

Indonesian Capital Market Response to U.S. Federal Funds Rate Increase Announcements

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ABSTRACT

This research aims to examine whether there are abnormal returns due to the increase in the Federal Funds Rate (FFR) in the United States on February 1, 2023, March 24, 2023, May 3, 2023, and July 26, 2023. The observation period for this study spanned two days before and after each event, with a sample size of 250 companies obtained using the Cochran formula. The sampling method employed was simple random sampling. The data analysis technique utilized was the one-sample Wilcoxon signed-rank test. The results of the analysis indicate that of the four FFR increase events, only the event on March 24, 2023, resulted in a significant abnormal return. It was concluded that this FFR increase event had an impact. This significant abnormal return was predicted to be due to the normalization of policies on the Indonesian Stock Exchange, which occurred one day before the event (t-1) of the FFR increase on March 24, 2023.

Kata Kunci: *Abnormal Return; Event Study; Fed Funds Rate*

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ABSTRAK

Penelitian ini bertujuan untuk menguji ada tidaknya *abnormal return* atas peristiwa kenaikan *The Federal Funds Rate* (FFR) di Amerika Serikat pada tanggal 1 Februari 2023, 24 Maret 2023, 3 Mei 2023, dan 26 Juli 2023. Periode pengamatan dalam penelitian ini adalah dua hari sebelum dan sesudah peristiwa, dengan jumlah sampel perusahaan sebanyak 250 yang diperoleh dengan rumus Cochran. Metode pengambilan sampel menggunakan teknik *simple random sampling*. Teknik analisis data menggunakan *one-sample wilcoxon signed test*. Hasil analisis menunjukkan bahwa dari keempat peristiwa kenaikan FFR, hanya satu peristiwa memperoleh adanya *abnormal return* yang signifikan, yaitu pada tanggal 24 Maret 2023 sehingga disimpulkan bahwa peristiwa kenaikan FFR ini tidak berdampak. Hasil *abnormal return* yang signifikan tersebut diprediksi karena adanya normalisasi kebijakan di Bursa Efek Indonesia yang terjadi pada satu hari sebelum peristiwa (t-1) kenaikan FFR tanggal 24 Maret 2023.

Keywords: *Abnormal Return; Event Stud; Fed Funds Rate*

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INTRODUCTION

The Federal Reserve System (FRS), commonly referred to as the Fed, is the central bank of the United States and one of the most influential institutions globally, significantly impacting the world economy. Established to furnish the country with a safe, flexible monetary and financial system (Hayes, 2022), the Fed employs various monetary policies, notably those focusing on interest rates to control inflation and support economic growth. The Fed's interest rates serve as a primary benchmark for other rates within the economy.

The influence of the United States on Indonesia's economic development is undeniable. An increase in U.S. bank interest rates notably affects investor reactions in Indonesia. Given that nearly 50 percent of investors on the Indonesia Stock Exchange (IDX) are foreign, any turmoil among U.S. investment banks can provoke immediate reactions on the IDX, often resulting in significant losses and a decline in the price index. Furthermore, the U.S. economy's influence extends beyond its borders due to the ubiquitous use of the U.S. dollar in international trade. As such, any fluctuations in the United States are likely to impact global economies. This is particularly pertinent given that the United States maintained its status as the world's strongest economy with a GDP of approximately US\$ 26.95 trillion in 2023, indicating that any economic shocks experienced by the U.S. could potentially resonate throughout the global economy.

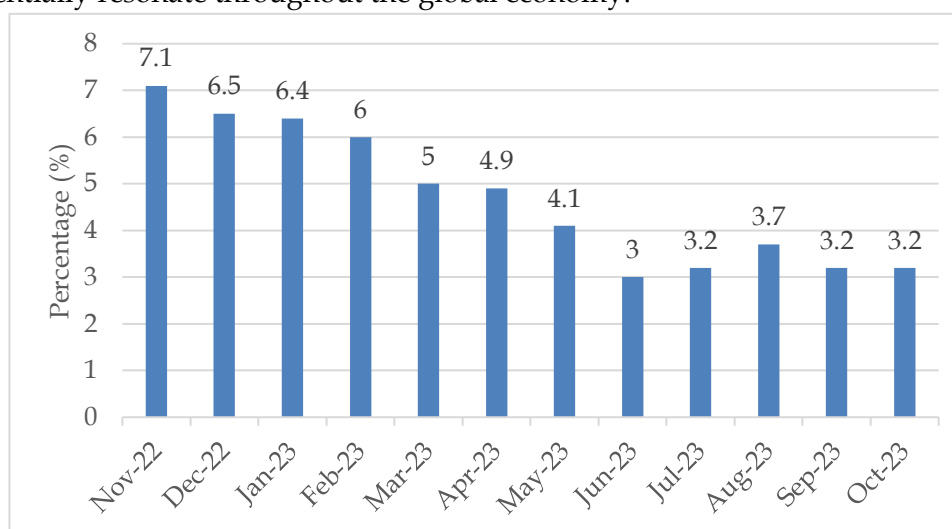


Figure 1. United States Inflation Rate in 2023

Source: Research Data, 2023

Figure 1 illustrates that in June 2023, inflation in the United States (US) significantly decreased compared to June 2022, where it had reached a high of 9.1 percent. Furthermore, Figure 1 reveals that the US recorded a year-on-year (yoy) inflation rate of 3.7 percent in August 2023, an increase from the previous month's 3.2 percent yoy. The Federal Reserve (Fed) has signaled that interest rate hikes will continue to target a reduction in the US inflation rate to around 2 percent. This decline in inflation correlates with the Fed's aggressive increase in the central bank benchmark interest rate since early 2023.

The Fed's rate-setting decisions are based on assessments of economic conditions and policy objectives. If the economy is perceived as growing too

quickly with rising inflation, the Fed is likely to increase interest rates to slow economic growth and curb inflation. Conversely, if the economy is growing too slowly or there is a risk of deflation, the Fed may lower interest rates to stimulate growth and prevent deflation (Riyandi, 2023).

Increases in the interest rates of the US central bank have significant impacts on the Indonesian economy, including a continual weakening of the rupiah. This challenge arises partly because Indonesia adheres to an open economic system. In such systems, exchange rates can be influenced by fiscal and monetary policies. Additionally, international investments require the conversion of domestic currency to foreign currency, leading to capital outflows which increase the supply of domestic currency in the currency exchange market, thus depreciating its value. Consequently, countries like Indonesia, with substantial transactions in goods/services and a high proportion of foreign investors, are vulnerable to exchange rate fluctuations. When the largest source country of investment enacts radical changes in its fiscal and monetary policies, it destabilizes Indonesia's exchange rate, triggering market and investor responses (Naibaho, 2018).

Nabiilah et al. (2024) demonstrate that monetary policy uncertainty in the United States (US) has minimal influence on global stock market indices. The significant role of the US in world trade and economics is linked to the fact that the US dollar serves as a standard reference for other currencies and is widely traded on the global market. Research by Fajarwati & Nurasik (2020) indicates that interest rates affect inflation. Similarly, findings by Yeni et al., (2018) show that interest rates have a significant impact on inflation. This substantial influence of interest rates on inflation suggests that the fluctuations in the inflation rate are largely determined by interest rate movements. The central bank in focus, the Federal Reserve (often referred to as the Fed), raised interest rates to curb inflation in its home country, the US.

At the Federal Open Market Committee (FOMC) meetings, the US Central Bank (Federal Reserve) decided to implement four increments to the benchmark interest rate (Fed Funds Rate) throughout 2023, each by 25 basis points (bps). By July 26, 2023, the Fed's interest rate ranged between 5.25% and 5.50%. This aggressive strategy of interest rate increases throughout 2023 aims to suppress or reduce the inflation rate to the target of 2 percent. The increments to the benchmark interest rate by the Fed in 2023 are detailed in Table 1.

Table 1. Increase in the Fed's Interest Rate (Fed Funds Rate) in 2023

<i>FOMC Meeting Date</i>	<i>Previous (bps)</i>	<i>Rate Changes(bps)</i>	<i>Federal Funds Rate</i>	<i>Inflation in the US (2023)</i>
January 27, 2023	450	-	4.50%	6.4%
February 01, 2023	450	+25	4.75%	6.0%
March 24, 2023	475	+25	5.00%	5.0%
May 03, 2023	500	+25	5.25%	4.1%
July 26, 2023	525	+25	5.50%	3.2%
Total Rate Changes(bps)		+100		

Source: federalreserve.gov, 2023

Apart from the phenomena previously described, another motivation for this research arises from the findings of Nussy et al. (2023), which relate to the Indonesian capital market's reaction to the increase in the benchmark interest rate by the Fed on June 16, 2022. This study highlighted June 16, 2022, as the date when the Fed raised the benchmark interest rate by 75 basis points (bps), marking the first and largest increase of 2022. This hike occurred in the same month that witnessed the highest and most severe inflation rate in the last 40 years, at 9.1 percent.

The interest rate increase on June 16, 2022, helped to mitigate the soaring inflation rates in the United States, which peaked in June 2022. The US Department of Labor reported that inflation decreased to 7.7 percent by October 2022, significantly lower than the 8.2 percent recorded in September 2022. The financial markets responded positively to this adjustment; the US stock exchange, notably Wall Street, experienced a sharp rise, and the S&P 500 index surged 5.5 percent to 3,966,370, representing the most substantial daily increase in two years. Jerome Powell, the Governor of the US Central Bank, noted that inflation had receded from its peak without a significant rise in unemployment rates. Furthermore, the US economy was reported to have grown by 2.1 percent annually up until September 2022 and was projected to continue expanding at a rate of 4.9 percent through September 2023. This growth trajectory dispels concerns of an imminent US recession in 2023, contrary to forecasts by Bank of America (BofA) predicting a recession in the first quarter of 2023.

Theoretically, when the Fed's interest rate increases, it triggers a capital outflow as investors seek higher returns or more substantial profit opportunities in the United States. Consequently, investors are inclined to reallocate their capital to the US. In June, this shift was evidenced by a significant outflow of funds from the stock market, coinciding with the month of the interest rate hike and high inflation. If foreign funds withdraw from the Indonesian stock market, the Composite Stock Price Index is likely to experience a short-term decline. However, the findings of this research reveal that there was no significant negative reaction in the Indonesian capital market in response to the Fed's interest rate increase.

Several studies have produced divergent results regarding market reactions to changes in interest rates. Fajarwati & Nurasik (2020) observed a difference in the average abnormal return before and after Bank Indonesia's decision regarding interest rates. Similarly, Mahendra & Rasmini (2019) documented a change in the average abnormal return following the increase in the Bank Indonesia 7-Day Reverse Repo Rate on August 15, 2018. Research by Putri et al. (2017) indicated that the market responded to Fed Rate and BI Rate policies, concluding that sectoral indices on the Indonesia Stock Exchange tended to exhibit significant inconsistencies in abnormal returns. Additionally, Lasano et al. (2021) found a significant difference in abnormal returns before and after the event.

Conversely, other studies reported no significant abnormal returns during the event window, suggesting that the market did not react to the events studied. Indrayuda & Sukartha (2019) found no significant average abnormal return around the FFR increase event window on September 26, 2018. Anjani et al. (2018) analyzed investors' reactions to the BI interest rate increase following the Fed's

interest rate hike and noted no abnormal returns before and after the event. Similarly, Cahyaningdyah & Cahyasani (2017) found no significant difference in the average abnormal return before and after the announcement of the BI Rate increase. Pratiwi & Wirakusuma (2018) also observed that the announcement of an increase in the benchmark interest rate by the Fed (Fed Funds Rate) did not influence abnormal returns in the Indonesian capital market.

This research examines whether the Indonesian capital market reacts to announcements of increases in the Federal Funds Rate. Market reaction is measured using abnormal returns (AR). An abnormal return of zero indicates no market reaction to the event. If the market reacts, a significant difference in the average abnormal return, deviating from zero, will be observed. To determine whether the Indonesian capital market reacted to the announcement of an increase in the Federal Funds Rate, this can be assessed by examining whether there was an abnormal return (AR) following the announcement. The conceptual framework for this research is illustrated in Figure 2.

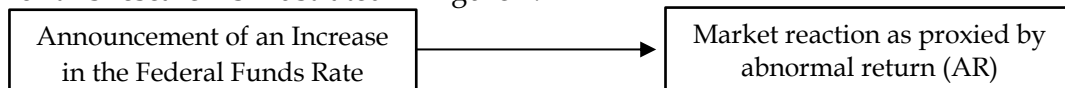


Figure 2. Conceptual Framework

Source: Research Data, 2023

The impact of information on capital markets can be assessed by measuring the magnitude of the market's reaction during an event period, typically using abnormal returns. Event study research primarily focuses on the rate at which market prices reflect incoming information. An abnormal return observed around the date of an event indicates that the market is responding to the information, thereby suggesting that the announcement is informative. This notion is rooted in the Efficient Market Hypothesis (EMH), which posits that published information can influence security prices, whether the news is positive or negative. This hypothesis will be tested during four instances of the Federal Funds Rate increase: February 1, 2023; March 24, 2023; May 3, 2023; and July 26, 2023.

Supporting this hypothesis, research by Fajarwati & Nurasik (2020) found a difference in the average abnormal return before and after Bank Indonesia's decision on interest rates. Similarly, Martatila (2018) observed that announcements of the Fed's interest rate increases could generate negative abnormal returns in the Indonesian capital market. Adebowale & Akosile (2018) also noted that interest rates significantly affect stock prices, with growth in interest rates correspondingly influencing share price growth. Furthermore, Mahendra & Rasmini (2019) documented a variance in average abnormal returns before and after the increase in the Bank Indonesia 7-Day Reverse Repo Rate on August 15, 2018. Conversely, some studies, such as Frikasih et al. (2022), found no market reaction to the Federal Reserve's interest rate increases, as seen with the NASDAQ 101 stock index on June 15, 2022, suggesting that the information was not impactful. Similarly, Indrayuda & Sukartha (2019) reported no significant average abnormal return around the FFR increase event on September 26, 2018.

H1: There is an abnormal return (AR) associated with the announcement of an increase in the Federal Funds Rate on February 1, 2023.

H2: There is an abnormal return (AR) associated with the announcement of an increase in the Federal Funds Rate on March 24, 2023.

H3: There is an abnormal return (AR) associated with the announcement of an increase in the Federal Funds Rate on May 3, 2023.

H4: There is an abnormal return (AR) associated with the announcement of an increase in the Federal Funds Rate on July 26, 2023.

RESEARCH METHODS

The selection of event dates for this study was strategically made to coincide with the announcements of Federal Funds Rate increases by Jerome Powell, Governor of the United States Central Bank (Federal Reserve), on February 1, 2023, March 24, 2023, May 3, 2023, and July 26, 2023. The window period utilized spans five days, encompassing two days before the event ($t-2$), the day of the event ($t=0$), and two days following the event ($t+2$). Additionally, an estimation period of 100 days, ranging from $t-102$ to $t-3$, was employed. This duration was chosen as it is adequate to capture the immediate impacts of the event while avoiding the inclusion of longer-term effects, as market participants typically respond swiftly to changes in interest rates. Details of the estimation period for each event are outlined in Table 2.

Table 2 Estimation Period

	<i>Event Date</i>	<i>Estimated Period (100 days)</i>
Event 1	February 1, 2023	September 9, 2022 to January 27, 2023
Event 2	March 24, 2023	19 October 2022 to 17 March 2023 (excluding the event window for the first event)
Event 3	May 3, 2023	08 November 2022 to 27 April 2023 (excluding the event window for the first and second events)
Event 4	July 26, 2023	11 January 2023 to 21 July 2023 (excluding event windows for the first, second and third events)

Source: Research Data, 2023

The population in this research encompasses all company shares listed across four indices of the Indonesia Stock Exchange (BEI) in 2023, totaling 705 companies. This includes 346 companies on the Main Board Index, 315 on the Development Board Index, 41 on the Acceleration Board, and 3 on the New Economy Board (www.idx.co.id). The sample size was determined using a modification of the Cochran formula, resulting in 250 samples. Proportional sampling was employed across the four boards, with the sample distribution as follows: 123 samples from the Main Board, 112 from the Development Board, 14 from the Acceleration Board, and 1 from the New Economy Board in 2023. Sampling was conducted using the simple random sampling method. This study utilized secondary data sourced from the official website www.idx.co.id and finance.yahoo.com. The significance of abnormal returns around the event period was assessed using the one-sample Wilcoxon signed-rank test.

RESULTS AND DISCUSSION

The presentation of descriptive statistics in this research provides an overview of the data, encompassing minimum, maximum, average, and standard deviation values for abnormal returns (AR) during the study period. Data analysis was

conducted using the IBM Statistical Package for Social Sciences (SPSS) Statistics 23 software. The results of the descriptive statistics are presented in Table 3.

Table 3. Descriptive Statistical Test Results for Cumulative Abnormal Return

	N	Minimum	Maximum	Mean	Std. Deviation
CAR1	250	-0.366	0.322	-0.007	0.077
CAR2	250	-0.449	0.417	0.015	0.084
CAR3	250	-0.326	0.495	-0.000	0.098
CAR4	250	-0.294	0.467	-0.006	0.093

Source: Research Data, 2024

The results of descriptive statistics illustrate the minimum, maximum, average, and standard deviation values for each event's cumulative abnormal return (CAR1, CAR2, CAR3, CAR4) over a five-day observation period with a sample of 250 companies. For the first event (CAR1), the minimum CAR1 value was -0.366, while the maximum CAR1 value reached 0.322. The average CAR1 was -0.007 with a standard deviation of 0.077, indicating a negative average CAR1, suggesting that the actual return was lower than the predicted or expected return.

For the second event (CAR2), the minimum CAR2 value was -0.449, and the maximum was 0.417. The average CAR2 was 0.015 with a standard deviation of 0.084, indicating a positive average CAR2, meaning the actual return exceeded the expected return.

In the third event (CAR3), the minimum value was -0.326, while the maximum was 0.495. The average CAR3 was approximately 0.000 with a standard deviation of 0.098, pointing to a virtually neutral average CAR3, where the actual return was closely aligned with the predicted return.

For the fourth event (CAR4), the minimum CAR4 value was -0.294 and the maximum was 0.467. The average CAR4 was -0.006 with a standard deviation of 0.093, indicating a negative average CAR4, suggesting that the actual return was again lower than the predicted or expected return.

Table 4. Cumulative Abnormal Return Normality Test Results

One Sample Kolmogorov-Smirnov Test	CAR1	CAR2	CAR3	CAR4
N	250	250	250	250
Statistical Tests	0.161	0.128	0.148	0.153
Asymp. Sig. (2-tailed)	0.000c	0.000c	0.000c	0.000c

Source: Research Data, 2024

The results of the normality tests presented in Table 4, utilizing the one-sample Kolmogorov-Smirnov test, indicate that the asymptotic significance (Asymp. Sig.) (2-tailed) for each event related to the announcement of an increase in the Federal Funds Rate – specifically, CAR1, CAR2, CAR3, and CAR4 – yielded identical outcomes of $p=0.000 < 0.05$. This finding suggests that the data does not follow a normal distribution. Consequently, when the data fails to meet the criteria for normality, it is inappropriate to employ parametric statistical tests, such as the one-sample t-test. Instead, the analysis should proceed with non-parametric statistical methods, specifically the one-sample Wilcoxon signed rank test.

Table 5. Results of the One-Sample Wilcoxon Signed Test Cumulative Abnormal Return for First to Fourth Events

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The median of CAR1 equals 0.00000	One-Sample Wilcoxon Signed Rank Test	0.368	Retain the null hypothesis.
2	The median of CAR2 equals 0.00000	One-Sample Wilcoxon Signed Rank Test	0,000	Reject the null hypothesis.
3	The median of CAR3 equals 0.00000	One-Sample Wilcoxon Signed Rank Test	0.211	Retain the null hypothesis.
4	The median of CAR4 equals 0.00000	One-Sample Wilcoxon Signed Rank Test	0.204	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .050

Source: Research Data, 2024

The results from hypothesis testing using the one-sample Wilcoxon signed rank test, as shown in Table 5, indicate that the significance level for CAR1 is $p=0.724 > \alpha$ (0.05); therefore, H1 was rejected. This implies that there were no abnormal returns following the announcement of an increase in the Federal Funds Rate on February 1, 2023. This finding suggests that the market did not react to the announcement of an increase in the benchmark interest rate by the Federal Reserve, indicating that the Indonesian capital market functioned normally despite the interest rate policy announcement from the U.S. Central Bank (The Fed).

Considering the economic conditions in the United States following the Fed's increase in the benchmark interest rate in February 2023, this policy was widely anticipated, and the stock market reacted positively. Financial markets responded favorably, with Treasury yields decreasing by at least 10 basis points and the S&P 500 increasing by more than 1 percent, the highest rise since the previous summer. Furthermore, economists at Bank of America have noted that the United States has likely passed the peak of inflation, which is a positive development, and policymakers appear increasingly confident that inflation is on a downward trajectory. This suggests that the U.S. economy remains stable.

In contrast, economic conditions in Indonesia are predicted to improve. Notably, Bank Indonesia decided to maintain the BI-Rate benchmark interest rate at 5.75 percent in February 2023. According to Bank Indonesia, this decision aligns with monetary policy goals to stabilize the rupiah exchange rate and ensure that inflation remains controlled at the target of 2.5 percent in 2024. Bank Indonesia remains optimistic that the current interest rate is sufficient to control future inflationary pressures.

This study's findings are consistent with those of Indrayuda & Sukartha (2019), who reported that the market did not react to the announcement of an increase in the Federal Funds Rate on September 26, 2018, evidenced by the absence of significant average abnormal returns around the event period. Similarly, research from Pratiwi & Wirakusuma (2018) also found that the announcement of an increase in the benchmark interest rate by the Fed did not significantly affect or influence abnormal returns in the Indonesian capital market.

The results of the one-sample Wilcoxon signed rank test, as presented in Table 5, reveal that the significance level obtained for CAR2 is $p=0.000 < \alpha(0.05)$; therefore, H2 is accepted. This indicates the presence of an abnormal return associated with the announcement of the increase in the Federal Funds Rate on March 24, 2023. This event evidently conveyed information significant enough to influence investor decision-making, leading to a notable market response driven by the significant changes in abnormal returns. Economically, in the United States, the Federal Reserve notes that the economy remains generally stable despite the increase in the benchmark interest rate in March 2023. There has been a rapid growth in job gains in recent months, a low unemployment rate persists, but high inflation continues. The U.S. banking system is also described as healthy and resilient.

In contrast, the economic situation in Indonesia as of March 2023, according to the Chief Investment Officer (CIO) of Danareksa Investment Management (DIM), was marked by high uncertainty in global stock markets. Nonetheless, the Indonesian economy has maintained its robustness. The stock market in Indonesia showed a limited reaction to the Fed's rate increase, as an increase of 25 basis points had been widely anticipated by many to meet the Fed's inflation targets. Indonesian economic experts have posited that the financial market conditions in Indonesia would remain neutral following the Fed's latest rate hike during this period.

This study aligns with the findings of Adebowale & Akosile (2018), who observed a disparity in average abnormal returns before and after Bank Indonesia's decision on interest rates. Similarly, Khairunnisa (2023) indicated that such events are significant for investor decision-making, eliciting market responses based on notable changes in abnormal returns.

Further, the one-sample Wilcoxon signed rank test data for CAR3, also shown in Table 5, registered a significance value of $p=0.211 > \alpha(0.05)$; hence, H3 is rejected. This suggests that there was no abnormal return following the announcement of the Federal Funds Rate increase on May 3, 2023. This outcome informs that the market had anticipated this event, and economists had foreseen the Fed's aggressive measures in raising interest rates to achieve a 2 percent inflation target. In the United States, inflation decreased to 4 percent in May 2023 from 4.9 percent in April 2023. The American Institute for Economic Research (AEIR) in May 2023 indicates that most economic trends in the United States tend to be neutral. Supported by the Q2 2023 GDP growth of 2.4 percent – compared to Q1, which mainly reflected increases in private inventory investment and nonresidential fixed investment – these factors signify that the U.S. economy remains stable despite the Fed's interest rate hikes, leading to an insignificant market reaction.

Furthermore, concerning economic conditions in Indonesia during the Fed's increases in the benchmark interest rate, economic growth in Indonesia remained stable. Until the Fed's third rate hike in May 2023, Bank Indonesia (BI) had not raised the BI-Rate benchmark interest rate, which was still set at 5.75 percent as of May 2, 2023. This rate has been maintained since January 2023 and is unaffected by the Fed's policy, despite three rate increases in 2023. BI's reluctance to immediately follow the US policy suggests that the Fed's rate hikes are unlikely

to impact the Indonesian economy. Moreover, since Indonesia's benchmark interest rate remains higher than that of the Fed, it could potentially reduce capital outflows. These findings are supported by Frikasih et al. (2022), which observed no difference in abnormal returns before and after the Federal Reserve's rate announcements in America. Similarly, research by Pangumpia et al., (2021) found no significant effects on abnormal returns around such events.

Based on the results of hypothesis testing using the one-sample Wilcoxon signed rank test, as shown in Table 5, the significance level for CAR4 is 0.204, which exceeds the alpha level of 0.05, leading to the rejection of H4. This indicates that there was no abnormal return following the announcement of an interest rate increase by the Fed on July 26, 2023. This outcome suggests that the market did not react to the Fed's July announcement, likely because market participants anticipated that this would be the final rate increase in 2023, as hinted during the prior announcement on May 3, 2023, rendering the July event irrelevant for investment decisions during that period.

In terms of economic conditions in the United States, data indicates that the US economy was stable at the time of the Fed's July rate increase, with a GDP growth rate of 2.4 percent on July 27, 2023. Meanwhile, in Indonesia, economic growth continued to be robust amidst global economic uncertainty, with the Central Statistics Agency (BPS) reporting a growth rate of 4.94 percent year-over-year for the third quarter of 2023. It is also posited that the July 2023 rate increase by the Fed did not significantly impact exchange rate stability in Indonesia, aligning with market expectations that capital owners would not precipitously withdraw funds, thereby avoiding fluctuations in the rupiah exchange rate. This is corroborated by recent research by Nugraha & Wirajaya (2023), which found that the Fed's announcements did not influence abnormal returns in the banking sector on the Indonesia Stock Exchange (IDX).

The results of the hypothesis test indicated that, among the four instances of increases in the Federal Funds Rate studied, only the event on March 24, 2023, yielded significant results. Therefore, researchers concluded that this specific increase in the Federal Funds Rate had negligible impact. This conclusion is bolstered by the stable economic condition in the United States, which notably defied predictions of a recession in 2023. Additionally, the US inflation rate declined significantly to 3.2 percent by July 2023. This period was also characterized by the resilience of the Indonesian economy, which remained robust and stable despite aggressive rate increases by the Fed throughout 2023. This stability is supported by Bank Indonesia's decision to maintain its benchmark interest rate at approximately 5.75 percent until September 2023, suggesting that the Fed's rate hikes did not adversely affect Indonesia's economy. Moreover, since Indonesia's benchmark interest rate remains higher than the Fed's rate, it continues to mitigate capital outflows.

This observation is corroborated by several studies, including Nussy et al. (2023), which examined the Indonesian capital market's response to the Fed's interest rate increase on June 16, 2022. The study found no significant negative reactions within the event window of the rate increase. Additionally, Frikasih et al. (2022) analyzed the capital market response to the United States Federal Reserve Bank's interest rate increase on June 15, 2022, on the NASDAQ 101 stock

index, revealing no differences in abnormal returns before and after the event. This suggests that the event did not provide substantive informational content, leading to no significant market reactions, particularly concerning the NASDAQ 101 index.

Researchers further analyzed the circumstances surrounding the date which produced significant abnormal returns, namely March 24, 2023. They identified another event occurring one day prior (t-1) to the Fed Funds Rate increase on March 24, 2023, specifically related to the revocation of the COVID-19 pandemic relaxation policies, as per the decree issued by the IDX Directors (Number Kep-00043/BEI/03-2023) on March 21, 2023, which was effectively implemented on April 3, 2023 (www.idx.co.id). This indicates a prolonged market response to the policy normalization announcement, leading researchers to hypothesize that this policy change might have contributed to the significant market reactions observed in conjunction with the Fed Funds Rate increase on March 24, 2023.

CONCLUSION

The aim of this research is to examine the information content of the Federal Funds Rate (FFR) increase events on February 1, 2023, March 24, 2023, May 3, 2023, and July 26, 2023. The results of the hypothesis tests conclude that, of the four FFR increase events studied, only one event obtained significant results, namely on March 24, 2023. Therefore, the researchers concluded that the Fed's increase in the benchmark interest rate had no impact. Based on these results, researchers reviewed and found that there was another event that occurred one day before the FFR increase on March 24, 2023, namely a decision regarding the revocation of the normalization of the Covid-19 pandemic relaxation policy on the Indonesia Stock Exchange, which had been issued on March 21, 2023. However, this policy was only implemented effectively on April 3, 2023. This indicates that market euphoria regarding the information received about the normalization of the Covid-19 pandemic relaxation policy on the IDX was quite prolonged. Therefore, researchers predict that this policy triggered significant results in the events of March 24, 2023.

Investors are advised not to immediately invest their shares if there is a policy regarding an increase in the benchmark interest rate by the Fed before checking events taking place in Indonesia. This research is slightly distorted, or there are slight deviations, so investors should not expect too much profit or stock returns from this increase in the Fed Funds Rate. By conducting thorough analysis, investors can make smarter investment decisions and minimize the risk of unwanted investments. For further event study research, it is hoped that specific samples can be taken according to the event, which have the greatest influence on the occurrence of the event. Researchers can then use methods that are able to separate the effects of other events that occurred around the observation period so that there is no confounding effect on the research results.

REFERENCE

Adebowale, E.A., & Akosile, A.I. (2018). Interest Rate, Foreign Exchange Rate, and Stock Market Development in Nigeria. *Binus Business Review*, 9(3), 247–253. <https://doi.org/10.21512/bbr.v9i3.4941>

- Anjani, NPP, Wahyuni, MA, & Atmadja, AT (2018). Analysis of Investor Reactions to the Effect of Bi Interest Rate Increases Due to the Fed's Increase in Interest Rates on the Lq45 Stock Index. *Scientific Journal of Accounting Students* Ganesha Education University, 9(3), 2614-1930. www.kontan.com
- Cahyaningdyah, D., & Cahyasani, NA (2017). Analysis of Capital Market Reactions to the Announcement of the BI Rate Increase on November 12 2013. *Maksipreneur Journal*, 6(2), 56-65.
- Fajarwati, PY, & Nurasik. (2020). Capital Market Reaction Analysis Before and After Bank Indonesia's Decision Regarding Interest Rates. *Academia Open*, 3(1), 1-14. <https://doi.org/10.21070/acopen.3.2020.1149>
- Frikasih, J., Muaja, MC, Nussy, SR, Manampiring, G., & Maramis, JB (2022). Capital Market Reaction to the Increase in Interest Rates of the United States Federal Reserve Bank June 15 2022 on the NASDAQ 101 Stock Index Listed on the New York Stock Exchange. *EMBA Journal: Journal of Economics, Management, Business And Accounting Research*, 10(4), 1445-1454. <https://ejournal.unsrat.ac.id/v3/index.php/emba/article/view/44041>
- Hayes, A. (2022). Federal Reserve System: What it is and how It Works (pp. 1-6). <https://www.investopedia.com/terms/f/federalreservebank.asp>
- Indrayuda, AAGA, & Sukartha, IM (2019). Capital Market Reaction to the Increase in the Federal Funds Rate on September 26 2018. *Accounting E-Journal*, 29(2), 854-868. <https://doi.org/10.24843/eja.2019.v29.i02.p27>
- Khairunnisa, T. (2023). Capital Market Reaction to the Announcement of an Increase in Fuel Prices (In Transportation and Logistics Sector Companies Registered in 2022). Publication Manuscript of the Faculty of Economics and Business, University of Lampung, 4(1), 88-100.
- Lasano, MW, Ali, IMA, Noch, MY, & Pattiasina, V. (2021). Abnormal Stock Returns and Trading Volume Activity Before and After Countercyclical Policy in Financial Companies Listed on the Indonesian Stock Exchange. *JOER: Journal of Economics Review*, 1(1), 1-10. <https://doi.org/https://doi.org/10.55098/joer.1.1.1-10> ABNORMAL
- Mahendra, IKR, & Rasmini, N.K. (2019). Market Reaction to the Increase in Bank Indonesia's 7-Day Reverse Repo Rate on August 15 2018. *Udayana University Accounting E-Journal*, 27(3), 2066-2099. <https://doi.org/https://doi.org/10.24843/EJA.2019.v27.i03.p16>
- Martatila, ABJ (2018). The Influence of the Issue of the Fed (Federal Reserve System) Interest Rate Increase on Changes in Stock Returns in the Lq'45 Category on the Indonesian Stock Exchange. *Repository Muhammadiyah University of Jember*, 1-13. http://repository.unmuhjember.ac.id/2145/1/ARTIKEL_JURNAL.pdf
- Nabiilah, IA, Hartono, U., & Haryono, NA (2024). Cointegration Analysis of the Philippine Stock Index Psei, Malaysian Stock Index Klcj, As Djia Stock Index and Macroeconomic Variables with Ihsg. *Scientific Journal of Management, Economics, & Accounting (MEA)*, 8(1), 528-557. <https://doi.org/10.31955/mea.v8i1.3740>
- Naibaho, H. (2018). Management Seminar: The Impact of the Global Economy on the Rupiah Exchange Rate. *Development Manuscript Jaya University Publications*, 1-3. <https://www.upj.ac.id/news/533/seminar-manajemen->

- dampak- Ekonomi-global-terhadap-besar-tukar-rupiah
- Nugraha, AVR, & Wirajaya, IGA (2023). Market Reaction to the Fed's Interest Rate Announcement in the Registered Banking Sector in Indonesia. *Accounting E-Journal*, 33(3), 701-714.
- Nussy, SR, Saerang, IS, & Maramis, JB (2023). US Corporate Bonds' Reaction to the Federal Reserve Bank's Interest Rate Normalization June 2022 (Event Study on Investment Grade Bonds & Junk Bonds). *EMBA Journal: Journal of Economic, Management, Business and Accounting Research*, 11(4), 1159-1168. <https://doi.org/10.35794/emba.v11i4.52349>
- Pangumpia, AW, Murni, S., Tulung, JE, Tulung, JE, Economy, F., & Management, J. (2021). Capital Market Reaction to the Sriwijaya Air Sj 182 Plane Crash on January 9 2021 (Case Study of a Transportation Sub-Sector Company Listed on the Indonesian Stock Exchange) Capital Market Reaction To Sriwijaya Air Conditioning Event,. *EMBA Journal: Journal of Economics, Management, Business And Accounting Research*, 9(4), 368-375. <https://ejournal.unsrat.ac.id/index.php/emba/article/view/36280>
- Pratiwi, KRDI, & Wirakusuma, IGM (2018). Indonesian Capital Market Reaction to the Fed's Announcement of an Increase in the Benchmark Interest Rate in the US. *Udayana University Accounting E-Journal*, 25(3), 1966-1993. <https://doi.org/10.24843/eja.2018.v25.i03.p13>
- Putri, NA, Anggraen, L., & Pasaribu, SH (2017). Analysis of Federal Fund Rate and BI Rate Announcement to Abnormal Return in Indonesia Stock Market. *International Journal of Business and Management Review*, 5(9), 65-77.
- Riyandi, V. (2023). Getting to know the Fed's interest rates and their influence on Indonesian investment (pp. 1-3). <https://landx.id/blog/mengenal-sukubunga-the-fed-Influence-terhadap-investasi-indonesia>.
- Yeni, P., Amar, S., & Satrianto, A. (2018). The Influence of Interest Rates, Loan to Deposit Ratio (LDR) and Credit Growth on Inflation in Indonesia. *Ecogen Journal*, 1(3), 557-566.