

## AN ANALYSIS OF MERGER AND ACQUISITION IN REGARD TO STOCK RETURN AND TRADING VOLUME IN COMPANIES LISTED ON INDONESIA STOCK EXCHANGE

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***Abstract** – The idea of this research is to analyze the impact of mergers and acquisitions on trading volume and stock returns of companies listed on Indonesia Stock Exchange. The approach used in this study is a quantitative method with the target of companies that have undergone mergers and acquisitions and are listed on Indonesia Stock Exchange between 2015-2020. Based on statistical tests on the value of stock returns during the event period, there is no significant change in the value of stock returns around mergers and acquisitions, nor changes in stock returns before and after mergers and acquisitions, this reveals that this research does not support the notion that there is a change in value stock returns before and after mergers and acquisitions, which is also evident from the results of the t-statistic test based on the results of the business volume statistical test (TVA). The results of this study show that there are changes in value before and after mergers and acquisitions, but there are no significant changes in TVA values before and after mergers and acquisitions. The lack of meaning surrounding the merger and acquisition event, namely three days before the acquisition, reveals that this study does not support the conjecture.*

***Keywords:** acquisitions, stock returns, trading volume*

### I. INTRODUCTION

Hidayat, et al (2016) said the capital market is currently no longer foreign to society and has become one of the pillars of the global economy. Capital markets are used by many sectors and companies to attract investments and to strengthen their financial position. Capital markets play an important role in developing of the country's economy, as well as benefiting investors. In the capital market, investors can include funds and invest through securities or stocks and other derivative instruments, in the hope that they will get a return on the outcome of such securities and other effects.

The very high enthusiasm of the Indonesian people for the capital markets is demonstrated by the growth of the number of investors that experienced a significant increase. It can be seen from the comparison of the number of investors in 2021 which increased by three times than that of in 2018. Indonesian Stock Exchange (BEI) has recorded that the number of investors in the capital market has already exceeded seven million by the end of November 2021. Stock is one of the attractive securities in the capital market because stocks have high profits. The share advantage is the division of the company's dividend. Before investors and investment managers buy stocks for investment, the course requires careful and accurate analysis in order to get maximum profit.

Patar and Saifi (2014) point out the announcement of mergers and acquisitions is to be done by many parties, as mergers & acquisitions combine the strengths of two or more companies. The reasons for mergers and acquisitions are to be conveyed to the public by the management of the company in order to provide information that the existence of these particular events may affect the value of the company. Any changes regarding internal and external expansion have an impact on all forms of transactions in Indonesian stock trading. This information will be analyzed and used for financial decision making.

Research by Gunawan and Sukartha (2013) found that market indicators examine the stock returns which reveal a significant increase in reactions after mergers and acquisitions. This research is also shown by research conducted by Gayatri and Andayani (2018) with the title Analysis of Market Reactions to Acquisition Announcements on IDX Registered Acquisition Companies resulted in significant differences in unusual business activities before and after the announcement of the acquisition, but there were also negative reactions indicated by a decrease in stock returns in several companies. Hidayat et al (2016) showed that there is no difference in returns before and after mergers and acquisitions. This is also shown by research conducted by Irhamani and Daud (2014) which shows that there is no return.

Information on mergers and acquisitions can be viewed by using one approach, called Trading Activity Volume (TVA). The TVA approach is a tool that makes it possible to see the reaction of the capital market to information using parameters for changes in stock trading volume. According to Gayatri and Andayani (2016), As'ari (2017) and Zahoor, Arshad and Khalil (2017), there were no significant changes of TVA regarding the announcement of mergers and acquisitions.

Along with this merger and acquisition announcement, it can be concluded whether or not there will be differences in share return and in the volume of trading stocks before and after the announcement of the mergers and acquisitions. This study aims to analyze the

difference in share returns and the differences in stock trading volumes in companies listed on the Indonesian Stock Exchange before and after the announcement of the acquisition and merger.

## II. METHODS

The approach used in this paper is the quantitative method and the purpose of this paper to analyze the difference in share returns in companies listed on the Indonesian Stock Exchange before and after the announcement of the acquisition and merger and to analyze the differences in the volume of stock trading in Companies listed in the Indonesia Stock Exchange. The sample in this study is a company that previously reported merger and acquisition transactions to the KPPU (Commission for the Supervision of Business Competition) whose role is as a supervisor of merger & acquisition activities in Indonesia and companies that are listed on the Indonesia Stock Exchange from 2015 to 2020.

The method used is the archival method or documentation method where researchers collect information from documents related to historical data. The research cites information from various resources such as the website of Bursa Efek Indonesia [www.idx.co.id](http://www.idx.co.id), Indonesia Capital Markets Directory (ICMD), books and journals related to the research. Business information is acquired from [www.finance.yahoo.com](http://www.finance.yahoo.com). The variables used in this study are merger and acquisition information, stock return and market trading volume.

## III. RESULTS AND DISCUSSION

The sample in this study uses eight criteria which are a requirement to be able to select companies that will become research samples, as follows:

**Table 1.** Criteria for Companies that Become Research Samples

No	Sample Criteria	Total
1	Companies carrying out acquisition and merger activities in 2015-2020 based on KPPU monitoring and listed on IDX	85
2	Have clear merger and acquisition dates 2015-2020	37
3	Number of companies sampled in 2017	7
4	Years of Observation	6
5	Number of samples during the study period	42

Source: Processed Secondary Data (2023)

Based on the sample criteria above, a sample of seven companies was obtained from the observations that had been listed. This study obtained 85 cases of corporate mergers or acquisitions that were included in the KPPU's watch list. In regards to this matter, there are several samples of companies that have merged more than once in different years.

Descriptive statistical analysis aims to be able to provide information about the characteristics of the sample in the form of the standard deviation value, the average, highest and lowest value.

**Table 2.** Descriptive Statistical Test Results

		Mean
Pair 1	Before M and A	342202508.86
	After M and A	-26107067.24
		N
Pair 1	Before M dan A	21
	After M dan A	21
		Std. Deviation
Pair 1	Before M dan A	1389081779.831
	After M dan A	140365401.593
		Std. Error Mean
Pair 1	Before M dan A	303122495.360
	After M dan A	30630241.798

Source: Secondary Data, Data Processed using SPSS 25

Based on the table above, the descriptive statistical analysis shows that the stock return value before the merger and acquisition event was 342202508.86 with a standard deviation of 303122495.360, while the stock return after the merger and acquisition event during the study period was -26107067.24 or with a standard deviation of 30630241.798. It can be concluded that there are differences in stock returns before and after mergers and acquisitions, in which stock returns appeared to be bigger before the acquisitions. Meanwhile, another test (paired-sample t-test) is used to determine the value of stock returns before and after mergers and acquisitions from the results of hypothesis testing, which can be seen in the following table:

**Table 3.** Paired Sample T-test of Stock Return Before and After Mergers and Acquisitions

	Paired Differences
	Mean
Before M and A - After M and A	368309576.095
	Paired Differences
	Std. Deviation
Before M and A - After M and A	1340997705.199
	Paired Differences
	Std. Error Mean
Before M and A - After M and A	292629690.040
	Paired Differences
	T
Before M and A - After M and A	1.259
	Paired Differences
	Sig. (2-tailed)
Before M and A - After M and A	.223

Source: Secondary Data, Data Processed using SPSS 25

The table above shows the results of testing the comparison of stock returns before and after the event (mergers and acquisitions) with a t value of 1.259 and a sig (2-tailed) value of 0.223. At a significant value of 5%, a sig value

of  $0.223 > 0.05$  was obtained, so that  $H_0$  was accepted, and  $H_a$  was rejected. This reveals that the capital market barely reacts to takeovers and mergers of companies listed on the Indonesian Stock Exchange (IDX). These results may explain that the announcements of mergers and acquisitions are not that valuable for the investors, so they do not affect the decisions of market participants. The absence of significant differences in shareholder returns before and after the announcement of mergers and acquisitions also reveals that one of the company's objectives of conducting mergers and acquisitions cannot be achieved because shareholder returns fall after mergers and acquisitions.

**Table 4.** Descriptive Statistics of Trading Volume Activity (TVA) Before and After

		Mean
Pair 1	TVA Before M and A	541977403.1007
	TVA After M and A	1263611106.3427
		N
Pair 1	TVA Before M and A	21
	TVA After M and A	21
		Std. Deviation
Pair 1	TVA Before M and A	1609680159.77914
	TVA After M and A	2926820867.19248
		Std. Error Mean
Pair 1	TVA Before M and A	351261008.42174
	TVA After M and A	638684674.73742

Source: Secondary Data, Data Processed using SPSS 25

Descriptive statistical analysis revealed that the average TVA before mergers and acquisitions was 541977403.1007 with a standard deviation of 1609680159.77914 and the mean trading volume activity after the merger and acquisitions was 1263611106.3427 with a standard deviation of 638684674.73742. The TVA value before and after the merger and acquisition event is smaller than the standard deviation, this shows that the greater the deviation of the TVA value to the value, namely 541977403.1007 and 1609680159.77914 while after 1263611106.3427 and 638684674.73742. Shows that the mean value of TVA before mergers and acquisitions of shares is smaller than the mean value of TVA after mergers and acquisitions. This means that there is an increase in stock trading transactions after the

mergers and acquisitions. The difference in trading volume activity in this study is due to the growth in trading transactions carried out by capital market players after mergers and acquisitions. Capital market players prefer to conduct transactions when mergers and acquisitions occur, this is indicated by the increasing volume of stock trading due to mergers and acquisitions.

Meanwhile, from the results of testing the hypothesis with the second test (paired-sample t-test), the value of TVA before and after the merger and acquisition, can be seen in the table below:

**Table 5.** Paired Sample T-Test Different Test Trading Volume Activity (TVA) Before and After Mergers and Acquisitions

		Paired Differences
		Mean
Pair 1	TVA Before M and A	-721633703.24196
	TVA After M and A	
		Paired Differences
		Std. Deviation
Pair 1	TVA Before M and A	2547130390.00770
	TVA After M and A	
		Paired Differences
		Std. Error Mean
Pair 1	TVA Before M and A	555829419.86346
	TVA After M and A	
		Paired Differences
		T
Pair 1	TVA Before M and A	-1.298
	TVA After M and A	
		Paired Differences
		Sig. (2-tailed)
Pair 1	TVA Before M and A	.209
	TVA After M and A	

Source: Secondary Data, Data Processed using SPSS 25

The table above reveals the results of the TVA volume comparison test before and after the event (mergers and acquisitions) with a t value of -1.298 and a sig value (2-tailed) = 0.209. At a significance value of 5%, the sig value is  $0.209 > 0.05$ , then  $H_0$  is accepted, and  $H_a$  is rejected. This reveals that the capital market does not react significantly to mergers and acquisitions. This insignificant difference

indicates that the information in the form of announcements of mergers and acquisitions has information content that is not very valuable and does not significantly influence the decision making of market participants on Trading Volume Activity (TVA). The insignificant difference in Trading Volume Activity (TVA) before and after the announcement of mergers and acquisitions indicates that the company's goal of carrying out mergers and acquisitions, as well as creating synergies, has not been achieved. This is also indicated by the decreasing Trading Volume Activity (TVA) in companies that decided to do mergers and acquisitions in 2020.

#### IV. CONCLUSION

Based on the results of the analysis and discussion in this study, several conclusions can be drawn. Based on statistical tests on the value of stock returns during the event period, there is no significant difference in the value of stock returns related to mergers and acquisitions. The absence of changes in stock returns before and after mergers and acquisitions reveals that this study does not support the conjecture which states that there are changes in the value of stock returns before and after mergers and acquisitions as revealed by the t-statistic test. Based on the results of statistical tests, the value of Trading Volume Activity (TVA) before mergers and acquisitions did not change significantly due to events before and after mergers and acquisitions.

The insignificance of TVA before and after mergers and acquisitions provides evidence that this research does not support the hypothesis, furthermore there is no significant change around the Trading Volume Activity (TVA) value of shares in 2015-2017 before the announcement of mergers and acquisitions and in 2018-2020 after the announcement mergers and acquisitions. The absence of significant changes in stock returns and trading volume before and after mergers and acquisitions may be due to a lack of information on mergers and

acquisitions known to investors. Based on these results, it can be reflected that the announcement of mergers and acquisitions is considered less appealing so that investors do not receive positive signals to make decisions in the capital market.

Mergers and acquisitions do not always have a positive impact on the acquiring company, so investors must be more careful about corporate mergers and acquisitions. It is also important for companies to expand their business, one of which is by joining other companies, but companies also need to be careful in conducting mergers and acquisitions so that later they can benefit the company and its shareholders. For future researchers, it is hoped that they can add other variables. In addition, the observation period can be further extended from 5 years to 8 or 10 years after mergers and acquisitions in order to obtain a more complete picture of stock returns and Trading Volume Activity (TVA) of acquiring and merging companies in the long term. Moreover, it is better to use companies that have more active stocks on the IDX as samples, so it will not generate zero returns.

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