

MARKET REACTION TO BI7DRR FLUCTUATIONS (EVENT STUDY ON LQ45 STOCK INDEX)

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Abstract

Market reaction shows how investors respond to information, which affects the stock price and trading volume. Analyzing market reaction is important for companies and investors. The BI7DRR policy is important information that causes a reaction in the stock market. The published information is part of the efficient market in semi-strong form, which was examined by the event study. This study aims to examine the market reaction using average abnormal return and average trading volume activity. The research sample consists of 23 companies, which continuously listed on LQ45 Stock Index, selected using purposive sampling. To examine the hypotheses, this study uses the Paired Sample T-Test and the Wilcoxon Signed Rank Test. The research found a difference in average abnormal return before and after BI7DRR interest rate cut, while the average trading volume activity showed no difference before and after the event. Conversely, the market reaction test during the interest rate hike shows a difference in the average abnormal return and the average trading volume activity before and after the event. These conditions indicate that the stock market reacted significantly to the information and was inefficient in semi-strong form.

Keywords: Market Efficiency, Event Study, Abnormal Return, Trading Volume Activity

INTRODUCTION

Market reaction reflects how information is responded by investors, which causes changes on stock prices and stock trading volumes. Market reaction analysis is helpful for companies to see how events affect investor sentiment, so that companies can develop appropriate financial and operational strategies to avoid the risk of falling stock prices, while from the investor side, market reaction analysis is useful for determining appropriate and profitable investment decisions. Investor decisions are shown by buying and selling stock transactions that are influenced by the information received (Sayudha & Rasmini, 2021).

The concept of examining information content is explained in a hypothesis known as the Efficient Market Hypothesis (EMH). The EMH states that stock prices are quickly evaluated toward a new equilibrium price and reflect all available information (Tandelilin, 2017: 565). In response to new information, markets can cause stock prices to become undervalued or overvalued (Mentari & Artini, 2022). Published information is a component of market efficiency in semi-strong form, which can be examined using an event study (Olbrys, 2021). Good news is information that adds economic value to a company, while bad news is information that diminishes a company's economic value (Abdioğlu & Aytakin, 2016; Ooi & Lau, 2021).

The event study is used to assess the speed and accuracy of the market response. The speed and accuracy of the market response can be measured using the abnormal return (AR) variable (Hartono, 2019: 237). The speed of the market response is reflected by the abnormal return around the event date, while the accuracy of the market response is reflected by the negative abnormal return or positive abnormal return around the event date (Tandelilin, 2017, p. 571). Positive abnormal returns indicate a positive market response due to stock purchases that increase stock prices. In contrast, negative abnormal returns indicate a negative market response due to stock sales that decrease stock prices (Ryandono et al., 2021).

Trading volume activity (TVA) is used to support examining the accuracy of market response as seen from changes in stock trading volume in the capital market. An increase in stock purchase volume is interpreted as a positive market response because it increases stock prices and returns. On the other hand, an increase in stock sales volume is interpreted as a negative response to the occurrence of events that contain bad news because it decreases stock prices and returns (Ryandono et al., 2021). The decline in stock trading volume indicates that investors are not interested in the stock market because the event is indicated as a negative signal that causes a decrease in stock prices and returns.

The BI-7 Day Reverse Repo Rate (BI7DRR) is a monetary policy instrument that has a direct influence on economic growth, especially in the capital market. A BI7DRR is a short-term policy that affects market participants' expectations, borrowing costs, and capital flows, which is reflected in market sentiment and portfolio allocation (Grace et al., 2017). Fluctuations in BI7DRR are viewed by investors as information that can trigger reactions in the capital market (Artini, 2022). The BI7DRR rate cut causes a decrease in deposit interest rates, which encourages investors to invest in the stock market to get higher profits. Increased investment in the capital market strengthens funding sources and triggers business expansion, which can affect economic growth. An Interest rate hike leads to an increase in borrowing costs, which potentially suppresses corporate profits and investor returns (Fausch & Sigonius, 2017). Interest

rate hike encourages investors to invest in instruments with more fixed returns, such as deposits and short-term bonds (Yilmaz, 2022).

Bank Indonesia has lowered the BI 7 Days Reverse Repo Rate (BI7DRR) to 3.5% on February 18, 2021, which is the lowest level in history (BI, 2021). This policy aims to maintain the inflation within the target range of $3.0 \pm 1\%$. Inflation rate on February 2021 was indeed below the target at 0.10% (BPS, 2021b). BI7DRR rate cut is also used to encourage national economic recovery and help Indonesia emerge from the recession it faced in 2020. Indonesia's economic growth in 2020 decreased by -2.07, which is the lowest decline since 1998 (BPS, 2021a).

In 2022, the inflation rate in Indonesia reached 5.51% (BPS, 2023). The combination of rising crude oil prices and an increase of domestic demand after the pandemic contributes to inflationary pressures (Kemenkeu, 2023). Rising crude oil prices directly increase production costs for many industries, which can be passed on to consumers through higher prices. Additionally, increased domestic demand, as economies recover from the pandemic, can exacerbate these effects by creating more competition for goods demand and supply. The Board Governors of Bank Indonesia decided to raise its benchmark interest rate from August to December 2020 to ensure the inflation rate within its target range and control the rupiah exchange rate stability in line with economic fundamentals amid persistently high global uncertainty and the ongoing need to drive economic growth (BI, 2022).

Bank Indonesia announced interest rate changes seventeen times during 2019-2023, consisting of ten rate cut announcements and seven rate hike announcements. The BI7DRR interest rate change announcements are described in Table 1.

Table 1. The Announcement of BI7DRR Fluctuations during 2019-2023

Event	Event Date	Rate	Policy	Event	Event Date	Rate	Policy
	01/01/19	6 %			19/11/20	3.75 %	
1	18/07/19	5.75 %	BI7DRR Interest Rate Cut	10	18/02/21	3.5 %	BI7DRR Interest Rate Cut
2	22/09/19	5.5 %	BI7DRR Interest Rate Cut	11	23/08/22	3.75 %	BI7DRR Interest Rate Hike
3	19/09/19	5.25 %	BI7DRR Interest Rate Cut	12	22/09/22	4.25 %	BI7DRR Interest Rate Hike
4	24/10/19	5 %	BI7DRR Interest Rate Cut	13	20/10/22	4.75 %	BI7DRR Interest Rate Hike
5	20/02/20	4.75 %	BI7DRR Interest Rate Cut	14	17/11/22	5.25 %	BI7DRR Interest Rate Hike
6	19/03/20	4.5 %	BI7DRR Interest Rate Cut	15	22/12/22	5.5 %	BI7DRR Interest Rate Hike
7	18/06/20	4.25 %	BI7DRR Interest Rate Cut	16	19/01/23	5.75 %	BI7DRR Interest Rate Hike
8	16/07/20	4 %	BI7DRR Interest Rate Cut	17	19/10/23	6 %	BI7DRR Interest Rate Hike
9	19/11/20	3.75 %	BI7DRR Interest Rate Cut				

Source: Processed data, 2025

Previous research on market reactions as measured using abnormal returns was conducted by Hu et al. (2020) showed that the Chinese stock market reacted positively to the announcement of an interest rate hike and reacted negatively to a interest rate cut which held by the Central Bank. Another study conducted by Poyraz

et al. (2020) examined the reaction of the BITS100 Stock Index to the decision of interest rates cut held by the Central Bank of the Republic of Turkey during 2010-2020 using the event study, showing there was market reaction indicated by a negative abnormal return. Research by Artini (2022) shows different results, there is no abnormal return before and after the announcement of the Fed interest rate change, this condition indicates that the market is efficient in semi-strong form or the market absorbs information quickly and reflected in stock prices.

Research on market reactions as seen from trading volume activity conducted by Frikasih et al. (2023) and Sumantri et al. (2022) shows that the market reacts to the announcement of the Fed interest rate change before and after the event, as seen from the significant trading volume activity, which means that the announcement of the Fed interest rate change has information content that effects stock trading activity. Agus Indrawan & Kusuma Dewi (2023) dan Safira & Artini (2024) show different research results, there is no difference in trading volume activity before and after the announcement of BI7DRR interest rate change in the banking sector, and also the property and real estate sector listed in the IDX.

Stock index helps investors to see the stock price movements and capital market conditions. LQ45 is one of the stock indexes that investors often use as a benchmark for assessing the stock market. The stocks listed in LQ45 are blue chips with strong financial fundamentals, growth prospect for a business, also high volume and share transactions (Hartono, 2019: 156). The high trading fluctuation in LQ45 are representative as barometer for market sentiment, particularly when assessing reactions to policy changes. Prices shift, and trading activities, including stock buying and selling, are more sensitive to announcements, news, or policy changes.

Previous research on market reactions to BI7DRR interest rate change policy showed inconsistent results, some research results showed a market reaction and some others showed no market reaction. Inconsistent results are a research gap in this study. Previous studies have examined market reactions on one event, this study uses seventeen BI7DRR interest rate change events that categorized into interest rate cut event and interest rate hike event. This research also uses the uncertainty in Indonesia's economic conditions throughout 2019-2023. It is hoped that the policies, market responses, and the number of events studied can illustrate more relevant and comprehensive results.

RESEARCH METHOD (500-1000 words)

The scope of this study is to examine the accuracy of the market reaction to the announcement of BI7DRR interest rate change during 2019-2023 using the average abnormal return and average trading volume activity variables before and after the event. This study uses a 15-day event window (7 days before and 7 days after the

event), which refers to Bank Indonesia's interest rate tenor, namely seven days reverse repo.

The population taken are companies listed in LQ45 Stock Index from 2019 to 2023. This study uses 23 companies that are listed consecutively during 2019-2023 in LQ45 Stock Index as a sample, which selected by purposive sampling method. This study uses quantitative data sourced from secondary data. The data collection process is carried out using the non-participant observation method, that available on the official website of the Indonesia Stock Exchange and several other sites such as finance.yahoo.com and investing.com. Abnormal return testing uses the market adjusted model, while the hypothesis testing uses the paired sample t-test and Wilcoxon signed rank test.

RESULT

Descriptive Statistical Analysis

Descriptive statistical analysis was conducted to obtain a general description of the sample used in the study. The description of the sample consists of the number of samples, the highest value, the lowest value of average abnormal return and trading volume activity in LQ45 stocks index before and after the announcement of BI7DRR interest rate cut and BI7DRR interest rate hike during 2019-2023.

Table 2. Descriptive Statistical Analysis of Average Abnormal Return

	N	Minimum	Maximum
AAR Before Interest Rate Cut	230	-0.05683	0.02902
AAR After Interest Rate Cut	230	-0.03058	0.06537
AAR Before Interest Rate Cut	161	-0.01903	0.01609
AAR After Interest Rate Cut	161	-0.02092	0.01438

Source: Data processed, 2025

Table 2 shows the lowest and the highest AAR before and after the announcement of BI7DRR interest rate changes among 2019-2023. The lowest AAR value before the announcement of the BI7DRR interest rate cut in 2019-2021 was -0.05683 namely SMGR and the highest AAR before the announcement BI7DRR interest rate cut in 2019-2021 was 0.02902 namely CPIN. After the announcement of BI7DRR interest rate cut occurred in 2019-2021, the lowest AAR value was -0.03058 namely INCO, while the highest AAR after the announcement of BI7DRR interest rate cut in 2019-2021 was 0.06537 namely ADRO. When the BI7DRR interest rate hike occurred in 2022-2023, the lowest AAR value before the event date was -0.01903 namely ITMG, while the highest AAR before the announcement of BI7DRR interest rate hike in 2022-2023 was 0.01609 namely

UNVR. The lowest AAR after the announcement of BI7DRR interest rate hike in 2022-2023 was -0.02092 namely UNVR and the highest AAR after the announcement of the BI7DRR interest rate hike in 2022-2023 was 0.01438 namely ADRO.

Table 3. Descriptive Statistical Analysis of Average Trading Volume Activity

	N	Minimum	Maximum
AAR Before Interest Rate Hike	230	0.00021	0.02991
AAR After Interest Rate Hike	230	0.00025	0.02288
AAR Before Interest Rate Hike	161	0.00024	0.00733
AAR After Interest Rate Hike	161	0.00013	0.00857

Source: Data processed, 2025

Table 3 shows the lowest and the highest ATVA before and after the announcement of BI7DRR interest rate change among 2019-2023. The lowest ATVA before the announcement of BI7DRR interest rate cut in 2019-2021 was 0.00021 CPIN and the highest ATVA before the announcement BI7DRR interest rate cut of in 2019-2021 was 0.02991 namely ANTM. When the announcement of BI7DRR interest rate cut occurred in 2019-2021, the lowest ATVA after the event date was 0.00025 UNVR, while the highest ATVA after the announcement was 0.02288 ANTM. During the announcement of BI7DRR interest rate hike in 2022-2023, the lowest ATVA value before the event was 0.00024 namely UNVR, while the highest ATVA before the announcement was 0.00733 namely ITMG. The lowest ATVA after the announcement of BI7DRR interest rate hike in 2022-2023 was 0.00013 namely CPIN and the highest ATVA after the announcement was 0.00857 namely PGAS.

Normality Test

The normality test used to see the data distribution. The normality test uses the saphiro wilk test, because the amount of data is less than 30 in each event. If the significance value of the saphiro wilk test > 0.05 , it means that the data is normally distributed and the hypothesis is examined by the paired sample test. If the significance value is < 0.05 , the hypothesis is examined using the Wilcoxon signed rank test.

Based on the test results in Table 4, AAR which shows normally distributed or the significance value > 0.05 is on event 1, 2, 3, 4, 5, 6, and 10. The hypothesis testing for its events uses the paired sample t-test. Different results were shown on event 7, 8, and 9, AAR before or after the events were not normally distributed or the significance value < 0.05 , so the hypothesis testing for these three events uses the Wilcoxon signed rank test.

Table 4. Saphiro Wilk Test Results of AAR during BI7DRR Interest Rate Cut

		Event 1		Event 2		Event 3		Event 4		Event 5	
	df	18/07/2019		22/08/2019		19/09/2019		24/10/2019		20/02/2020	
		Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.
AAR Before	23	0.957	0.402	0.956	0.389	0.961	0.480	0.967	0.609	0.983	0.946
AAR After	23	0.930	0.107	0.939	0.174	0.949	0.277	0.933	0.127	0.965	0.576
		Event 6		Event 7		Event 8		Event 9		Event 10	
	df	19/03/2020		18/06/2020		16/07/2020		19/11/2020		18/02/2021	
		Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.
AAR Before	23	0.951	0.303	0.970	0.694	0.848	0.002	0.963	0.526	0.962	0.505
AAR After	23	0.972	0.729	0.899	0.024	0.876	0.008	0.873	0.007	0.958	0.424

Source: Data processed, 2025

The results of Saphiro Wilk test on BI7DRR interest rate cut announcements, as in Table 5, showed the ATVA before or after all events (event 1 to 10) had a significance value < 0,05 or were not normally distributed. So, the hypothesis testing of all these events uses the Wilcoxon signed rank test.

Table 5. Saphiro Wilk Test Results of ATVA during BI7DRR Interest Rate Cut

		Event 1		Event 2		Event 3		Event 4		Event 5	
df		18/07/2019		22/08/2019		19/09/2019		24/10/2019		20/02/2020	
		Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.
ATVA Before	23	0.726	<.001	0.640	<.001	0.824	<.001	0.841	0.002	0.941	0.188
ATVA After	23	0.713	<.001	0.729	<.001	0.846	0.002	0.689	<.001	0.781	<.001
		Event 6		Event 7		Event 8		Event 9		Event 10	
df		19/03/2020		18/06/2020		16/07/2020		19/11/2020		18/02/2021	
		Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.
ATVA Before	23	0.916	0.054	0.596	<.001	0.749	<.001	0.614	<.001	0.433	<.001
ATVA After	23	0.838	0.002	0.592	<.001	0.827	0.001	0.802	<.001	0.483	<.001

Source: Data processed, 2025

Table 6. Saphiro Wilk Test Results of AAR during BI7DRR Interest Rate Hike

		Event 11		Event 12		Event 13		Event 14		
		df	23/08/2022	22/09/2022	20/10/2022	17/11/2022				
			Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.
AAR Before	23	0.948	0.262	0.984	0.958	0.962	0.512	0.952	0.314	
AAR After	23	0.954	0.347	0.964	0.547	0.792	<.001	0.947	0.253	
		Event 15		Event 16		Event 17				
		df	22/12/2022	19/01/2023	19/10/2023					
			Statistic	Sig.	Statistic	Sig.	Statistic	Sig.		
AAR Before	23	0.977	0.842	0.973	0.769	0.975	0.795			
AAR After	23	0.976	0.820	0.970	0.691	0.944	0.217			

Source: Data processed, 2025

Table 6 shows the results of the saphiro wilk test of AAR before and after the BI7DRR interest rate hike. On event 11, 12, 14, 15, 16, and 17 showed a significance value $> 0,05$, which means data are normally distributed. The hypothesis testing for these six events uses a paired sample t-test. In contrast, event 13 shows a different result, the data were not normally distributed or the significance value of AAR before or after the event < 0.05 , then the hypothesis testing uses wilcoxon signed rank test.

Table 7. Saphiro Wilk Test Results of ATVA during BI7DRR Interest Rate Hike

		Event 11		Event 12		Event 13		Event 14	
	df	23/08/2022		22/09/2022		20/10/2022		17/11/2022	
		Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.
ATVA Before	23	0.700	<.001	0.799	<.001	0.800	<.001	0.718	<.001
ATVA After	23	0.652	<.001	0.833	0.001	0.827	0.001	0.812	<.001
		Event 15		Event 16		Event 17			
	df	22/12/2022		19/01/2023		19/10/2023			
		Statistic	Sig.	Statistic	Sig.	Statistic	Sig.		
ATVA Before	23	0.949	0.276	0.759	<.001	0.940	0.178		
ATVA After	23	0.828	0.001	0.892	0.017	0.952	0.318		

Source: Data processed, 2025

Saphiro wilk test results in Table 7 showed that on event 11, 12, 13, 14, and 16 have a significance value $< 0,05$ or the data were not normally distributed and the hypothesis testing uses wilcoxon signed rank test. In contrast, event 17 showed different result, the significance value before and after the event was > 0.05 or the data was normally distributed, then the hypothesis testing uses a paired sample t-test.

Hyphotesis Test

Hypothesis testing is conducted to determine whether there is a difference in average abnormal return and average trading volume activity before and after the BI7DRR interest rate cut or hike announcement. The decision for the hypothesis test is based on the Asymp. Sign. (2-tailed) value, if the Asymp. Sign. (2-tailed) value < 0.05 , then H_0 is rejected and H_a is accepted, while if the Asymp. Sign. (2-tailed) > 0.05 , then H_0 is accepted and H_a is accepted.

Based on the results of the difference test before and after the announcement of BI7DRR interest rate cut in Table 8, it shows that of the 10 events tested, eight events show a Sig. (2-tailed) < 0.05 . Sig. (2-tailed) P1, P2, P3, P4, P5, P6, P9, and P10, which means the test results reject H_0 , so it is concluded that there are differences in AAR before and after the eight events. The seventh and eighth announcements show a Sig. (2-tailed) > 0.05 , which means the test results accept H_0 , so it is concluded that there is no difference in AAR before and after the seventh and eighth event announcements.

**Table 8. The Hypothesis Test Results of AAR
Before and After BI7DRR Interest Rate Cut**

Event	Event Date	df	Hypothesis Test Method	Sig. (2-tailed)	Result
1	18/07/2019	23	Paired Sample T Test	0.004	Significat
2	22/08/2019	23	Paired Sample T Test	0.001	Significat
3	19/09/2019	23	Paired Sample T Test	0.014	Significat
4	24/10/2019	23	Paired Sample T Test	<.001	Significat
5	20/02/2020	23	Paired Sample T Test	<.001	Significat
6	19/03/2020	23	Paired Sample T Test	<.001	Significat
7	18/06/2020	23	Wilcoxon Signed Rank Test	<u>0.287</u>	Insignificant
8	16/07/2020	23	Wilcoxon Signed Rank Test	<u>0.715</u>	Insignificant
9	19/11/2020	23	Wilcoxon Signed Rank Test	0.016	Significat
10	18/02/2021	23	Paired Sample T Test	0.012	Significat

Source: Data processed, 2025

The test results in Table 9 show that the Sig. (2-tailed) values before and after event 1, 2, 3, 4, 8, 9, and 10 are > 0.05 , which means that the test results accept H_0 , so it can be concluded that there is no difference in average trading volume activity before and after the announcement of BI7DRR interest rate cut. Different results for events 5, 6, and 7 show that the Sig. (2-tailed) values before and after the events are < 0.05 , which means that the test results reject H_0 , so it is concluded that there is a difference in average trading volume activity before and after the event.

**Table 9. The Hypothesis Test Results of ATVA
Before and After BI7DRR Interest Rate Cut**

Event	Event Date	df	Hypothesis Test Method	Sig. (2-tailed)	Result
1	18/07/2019	23	Wilcoxon Signed Rank Test	<u>0.14</u>	Insignificant
2	22/08/2019	23	Wilcoxon Signed Rank Test	<u>0.236</u>	Insignificant
3	19/09/2019	23	Wilcoxon Signed Rank Test	<u>0.315</u>	Insignificant
4	24/10/2019	23	Wilcoxon Signed Rank Test	<u>0.935</u>	Insignificant
5	20/02/2020	23	Wilcoxon Signed Rank Test	0.002	Significat
6	19/03/2020	23	Wilcoxon Signed Rank Test	<.001	Significat
7	18/06/2020	23	Wilcoxon Signed Rank Test	<.001	Significat
8	16/07/2020	23	Wilcoxon Signed Rank Test	<u>0.858</u>	Insignificant
9	19/11/2020	23	Wilcoxon Signed Rank Test	<u>0.064</u>	Insignificant
10	18/02/2021	23	Wilcoxon Signed Rank Test	<u>0.338</u>	Insignificant

Source: Data processed, 2025

The test results show that event 11 and 13 in Table 10 indicate a Sig. (2-tailed) value >0.05 , which means accepting H_0 , so it can be concluded that there is no difference in average abnormal return before and after the announcement of BI7DRR interest rate hike. Different results for event 12, 14, 15, 16, and 17 show a Sig. (2-tailed) value <0.05 , which indicates rejection of H_0 . Therefore, it is concluded that there is a difference in average abnormal returns before and after the announcement of BI7DRR interest rate hike.

**Table 10. The Hypothesis Test Results of AAR
Before and After BI7DRR Interest Rate Hike**

Event	Event Date	df	Hypothesis Test Method	Sig. (2-tailed)	Result
11	23/08/2022	23	Paired Sample T Test	<u>0.069</u>	Insignificant
12	22/09/2022	23	Paired Sample T Test	0.005	Significat
13	20/10/2022	23	Wilcoxon Signed Rank Test	<u>0.052</u>	Insignificant
14	17/11/2022	23	Paired Sample T Test	<0.001	Significat
15	22/12/2022	23	Paired Sample T Test	0.016	Significat
16	19/01/2023	23	Paired Sample T Test	0.035	Significat
17	19/10/2023	23	Paired Sample T Test	0.015	Significat

Source: Data processed, 2025

The results in Table 11 show Sig. (2-tailed) value >0.05 on event 11, 16, and 17 means no difference in average trading volume activity before and after the events. However, event 12, 13, 14, and 15 show a Sig. (2-tailed) value <0.05 , which means the test results reject H_0 , so it is concluded that there is a difference in average trading volume activity before and after the announcement of BI7DRR interest rate hike.

**Table 11. The Hypothesis Test Results of ATVA
Before and After BI7DRR Interest Rate Hike**

Event	Event Date	df	Hypothesis Test Method	Sig. (2-tailed)	Result
11	23/08/2022	23	Wilcoxon Signed Rank Test	<u>0.82</u>	Insignificant
12	22/09/2022	23	Wilcoxon Signed Rank Test	0.001	Significat
13	20/10/2022	23	Wilcoxon Signed Rank Test	0.011	Significat
14	17/11/2022	23	Wilcoxon Signed Rank Test	<0.001	Significat
15	22/12/2022	23	Wilcoxon Signed Rank Test	<0.001	Significat
16	19/01/2023	23	Wilcoxon Signed Rank Test	<u>0.603</u>	Insignificant
17	19/10/2023	23	Paired Sample T Test	<u>0.275</u>	Insignificant

Source: Data processed, 2025

DISCUSSION

The Difference of AAR Before and After The Announcement of BI7DRR Interest Rate Cut (H1)

Hypothesis testing of AAR before and after the BI7DRR interest rate cut showed significant results or differences in AAR before and after the event. The results showed that the BI7DRR interest rate cut contained information that caused the market reaction and the market was inefficient in a semi-strong form. The research results align with Olbrys (2021) findings, which show that the benchmark interest rate cut affects market reaction to stock price and stock return movements in the Warsaw Stock Exchange, Poland. Günay & Bayraktaroğlu (2022) different research results, which showed that the benchmark interest rate policy did not affect stock market reactions in the tourism sector.

The AAR value before the event was -0.00234 and the AAR value after the event was 0.00087. The positive AAR after the event shows a positive market response to the BI7DRR interest rate cut policy. Investors view the interest rate cut policy as a positive signal or good news, which can affect the action of buying stock, and causing the stock price to increase, as seen from the increasing abnormal returns value after the event.

These results are relevant to the semi-strong form efficiency market hypothesis about the market's accuracy toward information, which states that market participants will respond positively to good news (Tandelilin, 2017: 571). In addition, the interest rate cut is also seen as good news for the companies because it could lower the lending cost. Grace et al. (2017) research result said that the Fed's announcement of an interest rate cut was a positive signal because it would stimulate economic activity. A benchmark interest rate cut would lower the interest expense, which could encourage companies to invest, expand, and even buy back their stock.

The Difference of ATVA Before and After The Announcement of BI7DRR Interest Rate Cut (H2)

The ATVA hypothesis test before and after the BI7DRR interest rate cut showed insignificant results. Insignificant results indicate no difference in ATVA before and after the event. BI7DRR interest rate cut did not make the market react and it showed that the market was efficient in semi-strong form. The interest rate cut did not trigger a significant stock purchase reaction. The absence of market reaction was driven by panic, investor pessimism, and uncertainty conditions during the COVID-19 pandemic. Investors prefer to be cautious and hold their funds for investment or what is known as wait and see.

Another relevant reason is that non-banking companies dominate the research sample, out of the twenty-three companies studied, there are only five banking sector companies. Non-banking companies have lower sensitivity to the BI7DRR interest rate

changes. BI7DRR interest rate cut affects deposit facility rates and lending facility rates, which cause changes in the interest spread of companies in the banking sector. Therefore, the dominance of non-banking companies, less sensitive to interest rates, is not reflected in a substantial surge in trading activity across the sample.

ATVA before and after the event showed an increase. The ATVA before the event was 0.00188, and the ATVA after the event was 0.00199. Investors consider an interest rate cut as good news, by increased stock trading volume due to buying action. The increase in ATVA suggests a demand for stock purchases, but it is insignificant.

The finding related to research conducted by Cahyani & Wirakusuma (2025) shows no difference in trading volume activity before and after the BI7DRR interest rate change in the property and real estate sector. Another study by Safira & Artini (2024) showed no difference in TVA before and after the BI7DRR interest rate change announcement in banking companies on the IDX. Research with different results by Fajarwati & Nurasik (2021) and Mahendra & Rasmini (2019) shows a difference in TVA before and after the announcement of the benchmark interest rate change conducted by Bank Indonesia.

The Difference of AAR Before and After The Announcement of BI7DRR Interest Rate Hike (H₃)

The hypothesis showed significant results. Significant results indicate a difference in AAR before and after the event. BI7DRR interest rate hike contains information that makes the market reaction, and shows that the market is inefficient in a semi-strong form. The research result is supported by the findings of Lee & Carter (2020), which show that the stock index in the US reacted to the announcement of the Fed's interest rate hike, and the market responded negatively to the interest rate hike. Other studies that are in line with the findings were conducted by Safira & Artini (2024), showing a significant difference before and after the announcement of the BI7DRR interest rate hike, which means that the event contains information that makes the market react, as seen from the abnormal returns. Research with different results was conducted by Murdiana et al. (2022) and Putri et al. (2017), which shows no difference before and after the announcement of the BI Rate and Fed Rate

AAR before the event date was -0.00070, and AAR after the event was -0.00132. The negative value after the event date indicates that the market responded negatively to the BI7DRR interest rate hike. Investors perceived the interest rate hike as a negative signal or bad news because it causes the stock prices and returns to decrease, as seen from the decline in value after the event. These results are relevant to the semi-strong form efficiency market hypothesis about the market's accuracy

toward information, which states that market participants respond negatively to bad news (Tandelilin, 2017: 571).

An interest rate hike causes a decrease in the present value of future cash flows and company profitability, thus making investment in the stock market less attractive to investors. This condition can encourage some investors to sell their stock due to decreasing returns. This finding is in line with the research conducted by Pratiwi & Wirakusuma (2018), when the Fed interest rate hike is announced, investors choose to sell their stock, because it affects in Indonesian Stock Exchange and decide to divert their investments to banking instruments such as deposits.

The Difference of ATVA Before and After The Announcement of BI7DRR Interest Rate Hike

The hypothesis showed significant results. Significant results indicate a difference in ATVA before and after the event. The BI7DRR interest rate hike affected the market reaction, showing that the market was inefficient in a semi-strong form. The market reaction shows investors' decisions in stock trading, which cause significant movements in stock trading activity in the capital market. The same research results by Frikasih et al. (2023) and Sumantri et al. (2022) show a market reaction to the announcement of Fed interest rate changes, as seen from the difference in ATVA before and after the event, which means that the event has a significant impact on stock trading activity.

The ATVA value before the announcement was 0.00145, and ATVA after the announcement was 0.00123. The declining value after the event showed a negative response, which means that the announcement of an interest rate hike reduced investors' interest in buying and selling stock in the capital market. Higher lending and deposit interest rates encourage people to cut their consumption and divert their investment from higher-risk areas, such as capital markets, to deposits or short-term bonds for higher returns.

CONCLUSION

Based on the results of the analysis and the previous discussion, it can be concluded that the research results are as follows:

1. The BI7DRR interest rate cut affected the market reaction as indicated by the difference in abnormal returns before and after the event. Positive abnormal returns after the event indicate a positive market response. This condition shows that the market is inefficient in a half-strong form.
2. The BI7DRR interest rate cut did not affect the market reaction or the difference in average trading volume activity before and after the event. Positive trading volume activity after the event indicates stock buying activity, but it was not significant. This condition shows that the market is efficient in a half-strong form.

3. The market reaction during the BI7DRR interest rate hike shows a market reaction as seen from the difference in abnormal returns before and after the event. Negative abnormal returns after the event indicate a negative market response. This condition indicates that the market is inefficient in half-strong form.
4. BI7DRR interest rate hike affect the market reaction as seen from the difference in trading volume activity. Negative trading volume activity after the event date indicates decreased trading activity on the stock exchange. BI7DRR interest rate hike causes an increase in lending rates and encourage investors more interested in investments with higher returns such as in bonds and deposits.

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