

Analysis of the Impact of the Merger on Trading Volume, Return and Abnormal Return of BSI Shares



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ABSTRACT: This study discusses in trading volume, return and abnormal return of Bank Syariah Indonesia (BSI) stocks before and after merger. The purpose of this study was to determine the results of the analysis of differences in trading volume, stock return and abnormal returns before and after the merger of Bank Syariah Indonesia (BSI). The variables used are trading volume activity (TVA), stock returns and abnormal returns. The sample in this study was 10 days before and 10 days after the merger of PT Bank Syariah Indonesia Tbk. As for the sampling technique using Purposive Sampling. The results of this study are based on results of the different Paired Sample T Test on the TVA variable showing the Sig. (2-tailed) value of $0,002 < 0,05$. Based on the results of the Wilcoxon different test, the value Sig. (2-tailed) value on the stock return variable was $0,114 > 0,05$, then Sig. (2-tailed) value on the stock abnormal return variable was $0,139 > 0,05$. So it can be stated that there are differences in Bank Syariah Indonesia (BSI) before and after the merger based on the TVA variable and there are no difference in Bank Syariah Indonesia (BSI) before and after the merger based on the return and abnormal stock returns variables.

KEYWORDS: Merger, TVA, Return and Abnormal Stock Return

I. INTRODUCTION

The merger is the consolidation of mergers between several banks, both state-owned government banks, national private banks, and banks resulting from government recapitulation. One of the merger actions that is being hotly discussed is the merger of three state-owned Islamic banks (State-Owned Enterprises), namely PT. Bank BRI Syariah Tbk, PT. Bank Syariah Mandiri and PT. Bank BNI Syariah. PT. Bank Syariah Indonesia (BSI), which officially operated on February 1, 2021, is considered to be able to provide a significant multiplier effect on the national economy and can make the market share of the Islamic finance industry in Indonesia larger. As of December 2020, BSI's assets reached IDR 239.56 trillion. With these large assets, BSI is in the 7th position of the largest bank in Indonesia in terms of assets (Achmad Sani Alhusin, 2021).

Merger as one of the business developments is an event that occurs in an issuer which is then published and is expected to receive a reaction from capital market participants as shown by a change in the price of the securities concerned. The market reaction caused by the announcement of the merger can also be seen from the stock trading volume of the securities. Changes in stock trading volume in the capital market indicate stock trading activity on the stock exchange (Adrian Sutedi, 2015).

Stock trading volume is an increasing function of stock price changes, where the price reflects the level of information. In addition, stock trading volume is one of the variables of the indicator of trading transactions on the Stock Exchange which is then researched to see the reaction of the capital market. Changes in stock trading volume in the capital market indicate stock trading activity on the stock exchange and reflect the investment decisions of investors. The return is a motivator in an investment process that is usually used by investors to measure the comparison of alternatives in investment (Utoyo Widayat, 2005).

When a company announces a merger in which there is information on stock movements, investors can calculate the stock return as the value of the price change and the abnormal return of the stock which is the difference between the actual return and the expected return. Stock returns are the main goal for investors to make investments. In stock price movements, if the price increases, investors can be said to have gained capital gains and vice versa, if the price decreases, investors get capital losses.

Abnormal returns can be seen from investors' reactions to the merger event if there is information in the event. Events that contain information will provide abnormal returns for investors, on the other hand, if the event does not contain information, then it will not provide abnormal returns for investors. This information is considered to have value if it causes investors to make transactions in the capital market. This transaction is reflected in changes in stock prices, trading volumes, and stock returns. When

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there is an increase in *returns*, this will increase investor confidence in the company's decisions. Market reactions can be known by using *returns* as the value of price changes or by using abnormal *returns*.

II. METHODS

The type of approach used in this study is a quantitative approach. A quantitative approach is a type of approach to a study that produces findings using statistical procedures or other methods of quantification (measurement) (Wiratna Sujaweni, Lila Retnani Utami, 2019). The type of research used in this study is *Event Study research*. The data used in this study is historical data on stock prices at the time of closure that can be accessed through <https://www.yahoo.finance.com> and <https://www.idx.co.id> accounts. The analysis techniques used in this study are the *Paired Sample T Test* and the *Wilcoxon Test*.

Stock trading volume is an indicator that is usually used in stock price valuation analysis and is also one of the instruments used to see the market's reaction to information on the movement of stock trading volume activities in the market. Trading transactions can occur if investors have different expectations, the difference lies in the investors who speculate. Significant differences indicate that merger announcements contain valuable information and influence investor decision-making. The difference in *trading volume activity* (TVA) before and after the merger shows that the company's goal of the merger has been achieved. Based on this description, the hypothesis proposed is:

H1: There is a significant difference in trading volume before and after the merger.

Stock returns occur due to the movement of stocks both up and down due to the market's reaction to the merger announcement. These reactions can be in the form of positive or negative reactions, if the market reacts positively to the merger announcement, it will get profits or *capital gains*. Likewise, if the market reacts negatively, it will get a loss or *capital loss*. The difference in *stock returns* before and after the merger shows that one of the company's goals in conducting a merger is to create synergy achieved. Based on this description, the hypothesis proposed is:

H2: There is a significant difference in stock returns before and after the merger.

Abnormal returns occur due to the rise and fall of stocks due to the market's reaction to the merger announcement. *Abnormal returns* occur in all types of stocks every day, because they occur every day, the calculation of *abnormal returns* is also carried out daily. The significant *abnormal difference in returns* indicates that the merger announcement contains information that is influential for investors as good news that changes investors' motivation to make decisions. As for the company's point of view, the company's goal to create better synergy for the company is achieved by conducting a merger. Based on this description, the following hypothesis can be proposed:

H3: There is a significant abnormal difference in stock returns before and after the merger.

III. RESULT AND DISCUSSION

A. *Meger*

The word merger is taken from the Latin language, *Mergere* which means to join together, merge in combination causing the loss of identity due to being swallowed by something (Agung Triraharja, 2014). In general, a merger can be defined as the merger of two or more organizations and there is only one company that survives. A merger is a *fusion* or *absorption* of two parties where one of the two parties dissolves and joins the other party which is considered more important. Meanwhile, according to legal terms, a merger is an act of merging two or more companies based on the conditions that have been set by law where one of the companies survives while the other disappears (Adrian Sutedi, 2015).

Mergers can give birth to positive energy for companies or banks. The advantages of the merger include increasing efficiency, increasing the quantity and quality of company information, reducing organizational problems, strengthening market positions, tax advantages, and the division of control over shareholders (Utoyo Widayat, 2005).

B. *Trading Volume*

Trading volume is an instrument used to see the reaction of the capital market to information through the parameters of the volume of stocks traded in the market. Stock trading volume can be interpreted as the number of shares traded on a given day. Stock trading volume is one of the indicators used in technical analysis of stock price valuation (Latif Zubaidah Nasution,tt).

Stock trading volume can be viewed using the *Trading Volume Activity* (TVA) indicator by dividing the shares of the traded company by the outstanding shares of the company. *Trading Volume Activity* /TVA is an indicator used to observe and measure the reaction of the capital market to information or events that occur in the capital market and is one of the factors that influence the movement of stocks (T Renald Suganda, 2018).

$$TVA (\text{Trading Volume Activity}) = \frac{\text{Jumlah saham yang diperdagangkan}}{\text{Jumlah saham beredar}}$$

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C. Return on Shares

In general, *return* is the result of returns collected from funds or capital invested in an investment, both in the form of real and financial assets (Liliana et al, 2016). *Return* is a reward for an investor's courage in taking risks as well as the commitment of time and funds that he has spent. *Return* is also one of the motivators for someone to make investments (Zulfikar, 2016).

In measuring stock *returns*, it can be calculated with the formula below (Deni Sunaryo, 2019):

$$\text{Return on Shares} = \frac{P_t - (P_{t-1})}{P_{t-1}}$$

D. Abnormal Return

Abnormal *return* is a term that shows an abnormal profit or *return*. Abnormal *returns* often occur when the first day of listing a stock on the Stock Exchange which in general the stock price at that time has increased in rupiah and a large percentage so that investors get extraordinary profits (Hendy M. Fakhruddin, 2008).

Using the market-adjusted model, it is assumed that the return of a security is based on the *return* of the market index at that time. So that the amount of abnormal *return* can be determined by the formula (Eduardus Tandelilin, 2017):

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

E. History of Bank Syariah Indonesia

Bank Syariah Indonesia (BSI) began on July 3, 1969 under the name PT Bank Djasa Arta and was headquartered at Jalan Suniaradja No. 24B Bandung. Then on December 19, 2007, it was officially acquired by Bank Rakyat Indonesia and after obtaining a business license from Bank Indonesia through letter No. 10/67/Kep.GBI/DPG/2008 dated October 16, 2008, this bank officially operated under the name PT Bank BRISyariah on November 17, 2008. In 2009, the sharia business unit of Bank BRI was officially merged and then in 2018 it was officially listed as an issuer on the Indonesia Stock Exchange (IDX) with the stock code BRIS. In 2020, the plan to merge with Bank Syariah Mandiri and BNI Syariah was approved by the shareholders. On January 27, 2021, Bank Syariah Indonesia received a permit from the OJK with Number: SR-3/PB.1/2021 regarding the granting of a permit for the merger of PT Bank Syariah Mandiri and PT Bank BNI Syariah into PT Bank BRISyariah Tbk as well as a name change permit using the business license of PT Bank Syariah Indonesia Tbk as the merged bank.

Bank Syariah Indonesia (BSI) was inaugurated on Monday, February 1, 2021 at 13.00 WIB to coincide with the 19th of Jumadil Akhir 1442 H. This bank is the result of the merger of Bank Syariah Mandiri, BNI Syariah and BRI Syariah. This merger will unite the advantages of the three Sharia Banks so that they can provide complete services, wider coverage and better capital capacity. With the encouragement of synergy from the parent company (Mandiri, BNI and BRI) and the government's commitment through the Ministry of SOEs, Bank Syariah Indonesia is expected to be able to compete at the global level (<https://ir.bankbsi.co.id/>, 2021).

The composition of BSI's shareholders consists of PT Bank Mandiri (Persero) Tbk by 51.2%, PT Bank Negara Indonesia (Persero) Tbk by 25.0%, PT Bank Rakyat Indonesia (Persero) Tbk by 17.4%, DPLK BRI-Sharia Shares by 2% and the public by 4.4%.

F. Descriptive Statistical Analysis of Stock Trading Volume

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Before	10	,0028	,0469	,025480	,0126816
After	10	,0011	,0102	,005200	,0035845
Valid N (listwise)	10				

Based on the table of the results of the descriptive analysis above, it shows that the average value of stock trading volume (TVA) before the merger event is 0.25480 with a standard deviation value of 0.0126816, while the average stock trading volume (TVA) after the merger is 0.005200 with a standard deviation value of 0.0035845. From the results of the comparison above, it can be concluded that the average stock trading volume (TVA) before and after the merger has decreased.

G. Descriptive Statistical Analysis of Stock Returns

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Before	10	-,0695	,1442	-,038050	,0676143
After	10	-,0679	,0923	,004440	,0457256
Valid N (listwise)	10				

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Based on the table of the results of the descriptive analysis above, it shows that the average *return* before the merger event is - 0.38050 with a standard deviation value of 0.0676143, while the average *return* after the merger is 0.004440 with a standard deviation value of 0.0457256. From the results of the comparison above, it can be concluded that the average *stock return* before and after the merger has increased.

H. Descriptive Statistical Analysis of Abnormal Stock Returns

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Before	10	-,0847	,1078	-,039860	,0561899
After	10	-,0756	,0665	-,013620	,0409353
Valid N (listwise)	10				

Based on the table of the results of the descriptive analysis above, it shows that the average value of abnormal *return* before the merger event is -0.39860 with a standard deviation value of 0.561899, while the average abnormal *return* after the merger is - 0.13620 with a standard deviation value of 0.0409353. From the results of the comparison above, it can be concluded that the average *stock return* before and after the merger has increased.

I. Analysis of TVA Normality Test

Tests of Normality

	TVA	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	Df	Sig.
TVA BSI	Before	,149	10	,200*	,974	10	,924
	After	,257	10	,060	,867	10	,093

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the results of the normality test, it can be seen that the value of stock trading volume has a significant level of $0.924 > 0.05$ and $0.093 > 0.05$ after the merger. So it can be concluded that the *variable of trading volume activity* is normally distributed. Thus, the different test that will be used is the Paired *Sample T Test*.

J. Analysis of the Normality Test of Stock Return

Tests of Normality

	Return	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Return BSI	Before	,367	10	,000	,548	10	,000
	After	,216	10	,200*	,958	10	,763

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the results of the normality test, it can be seen that the value of *stock returns* has a significant level of $0.000 < 0.05$ and $0.763 > 0.05$ after the merger. So it can be concluded that the *variable of stock return* is abnormally distributed. Thus, the different test that will be used is the Wicoxon *different test*.

K. Analysis of the Abnormal Normality Test of Stock Returns

Tests of Normality

	AR	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
AR BSI	Before	,396	10	,000	,631	10	,000
	After	,205	10	,200*	,961	10	,795

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

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Based on the results of the normality test of abnormal *stock returns* before the merger have significant values of $0.000 < 0.05$ and $0.795 > 0.05$ after the merger. So it can be concluded that the abnormal *variable* of stock returns is abnormally distributed. Thus, the different test that will be used is the Wilcoxon *different test*.

L. Analysis of Paired Test Difference to TVA T Test

Paired Samples Test									
Pair 1	sebelum - sesudah	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
		,0202800	,0151455	,0047894	,0094456	,0311144	4,234	9	,002

Based on the table above, the results of the Paired *Sample Statistics differential test* on stock trading volume have a Sig. (2-tailed) value of 0.002, meaning that the sig value is smaller than 0.05. Because the Sig < 0.05 , it can be concluded that H1 is accepted, meaning that the average trading volume of Bank Syariah Indonesia shares before and after the merger is different.

M. Analysis of Wilcoxon Stock Return Difference Test

Test Statistics^a

	After – Before
Z	-1,580 ^b
Asymp. Sig. (2-tailed)	,114

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Berdasarkan tabel di atas, hasil uji beda *Wilcoxon* pada *return* saham memiliki nilai Asymp. Sig. (2-tailed) sebesar 0,114 artinya nilai sig lebih besar dari 0,05. Karena Sig $> 0,05$ maka dapat disimpulkan bahwa H2 ditolak, artinya rata-rata *return* saham Bank Syariah Indonesia sebelum dan sesudah merger tidak terdapat perbedaan.

N. Analysis of Wilcoxon Abnormal Stock Return Divergence Test

Test Statistics^a

	After – Before
Z	-1,478 ^b
Asymp. Sig. (2-tailed)	,139

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Based on the table above, the results of *Wilcoxon's differential test* on abnormal *stock returns* have an Asymp. Sig. (2-tailed) value of 0.139, meaning that the sig value is greater than 0.05. Because the Sig > 0.05 , it can be concluded that H3 was rejected, meaning that there is no difference in *the average abnormal return* of Bank Syariah Indonesia shares before and after the merger.

IV. CONCLUSIONS

Based on the results of data processing using the IBM SPSS.26 program in the data test whether there is a significant difference in trading volume, *return* and abnormal *return* of shares in the merger event of Bank Syariah Indonesia, it can be concluded based on descriptive statistical tests and hypothesis tests using *the Paired Sample Test*, there is a significant difference in stock trading volume with the merger. The difference is due to the decline after the merger event because there is a possibility that information about the merger announcement has been leaked before the merger. The change in stock trading volume before and after the merger shows that this study supports the hypothesis that there is a significant difference before and after the merger.

Based on statistical tests and hypothesis tests using *Wilcoxon*, there was no significant difference in stock *returns* before and after the merger. This is due to the lack of market response that investors respond to as a normal event or investors do not provide quick *feedback* on the information they receive so that there is no significant difference in stock *returns* before and after the merger. This shows that this study does not support the hypothesis that there is a significant difference *in stock returns* before and after the merger.

Based on statistical tests and hypothesis tests using *Wilcoxon*, there was no significant difference in abnormal stock *returns* before and after the merger. This is because investors consider the merger not to provide synergy for the company. In other words,

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the merger announcement does not provide economic benefits to the merger actors themselves. So this study does not support the hypothesis that there is a significant abnormal difference in stock *returns* before and after the merger.

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REFERENCES

- 1) Fakhruddin, Hendy M. 2008. *Istilah Pasar Modal A-Z*. Jakarta: PT Elex Media Komputindo.
- 2) Suganda, T Renald. 2018. *Event Study Teori dan Pembahasan Reaksi Pasar Modal Indonesia*. Malang: CV. Seribu Bintang.
- 3) Sujaweni, Wiratna dan Lila Retnani Utami. 2019. *The Master Book of SPSS*. Yogyakarta: STARTUP.
- 4) Sunaryo, Deni. 2019. *Analisis Harga Saham yang Dimoderasi Return Saham Implementasi pada Manajemen Keuangan*. Pasuruan: CV. Penerbit Qiara Media.
- 5) Sutedi, Adrian. 2015. *Buku Pintar Hukum Perseroan Terbatas*. Jakarta: Raih Asa Sukses.
- 6) Tandelilin, Eduardus. 2017. *Pasar Modal Manajemen Portofolio dan Investasi*. Yogyakarta: Konisius.
- 7) Zulfikar. 2016. *Pengantar Pasar Modal dengan Pendekatan Statistika*. Cet. Ke-I. Yogyakarta: Deepublish.
- 8) Triraharja, Agung. 2014. "Analisis Dampak Merger terhadap Profitabilitas pada PT Bank Cimb Niaga". *Skripsi*. Bengkulu: FEBI Universitas Bengkulu.
- 9) Alhusin, Achmad Sani. 2021. "Bank Syariah Indonesia Tantangan dan Strategi dalam Mendorong Perekonomian Nasional". *Info Singkat*. No. 3. Vol. XIII Februari.
- 10) Liliana dkk. 2016. "Analisis Dampak Akuisisi terhadap Return Saham dan Volume Perdagangan (Studi pada Multinational Company yang Terdaftar di BEI Periode Tahun 2010-2012)". *Jurnal Administrasi Bisnis*. No. 3. Vol. 5 September.
- 11) Nasution, Latif Zubaidah. "Pengaruh Volume Perdagangan Saham, Frekuensi Perdagangan Saham, Volatilitas Harga Saham, dan Kapitalsiasi Pasar Terhadap Return Saham Perusahaan Makanan dan Minuman yang Terdaftar Di Bursa Efek Indonesia". *Journal Riset Mahasiswa*. Program Studi Akuntansi. FEB Universitas Kejuruan Malang.
- 12) Widayat, Utoyo. 2005. "Beberapa Dimensi Merger dan Akuisisi". *Jurnal Akuntansi*. No. 3. Vol. 5 September.
- 13) https://ir.bankbsi.co.id/corporate_history.html diakses pada 26 Desember 2023 pukul 09.38 WIB.



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