Jurnal Ekonomi Syariah Teori dan Terapan p-ISSN: 2407-1935, e-ISSN: 2502-1508.
Vol. 12 No. 1, Februari 2025: 73-85; DOI: 10.20473/vol12iss20251pp73-85

Stock Market Reaction to Corporate Sukuk Issuance: Evidence from Indonesia

Fathiya Ni'matul 'Aisy[1], Bayu Arie Fianto[2]
[1,2]Program Studi Ekonomi Islam, Fakultas Ekonomika dan Bisnis, Universitas Airlangga, Surabaya, Indonesia
fathiya.nimatul.aisy-2020@feb.unair.ac.id*, bayu.fianto@feb.unair.ac.id

ABSTRACT:

This study aims to examine the reaction of the Indonesian stock market to sukuk issuances over an 11-year period from January 2013 to December 2023. The quantitative approach is employed using an event study and market model, with the Indonesia Sharia Stock Index (ISSI) as the benchmark. This study analyzes market reactions using average abnormal returns and average trading volume activity as variables. The results show that there is a market reaction around the sukuk issuance date, with a significant negative average abnormal return in periods t-7, t+2, and t+4. Furthermore, there is no significant difference in average abnormal returns and average trading volume activity before and after the sukuk issuance. The average abnormal return and average trading volume activity of each company also show no significant difference before and after the sukuk issuance, except for the average trading volume activity of companies TINS and INKP in the basic materials sector. These findings indicate a significant negative reaction to sukuk issuances. This result contradicts previous literature that states a significant market reaction, either positive or negative. The insignificance of these results seems to be caused by investor perceptions of sukuk issuances in Indonesia.

Keywords: Market Reaction, Sukuk Issuance, Abnormal Return, Trading Volume Activity

Article History
Received: 11-12-2024
Revised: 11-10-2025
Accepted: 12-10-2025
Published: 13-10-2025

*)*Correspondence:*
Fathiya Ni'matul 'Aisy

I. INTRODUCTION

The capital market plays an important role in a country. As a market for the buying and selling of various financial instruments or securities, the capital market performs economic and financial functions by bringing together borrowers and lenders (Sujana, 2017). Parties that need funds (borrowers) and those who provide funds (lenders) meet in the capital market without being directly involved in ownership and management. This fund transfer activity can drive economic development because funds are used productively for optimal purposes (Rilwanu & Daniel, 2020). Thus, companies that raise funds for long-term investment can improve their performance, ultimately leading to economic growth.

As one of the most actively used instruments in the Islamic debt capital market, sukuk has continuously evolved over time, even since 2000 (Mseddi, 2023). According to the International Islamic Financial Market (IIFM), although sukuk issuance in the global market experienced a slight decline of -2.96% in 2022 (from USD 188,121 million to USD 182,715 million) due to global economic conditions experiencing inflation throughout the year, the overall volume of sukuk issuance remained stable. Several other countries even experienced a positive increase in the number of sukuk issuances in 2022 by 5.98% (from USD 138,693 million to USD 146,990 million) compared to 2021 (IIFM, 2023). Even in 2015, Indonesia became the second largest sukuk issuer globally with more than 12% (USD 8 billion) of global issuance originating from Indonesia (Zawya, 2015). Growth continued until December 2023, with a recorded 1.13% increase in the accumulation of sukuk issuances to 457 from 403 issuances in 2022, nearly double the number of issuances in 2019.

As a developing country with significant economic potential, stock investments in the Indonesian capital market are an attractive option for investors (Salim et al., 2024). The number of investors in the Indonesian capital market has also increased from year to year with a rate of 37.68% from 2022 to 2023 (OJK, 2023). Despite having the potential for high returns, investors still need to analyze a number of elements such as trends, company performance, psychological aspects, macroeconomics, and other factors that influence stock price movements before making investment decisions (Tran et al., 2019).

Market reactions to each event also vary depending on the content of the information, including

whether it is good news or bad news for investors. Even the type of event that occurs, whether it specifically impacts one company, one industry, or the entire capital market, has a different impact. The more unexpected the event, the greater and more significant the market reaction. The market's reaction to information is also discussed in the efficient market theory. A market is said to be efficient if the price in the market fully reflects the set of information available to the public (Sharda, 2022).

There is still limited research analyzing the stock market reaction to sukuk issuance in Indonesia, especially in the sharia stock market. Previous research that produced significant negative results is inconsistent with the development of sukuk in Indonesia and the movement of stock returns of issuing companies which increased around the issuance date. This has prompted researchers to reanalyze the reaction in the sharia stock market to the issuance of sukuk by companies indexed by the Indonesia Sharia Stock Index (ISSI). In the Indonesian stock market, the first research on the effects of sukuk announcements was conducted by Fauzi et al. (2017) using the event study method with three models: market model, average adjustment, and market adjustment with an observation period from 2000 to 2009. The study found that the impact of sukuk issuance showed a positive significant average abnormal return (AAR) and cumulative abnormal return (CAAR), although t-1 in the market model showed negative significance and became positive significant at t+1. The study concluded that the Indonesian stock market is inefficient in the context of form efficiency, indicating that price movements can be predicted.

Mahomed et al. (2018) also used the market model event study method with an observation period from 2003 to 2015, but had different research results from Fauzi et al. (2017). For the total sample, positive significant average abnormal return (AAR) and cumulative abnormal return (CAAR) only occurred long before the sukuk issuance date (t0) and AAR on other days was positive but not significant. When divided by sub-sample, the pre-crisis research results showed no gains from sukuk issuance. In the crisis period (2007-2010), positive significant AAR results occurred frequently before the issuance date and one day after the issuance, namely t-40, t-30, t-27, t-14, and t+4. When viewed during the event window, the pre-crisis CAAR movement tended to decline and although not statistically significant, the crisis period tended to rise even though it was negative around the sukuk issuance date (t0) followed by a trend that returned positive on the fifth day (t+5). The reaction of the Indonesian stock market is contrary to the research results of Khartabiel et al. (2020) with Indonesia as one of the samples showing a significant negative average market reaction to sukuk issuance during the crisis period.

Seeing the different findings in previous research, researchers are interested in researching the reaction of the stock market to sukuk issuance in Indonesia. The research population is all sukuk issuances in the Indonesian capital market during 2013 to 2023 by eliminating companies that conducted corporate actions within the observation period to anticipate confounding effects and improve the accuracy of the analysis. One of the causes of the differences in the findings of previous research is likely the presence of external factors outside of sukuk issuance that can affect the event reaction, so researchers added purposive sampling criteria related to corporate actions. Efforts to anticipate confounding effects like this have been carried out in many event studies such as research by Hoi et al. (2020).

II. LITERATURE REVIEW

Market Reaction

An event or information in the market can be likened to a surprise or something unexpected. Because there has been no prior anticipation, the market will react to events containing such information (Hartono, 2018). The parties involved in showing reactions in the market are investors who own shares. Investor behavior towards an event can be reflected in investment decisions, which can impact stock prices. Therefore, the market reaction to an event can be measured by abnormal returns. The greater the surprise brought by a particular event, the greater the market reaction. According to Sunardi et al. (2023), if the abnormal return is not equal to zero (abnormal) and has a positive value, then the event is good news for investors. Conversely, if the market reacts negatively, it means the event is bad news. The difference in returns from zero is the market reaction triggered, and the positive or negative value is the direction of the market reaction that occurs.

Market reactions vary for each event, therefore it is necessary to identify the event before conducting a reaction analysis. Events can be differentiated based on their type, source, impact, and time of occurrence (Hartono, 2018). Based on their type, events can be announcements made by a party or occurrences that contain information that affects the company's value. Then, based on the source, events can originate from a company or from outside the company. Furthermore, when viewed from their impact, whether the event has a specific impact on a particular company, or all companies in an industry, or has an impact on all companies in the capital market. Meanwhile, based on the time of the event, events are divided into two: periodic and sporadic. An event is considered periodic if it occurs repeatedly within a certain period, while it is considered sporadic if the event occurs at an uncertain or unpredictable time.

Signaling Theory

Signaling theory was first developed by Spence (1973) to explain how job seekers can demonstrate their abilities to potential employers through higher education. However, at its core, this theory explains how one party takes action to signal the quality of information they possess to another party (Connelly et al., 2011). The actions taken by this party are expected to reduce information asymmetry. This theory has since been widely used in various fields, including finance. An example of the application of signaling theory in finance is when a company announces debt and dividends, this information is a signal of the company's quality. Only high-quality companies have the ability to dare to make dividend payments and long-term debt. As a result, this signal influences investors' perceptions of the company's quality based on the available information.

Similarly, with market reactions as researched by Liu et al. (2020). Signaling theory can be used to analyze how parties with information advantages in the market convey information to others through signals, with the company as the signaler, announcements of company activities as the signal, and investors and the market as the recipients of the signal who react to it. The interpretation and reaction of investors to this signal is the object of the research analysis. This is how signaling theory is related to research on market reactions.

Efficient Market Theory

Empirical research on efficient market theory focuses on whether prices in a market fully reflect the set of information available to the public (Sharda, 2022). To test this hypothesis, commonly referred to as the EMH (Efficient Market Hypothesis), it is necessary to analyze price reactions in the capital market based on information as the research object. In certain situations, it is not easy for investors to earn abnormal returns due to price fluctuations and no one can predict prices and market conditions (Ali et al., 2023). Therefore, the EMH plays an important role in understanding the behavior and performance of financial markets to predict such potential gains.

According to Fama (1970), the forms of market efficiency are divided into three types based on the information being tested, namely: weak form, which assumes that all historical information, both from prices and volume, is reflected in the market price of shares. The basic premise of technical analysis is that past stock prices are used to predict future prices. However, many tests of the weak form of EMH show that past price movements cannot always be used by investors to achieve abnormal returns (Dobbins & Witt, 1979). This means that in a weak-form market, historical data is public information and any implications from the past for the future have already been incorporated into the current price. Then semi-strong form, which states that the prices of securities or shares adjust efficiently to publicly available information. A semi-strong form efficient market means that all publicly available information is reflected in the price of securities. Not only historical price information, but also all published announcements related to company activities. Although it generates above-normal returns, these gains will not be obtained permanently and consistently (Başarir & Yilmaz, 2019). The last is strong form, which states that all public and private information is reflected in the prices of securities or shares. In a strong form efficient market, not only information related to historical prices and public information about company activities, but also internal company information is all reflected in the price of securities.

Those three forms of market efficiency are related to each other in a hierarchical manner. The relationship that occurs is based on the scope of information, such as for a market to be semi-strong, it must first be weak-form efficient. Similarly, to become a strong market, it needs to encompass

information from weak-form and semi-strong efficient markets. However, the reverse is not true, meaning that a weak-form efficient market does not necessarily encompass semi-strong or strong efficient markets.

Event Study

The event study methodology has been widely used as a good tool for studying the impact of an event on stock price movements or reactions (Rai & Pandey, 2022). This is because the event study approach typically uses a shorter time window in its analysis than long-term research methods, allowing for the immediate impact of an event to be quickly assessed. Therefore, the event study approach provides a more accurate understanding of assessing the impact of an event by capturing the immediate effect on price changes around the event, both before and after (Li et al., 2024). In addition to examining investor reactions in the capital market to the occurrence of a published event, event studies are also used to measure the impact of economic events on company value by testing the information content of announcements and semi-strong form market efficiency (Fauzi et al., 2017).

Event study methods are widely used to calculate abnormal stock price, return, and volume (Nanda & Barai, 2020). So, these three variables are the objects of measurement of market reactions seen as the effects of an event. One study that uses these variables is the exploration of the impact of Digital Supply Chain (DSC) announcements on stock market performance by (Liu et al., 2024) which looks at market reactions from abnormal returns around the event day. Abnormal return (AR) or abnormal return is the difference between the actual return of a security or asset and the expected return of the financial market. The abnormality is meant to occur when there is an unusual or inconsistent return with the return from the financial performance of the market index (Shawawreh, 2023). The AR is generated from events related to the financial market, thus affecting the price of the company's financial assets traded, such as mergers, dividend announcements, company profit announcements, interest rate hikes, lawsuits, to sukuk issuances. According to Rahim et al. (2021), the market can be said to react when the calculated AR result is not equal to zero ($AR \neq 0$).

To determine whether the market reacts to an event or not, one way is for researchers to analyze the abnormal return (AR) of the average of all companies, which is the difference between the actual return and the expected return (Sunardi et al., 2023). If the actual return of a share from a company related to the event is greater than the expected return, then there is a positive abnormal return. Therefore, a significant average abnormal return (AAR) indicates a change in the price of securities as a result of an event that contains information, which in this case means the issuance of sukuk (Sharda, 2022).

H1.1: There is a significant average abnormal return (AAR) reaction around the day of sukuk issuance by ISSI-indexed companies in Indonesia.

Analyzing the abnormal return around the event day can show more specifically on which day the market shows a positive or negative average reaction across all samples. However, if you want to analyze whether there is indeed a difference between before and after the event occurs, an analysis can be done on the average abnormal return (AAR), both on the average of all samples as an overall picture and for each event specifically. If investors know important information that affects a particular stock, then abnormal returns tend to change after the issuance is made due to investor reactions (Saputra et al., 2021).

H1.2: There is a significant difference in average abnormal return (AAR) before and after the issuance of sukuk by ISSI-indexed companies.

H1.3: There is a significant difference in average abnormal return (AAR) before and after the issuance of sukuk by companies from each sectors.

In addition to abnormal return (AR), event studies can also use trading volume activity (TVA) to analyze market behavior around specific events. Trading volume activity can increase the power of tests in analyzing market reactions (Biktimirov & Afego, 2022). Trading volume or trading activity is a valuable metric in understanding investor sentiment and market activity that serves as a primary proxy for the intensity of investor response to an event (Ante et al., 2024). Trading volume activity is used to see if an event is informative for investors, thus becoming a consideration in making trading decisions. A stock is said to have good performance if its trading volume is high. An increase or decrease in stock movement accompanied by a large trading volume indicates a large market reaction to new information

(Sunardi et al., 2023).

H1.4: There is a significant difference in average trading volume activity (ATVA) before and after the issuance of sukuk by ISSI-indexed companies.

H1.5: There is a significant difference in average trading volume activity (ATVA) before and after the issuance of sukuk by companies from each sectors.

III. RESEARCH METHODS

This study employs an event study as it is more suitable for capturing the immediate impact of an event in the short term. To assess the impact of an event by capturing price changes around the event, an event study is a method that can provide a more accurate understanding (Li et al., 2024). Therefore, this study uses an event study to analyze the abnormal return (AR) and trading volume activity (TVA) of a company's stock around the sukuk issuance date. Event studies can be used to examine investors' reactions to information from published announcements and test market efficiency (Rahim & Ahmad, 2016; Fauzi et al., 2017). The researcher uses a market model with the Indonesia Sharia Stock Index (ISSI) as the market index because it is considered most suitable for the needs of the research analysis as it can anticipate the occurrence of cross-correlation between companies that may occur (Mahomed et al., 2018).

This study employs quantitative approach using secondary data sources. The research data was obtained from IDX for companies listed on the Indonesia Sharia Stock Index (ISSI) and Bloomberg Professional Server or Bloomberg Terminal. Based on the research object being analyzed, the population of this study is all companies indexed on the Indonesia Sharia Stock Index (ISSI) that issued sukuk in the years 2013-2023. Meanwhile, for the sample, this study uses purposive sampling with specific criteria that the company does not conduct any other corporate actions during the event window besides sukuk issuance and the company is the largest capital market in each sectors. After eliminating the population according to the purposive sampling criteria to improve research accuracy, the total final sample amounted to 10 companies from 6 sectors with 18 sukuk issuances. This study uses a 10-day window period with a total of 21 days, including 10 days before the event, the day of the event, and 10 days after the event.

Table 1. Variable Measurement Items

Variables	Definitions	Source
Sukuk Issuance	Sukuk are certificates of equal value that represent joint undivided ownership of tangible assets, benefits and services of specific project assets from specific investment activities	The Accounting and Auditing Organization for Islamic Financial Institutuions
Abnormal Return	In event studies, AR reflects the impact of an announcement on market reactions which is calculated based on changes in the price of the issuing company's securities. These price changes can be seen from the difference between the actual return and the normal return or the return expected by investors (expected return). $AR_{i,t} = R_{i,t} - E(R_{i,t})$ $AR_{i,t}$ = Abnormal return of stock i on day t $R_{i,t}$ = Actual return of stock i on day t $E(R_{i,t})$ = Expected return of stock i on day t	Sunardi et al. 2023
Trading Volume Activity	Trading volume activity is an instrument that can be used to analyze capital market reactions to existing information. The volume of stock trading activity or trading volume activity itself is the number of shares traded on the capital market every day at a price agreed by both parties $TVA_{i,t} = \frac{\sum volume\ of\ share\ i\ traded\ on\ day\ t}{\sum share\ i\ outstanding\ in\ period\ t}$	Zhou, 2022

Source: Author (2024)

Then, because the expected return is obtained using a market model, the researcher needs an estimated period of 120 days before the event window (t-130, t-11). There are no specific provisions

for determining the number of days used in the study, so the researcher refers to previous studies (Goyal & Soni, 2024; Mahomed et al., 2018; Covachev & Fazakas, 2024; Qamar et al., 2022; Jin & Kim, 2018). The market model is given as follows:

$$R_{i,t} = \alpha_i + \beta_i . R_{m,t} + \varepsilon_{i,t} \quad (1)$$

where:

$R_{i,t}$ = return of security i in period t;
$R_{m,t}$ = return of the market;
α_i = alpha or the intercept of the security i;
β_i = beta or the slope of the security i; and
$\varepsilon_{i,t}$ = the error term of security i in period t

So, the abnormal return (AR_{it}) for each event in the estimation window is calculated as:

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i . R_{m,t}) \quad (2)$$

The abnormal returns are averaged for each event day using the following:

$$AAR = \frac{\sum AR_t}{\sum n_t} \quad (3)$$

Meanwhile the trading volume activity is given as follows:

$$TVA_{i,t} = \frac{\sum volume\ of\ share\ i\ traded\ on\ day\ t}{\sum share\ i\ outstanding\ in\ period\ t} \quad (4)$$

The trading volume activity are averaged for each event day using the following:

$$ATVA = \frac{\sum TVA_t}{\sum n_t} \quad (5)$$

Before conducting a t-test, researchers need to determine whether the data being analyzed is normally distributed or not. As in previous research (Wiranda, 2020), the appropriate normality test for AAR is the Kolmogorov-Smirnov test with a significance level of 0.05 (5%). Data is considered normally distributed if the p-value is greater than 0.05 and not normally distributed if the p-value is less than or equal to 0.05. If the normality test results show a normal distribution, then the one-sample t-test is used for analysis of the reaction around the sukuk issuance day, and the paired-samples t-test is used for analysis of the differences before and after the sukuk issuance. However, if the data is not normally distributed, the Wilcoxon signed-rank test is used.

IV. RESULTS AND DISCUSSION

Results

Table 2 presents the results of the t-test conducted on daily AAR data based on data normality. It can be seen from the table that there are both significant and insignificant results for the average daily AAR of the entire sample. All the event window periods of 21 days, except for t-7, t+2, and t+4, have a p-value > 0.05, thus H0.1 is accepted. On the other hand, the remaining periods, namely t-7 (0.031), t+2 (0.036), and t+4 (0.013), have a p-value < 0.05, thus H0.1 is rejected, which also means that H1.1 is accepted. These results indicate that significant abnormal returns occur 7 days before the sukuk issuance and 2 also 4 days after.

Both the before and after sukuk issuance average abnormal return (AAR) data for the entire sample are normally distributed, thus a paired-samples t-test is used. From Table 3, it can be seen that the t-test result for the AAR before and after the sukuk issuance of all events has a significance value greater than 0.05 (5%), specifically 0.647. Based on these results, it can be concluded that H0.2 is accepted. This means that there is no significant difference in AAR between before and after the sukuk issuance for all sample events.

Table 2. Average Abnormal Return around the Day of Sukuk Issuance

	T-Test	Mean	Asymp. Sig.	Conclution
t-10	One-Sample T-Test	-0.00031994	0.957	H_0 accepted
t-9	One-Sample T-Test	0.00382011	0.514	H_0 accepted
t-8	One-Sample T-Test	-0.00613286	0.214	H_0 accepted
t-7	One-Sample T-Test	-0.00788498	0.031	H_0 rejected

	T-Test	Mean	Asymp. Sig.	Conclution
t-6	One-Sample T-Test	-0.00384346	0.469	H_0 accepted
t-5	One-Sample T-Test	-0.00061658	0.941	H_0 accepted
t-4	One-Sample T-Test	-0.00106084	0.861	H_0 accepted
t-3	One-Sample T-Test	0.00033896	0.952	H_0 accepted
t-2	One-Sample T-Test	-0.00336568	0.417	H_0 accepted
t-1	One-Sample T-Test	-0.00766797	0.169	H_0 accepted
t0	One-Sample T-Test	-0.00237576	0.690	H_0 accepted
t+1	One-Sample T-Test	-0.00504187	0.374	H_0 accepted
t+2	One-Sample T-Test	-0.00923821	0.036	H_0 rejected
t+3	One-Sample T-Test	0.00252239	0.599	H_0 accepted
t+4	One-Sample T-Test	-0.01135006	0.013	H_0 rejected
t+5	One-Sample T-Test	-0.00262760	0.625	H_0 accepted
t+6	One-Sample Wilcoxon Signed Rank Test	0.00069567	0.500	H_0 accepted
t+7	One-Sample T-Test	-0.00027778	0.946	H_0 accepted
t+8	One-Sample T-Test	0.00660310	0.316	H_0 accepted
t+9	One-Sample T-Test	0.00530596	0.356	H_0 accepted
t+10	One-Sample T-Test	-0.00324100	0.332	H_0 accepted

Source: Author (2024)

Table 3. Average Abnormal Return Before and After Sukuk Issuance

			95% Confidence Interval of the Difference		
	Mean	Std. Dev.	Lower	Upper	Sig. (2-tailed)
AAR Before & After Sukuk Issuance	-0.00101	0.00673	-0.00582	0.00380	0.647

Source: Author (2024)

After examining the AAR for the entire sample, Table 4 presents more specific AAR values for each individual event and different dates. It is evident from the table that the AAR for each event has a p-value greater than 0.05, exceeding the significance level. Based on the normality test, AAR for ALL companies except ASII and KAEF are normally distributed, thus a paired-samples t-test is used. ASII and KAEF are used related-samples wilcoxon signed rank test. The statistical test results in Table 4 indicate that the average abnormal return for each event is greater than the 5% significance level (0.05), implying that H0.3 is accepted, or there is no significant difference in AAR between before and after the sukuk issuance for each companies.

Table 4. Average Abnormal Return Before and After Sukuk Issuance for Each Events

			95% Confidence Interval of the Difference		Sig. (2-tailed)
	Mean	Std. Dev.	Lower	Upper	
INFRASTRUCTURE					
ISAT	0.00177	0.01969	-0.01232	0.01586	0.783
TLKM	-0.00669	0.02487	-0.02448	0.01110	0.417
BASIC MATERIALS					
TINS	0.00041	0.01795	-0.01244	0.01325	0.945
INKP	-0.00505	0.03789	-0.03215	0.02205	0.683
PROPERTY AND REAL ESTATE					
SMRA	0.00062	0.02075	-0.01422	0.01546	0.927
BSDE	0.00204	0.02323	-0.01458	0.01866	0.787
CONSUMER NON-CYCLICALS					
BMTR	-0.00377	0.04026	-0.03257	0.02503	0.774
WOOD	-0.00457	0.01981	-0.01874	0.00960	0.484
INDUSTRIALS					
ASII	-0.00461	0.01922	-0.01836	0.00914	0.959
HEALTHCARE					
KAEF	-0.00244	0.02472	-0.02012	0.01524	0.878

Source: Author (2024)

Furthermore, normality tests indicate that both the before and after sukuk issuance average trading

volume activity (ATVA) data for the entire sample are normally distributed. Therefore, a paired-samples t-test is employed. The t-test results in Table 5 show that the average trading volume activity before and after the sukuk issuance for the entire sample has a significance value greater than 0.05 (5%), specifically 0.967. Based on these results, H0.4 is accepted, implying no significant difference in ATVA before and after the sukuk issuance for the overall sample.

Table 5. Average Trading Volume Activity Before and After Sukuk Issuance

			95% Confidence Interval of the Difference		
	Mean	**Std. Dev.**	**Lower**	**Upper**	**Sig. (2-tailed)**
ATVA Before & After Sukuk Issuance	0.00001	0.00060	-0.00042	0.00044	0.967

Source: Author (2024)

Subsequently, Table 6 provides a more detailed analysis of ATVA for each companies. Normality tests reveal that the ATVA before and after sukuk issuance for all companies are normally (except ASII and KAEF) distributed, hence paired-samples t-tests are used. Conversely, for ASII and KAEF, the data is not normally distributed, thus related-samples Wilcoxon signed-rank tests are applied. The test results in Table 6 indicate that, except for TINS and INKP, the average trading volume activity for each event has a p-value greater than 0.05, leading to the acceptance of H0.5, or no significant difference in ATVA before and after the sukuk issuance. However, for TINS (Timah Tbk PT) and INKP (Indah Kiat Pulp & Paper Tbk PT), with a p-value of 0.005 (< 0.05) and 0.045 (< 0.05), H0.5 is rejected and H1.5 is accepted, signifying a significant difference in ATVA before and after the sukuk issuance.

Table 6. Average Trading Volume Activity Before and After Sukuk Issuance for Each Events

			95% Confidence Interval of the Difference		
	Mean	**Std. Dev.**	**Lower**	**Upper**	**Sig. (2-tailed)**
INFRASTRUCTURE					
ISAT	-0.00020	0.00044	-0.00051	0.00012	0.192
TLKM	0.00029	0.00056	-0.00011	0.00069	0.137
BASIC MATERIALS					
TINS	-0.00115	0.00083	-0.00175	-0.00056	0.005
INKP	0.00081	0.00111	0.00002	0.00161	0.045
PROPERTY AND REAL ESTATE					
SMRA	0.00033	0.00060	-0.00010	0.00076	0.112
BSDE	-0.00018	0.00104	-0.00093	0.00057	0.575
CONSUMER NON-CYCLICALS					
BMTR	0.00556	0.00815	-0.00027	0.01139	0.059
WOOD	-0.00088	0.00216	-0.00243	0.00066	0.228
INDUSTRIALS					
ASII	-0.00014	0.00065	-0.00061	0.00032	0.799
HEALTHCARE					
KAEF	-0.00030	0.00099	-0.00101	0.00041	0.678

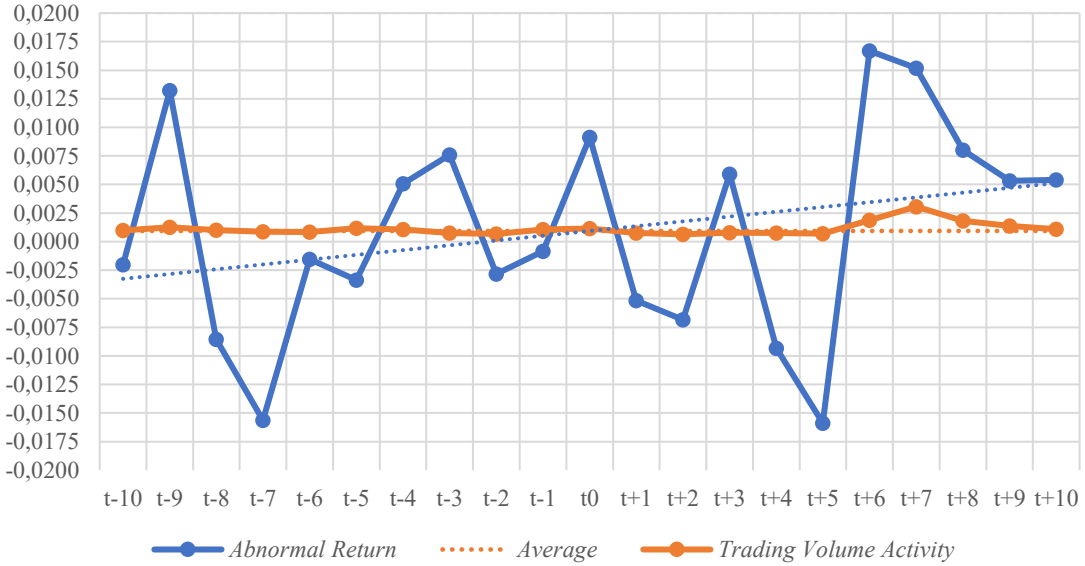
Source: Author (2024)

Discussion

The graph in Figure 1 indicates that the average abnormal return (AAR) in the Indonesian Islamic stock market was negative before the sukuk issuance but gradually increased closer to the issuance date. Although not significant, the AAR on the sukuk issuance day (t0) was increased after being slightly negative on the previous day (t-1). The AAR also became highly positive from the eighth day (t+8) after the issuance. This positive change signals that the sukuk issuance event was considered good news for investors in the Indonesian Islamic stock market. As suggested by Kasim et al., (2022), Qamar et al. (2022), and Lee et al., (2019), good news indicates expectations of a positive long-term performance for the company. This is because sukuk issuance indirectly provides information about the existence of specific projects that require capital from investors.

Before the highly positive abnormal return at t+8, the graph shows a rather fluctuating pattern around the sukuk issuance day (t0). Based on the efficient market hypothesis first proposed by Fama (1970), the fluctuating abnormal return indicates that investors are analyzing the available information

to make investment decisions regarding the sample company's shares. Meanwhile the fluctuating abnormal returns from t+1 to t+7 suggest that investors were still considering the risks associated with the sukuk issuance. The resulting negative reaction reflects investor concerns, thus influencing their investment decisions. This is due to a delayed reaction, causing the significant negative abnormal return to not occur immediately at the time of the sukuk issuance (t0), but rather at the t-+2 and t+4 (Young et al., 2022). This delayed-reaction analysis is supported by the significant negative t-test result for the abnormal return period.



Source: Author, 2024

Figure 1. Movement graph of Average Abnormal Return and Average Trading Volume Activity around the Sukuk Issuance Day

Conversely, in the period before the sukuk issuance day (t0), there was a significant negative average abnormal return at t-7. This is likely due to information leakage or investors having obtained information that the company would be issuing sukuk, causing the stock to react earlier than the issuance date (t0). Considering the stages involved in the sukuk issuance process, the possibility of information leakage is not impossible. Abnormal returns occurring before t0, indicating information leakage, also occurred in the research by Khoiruddin & Romadanti (2016) because of leaked information.

The significant negative AAR at periods t-7 and t+4 around the sukuk issuance day aligns with the study by Fauzi et al. (2017), which also produced significant negative values in the same period. This negative reaction occurred due to investors' pessimistic behavior towards the company's sukuk issuance, as reflected in the stock price. Considering the resulting reaction, the perception or view regarding sukuk as debt with risks for investors in Indonesia seems to not be fully positive. The fluctuating movement after the sukuk issuance is also in line with the study, indicating that there are different perceptions among investors regarding sukuk issuance. Similarly, the insignificant results around the issuance date support this finding.

The results of the statistical test for average abnormal return (AAR) before and after sukuk issuance for the entire sample show that there is no significant difference in AAR between before and after the event. The absence of a significant difference in abnormal returns is indicated by the fact that the company's returns are not large enough to produce a significant difference. Similarly, the results of the test on average trading volume activity (ATVA) before and after sukuk issuance for the entire sample show no significant difference in ATVA. In other words, sukuk issuance has not had a significant impact on investment activity in the Indonesian Islamic stock market. One possible contributing factor is investor perception of sukuk issuance (Khartabiel et al., 2020).

Although not significant in statistical terms, the data shows that the Islamic stock market experienced an increase in average abnormal return (AAR) after the sukuk issuance. The mean in the t-test results for AAR is negative (-0.00101), indicating that the average abnormal return for the entire

sample 10 days before the issuance is lower than the average abnormal return 10 days after the issuance. Additionally, the abnormal return graph in Figure 1 previously showed more clearly the movement of the average abnormal return from before to after the sukuk issuance, indicating that the stock movement tended to increase after the sukuk issuance.

Meanwhile, for TINS and INKP, it can be concluded that H0.5 is rejected or H1.5 is accepted, meaning that there is a significant difference in ATVA between before and after the sukuk issuance by Timah Tbk PT and Indah Kiat Pulp & Paper Tbk PT. In other words, except for them, there are no significant abnormal returns and trading volume for the Islamic stock market in Indonesia before and after the sukuk issuance. The insignificant results indicate that the sukuk issuance event has not had a significant impact on investment activity in the Indonesian Islamic stock market. However, the abnormal return ($AR \neq 0$) on each event indicates an unusual return on the stock, although it is not large enough. In the mean column of the AAR t-test results for companies TLKM, INKP, BMTR, WOOD, ASII and KAEF, there are also negative values (-0.00669, -0.00505, -0.00377, -0.00457, -0.00461, -0.00244), which means that the average abnormal return after the sukuk issuance is higher than before the issuance. This positive change in stock reaction indicates a positive response from investors to sukuk issuance in the Indonesian Islamic stock market, although it is still weak. Due to the indication of the ability to influence the market, the sukuk issuance event contains good news that sends a positive signal to investors, thus influencing investment decisions, albeit weakly (Cipto et al., 2024).

V. CONCLUSION

The results of this research on the market reaction of Islamic stocks to sukuk issuance events show that there is a significant average abnormal return (AAR) (p-value < 0.05) on three days within the event window or observation period, namely at periods t-7, t+2, and t+4, while the remaining 18 days from t-10 to t+10 are not significant. The negative abnormal return at period t-7 indicates the leakage of information related to the sukuk issuance. Similarly, the negative tendency in the period t+2 and t+4 after the issuance indicates a delayed reaction. The significant negative AAR at periods t-7 and t+4 around the sukuk issuance day aligns with the study by Fauzi et al. (2017), which also produced significant negative values in the same period. This negative reaction occurred due to investors' pessimistic behavior towards the company's sukuk issuance, as reflected in the stock price.

Besides ATVA at TINS and INKP, the insignificant test results of AAR and ATVA before and after the sukuk issuance indicate that the sukuk issuance has not had a significant impact on investment activity in the Indonesian Islamic stock market. The insignificant difference in the AAR and ATVA tests before and after the sukuk issuance indicates that the sukuk issuance has not had a significant impact on investment activity in the Indonesian Islamic stock market. However, the daily movements of AAR and ATVA show an increase after the sukuk issuance, meaning that the sukuk issuance event contains information that is considered good news for investors. As signaling theory suggests, this causes investors who capture this good news signal to increase their demand for Islamic stocks, as the average trading volume increases, followed by an increase in the average share price. However, this signal is still weak, as seen in the insignificant statistical test results.

Although complementing and supporting previous research, this study also has limitations, including the limited sample selection to ISSI-indexed companies that are among companies with the largest capital market from each sectors in Indonesia. Companies with larger capital market are more closely watched by investors in making investment decisions, so this is expected to make the research more informative. Due to this limitation, companies with smaller capital market are not included in the study. Furthermore, the sample companies did not undertake any corporate actions during the 21-day event window other than the sukuk issuance, in order to increase the validity of the research results.

AUTHOR CONTRIBUTIONS

Conceptualization, F.N.A. and B.A.F.; methodology, F.N.A. and B.A.F.; software, F.N.A.; validation, F.N.A.; formal analysis, F.N.A.; investigation, F.N.A.; resources, F.N.A.; data curation, F.N.A.; writing – original draft preparation, F.N.A.; writing – review and editing, F.N.A.; visualization, F.N.A.; supervision, B.A.F.

FUNDING

This research received no external funding.

INFORMED CONSENT STATEMENT

Not applicable.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author, [F.N.A].

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

ACKNOWLEDGEMENT

The author would like to express sincere gratitude to Bayu Arie Fianto, Ph.D for his valuable guidance, insightful feedback, and continuous encouragement throughout the preparation of this thesis, which greatly contributed to the completion of this research.

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