

Analysis of Capital Market Reactions to the Merger of Indonesian Sharia Banks: BRIS Stocks Evidence

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Abstract

This study aims to obtain evidence of the stock market's reaction to the merger of Indonesian Islamic banks and its prediction power to JCI. The variables used in this study are abnormal returns and trading volume activity with an observation period of 60 days before the event and 60 days after the event. We use 2 types of time series data, which are daily data to analyze AR and trading volume activity, and weekly data to analyze the causality relationship. The results showed that there were no differences in abnormal returns before and after the merger, but there were differences in trading volume activity before and after the merger. In addition, this study also aims to determine the reciprocal relationship using Granger causality between the JCI and BRIS stocks prices before and after the merger of Indonesian Islamic banks. The results of the study show that there is no reciprocal relationship between the Composite Stocks Price Index and the stock's price of BRIS and vice versa.

Keywords : Abnormal Return; Trading Volume Activity; Granger Causality

JEL Classification : E22, G12, G24

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1. INTRODUCTION

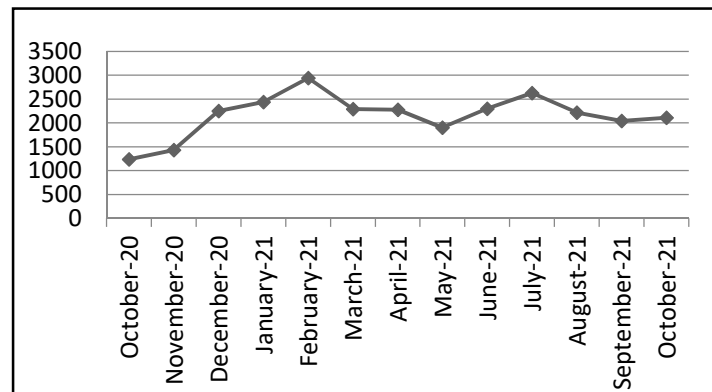
Banks have the main activity of channeling funds and collecting funds from the public. Banks have their strategies for raising funds, such as providing attractive and profitable remuneration (Raj et al., 2011). Handayani & Oktavia (2018) in their study states that Islamic banks are financial institutions that apply the principle of profit-sharing with a contract system and the system is based on Islamic law which prohibits the existence of elements of *gharar*, *riba*, *bathil*, and *masyir*. This is what distinguishes Islamic banks from conventional banks because their operational activities have a profitable system. Sharia-based investment instruments are currently increasingly popular. Study by Shahzad et.al (2019) using different portfolio strategies and access the portfolio implications of a multi-

asset portfolio. The results provide evidence that the Islamic bond index can be included as a potential hedge/safe haven in benchmark stock portfolios.

Economic development in the world is dependent on investors who invest their capital. Currently, many world companies are competing to offer and play their shares and then provide interesting information for investors so that investors want to invest in the company. In the investment business, financial ratios are the main factor used by investors in conducting fundamental analysis. Through financial ratios, investors can find out the performance of a company (Rahayu et al., 2021). On the other hand, an event and stock prices also need to be considered because these factors can affect the capital market. Events can be information for investors from both internal and external conditions. According to Nuryana's (2017) in his study states that information that can be used by investors related to the capital market includes national events and new political policies. Concerning capital, Kristanto & Idris (2016) revealed that investors have an important role to achieve the expected return.

In the era of increasingly advanced economic development that makes many companies compete fiercely, this condition requires companies to be required to always develop the latest strategies to maintain business continuity and company performance, one of which is expansion. Many companies thrive on mergers. Merger and Acquisition are two forms of business combination, where companies that take assets and liabilities or controls are called acquiring companies or bidders, while companies that are taken over are called target companies (Zuhri, et.al., 2020). One form of innovation carried out by the Indonesian government through the Ministry of SOEs is to combine three Islamic commercial banks government owned, namely Bank BRI Syariah, Bank Syariah Mandiri, and Bank Syariah Mandiri. BNI Syariah. Companies that carry out mergers and acquisitions aim to achieve synergies.

The merger of these three Islamic banks must be able to increase value for other stakeholders such as the Islamic banking industry, the business world (MSMEs), the world of education, the management of Hajj funds, and the development of the Islamic economic ecosystem in Indonesia. broad understanding. To see whether the market reacts favorably or not to the mergers and acquisitions carried out can be seen from the changes in the stock prices of the companies conducting the mergers and acquisitions. Darlis & Zirman (2011) revealed that changes in stock prices indicate a change in the level of prosperity of shareholders as measured by positive abnormal returns obtained by shareholders, besides that the results of the study also explain positive abnormal returns indicating good news or positive results received by shareholders from mergers and acquisitions. Meta's study (2009) states that if the scale increases, coupled with the synergies resulting from the combination of simultaneous activities, the company's profits will also increase so that the company's performance after mergers and acquisitions must be better than before mergers and acquisitions.



Graph 1. BRIS Stock Development October 2020 - October 2021
 Source: www.keuangan.yahoo.com

The share price of PT Bank Syariah Indonesia, Tbk in the last 5 months experienced a very significant increase of Rp 1,705 per share, recorded from October at the level of Rp 1,235 per share until February at the level of Rp 2,940 per share. The increase in BRIS's share price did not last long until BRIS's shares fell by Rp. 1,035 per share, to be precise in May 2021 at the level of Rp. 1,905 per share, which in that month was the lowest level of BRIS shares. Furthermore, from June to July there was an increase of Rp. 330 per share from the level of Rp. 2,300 to the level of Rp. 2,630, from August to September decreased by Rp. 180 per share from the level of Rp. 2,220 per share to Rp. 2,040, the last in October 2021 an increase of Rp. 70 per share to the level of Rp. 2.110 per share.

The fluctuating value of BRIS shares can certainly influence investors to buy these shares. The consequences of high stock price increases can lead to a decrease in stock demand from investors. Investors will choose stock values that tend to be low with good prospects in the future. Seeing the merger phenomenon that occurred in the three Islamic commercial banks, investors considered Islamic banks to have bright prospects, this phenomenon is also one of the information that investors may need as a basis for making investment decisions, so this study aims to determine the market reaction to mergers. Previous studies only focus to market reaction, but this study will try to explore whether the predictive power of BRIS fluctuation to JCI, vice versa by determining its causality relationship.

2. LITERATURE REVIEW

Signaling Theory

Signaling Theory can be assessed as an action where the company's management takes steps to provide financial statement information to investors. The information provided by the company to external parties aims to avoid information asymmetry between management and external parties (Fidhayatin & Dewi, 2012). In stock markets, implemented signaling theory can give the effectiveness of merger signals as vehicles to reduce adverse selection has also attracted attention to be studied in recent years. The presence of signals prevents worthwhile merger from falling through in the market, even when information asymmetries exist (Wu et.al, 2013). This is very important for investors because the information has provided notes, descriptions, and information from time to time for the sustainability of a company's business cycle.

In her study, Mayangsari (2018) argues that signaling theory is the view of shareholders about the opportunities that exist in the company in increasing the value of the company in the future, information that will be provided to shareholders or investors. This opinion is reinforced by the study of Putri et.al (2018) which explains that if the results of the information analysis carried out are a good signal for investors, it will increase stock trading volume, because in the future if the company has good prospects, it will be supported by good signals as well. The study of Setiyono & Rinwatin (2021) shows that abnormal BRIS stock before and after the merger has no significant effect, while trading volume activity before and after the merger has a significant effect, it can be interpreted that the market responds to events, Holy (2021), that abnormal return has a significant effect, while trading volume activity has no significant effect before and after the merger.

Stocks

Stocks in the world capital market are in great demand by investors. This is because the advantages of investing in stocks are very attractive. Aldiena & Al Hakim, (2019) defines stocks as a certificate to show proof of company ownership, and shareholders have claim rights to the company's income and assets. Shares can be divided into two types, namely ordinary shares, and preferred shares. Murniati's study (2016) stated that there are several considerations for investors in investing their shares, one of which is the size of the company, large companies will find it easier to get loans because the value of guaranteed assets is greater and the level of trust from the bank is also higher.

Stock price

Quoting on study Adipalguna & Suarjaya (2017) the stock price is the current income or value at that time that investors will receive in the future. In contrast to the opinion of Aziz et.al (2015) who stated that stock price is the price of a stock that is happening or when the real market is closed. Stock prices can change at any time even in seconds or minutes the stock price has changed. Rahmadewi & Abundanti (2018) explains that stock prices can fluctuate due to supply and demand for the stock itself. From this statement, it can reflect the condition of a company, the more or the better the company, the individuals who buy shares will tend to rise. If individuals tend to sell shares, then the stock price will tend to cause a decrease in stock prices.

Several factors cause stock price fluctuations, namely internal factors and external factors from the company. Tang & Yao Study (2018) concluded that through the internal financial structure there is a relationship between exchange rates and stock prices, as well as studies conducted by Hussaney & Khanh Ngoc (2009), which explain that macroeconomic fundamentals are also one of the factors that can influence the rise and fall of stock prices. While the opinion Hasanah & Maspupah (2018) explain the sharia on-demand asset pricing model, namely a modification of the capital asset pricing model with the assumption that inflation does not include but is replaced with a rate of return for Indonesian sharia bank certificates.

Composite Stock Price Index

The capital market in Indonesia or commonly known as the Indonesia Stock Exchange has a variety of products, namely stocks, mutual funds, bonds, and others. In determining what products to invest in, the JCI is a reference for investors to invest (Handayani & Oktavia, 2018). Quoting the opinion of Tricahyadinata (2016) the Composite Stock Price Index describes a value that is used to measure the performance of the joint-stock on the stock exchange. The value of the JCI changes every day, this happens because of changes in market prices that change every day. A study conducted by Nugroho et al.

(2021) stated that the JCI had experienced a decline at the beginning of the outbreak of the Covid-19 outbreak, thus making investors have to be careful in investing.

In line with a study by Winarti (2021) which explained that there was a decline in BRIS stock prices, where BRIS stock prices included in the Composite Stock Price Index also decreased at the beginning of the Covid-19 outbreak in Indonesia. Meanwhile, another study conducted by Suci (2021) stated that there was a difference in the announcement of the merger of three state-owned commercial banks, the stock price of BRIS caused the JCI to rise.

Merger

A merger can be interpreted as a legal action carried out by one or more business entities to merge with other business entities. By combining the two business entities, juridically the assets in one business entity will merge into one new entity's assets. One of the objectives of the merger is to increase cost efficiency and profit. Mergers also have the function of obtaining high returns on loans and deposit rates (Sufian & Fadzlani, 2004), according to Huizinga et.al. (2001) the ratio of the profitability of banks joining non-joining banks tends to be higher than that of banks joining other banks.

Impact of Merger on Return

Factors that affect abnormal returns are the existence of an event such as national, and political situations, mergers, and acquisitions, stock splits, and others. In addition, research conducted by Kusumayanti & Suarjaya, (2018) found that there are differences in abnormal returns for certain events, investors take into account an event or announcement in terms of the difference in returns that will be received on certain events against the expected return. These results are different from the study Nugraha & Daud (2013) in their study say that there is no difference between abnormal returns on an event. The absence of this difference can be caused by investors who use a wait and see strategy and are not quick in making decisions but still assess an event.

The merger of 3 state-owned Islamic banks, if it gets a good response from shareholders, will later affect abnormal stock returns, if investors consider this merger event as a positive signal, then stock prices will increase and investors will get positive abnormal returns. Studies from Fatmawati & Azizah (2020) shows results that abnormal stock returns after the merger did not experience a significant change, based on the hypothesis test conducted the sign value (2-tailed) is $0.064 > 0.05$ so the results of this study are that there is no difference in stock returns a week before the merger and a week after the merger.

Similar results were also presented in another study which stated that there was no difference in abnormal stock returns after the merger (Chhetri & Baral, 2018; Wairooy, 2019; Dewi & Widjaja, 2021). Regarding the market reaction to the legalization of the merger, there were different results. The results of the study (Sumantri, 2017; Haryanto et al., 2018) show that there are significant differences in abnormal returns in the events before and after the merger of several companies listed on the IDX for the period 2006 – 2008, from the results of several previous studies which tend to prove merger activities. has a positive effect on the response of capital market participants, so a justification for the hypothesis can be drawn up which shows a significant difference in Abnormal Return of BRIS shares before and after the merger of Bank Syariah Indonesia.

Ha: There is a significant difference in the Abnormal Return of BRIS shares before and after the merger of Bank Syariah Indonesia.

Impact of Mergers on Trading Volume Activities

Trading volume activity is one of the instruments in the capital market to analyze stock movements by paying attention to the demand and supply of stock transactions. One of the factors that drive stock prices is the total number of shares in the market. The higher the stock price, the higher the stock trading transactions in the company. High volume trading activity can also mean that the market is in good shape and has a continuous trend. According to a study by Mahendra & Rasmini (2019), trading volume activity can also be used to determine the reaction of the capital market through the movement of trading volume in the capital market. The reaction of a market can be seen from changes in trading volume activity.

Meanwhile, Chrisnanti & Trisakti (2015) think that changes in the capital market indicate that there are various kinds of decisions taken by investors in investing. A merger is one of the information that can have an impact on trading volume activity. According to research conducted by Mubarokah & Sucipto (2011), there is no significant change before and after the merger, trading volume activity before the merger is greater than after the merger, while Nurussobakh (2009) explains that the volume of trading activity in the shares of the merged companies has increased and fluctuated quite high, the average share of the merged companies has decreased quite drastically. Significant changes between before and after the merger, the company's liquidity is not in positive synergy (Qomariah, 2014). Schaik & Steenbeek (2004) found an increase in the two days following the merger announcement.

Ha: There is a significant difference in the trading volume activity of BRIS shares before and after the merger of Bank Syariah Indonesia.

Impact of Merger on JCI

Importance of determining reciprocal relationship between the Composite Stocks Price Index (CSPI/JCI) and the stock's price of BRIS investigates whether the predictive power of BRIS fluctuation to JCI, or from JCI fluctuation to BRIS. Study by Yilanci et.al (2021) investigates the stock price-economic activity nexus in 12 member countries of the Organization for Economic Cooperation and Development (OECD) uses Granger causality. This methodology determines whether the predictive power of interested variables is concentrated on quickly, moderately, or slowly fluctuating components. The findings show that the stock prices have predictive power for future long-term economic activity in the panel setting. However, economic activity has more reliable information for stock prices for negative components. Study by Gok & Cankal (2021) employed causality tests on the decomposed series to unearth the true dynamics of causal linkages. The results of frequency causality test reveal that the predictive power of the financial index returns on the interest rate changes intensifies across frequencies.

Ha1: JCI not Granger cause BRIS

Ha2: BRIS not Granger cause JCI

3. METHOD AND DATA

This research uses a quantitative analysis method using an event study and using analysis of *Granger Causality* between two variables. An event study is one of the research methods used to measure the impact of a specific event or thing on the value of a company, which is generally seen from the ups and downs of stock prices and volumes (Mackinlay, 1997). Abnormal return is an indicator used to observe a phenomenon that occurs in a stock

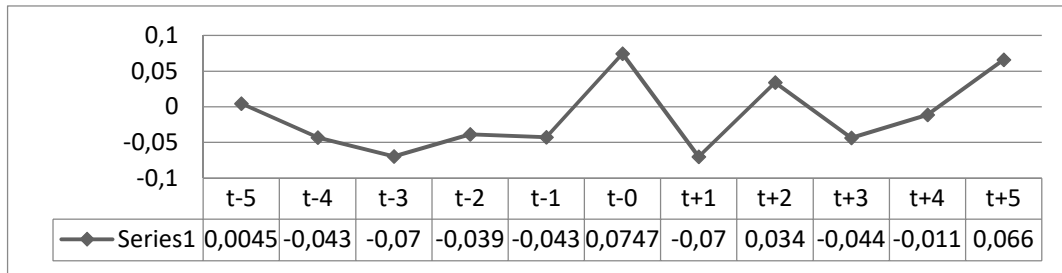
market. The study event in this study is focused on events when the merger takes place, namely on February 1, 2021. This study utilizes secondary data which includes daily data on BRIS stock prices and JCI every day during observations carried out, from January 22, 2021, to February 11, 2021.

The period study event in this study uses the event period and the estimation period where the event period used is 11 days (from $t-5$ to $t+5$) which aims to analyze abnormal returns, while the estimation period uses 60 days (from $t-6$ to $t-65$) which aims to calculate alpha and beta to determine the expected return. Calculation of abnormal return in this research advance through several stages starting with calculating the returns of individual stocks (R_{it}) and calculating return market (R_{mt}) followed by regressed return the individual to return the market daily to obtain α and β in stocks by using the Single Index Models. Then calculate the expected return $E(R_{it})$ using and that have been found previously. The last stage is continued by calculating the abnormal return (AR_{it}). The data analysis method in this study uses software SPSS 25 and first goes through several stages, starting with the Normality Test of the data with the Shapiro-Wilk test, the Shapiro-Wilk test is generally carried out for samples with small amounts or less than 50 data. Next, performed Paired Sample t-Test sample was, starting with paired statistics, then to prove whether there was a significant difference in the data or not, a paired t-test was then carried out.

This research model is related to the research objective, namely to determine the difference in conditions abnormal returns before and after the merger of the three Islamic commercial banks. The data obtained for the next merger event will be carried out by testing the reciprocity of the capital market by taking into account the abnormal aspect return using SPSS. The next stage uses the Granger Causality Test or Granger Causality Test where the test is a type of method that aims to find out a variable (dependent variable) can affect other variables (independent variables) and on the other hand the independent variable can replace or occupy the position of the dependent variable. Therefore, this kind of relationship can be called a causal or reciprocal relationship (Soebagiyo, 2007). The type of data used in this study is secondary data in the form of weekly data on Bank Rakyat Indonesia Syariah (BRIS) stock prices and Composite Stock Price Index (CSPI) data. The data obtained in this study is daily data in 30 weeks period before and 30 weeks period after the merger.

4. RESULTS AND DISCUSSIONS

In the graph below, it is explained that there is an increasing of abnormal return from $t-5$ (5 days before merger) to $t+5$ (5 days after merger) where before the merger of three Islamic banks the minimum abnormal return value was -0.069855 and the maximum value was 0.00448 while the minimum abnormal return value after the merger of three Islamic commercial banks are -0.070246 and the maximum value is 0.06596. The maximum value after merger increases 136.67% compare with the maximum value before merger. It shows very positive signal from the investor and market because the positive abnormal return result in the 5 days period after the merger shows a positive response from investors. If investors respond positively to the merger or acquisition, the share price will fluctuate positively, and vice versa (Astricia et.al, 2020).



Graph 2. Change of Abnormal Return
Source: Data processed, 2021.

Normality Test

In the normality test, the Shapiro-Wilk approach is used, the test can be used to determine or identify whether a random variable is normally distributed or not. Besides the Shapiro-Wilk test in general, it is considered often implemented in analysis to check normality assumptions. In the Shapiro-Wilk test, the data can be said to be normally distributed if the significance value is greater than 0.05. It can be seen from Table 1 below that the significance value of the stock price and trading volume of stock price variables both before and after the merger event is more than 0.05. It can be concluded that the data contained in graph 2 above is normally distributed.

Table 1. Normality Test

Group	Shapiro-Wilk		
	Statistics	df	Significance
Abnormal Return	0.889	5	0.352
Volume	0.922	5	0.541
	0.928	5	0.584

Source: Data processed, 2021.

The next step in this analysis stage is the paired t-test, this test is generally used to see whether or not there are differences in the two groups of samples that are related. Below are the results of the paired sample difference test.

Paired Sample Difference Test t-test

Table 2. Pairwise Sample Statistics

	Means	N	Std. Deviation	Std. Mistakes Mean
Previous AR	-0.0379562	5	0.026776151	0.01197466
ARAfter	-0.0050905	5	0.055557465	0.02485374

Source: Data processed, 2021.

Based on the calculations informed in Table 2 above, it is explained that the minimum abnormal return value at Bank Syariah Indonesia before the merger occurred was -0.069855 and a maximum of 0.00448, then the mean of abnormal return before the merger of Bank Syariah Indonesia is -0.0379562 with a standard deviation of 0.026776151. Furthermore, it can be seen that the minimum value after the merger of Bank Syariah Indonesia is -0.070246 and the maximum value is 0.06596, while the mean of abnormal return of Bank Syariah

Indonesia after the merger is -0.00509054 with a standard deviation of 0.055557465. The mean of abnormal return of stock after the merger is greater than before the merger. It can be interpreted descriptively that there is a difference of mean of abnormal return shares before and after the merger.

The results of the research above are different from previous research conducted by Alexander & Kadafi (2018) which explains that there is no significant difference between mean value of abnormal return of shares before and after the stock split event. Asticia et.al, (2020) prove that from 7 mergers and acquisition in Indonesia during 2018-2019, there is only one bank that has a significant difference while the rest does not have a significant difference pre and post the event.

Table 3. Pairwise Differences

	Means	Std. Deviation	Std. Mistakes Mean	95% Confidence Interval of Difference		T	df	Significance (2-tail)
				Lower	On			
AR Before - AR After	-0.0328	-0.0328	0.0311	-0.1192	0.0535	-1.056	4	0.350

Source: Data processed, 2021.

Based on the output in table 3 above, it is known that the significance value (2-tailed) is more than 0.05 or 0.350. Therefore, according to the basis of decision making in the paired sample test, H_0 is accepted (H_0 can't be rejected) and H_a is rejected. Thus, it can be concluded that there is no significant difference between the abnormal returns of BRIS shares before the merger of the three Islamic commercial banks. The results of the tests that have been carried out above are in line with research conducted by Holy (2021) which states that at the time of the announcement of the merger of 3 state-owned banks there were different statistical abnormal returns.

On the other hand, different from the research that has been done by Suherman et, al. (2016) which shows that there are significant differences in abnormal returns before and after the announcement of acquisitions and mergers. Kumar & Kumar (2011) examine the relationship between merger announcements with the stock returns in the Indian Banking during the period of 1999-2008. Using event study methodology, it attempts to ascertain whether the bidder banks experience significant abnormal returns during the post-announcement and pre-announcement periods. The results indicate that bidder banks may or may not experience any significant abnormal returns during the post-announcement period. No bank specific characteristics could explain the pattern of market reaction to merger announcements.

Furthermore, a descriptive sample test was conducted to show the difference in the average trading volume activity before the merger of the three Islamic commercial banks.

Table 4. Pairwise Sample Statistics

	Means	n	Std. Deviation	Std. Mistakes Mean
TVASBLM	0.02856857	5	0.08621375	0.003855596
TVASSDH	0.00721477	5	0.003126712	0.001398308

Source: Data processed, 2021.

Based on the output, it is known that the average stock trading volume activity before the merger is 0.02856857, average activity stock trading volume after the merger is 0.00721477. The average effect of stock trading volume activity before the merger is greater than after the merger, so descriptively there is a difference in the average stock trading volume activity before and after the merger. The test results in this study are in line with the results of the study by Setiyono & Rinwatin (2021), which states that the average trading volume activity before the merger is greater than the average trading volume activity after the merger so that it can be interpreted descriptively that there is a difference between the average trading volume activity before the merger and the average trading volume activity after the merger. The next step is to prove whether the difference is significant or not, then a paired t-test is performed.

Table 5. Pairwise Differences

	Means	Std. Deviation	Std. Mistakes Mean	95% Confidence Interval of Difference		T	df	Significance (2-tail)
				Lower	On			
TVA Before – TVA After	0.02135	0.01127	0.0050	0.0073	0.03535	4.235	4	0.013

Source: Data processed, 2021

Based on the output table above, it is known that the significance value (2- tailed) is 0.013 which is smaller than 0.05. Then according to the basis of the decision in the paired sample test, H_0 is rejected, H_a is accepted. It means that there is a significant difference between stock trading volume activities before and after the merger. After the merger trading volume activity becomes more intense because investor and market enthusiasm for the bank's profitability and performance.

Based on the results of research tests that have been carried out, the results tend to be different from previous studies, Anwar & Asandimitra (2018) revealed that there was no significant difference between the trading volume of stock activity before and after the company conducted a stock split, as well as Suci's (2021) study also stated that there was no significant difference in trading volume activity after and before the announcement of the merger of three state-owned banks. This is because the information conveyed does not change the market reaction, namely in the form of an investor's decision to invest.

Granger Causality

The first step using the Granger causality test is to determine the minimum Lag value using information criteria such as the Akaike Info Criterion (AIC). As seen in Table 6 below, the minimum AIC states that the results that will be used for Granger causality in this study are lag 1.

Table 6. Lag Determination Results

Left behind	Equality	AIC value	Conclusion
1	BRIS (-1) JCI JCI (-1)	13.24320	Smallest
2	BRIS (-1) BRIS (-2) JCI JCI (-1) JCI (-2)	13.27923	

Source: Data processed, 2021

The next step is to use the Granger causality test using *lag* 1. This Granger causality test aims to determine the causal or reciprocal relationship between the JCI / Composite Stock Price Index (CSPI) variable and the BRIS stock price variable. Granger's test can be written mathematically as follows:

$$Trace(r) = -T \sum_{i=r+1}^g \ln(1 - \lambda_i)$$

Table 7. Granger Causality Test Results

Null Hypothesis:	Obs	F-Stats	Problem.
JCI Not Granger Cause BRIS	59	3.13181	0.0822
BRIS not Granger Causes JCI		0.24258	0.6243

Source: Data processed, 2021

Based on table 7 above, it can be seen that the relationship between the JCI and the stock price of BRIS is indicated by the F-Statistic value of 3.13181 with a probability value greater than 0.05, namely 0.0822 or it can be concluded that the JCI does not Granger cause the stock price of BRIS. This also occurs in the relationship between BRIS stock price and JCI which is indicated by the F-statistic value of 0.24258 with a probability value greater than 0.05, namely 0.6243 or it can be interpreted that the BRIS stock price does not Granger cause the JCI. It can be concluded that there is no causal relationship or reciprocal relationship between variables. BRIS fluctuation is not strong enough to predict JCI and vice versa.

Muharam et.al. (2019) analyse the two-way relationship between the Islamic stock market and sukuk market development, and economic growth in Indonesia and Malaysia using Granger causality. The results is a bi-directional causality between the development of the Islamic stock market and sukuk market with economic growth in Indonesia. Unidirectional causality is found between economic growth and the sukuk market development in Malaysia. And no causality (neutrality) is reported between the development of the Islamic stock market and economic growth in Malaysia. Meanwhile, trade openness has a significant and positive effect on the sukuk market development as well as economic growth in Malaysia.

5. CONCLUSION AND SUGGESTIONS

Conclusion

Based on the results of the tests and discussions that have been described previously, it can be concluded that the researchers found the little difference in the average abnormal return of stocks before the merger was slightly greater than after the merger. However, in the statistical test, there is no significant difference between abnormal stock returns before the merger of the three Islamic commercial banks. Thus, the information on the merger of the three Islamic banks is considered not to have a significant effect on the overall return of investors during the observation period. It means that merger of three sharia banks taken place in Indonesia in 2021 increase firms profitability even though not significant statistically.

The researcher also found that the average stock trading volume activity before the merger was slightly greater than after the merger and there was a significant difference between the stock trading volume activity before and after the merger. This shows that the information on the merger of the three Islamic commercial banks changed the market reaction in the form of investors' decisions to invest.

Based on the results of the Granger causality test in the previous discussion, it can be concluded that there is no reciprocal relationship between the JCI and the stock price of BRIS and vice versa. This shows that the reciprocal relationship between variables has not significance. The merger activity of three sharia banks doesn't give impact to JCI and vice versa. There is no prediction power from BRIS fluctuation (because of merger activity) to JCI, vice versa.

The market already responds it by more intense in trading volume activity after merger but the stock's price slightly up. In this study, signaling theory related to merger doesn't give any significance impact in Indonesia's stock market in 2021 because nowadays in digital era, rumors and information about merger can spread widely in seconds, even weeks before merger is actually implemented. It could be indicating the leakage information about merger in the stock market (Kumar & Kumar, 2011).

Suggestion

Limitation of this study is focusing only in three sharia banks' stock before and after merger in short term. Because when the market is depressed, the prices of shares become more attractive to potential buyers, under the perspective of growth over the long term (Carrasco-Gutierrez & Farias, 2017).

Abnormal Returns and Trading Volume Activity do not always react to and affect a merger event in a company. From the conclusions that have been stated previously, investors are advised not to pursue stock prices based on an event or occurrence. Investors must remain objective in using careful analysis, both technical analysis and fundamental analysis as the basis for making investment decisions, in order to obtain maximum profits.

For further research, it is expected to be able to analyze market reactions with other methods, such as dummy variables, regression and so on which are in line with abnormal returns. And for further research, longer data can be used.

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