

Share Split Effect on Trading Volume Activity and Abnormal Return in Indonesia

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A B S T R A C T

The significant economic contraction experienced by Indonesia as a consequence of the 2020 pandemic was paralleled by a marked decline in the frequency of corporate stock splits compared to the preceding year. However, in the years that followed, the national economy demonstrated signs of recovery and consistent growth. This trend was concomitantly reflected in the increased prevalence of stock split implementations by publicly listed companies. This investigation employed a quantitative research methodology and applied purposive sampling techniques to identify a sample of 60 firms that executed stock split actions between 2019 and 2024. The research's empirical foundation was derived from secondary data, systematically sourced from the official database of the Indonesia Stock Exchange (IDX). Hypothesis testing was conducted using the Wilcoxon signed-rank test, which was employed to assess the presence of statistically significant differences in both trading volume activity and abnormal returns surrounding the execution of stock split events. The empirical outcomes derived from analyzing data spanning the 2019–2024 period reveal that abnormal returns exhibited statistically significant variation between the pre- and post-split phases. Conversely, the outcomes indicate no significant differences in trading volume activity across the same temporal benchmarks.



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INTRODUCTION

The capital market serves as a platform where entities requiring long-term financing connect with investors who provide the necessary funds. This function is crucial, as it enables companies to secure capital efficiently for their business operations without relying solely on debt. Through mechanisms such as initial public offerings (IPOs), companies can offer ownership shares to the public, thereby raising capital. Additionally, firms often issue bonds or other debt instruments alongside equity shares to diversify their funding sources (Hariyanto

et al., 2020). The capital market also serves as a strategic platform, allowing investors to evaluate, select, and acquire investment instruments that align with their risk appetites, return expectations, and financial objectives. Investors participate in the capital market with diverse objectives, including earning dividends, acquiring ownership stakes, or engaging in trading activities (Abi, 2016). Within this market, investors have the opportunity to select investments that align with their risk tolerance levels.

Investors base their transactions on multiple considerations, including the issuer's stock price. The firm's share price in the market is often influenced by publicly disseminated information. Such information enables investors to select stocks according to their preferences and may include current and historical performance data as well as market opinions that impact stock price fluctuations. When a company's share price becomes excessively high, it may deter investor interest, leading to reduced demand for the stock (Ahmed & Kumari, 2022). Consequently, companies need to disclose accurate, timely, and relevant information to facilitate informed investment decisions among market participants. One particularly influential category of stock-related disclosures utilized by investors in their evaluative processes is the announcement of share split events.

Drawing on data retrieved from the official website of the Indonesia Stock Exchange (IDX), the graph below presents the distribution of firms that executed share split activities between 2019 and 2024.

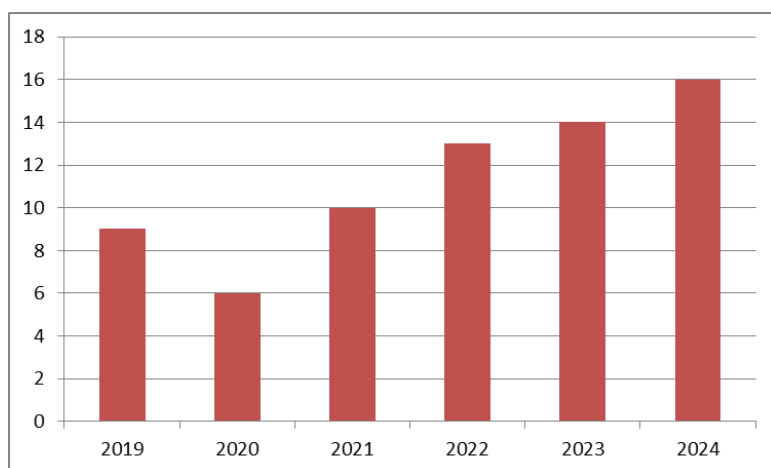


Figure 1. Companies that Share Split in Indonesia

In 2019, a total of nine companies undertook share split actions; however, this figure experienced a notable decline to five in 2020, a reduction that can plausibly be attributed to the economic disruptions and heightened market uncertainties brought about by the COVID-19 pandemic in Indonesia. By 2021 to 2024, the Indonesian economy experienced positive growth, which coincided with an increase in the number of companies conducting share splits, rising by eight to sixteen.

The event of a share split is closely linked to several theoretical frameworks, notably signaling theory. This theory posits that any information disclosed by a company serves as a significant signal to the market (Trisanti, 2020). Specifically, it suggests that share splits reflect both the improving quality and growth prospects of a company, indicating ongoing robust performance (Amri & Ramadhi, 2021). According to signaling theory, share splits serve as a communication tool through which management conveys the company's positive financial condition (Rahayu & Haq, 2023). By initiating a share split, management signals strong corporate performance. As share prices increase, however, some investors may be deterred from purchasing the stock due to its elevated cost (Putra & Suarjaya, 2020). To mitigate issues related to high share prices and enhance market accessibility, companies frequently implement share split strategies as a means of lowering the nominal share value, thereby making their stocks more affordable and appealing to a broader base of potential investors.

Corporations often opt to execute share splits in response to disproportionately elevated stock prices, which may act as a deterrent to trading activity by reducing market liquidity and limiting participation by retail investors. According to the compelling price range hypothesis, when a stock price becomes too elevated, a forward split is conducted to adjust the price back within an effective range (Neuhauser & Thompson, 2016). A stock priced within this effective range is more attractive to investors, thereby increasing trading activity and

enhancing stock liquidity (Pratama & Hotman Tohir Pohan, 2023). This hypothesis suggests that a forward stock split serves as positive information for investors, signaling stability or growth in future stock prices. Consequently, the hypothesis posits that a forward split can enhance stock liquidity by bolstering investor confidence in the company.

Information regarding share splits also influences investors' decision-making processes. From a behavioral finance perspective, psychological factors significantly shape investor behavior and contribute to market anomalies (Addinpujoartanto & Darmawan, 2020)—such market anomalies often result from irrational decision-making by investors. Kahneman and Tversky (1979), as cited in Ladrón de Guevara Cortés et al. (2023), argue that investors frequently exhibit irproportionnal behavior due to heightened sensitivity to losses and a tendency to disregard other relevant information. Consequently, investors often prefer to avoid uncertain or high-risk situations. Announcements such as share splits, which reduce perceived stock risk, can provoke investor overreaction, leading to market anomalies.

Stock liquidity refers to the volume of shares traded or converted into capital by shareholders (Inayah & Sartika, 2023). Market liquidity is frequently quantified through trading volume, commonly expressed as Trading Volume Activity (TVA), which serves as an indicator of the frequency and intensity of stock transactions over a designated period. TVA is calculated as the proportion of the number of shares traded within a given timeframe to the total number of outstanding shares, thereby offering a measure of the relative activity and liquidity of a company's stock. TVA offers insight into a company's market activity by reflecting the level of share trading on the stock exchange. Investors frequently use this metric to gauge the liquidity and vibrancy of a stock when making investment decisions. A share split results in an increase in the number of outstanding shares circulating in the market, a structural adjustment that can contribute to reducing perceived investment risk by enhancing stock liquidity and lowering the price per share, thereby facilitating broader investor participation and potentially stabilizing price volatility. (Puspita & Yuliari, 2019). Despite the risk reduction, the hoped return remains unchanged (Schoenmaker & Schramade, 2019). The reduction in perceived investment risk following a share split often serves as a catalyst for heightened investor interest, a response that may consequently manifest in increased trading volume activity (TVA) as market participants engage more actively with the now more accessible and liquid shares. Empirical evidence presented by Merthadiyanti et al. (2019), Madani et al. (2020), and Muna et al. (2022) demonstrates a statistically significant correlation among share split events and variations in trading volume activity (TVA) in the durations preceding and following the split. This relationship is notably reflected in the observed post-split increase in TVA, indicating that the reduced nominal share price enhances accessibility for retail investors, thereby fostering greater market participation. In contrast, studies by Yuniati et al. (2019), Maulida et al. (2021), and Yuliana et al. (2022) found no significant difference in TVA pre- and post-share split. This discrepancy may be attributed to investor skepticism towards share split signals, as the information provided is often deemed insufficient, resulting in no noticeable change in TVA after the split.

Abnormal return is defined as the deviation between the realized return of a security and its expected return, as predicted based on market models or historical performance benchmarks (Putri & Sihombing, 2020). Investors typically assess company performance by comparing these returns; a return below expectation is considered a negative abnormal return. Abnormal returns may also influence stock price volatility following a share split event (Hidayati & Putri, 2022). These outcomes are consistent with the conclusions drawn by Puspita and Yuliari (2019), Sriyono et al. (2021), and Fadlilah et al. (2020), who identified statistically significant differences in abnormal returns surrounding share split events. In contrast, research conducted by Yustisia (2018) and Herlambang et al. (2020) reported no significant variation in abnormal returns post-split, thereby highlighting the mixed empirical evidence regarding the capital market's response to such corporate actions.

The varying outcomes observed in previous studies highlight the need for further investigation into share splits. Examining the impact of share splits is crucial for understanding their effects on the Indonesian capital market. Furthermore, the outcomes of this research have the potential to offer investors meaningful insights by enhancing their decision-making processes through a deeper understanding of market responses to share splits. Simultaneously, the outcomes may help corporate decision-makers assess the efficacy of share splits as a strategic financial maneuver to address valuation concerns and enhance shareholder value.

This research utilizes company data sourced from the Indonesia Stock Exchange (IDX), which is selected

due to its reliability and authority in matters related to stocks and investments. The dataset comprises corpoproportionns that executed share splits between 2019 and 2024. The data collection process employed a 15-day event window framework, encompassing seven trading days preceding the share split announcement, the event day itself, and the subsequent seven trading days. The primary objective of this research is to investigate the existence of statistically significant differences in trading volume activity (TVA) and abnormal returns during the pre- and post-share split periods among firms listed in Indonesia from 2019 to 2024.

RESEARCH METHODS

This research conducted a comparative analysis of trading volume activity (TVA) and abnormal returns in the durations preceding and following share split events. The data utilized were derived from secondary sources, retrieved explicitly by Yahoo Finance and the official website of the Indonesia Stock Exchange (www.idx.com). The sampling method employed was purposive sampling, guided by predetermined criteria to ensure the selection of relevant and representative firms for analysis. The criteria for sample inclusion were as follows:

Table 1. Criteria Sample

Description	Total
The company must be officially listed on the Indonesia Stock Exchange (IDX) and must have undertaken a share split transaction within the duration spanning by 2019 to 2024	67
Companies lacking the complete set of required data	4
During the designated 15-day observation duration, the company did not undertake any corporate actions aside by the share split.	3
Companies that meet the criteria	60

Source: Data Processed, 2025

The data collection process in this research was focused on acquiring key indicators pertinent to the analysis of trading volume activity (TVA) and abnormal return variables. The primary indicators encompassed share prices, trading volumes, the total number of outstanding shares, and the Composite Stock Price Index (IHSG) during the period from 2019 to 2024. To facilitate a robust quantitative assessment, the researchers employed established analytical formulas to compute the values of both TVA and abnormal returns, ensuring methodological consistency and accuracy in evaluating market reactions surrounding share split events.

Subsequently, the collected data undergo a normality test to assess whether the distribution is normal, a prerequisite for parametric analysis. If the data distribution deviates from normality, it suggests that the model assumptions may not be fully satisfied, necessitating the use of non-parametric methods. Conducting a normality test is a crucial preliminary step in sample analysis. In this research, the Shapiro-Wilk test was utilized to assess the normality of the data distribution. This statistical test functions according to established decision-making criteria, as outlined by Wijayanti (2023), which guide the determination of whether the dataset deviates significantly from a normal distribution.

- a. The data are normally distributed if the p-value is greater than 0.05.
- b. The data is not distributed normally if the p-value < 0.05.

The Wilcoxon Signed-Rank test was employed in this research to evaluate the presence of statistically significant differences in trading volume activity and abnormal returns before and after the execution of share split events. As a nonparametric statistical method, it is particularly suitable for analyzing paired sample data that do not meet the assumptions of normality, as confirmed by prior normality testing (Suharno & Afriani, 2021). This test serves as a robust alternative to the paired sample t-test, which is applicable only when the data are typically distributed. Consequently, when the outcomes of the normality test indicate that the data or sample distribution deviates from normality, the Wilcoxon Signed-Rank test is deemed an appropriate nonparametric alternative for assessing paired differences. The decision rule for the Wilcoxon test is based on the p-value (ρ), wherein a p-value less than 0.05 ($\rho < 0.05$) leads to the rejection of the null hypothesis (H_0), thereby supporting

the alternative hypothesis (H_a) and indicating a statistically significant difference. Conversely, a p-value greater than 0.05 ($p > 0.05$) suggests that the null hypothesis cannot be rejected, implying the absence of a significant difference in the measured variables.

Table 2. Oproportional Definition of The Variables

Variabel	Definition	Formula	Scale
Trading volume activity (TVA)	The Trading Volume Activity (TVA) is calculated as the proportion of the total number of shares traded within a specific time frame to the total number of shares outstanding during that same duration, thereby serving as a proxy for market liquidity and investor engagement.	$TVA = \frac{\sum \text{number of shares traded}}{\sum \text{number of shares outstanding}}$	proportion
Abnormal return	The deviation among the realized return and the anticipated return.	Fact return: $R_{it} = \frac{P_{it} - P_{i(t-1)}}{P_{i(t-1)}}$ Hoped return: $E[R_{it}] = \frac{CSPI_t - CSPI_{(t-1)}}{CSPI_{(t-1)}}$ Abnormal return: $RTN_{it} = R_{it} - E[R_{it}]$	proportion

Source: Data Processed, 2025

RESULTS AND DISCUSSION

Results

Descriptive Statistics Test

Table 3. Outcome of Descriptive Statistics Test of Share Split 2019-2024

	Minimum	Maximum	Mean	Std. Deviation
TVA before	,000	,822	,049	,125
TVA after	,000	,289	,032	,060
AR before	-,038	,043	,006	,014
AR after	-,041	,802	,012	,106

Output: SPSS 27 version

The outcomes of the descriptive statistical analysis reveal that trading volume activity (TVA) in the pre-share split duration ranged from a minimum value of 0.000 to a maximum of 0.822, with a mean of 0.049 and a standard deviation of 0.125, indicating a relatively wide dispersion of trading intensity prior to the corporate action. In contrast, the post-share split TVA demonstrated a narrower distribution, with values spanning from a minimum of 0.000 to a maximum of 0.289, a reduced mean of 0.032, and a lower standard deviation of 0.060, suggesting a decline in both the average trading volume and variability following the stock split. The preliminary test outcomes indicate a noticeable variation in trading volume activity (TVA) among the pre- and post-share split durations, as reflected by a decline in both the mean and standard deviation values. However, to determine whether this observed difference is statistically significant, further inferential analysis will be conducted using appropriate hypothesis testing procedures.

The descriptive statistical analysis of abnormal returns prior to the share split reveals a standard deviation of 0.014, with values ranging from a minimum of -0.038 to a maximum of 0.289, and a mean return of 0.006. In contrast, abnormal returns in the post-share split duration exhibited greater variability, as indicated by a higher standard deviation of 0.106, alongside an expanded range by -0.041 to 0.802, and an increased mean of 0.012. These outcomes suggest a potential shift in return behavior following the corporate action, warranting further inferential examination to determine the statistical significance of these observed differences. The observed increase in both the mean and standard deviation of abnormal returns in the post-share split duration suggests a heightened level of return volatility as well as an overall rise in average returns, indicating a potential difference among the pre- and post-split durations. To rigorously evaluate the statistical significance of this observed change, the Wilcoxon Signed-Rank test will be employed, given its suitability for analyzing paired data that do not conform to a normal distribution.

Normality Test

Table 4. Outcome of Normality Test of TVA and Abnormal Return

Tests of Normality	Shapiro-Wilk Statistic	Sig.
TVA before	,422	,000
TVA after	,577	,000
AR before	,958	,037
AR after	,229	,000

Sources: Data processed by SPSS 27 version

The outcomes of the normality test indicated that the significance values for trading volume activity (TVA) in both the pre- and post-share split durations were 0.000. Likewise, the significance levels for abnormal returns were 0.037 before the split and 0.000 after the split. As all observed p-values fell below the 0.05 threshold, the assumption of normality was not met for any of the variables under investigation. Consequently, the Wilcoxon Signed-Rank test—a nonparametric statistical method appropriate for non-normally distributed paired data—was selected to conduct further analysis on the differences among the pre- and post-event observations.

Wilcoxon Signed Rank Test

Table 4. Outcome of the Wilcoxon Signed-Rank Test

	TVA before - TVA after	AR before- AR after
Z	-1,324 ^c	-3,291 ^c
Asymp. Sig. (2-tailed)	,186	,001

Sources: Data processed by SPSS 27 version

The outcomes of the Wilcoxon Signed-Rank test revealed a Z value of -1.324 for Trading Volume Activity (TVA), with an associated asymptotic significance (2-tailed) of 0.186. In contrast, the test yielded a Z value of -3.291 for abnormal returns, accompanied by an asymptotic significance (2-tailed) of 0.001. Interpreted at the 5% significance level, these outcomes indicate that there is no statistically significant difference in TVA before and after the share split events occurring in Indonesia between 2019 and 2024. However, a statistically significant difference is observed in abnormal returns over the same duration, suggesting that share splits may influence return behavior more directly than trading activity.

Discussion

Analysis of Trading Volume Activity Pre and Post-Share Split

The outcomes by the differential analysis of trading volume activity (TVA) indicate the absence of a statistically significant difference among the pre- and post-share split durations in Indonesia during the 2019–

2024 timeframe. This outcome may be partially explained by the broader macroeconomic disruptions associated with the COVID-19 pandemic, particularly during the years 2020 to 2021, which likely constrained investor behavior and led to a reduction in trading activity across the capital market (Haryanto & Lina, 2023). The pandemic adversely impacted company operations, further contributing to this cautious investor behavior (Wicaksono & Adyaksana, 2021). This situation was perceived as negative news, leading to increased investor hesitation and caution during the COVID-19 pandemic. Moreover, concerns about future uncertainties prompted individuals to prioritize saving money as an emergency fund. Additionally, the 2024 general election further influenced investor behavior, as many opted to hold off on investments and adopt a wait-and-see approach until the election concluded. The success of executive and legislative candidates often leads to policy changes that can influence capital market dynamics (Zoraya et al., 2020). Such uncertainty prompts investors to limit their investment activities to mitigate risks associated with the election duration. Consequently, announcements of share splits occurring during the COVID-19 pandemic and the 2024 general election were met with caution, as investors opted to closely monitor the situation rather than respond actively to the news.

These outcomes contradict signaling theory, which posits that share splits serve as positive signals intended to attract more investors (Inayah & Sartika, 2023). However, in the context of macroeconomic uncertainty, investors did not perceive the share split as a favorable indicator of profitability. Furthermore, according to the compelling price range hypothesis, firms undertake share splits to adjust stock prices into an effective range, thereby making shares more accessible to small investors (Nehauser & Thompson, 2016). However, the outcomes demonstrated no significant change in trading volume activity (TVA), suggesting that the effective share price did not enhance investment interest among potential investors. This outcome aligns with behavioral finance theory, which posits that investors tend to avoid uncertain risks during periods of macroeconomic instability. Consequently, investors may have been unresponsive to the company's share split signal, resulting in no meaningful difference in TVA following the share split. The lack of a statistically significant difference in trading volume activity (TVA) before and after the share split, as observed in this research, aligns with the outcomes of Haryanto and Lina (2023), Kadiwala and Prajapati (2020), Pangesti et al. (2020), and Putri and Sihombing (2020), all of whom similarly reported no substantial changes in TVA in the context of share split events. However, this outcome stands in contrast to the empirical evidence presented by Hidayati and Putri (2022), Muna and Khaddafi (2022), and Trisanti (2020), whose studies identified statistically significant shifts in TVA following share splits, thereby highlighting the ongoing debate in the literature regarding the extent to which stock splits influence market liquidity.

Analysis of Abnormal Return Pre and Post-Share Split

This research revealed significant differences in abnormal returns before and after share splits in Indonesia from 2019 to 2024. The observed increase in abnormal returns following the share split suggests that investors responded positively to this information. Such a response suggests that share split announcements can significantly impact investor behavior and decision-making (Yuniati et al., 2019). Furthermore, the announcement of a share split can enhance investor confidence by signaling strong firm performance and promising prospects (Riantani & Hendayana, 2020). This effect was particularly pronounced during the post-COVID-19 economic recovery period, coinciding with improvements in Indonesia's overall economic conditions, which made the share split perceived as positive news. This outcome supports signaling theory, which suggests that corporate managers use share splits to boost investor confidence and signal strong company performance. An announcement of a share split reflects management's optimism about the company's prospects. Moreover, these outcomes are consistent with behavioral finance perspectives, which propose that corporate disclosures like share splits can psychologically influence investors, potentially leading to irrational decision-making (Addinpujoartanto & Darmawan, 2020). Investors typically exhibit risk-averse behavior, and the announcement of a share split—which lowers stock prices and reduces perceived risk—can trigger investor overreaction, leading to market anomalies reflected in abnormal returns following the split. These outcomes align with those of Yuniati et al. (2020) and Pangesti et al. (2020), who observed significant differences in abnormal returns following the share split, attributed to increased investor confidence in the company. Furthermore, the share split influenced investors to adjust their investment decisions. Nevertheless, the outcomes

of this research contrast with those reported by Trisanti (2020), Naftalia et al. (2024), and Almeida et al. (2024), whose analyses revealed no statistically significant differences in abnormal returns surrounding share split events. These researchers attributed the absence of market reaction to factors such as diminished investor confidence in corporate performance and the possibility that investors had already anticipated the share split announcements, thereby reducing the informational impact of such corporate actions.

CONCLUSION

The outcomes demonstrate a statistically significant difference in trading volume activity (TVA) before and after the share split. However, this outcome appears incongruent with the expectations derived by signaling theory and the compelling price range hypothesis, both of which suggest that share split announcements should elicit heightened investor interest and trading activity. The muted market response observed in this research may be attributable to prevailing macroeconomic uncertainties, notably those arising by the COVID-19 pandemic and the political volatility associated with the 2024 general elections, which may have tempered investor enthusiasm and attenuated the anticipated effects of the share split. Therefore, the effectiveness of share splits in attracting investors and enhancing liquidity during the 2019–2024 period appears limited. Conversely, abnormal returns demonstrate a significant difference between the pre- and post-share split phases. This outcome aligns with signaling theory and behavioral finance, which suggest that share splits lower stock prices and perceived risk, thereby encouraging small investors to purchase shares of fundamentally sound companies.

This research suggests that prior to undertaking a share split, companies should carefully evaluate various factors, particularly macroeconomic conditions such as pandemics and general elections. Additionally, firms should announce share splits in conjunction with positive performance reports to reinforce investor confidence. Based on the outcomes, while share splits may yield short-term advantages through abnormal returns, investors are advised to carefully consider factors such as the broader economic environment and the company's fundamental performance to optimize their potential gains.

This research is constrained by several limitations, most notably the temporal context in which the observations were conducted. The research duration overlaps with two major external events—the COVID-19 pandemic and the 2024 general elections—which may have introduced atypical market dynamics and investor behavior, thereby limiting the extent to which the outcomes can be generalized to more stable capital market conditions. Consequently, it is recommended that future research conduct observations over different time durations with an extended event window exceeding 15 days. Furthermore, it is advised that future research incorporate additional variables that capture market reactions following share split events, taking into account other concurrent occurrences during the same duration. This approach is hoped to enhance the depth of understanding and offer more meaningful implications for relevant stakeholders.

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