ASEAN GO PUBLIC COMPANIES' STOCK SPLIT: CUMULATIVE ABNORMAL RETURN AND CUMULATIVE TRADING VOLUME ACTIVITY

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ABSTRACT

The current study compares the differences between Cumulative Abnormal Returns (CAR) and Cumulative Trading Volume Activity (CTVA) for publicly traded companies that execute stock splits in the year 2021 on the ASEAN Stock Exchange. According to estimates and timelines, businesses listed on the ASEAN Stock Exchange in 2021 are not permitted to take additional corporate action. There are 47 companies using the sampling exchange in the countries of Indonesia, Malaysia, Philippines, Vietnam, Thailand, and Singapore. The data analysis methodology used by researchers is a different test through the Wilcoxon Rank Test. The first result from this study is that there is a difference in CAR before and after a stock split that is significant. In contrast, for the second result, there is no significant difference in the CTVA for the prior and subsequent stock split. Before the stock split happened, researchers discovered a bigger discrepancy in CAR. This shows that the market responded from time t-31 to time t-1. Due to several reasons, including the global influence of dominant data and patterns in investor behavior, there was no discernible difference in the CTVA.

Keywords: Stock split; Cumulative Abnormal Return; Cumulative Trading Volume Activity; ASEAN Go Public Companies

INTRODUCTION

ASEAN was founded to accelerate the economy of Southeast Asia. This causes ASEAN to have the potential to become a country with a higher level of economy. The countries in the Southeast Asian region that are members of ASEAN are Laos, Brunei, Cambodia, Myanmar, Singapore, Malaysia, Vietnam, Philippines, Thailand, and Indonesia. This organization must make the capital market to be a priority to support ASEAN's economic growth. According to Rasyidin (2016), a sector that has a large opportunity role in the economy is the capital market sector. In ASEAN, the capital market will be integrated so that capital flows and investments run smoothly. The smooth flow of capital and investment will encourage investment growth in ASEAN and accelerate the development process to make ASEAN a region with a strong and advanced economy.

In contrast, not all ASEAN Member countries have Stock Exchanges. There are 7 stock exchanges that are members of the ASEAN Stock Exchange. Of all the countries that are members of the ASEAN Stock Exchange, only Vietnam has 2 stock exchanges such as the Ho Chi Minh Stock Exchange and the Hanoi Stock Exchange. In Vietnam, the Ho Chi Minh Stock Exchange is the first stock exchange that currently dominates the capital market value and is a driving force for the economy. Since 2016, this stock exchange has achieved stable growth, capitalization, and increased stock trading liquidity so the researchers use Ho Chi Minh as the object to be studied.

In 2020, the whole world experienced the Covid-19 pandemic and had a drastic economic decline. All

sectors on the ASEAN Stock Exchange have also experienced a decline as a result of this pandemic. Different government policies in each country can hinder economic development. One of them is in Indonesia, which undoubtedly influences capital market activity, although according to the Indonesian Central Securities Depository (KSEI), there are more investors now than there were a year ago. In Indonesia, there were 1,619,372 stock investors in 2018; by 2021, that number had risen to 4,415,237.

Several factors can have an impact on an investor's choice of stocks. The cost and volume of stock trading are two elements that may have an impact on investors. Stock prices can influence an investor's interest in selecting equities. According to Dewi and Suaryana (2013), investor interest in shares will decline if the price of such shares on the capital market is too high. The trading volume of these shares will be low because investor interest in specific stock price levels is declining. Amin (2022) asserts that the volume of shares trading on the capital market can also provide insight into the state of the market.

If the stock price is excessively high, a price adjustment is necessary to keep shares appealing to investors. A stock split is a corporate activity that the corporation uses to accomplish this. The stock split activity is a company policy to maintain the ideal trading volume of shares by balancing the market.

The abnormal return before and after the stock split differs significantly from each other. A stock split can be divided into two groups. According to Sutrisno et al. (2000), the first group believes that the change is simply "cosmetic" and not substantive. The second is how a stock split will affect investors' returns and risks. The corporation believes that a stock split will encourage investors to purchase these shares as good news because it shows the company is in solid financial shape.

Because there is a correlation between security prices and information, Jogiyanto (2019: 606) says that market efficiency happens through the dissemination of information. Market conditions will be in a semi-strong state when the existing issuer releases information about a stock split. Investors will respond to this knowledge in a certain way, possibly with returns that are different from what they anticipated because not all investors will receive and process information in the same way. A variation in investor returns is also referred to as abnormal returns.

A stock split might result in unusual returns, which can raise the price of the stock. As a result, investors' actual returns diverge from their anticipated returns, which allows the stock split action to produce an irregular return. According to Puspita and Kartika (2019), there was a difference in the abnormal returns following a stock split. To completely illustrate the ups and downs of abnormal returns and trading volume activity within the window period, researchers in this study will employ cumulative abnormal returns and cumulative trading volume activity.

The purpose of this study was to compare the cumulative abnormal returns (CAR) and trading volume activity (CTVA) of businesses listed on the ASEAN Stock Exchange for the year 2021 before and after a stock split. The researcher brought up the subject of this study since unusual returns and trading volume activity were the primary motivators for investors to make investments. The market will either respond unfavorably or favorably to a stock split.

Researchers think about prices and trading volume activities before opting to buy based on their experience as novice investors who want to participate. When the price of the stock we wish to purchase is too expensive, the investor decides against buying it. This research will contribute to the investors since they must view every action performed by the issuer as

information in order to determine the appropriate response to it. This is crucial information for investors to consider when purchasing or selling the company's shares because the corporation has decided to split its stock.

THEORETICAL REVIEW

Efficient Market Hypotheses

The Trading Range Theory and the Efficient Market Hypothesis are the two theories used in this study. According to Jogiyanto (2010:515), market efficiency refers to the extent to which market prices reflect all available relevant information. If the market is efficient, then all the information is included in the stock price (Jogiyanto, 2019: 616). According to Jogiyanto (2015: 547), an efficient market is one that reacts quickly and accurately to new information to create a new equilibrium. Investors will respond when new information is available.

There are three types of Efficient Market Hypotheses. First, it qualifies as a weak form since current prices only reflect information from the past and cannot be foreseen. Investors cannot obtain abnormal returns by using historical knowledge. Second, when the stock prices reflect those announced without exception, market efficiency is said to be semi-strong form. The information is presented in the form of only the prices of securities that are impacted by information that has been published; regulations issued by the government or the center that have an impact on the prices of multiple securities; and the prices of all companies that are impacted by information that has been published by one or more regulators or regulations that may have an impact on all companies. Abnormal returns occur as a result of market reactions when information is available. Third, the market efficiency of the strong form reflected prices is the result of information circulating or not. Investors are unlikely to get abnormal returns because they have private information.

According to Badollahi et al. (2020), corporations take some steps to sustain and enhance the performance of the capital markets by granting all investors the same rights. There are four categories: corporate restructuring, required corporate action, optional corporate action, and having an impact on the number of shares is one of the categories.

Stock Split

According to Amin (2020), a stock split is a type of business activity in which a corporation divides its shares into more ratios in order to lower the price per share. This is done at relatively high prices and with little trading activity. When the market price is high enough to cause low trading volume and poor stock liquidity, which will have a detrimental effect on the stock and the company, a company splits its stock.

Furthermore, because the current price is determined by the information that is currently in circulation, stock splits are categorized as a semi-strong form of market efficiency. Given that they have access to private information, investors are unlikely to receive abnormal returns. Because the current price is determined by the information that is currently in circulation.

Cummulative Abnormal Return (CAR)

According to Jogiyanto (2010:94), an abnormal return is a discrepancy between what was expected and what was received. When investors anticipate returns at a specific level but instead receive higher returns than anticipated, this is known as the expected return. According to Kusnandar and Bintari (2020), an abnormal increase in stock trading activity causes abnormal returns to happen. According to Halim (2015: 95), abnormal returns represent the benefits of actual returns over normal returns. The efficient market hypothesis was applied in this study because, as a result

of a stock split, the market will become efficient in a semi-strong form, allowing abnormal returns to happen since investors' actual returns diverge from expectations.

Boosting the liquidity of stock volume is the goal of stock splits (Kristianiarso, 2014). A stock split may be required to maintain trading volume and stock returns if the low trading activity makes the stock less desirable and prevents the price from rising too high. Trading volume is a factor that affects investors' decisions when selecting stocks in Pramana and Mawardi (2012); the more shares are traded, the more investors acquire them. To determine how much of an impact a stock split has on stock trading volume, the trading range hypothesis is the theory that is employed.

There are disparities in cumulative abnormal returns before (CAR BTSS) and after stock splits (CAR ATSS) carried out by corporations, according to Pangesti et al. (2020). Stock price splitting causes stock prices to drop, which results in atypical returns that, depending on the actual return received by investors, can be either positive or negative. An investor is informed about a stock split, and when the investor reacts to the information, abnormal returns take place, proving the premise.

H1: The Cumulative Abnormal Return (CAR) before and after the stock split differs significantly.

The amount of trade before and after a stock split differs significantly. This tends to drop, showing that investors are reacting negatively to the information asymmetry. Stock prices significantly affect trading activity; if they are too high, they reduce trading volume, which prompts corporations to split their stocks to stabilize stock prices. Thus, the theory that has validated the hypothesis is:

H2: The Cumulative Trading Volume Activity (CTVA) before and after the stock split differs significantly.

RESEARCH METHODS

Quantitative research is used in this study to assess whether there are statistically significant differences between one variable and another. In this investigation, a normality test and two separate test means were applied. With an estimated period of 30 days prior to the stock split, the window period is 7 days before and after the stock split. Use the computation procedure shown below to determine the actual return:

$$Rit= (P_{(it)}-P_{(it-1)})/(P_{(it-1)})$$

Where Rit is the stock return earned on the i-th security in the time period leading up to the event, Pit is the i-security's stock price during the time of the t-event, and Pit-1 is the security-i stock price during the event period t-1. The market return is the next computation:

$$Rmt= (IHSG_{(it)}-IHSG_{(it-1)})/(IHSG_{(it-1)})$$

Where Rmt is the market return earned on the i-th market in the ASEAN stock exchange in the time period leading up to the event, IHSGit is the i-market's index during the time of the t-event in the ASEAN stock exchange and IHSGit-1 is the i-market's index during the event period t-1 in the ASEAN stock exchange. The expected return is the next computation:

$$R_{it}= \alpha_i+\beta_i.R_{mt}+ \varepsilon_{it}$$

Where R_{it} and R_{mt} are calculated during the estimation period (t-30) for stock split and then we calculate the expected return (ER_{it}) for the windows period (t-7 until t+7) and the abnormal return (AR_{it}):

$$ER_{it}= \alpha_i+\beta_i.R_{mt}$$

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

Furthermore, we calculate the cumulative abnormal return (CARit) during the windows period:

$$CARit = \sum_{t=-7}^{+7} ARit$$

Amin (2022) defines trading volume activity as the comparison of the number of stocks traded at one moment with the total number of outstanding shares at that same time. The following equation can be used to calculate cumulative trading volume activity during the windows period:

$$CTVAit = \sum_{t=-7}^{+7} TVAit$$

This study employs secondary data; the data was gathered through library research; and the paperwork came from the official ASEAN stock exchange websites for the year 2021. The population used in this study consisted of 47 firms, and the research criteria comprised public companies listed on the ASEAN Stock Exchange for the 2021 term.

In order to determine if the data utilized in this study are normal or not, a normality test is used (Murwani, 2001:20). The Kolmogorov normalcy test is a test that evaluates the degree of agreement between a sample's results and a population with a particular theoretical distribution. If the calculation yields a Sig. 0.05, the distribution is considered non-normal using the paired sample t-test; otherwise, the Wilcoxon Rank Test is used to determine whether the distribution is normal.

According to Widiyanto (2013: 35), one of the testing techniques to investigate the efficacy of the treatment is to compare the average before and after receiving the treatment. To determine whether there are variations in trading volume and abnormal returns before and after a stock split, this study employs a paired sample test. If the results of the normality test are normally distributed, the paired sample t-test is employed.

The Wilcoxon rank test is a test used to determine the importance of a difference between two pairs of ordinal scale data that are not regularly distributed (Sugiyono, 2017). According to experiments were done by Memarista et al. (2022), the Wilcoxon rank test can be used when the data is not regularly distributed. When the normality test yields data that are irregularly distributed, the Wilcoxon rank test is used in this study under the following conditions. Ho is rejected and Ha is accepted, if it receives Asymp Sig (2-tailed) findings is less than 0.05. Ho is disregarded and Ha is accepted, if it receives Asymp. Sig (2-tailed) is more than 0.05.

ANALYSIS AND DISCUSSION

The companies used in this study are ASEAN Stock Exchange members and had stock splits in 2021. Indonesia, Malaysia, Vietnam, Thailand, Singapore, and the Philippines will be under monitoring from January 1, 2021, to December 31, 2021. Those criteria as purposive sampling were utilized to choose the study's sample. Totally there are 47 go-public companies in the ASEAN stock exchange for this research sample.

Table 1.
Number of Companies of ASEAN Stock Exchange for Conducting Stock Splits During The 2021 Period

Country	Number of Companies
Singapore	1
Malaysia	34
Vietnamese	1
Philippines	1
Thailand	3
Indonesia	7
Total	47

Researchers tested the two variables, cumulative abnormal return (CAR) and cumulative trading volume activity (CTVA), using the findings of a normality test. Because the significance value is less than 0.05 for CAR and CTVA before (BTSS) and after the stock split (ATSS), it may be inferred from the results that the data is not normally distributed. To utilize the Wilcoxon rank test as the next test, the CAR in the Kolmogorov-Smirnov table before and after the stock split was 0,003 and 0,001, respectively. Yet, the CTVA in the Kolmogorov-Smirnov table before and after the stock split was 0,004 and 0,024, respectively.

Table 3.
Wilcoxon Test Results for CAR and CTVA

Value	CAR BTSS - CAR ATSS	CTVA BTSS - CTVA ATSS
Z	-2,085[b]	-0,053[b]
Asymp. Sig. (2-tailed)	0,037	0,958

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks

Based on the Wilcoxon rank test results used to test the hypothesis seven days before (BTSS) and after the stock split (ATSS), which results in a substantial difference in cumulative abnormal returns (CAR). Find the Asymp result. The results of the following hypothesis are produced with a sign of 0,037, or less than 0,05, hence Ho is rejected and Ha is approved. Yet, there is no discernible variation in cumulative trading volume activity (CTVA) between the window period of 7 days before and after the stock split, according to the Wilcoxon rank test used to test the hypothesis. Find the Asymp result. Sig. 0,958, which indicates more than 0,05, leads to the outcomes of the following hypothesis Ho is accepted, whereas Ha is rejected due to Asymp. Sig. results is more than 0,05.

Table 4.
Wilcoxon Signed Ranks Test Results for CAR and CTVA

Variables	Ranks	N	Mean Rank	Sum of Ranks
CAR ATSS - CAR BTSS	Negative Ranks	30[a]	25,37	761,00
	Positive Ranks	17[b]	21,59	367,00
	Ties	0[c]		
	Total	47		
CTVA ATSS - CTVA BTSS	Negative Ranks	25[a]	22,36	559,00
	Positive Ranks	22[b]	25,86	569,00
	Ties	0[c]		
	Total	47		

a. CAR and CTVA ATSS < CAR and CTVA BTSS
b. CAR and CTVA ATSS > CAR and CTVA BTSS
c. CAR and CTVA ATSS = CAR and CTVA BTSS

Thirty corporations had smaller cumulative abnormal returns (CAR) following the stock split, whereas seventeen had bigger abnormal returns. Prior to a stock split (t-30 to t-1), cumulative abnormal returns (CAR) are more prevalent due to market responses to circulating information. Following a stock split, there were 25 firms with lower cumulative trading volume activity (CTVA) and 22 companies with higher cumulative trading volume activity (CTVA). The majority of trading volume activity occurs prior to stock splits.

The cumulative abnormal returns of the businesses listed on the ASEAN Stock Exchange were significantly different in the 7-day period before and after the stock split, according to the data. This is consistent with the study by Azhar et al. (2013), who discovered a difference in abnormal returns that were significantly different before and after a stock split. In semi-strong market circumstances, this observation duration is consistent with the Efficient Market Hypothesis.

Investors respond to news of stock splits as a result of corporate action procedures used by businesses to decide how to invest their cash. The difference between the predicted and actual returns, which typically happen around the time of an event announcement (such as a stock split), is known as an abnormal return. Abnormal returns are greater before the stock split than after. Investors want to make more money from the stock split event; therefore, the market reacts in the time leading up to it.

Due to the diversity of the samples used in the study for ASEAN listing companies, the fact that investors did not all have access to the same information, which caused the distribution to be uneven, and the fact that investors who had sold their shares were replaced by new investors, which causes prices to fluctuate but does not change the volume traded, there was no discernible difference between the trading volume activity of the companies listed on the ASEAN Stock Exchange during the 7 days before and after the stock split.

This study discovered that elements from the company, such as investors' familiarity with stock splits due to firms' frequent practice, and from the investor side, such as the trend of investor behavior in each nation, differ depending on the country, have an impact on trading volume activity. Malaysia is a powerful nation, so it has a significant impact on this test. Between before and after the stock split, the cumulative trading volume activity is

not significantly different under the constant behavior trend.

CONCLUSION AND SUGGESTION

Conclusion

The researcher concludes that, between the D-7 and D+7 periods following the stock split, there is a substantial difference in cumulative abnormal returns (CAR), but no significant change in cumulative trading volume activity (CTVA).

Researchers found that there were significant differences prior to the stock split and concluded that the market had already reacted, causing stock price changes that impacted returns. Because of several factors, including investors' familiarity with stock split companies, differing investor behavior trends in investor society, and Malaysia's position as a dominant nation, this test is not significantly different during the window period of cumulative trading volume activity.

Suggestion

The various policies of each nation, the fact that the data used is worldwide, and the fact that not all the ASEAN member states have stock exchanges are only a few of the research's shortcomings. In order to serve as a reference for investors before making decision during a stock split, investors should pay attention to the company's fields and company trends. Other investors can use it to reduce systematic risk in the market by owning company shares in other countries, according to the researcher's suggestion for future researchers to add a sample of countries other than those in ASEAN and extend the research period.

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