amount of trading volume before the event occurred (TV_{t-1}). An LTV value greater than 1 indicates the volume of stock trading when the event occurs is greater than the previous day, conversely an LTV value less than one indicates the volume of trading when the event

occurs is smaller than the previous day. The average value of LTV at Event 8 was 1.26 with the lowest value being 0.39 owned by PT. Surya Citra Media Tbk. (SCMA) while the highest score of 5.50 is owned by PT. Aneka Tambang Tbk. (ANTM). The range of data distribution is not large enough with a standard deviation of 1.50 compared to an average of 1.26.

The last variable is the company's leverage which is denoted by Lev. Leverage is the ratio between long-term debt to total capital (total equity) of the company at the time the event occurred. This variable has an average value of 0.53, a minimum value of 0.18, and a maximum value of 1.15. The issuer with the lowest leverage is PT. Gunung TBC (PTBA), a leveraged issuer the biggest is PT. by Barito Pacific TBK. (BRPT). The standard deviation value of 0.36 is enough to show that the data distribution range is quite wide.

Cross-Sectional Regression

After all the classical assumptions are met, then the estimation is carried out in the multiple regression model. This analysis was conducted to find out what factors significantly influenced the overreaction of winner portfolio Islamic stocks to the inauguration of Joe Biden as president of the United States during the COVID-19 pandemic. The menu table shows the results of cross-sectional regression (CSR) estimation at the event.

Table 5 CSR Estimation Results for the Winner Share Group at Event 8

Independent Variable	Dependent Variable: CARi
C	- 2,489 (0.032)
AR	2,467 _ (0.078)
leak	- 1.518 (0.528)
Ln_MCap	0.082 (0.029)*
LTV	- 0.110 (0.050)*
Lev	- 0.112 (0.168)
R-squared	0.846
Adjusted R-squared	0.654
Prob (F-statistic)	0.088

Source: Yahoo Finance and IDX 2023 (data processed)
Note: the value in brackets is a p-value
* significant at 5% level of significance

Statistical test results show the value of R-squared (R^2), F-statistic, and t-statistic for each independent variable. The R-squared value of 0.846 indicates that 84% of the variability of the dependent variable cumulative abnormal return (CAR) can be explained by factors in the model, while the rest is explained by other factors outside the model. The F-statistic value of 0.088 exceeds the 5% significance level. This shows that simultaneously, the independent variable has no significant effect on the dependent variable CAR. However, the t-statistic shows that there are two variables that significantly affect the dependent variable CAR. The estimation results for Joe Biden's inauguration as president of the United States during the pandemic (Event 8) using the full cross-sectional multiple regression method can be seen in Table 8. Model specifications and the coefficients of each variable can be written as follows:

$$CAR_{\mathrm{i}} = -2{,}489 + 2.467AR_{\mathrm{i}(0)} - 1{,}518Leak_{\mathrm{i}} + 0{,}082Ln_{MCap_{\mathrm{i}}} - 0{,}110LTV_{\mathrm{i}} - 0{,}112Lev_{\mathrm{i}}$$

The variables Ln_MCap and LTV show significant t-statistical values at the 5% significance level with values of 0.029 and 0.05 respectively. That is, market capitalization and trading volume at the time of Joe Biden's inauguration as president of the United

States (Event 8) affected the overreaction of winner portfolio islamic stocks in Indonesia. Market capitalization describes the size of a company. The market capitalization value is obtained by the price of the outstanding shares multiplied by the number of outstanding shares at a certain time. Significant results with a coefficient of 0.082 indicate a positive relationship between market capitalization and CAR. That is, the company's larger market capitalization is possibly happening an overreaction even bigger. Vice versa, the smaller the company's market capitalization, the smaller the overreaction will occur. These results are consistent with research by Fauzi dan Wahyudi (2016), (Lerskullawat & Ungphakorn, 2019), and Syafitri et al. (2022), who found the shares of companies with large market capitalizations to be more responsive during market crises. When an event affects the economy, especially the stock market, investors tend not to want to take big risks. Therefore, investors tend to choose to allocate funds to stocks that have a larger market capitalization.

The next variable that affects CAR is the trading volume (LTV). Trading volume significantly influenced the occurrence of the phenomenon of overreaction at the inauguration of Joe Biden as president of the United States of America for winner portfolio islamic stocks. The value of this variable is obtained from the comparison of the stock trading volume at the event (t = 0) with the trading volume of the stock the day before (t-1). Trading volume is negatively related to CAR with a coefficient value of 0.11. This means that the smaller the stock trading volume when the event occurs compared to the previous day's trading volume, the easier it is for stocks to experience overreaction. This is consistent with research conducted by Ali et al. (2011), Sohail et al. (2017), and Syafitri et al. (2022) who found that the smaller the volume of stock trading, the more vulnerable it is to overreaction.

Three other variables in the model including abnormal returns (AR), information leakage (Leak), and leverage (Lev) did not show statistically significant results. Abnormal Return (AR) shows a significant value of 0.078 which is greater than the 5% significance level. This variable has no significant relationship with the CAR value. It can be concluded that there was overreaction when Joe Biden was inaugurated being president of the United States is not affected by abnormal returns when the events occur. Investors do not consider the amount of return at that time, but consider other factors such as market capitalization, trading volume and other factors outside the model.

The information leakage variable (leak) has a significance value of 0.528 which is far greater than the 5% significance level. These results indicate that the information leakage variable did not affect the occurrence of the overreaction phenomenon of the winner group's islamic stocks at the time of Joe Biden's inauguration as president of the United States (Event 8). Mujadiddah et al. (2020) and Syafitri et al. (2022) found similar results in their research, namely information leaks did not affect the bombing incident in Surabaya and the announcement of COVID-19 transmission and lockdown. Therefore, in the phenomenon of Islamic stock overreaction to the COVID-19 event, no information leaks were found so there were no violations of Sharia principle transactions, namely misleading information. The last variable is leverage (Lev) has a significant value of 0.168 greater than the 5% significance level. This means that investors do not consider the large ratio of long-term debt to the company's total equity when investing when an event occurs. Differences in results with hypotheses and other similar studies can be caused by differences in the characteristics of the events studied.

Discussions

Investments in the Islamic stock market are carried out in accordance with Islamic principles and are regulated by the DSN MUI. One of the rules that has been set is the DSN MUI Fatwa No. 40 of 2003 concerning Capital Markets and General Guidelines for the Application of Islamic Principles in the Capital Market Sector and MUI DSN Fatwa No. 80 of 2011 concerning Application of Sharia Principles in Equity-Based Securities Trading Mechanisms in the Exchange Regular Market. Islamic stocks are long-term investment instruments. However, the fatwa allows investors to make short-term buying and selling based on the qabdh hukm principle.

Qabdh hukm is the ownership of assets by the buyer both electronically and non-electronically. When an investor buys shares, the sale and purchase agreement is valid and share ownership has been transferred to the buyer even though the administrative settlement has not been fully completed. This presents an opportunity for investors to speculate by buying and selling stocks quickly to maximize profits or avoid potential losses.

The Sharia principles that regulate and are implemented in investment activities, especially in the stock market, have the goal of avoiding all activities that are not in accordance with Islamic teachings. This should make the Islamic stock market more efficient (Ali

et al. 2011). The results of this study reveal that there is an anomaly in the stock market in the form of an overreaction that occurred during the COVID-19 pandemic. This phenomenon indicates that the Islamic stock market in Indonesia may not have reached the expected level of efficiency. The Islamic stock market mechanism still has certain loopholes or imperfections that allow speculative transactions to occur for the purpose of obtaining abnormal returns for personal gain. The presence of this anomaly indicates an imbalance between the stock price reflected in the market and the intrinsic value that should be. Therefore, efforts are still needed to improve market mechanisms, increase awareness, and implement stricter Sharia principles so that the Islamic stock market in Indonesia can achieve a higher level of efficiency and avoid speculative transactions that conflict with the objectives of compliant Islamic investments. with Islamic teachings.

CONCLUSION AND RECOMMENDATION

The COVID-19 pandemic in 2020-2022 had a negative impact on the global economy, including islamic stocks in Indonesia. The economic and health crises affected investor sentiment so Islamic stock price movements become fluctuating. Investors set prices that are too high for events that are considered good and set prices that are too low for events that are considered bad. There were 12 events during the pandemic from the health, economic, and political perspectives that indicated overreaction occurred and were then analyzed using a different test.

Based on the research results, there was an overreaction in the Indonesian Islamic stock market to two events during the COVID-19 pandemic. The results of testing the hypothesis using the different test methods show that the event of Joe Biden's inauguration as president of the United States (Event 8) and the event of an increase in cases of death caused by COVID-19 (Event 11) caused an overreaction in the winner group shares.

The findings from the analysis of market capitalization variables have a significant positive impact on overreaction. Furthermore, the trading volume variable has a significant negative effect on the occurrence of overreaction. Three other variables, namely abnormal returns, information leaks, and leverage, have little bearing on overreaction. As a result, the Indonesian Islamic stock market is still inefficient in providing opportunities for investors to speculate and make returns, which is unfair.

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