Digital Innovation : International Journal of Management

E-ISSN: 3047-9053
P-ISSN: 3047-9681

Trading Volume Analysis and Price Before Share and After Stock Split and the implications to Liquidity Indonesian Capital Market
(Study Empirical in Companies Listed on the IDX in 2022 – 2024)

Wahyu Anggraini[1]*, Anna Christin Silaban[2], Akhmad Arfan[3]

[1-3]Fakultas Ekonomi dan Bisnis, Universitas Lighthouse Dunia Jakarta, Jl. Raya Jatiwaringin 144 Pondok Gede Bekasi, Indonesia 17411

Corresponding Author: Wahyu.anggraini@mercubuana.ac.id[1]

Abstract. Research on stock splits has been widely conducted in Indonesia and internationally, as stock splits are considered an important corporate action that can influence investor perception and stock performance. However, the motivations and consequences of stock splits remain diverse, ranging from efforts to increase stock liquidity, adjust market price ranges, attract new investors, or signal positive corporate prospects. This study aims to empirically reanalyze the effect of stock splits on trading volume and stock prices of companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. Specifically, the research investigates whether significant differences exist between trading activities and stock price levels before and after the stock split event. The data used in this study are historical in nature, consisting of stock split announcements, daily trading volume, and stock price movements surrounding the event period. To test the hypotheses, this research employs both the paired-sample t-test and the Wilcoxon signed-rank test as statistical tools. These tests are appropriate because they allow for the comparison of two related samples, namely the stock performance indicators before and after the split. The selection between the two methods depends on the distribution of the data, where the paired t-test is used if the data is normally distributed, while the Wilcoxon test is applied if the normality assumption is not met. This study is categorized as moderate TKT (Technology Readiness Level 4–6) because it uses secondary historical data and focuses on empirical statistical analysis rather than experimental or simulation-based approaches. By examining stock split events within the specified period, this research contributes to the understanding of whether stock splits in Indonesia are primarily cosmetic in nature or if they generate real economic impacts on liquidity and stock valuation. The findings are expected to provide useful insights for investors, market analysts, and policymakers in assessing the relevance and effectiveness of stock splits as a corporate strategy.

Keywords: Indonesia Stock Exchange (IDX); Statistical Test; Stock Price; Stock Split; Trading Volume.

Received: June 26,2025
Revised: July 28,2025
Accepted: August 31,2025
Published: September 04,2025
Curr. Ver.: September 04,2025

1. INTRODUCTION

Stock split is Wrong One action corporations that often done by company For increase liquidity its shares with method lower price shares per sheet without change fundamental values of the company . In general theory , stock split can interesting more many retail investors Because price share become more affordable , so that increase trading volume . In the Indonesian capital market , the stock split phenomenon is increasingly often happen , especially on company with price shares that have been high . The Indonesia Stock

Exchange (BEI) recorded that a number of company big do a stock split on 2022–2024 for increase investor participation and guard liquidity share .

However , the impact of stock split on trading volume share Still still continues . Some study find that stock splits increase liquidity And Power pull shares , while others show that the effect only temporary .

Study This aim For analyze changes in trading volume before And after the stock split companies listed on the IDX in 2022–2024. With use event study approach and method statistics , research This will test does stock split have an impact significant to liquidity share And How investor reaction to action corporation the .

Research conducted by Rofiah et al (2019) showed No there is difference between trading volumes company before And after carry out a stock split. Likewise with Dedy Januar's research et al (2024) and Moch . Sa'dun Mustafa and Agustina Widodo (2024). On the other hand Tia Yuliawati's research et al (2024) and Andri Hirmawan (2020) shows that There is differences in trading volume between before And after solving .Based on description on background behind above , then writer interested For do return study with title " Trading Volume Analysis And Price Share Before Share And After Stock Split and The implications To Liquidity Indonesian Capital Market (Study Empirical (in Companies on the IDX in 2022-2024)

Based on background behind previously , then writer formulate problem study This as following : 1. What is There is differences in trading volume share before And after the stock split? 2. What is it? There is difference price share before And after the stock split?

2. THEORITICAL REVIEW

Agency Theory

Agency theory is a theory that discusses the relationship between the principal (the person who gives the task) and the agent (the person who performs the task). This theory was developed by Jensen & Meckling (1976) and is often used in economics, management, and accounting to explain the conflict of interest between the party who delegates the task and the party who carries out the task. The main concept in agency theory is based on three main concepts: principal and agent, agency problems, and agency costs.

A principal is the party who grants authority or duties (e.g., shareholders, company owners), while an agent is the party who carries out duties on behalf of the principal (e.g., managers, company executives). In agency problems, conflict arises because agents often have different interests than the principal. Agents may act in their own interests rather than the principal's, leading to information asymmetry and moral hazard. The concept of agency costs emerged to reduce conflict; principals often incur costs, such as:

Monitoring costs, for example audits and financial reports, incentive costs, for example giving bonuses to agents to act in accordance with the principal's interests, and residual costs, namely losses due to differences in interests that cannot be completely eliminated.

In a company: Shareholders (principals) entrust management to the CEO (agent). If the CEO prioritizes personal gain, such as increasing salaries without improving company performance, this creates an agency problem. In government: The people, as principals, elect public officials as agents to run the government. However, if officials prioritize personal or group interests, corruption and power struggles occur. To address this conflict, several mechanisms can be used, namely providing performance-based incentives (bonuses, shares, stock options), increasing transparency and oversight systems (audits, periodic reports), and good corporate governance mechanisms.

Signaling Theory

Signaling Theory explains how one party (the signaler) provides information to another party to reduce information asymmetry. This theory was first developed by Michael Spence (1973) in the context of the labor market, but has since been widely applied in economics, management, and finance.

The main concepts in Signaling Theory are the sender, the party with more information and wanting to convey a signal to others. Companies announce high profits to attract investors. The receiver, the party who receives and interprets the signal to make decisions. Information asymmetry occurs when one party has more information than the other. Signals are used to reduce this uncertainty. Signals must be credible and difficult to counterfeit to be effective.

Signaling Theory can be applied in finance and investment, such as dividends as a signal. Companies that pay high dividends demonstrate financial stability, attracting investors. If a company buys back its shares, this can signal that management believes the stock price will rise in the future.

Signaling Theory explains how information can be communicated effectively to reduce distance and information asymmetry. In various fields, signals are used to build trust and influence the decisions of others.

Stock Trading Volume

Stock trading volume indicates the number of shares traded within a specific time period. According to signaling theory, significant changes in trading volume can signal investors about market sentiment, company prospects, or hidden information not yet revealed in the stock price. Trading volume signals high trading volume; if trading volume increases drastically, this can signal important information influencing investor decisions. If many investors buy a stock simultaneously, this could signal good news or positive expectations about the company's performance. Conversely, if trading volume is high but the price falls, this could indicate fear or a distribution of shares by large investors. Low trading volume, if low, could indicate investor uncertainty or a lack of new information to attract market attention. Stocks with low trading volume tend to have low volatility but are also less liquid.

Stock Split

A stock split is a company's policy of dividing its shares into more shares with a lower nominal value, without changing the total market capitalization. Stock splits are often seen as a positive signal that a company believes its stock price will continue to rise in the future. Investors view stock splits as a sign that management is optimistic about the company's business prospects, making them more likely to purchase the shares. If a company implements a 1:2 stock split, it means that every old share is split into two new shares at a lower price per share. This makes the stock more liquid and affordable, attracting more investors.

Stock price

A stock price is the market value assigned to a single share of a company's stock. This price fluctuates depending on factors such as company performance, economic conditions, market supply and demand, and investor sentiment. Stock prices before and after a stock split depend on the company's split ratio. A stock split can increase liquidity. A lower stock price can attract more investors. A stock split also doesn't change the investment value; it's the price per share that changes, not the total value of ownership. A stock split can have a positive effect on the market, as some investors perceive a stock split as a sign of corporate optimism.

Framework Thinking

Based on The main points of the theory above can be concluded framework think following This :

Hypothesis .

Based on research above, the hypothesis that will be proposed for testing is:

H1 : There is no change in trading volume before and after the stock split

H2: There is no change in stock prices before and after the stock split.

3. METHOD

Time and Place of Research

The author conducted research on several companies listed on the Indonesia Stock Exchange (IDX) for the 2022–2024 period that underwent stock splits, spanning from January 2025. The data used in this study were financial data obtained from the official website of the Indonesia Stock Exchange (IDX), www.idx.co.id, and the websites of each company.

Research Design

The research design used in this study is the descriptive method and the explanatory causal method. The descriptive method is a problem-solving process carried out by describing the state of an object or research object. This object can be a person, institution, society, or other people at the present time based on the facts that appear to exist. According to Sugiyono (2005: 21), the descriptive method is a method that describes or analyzes research results but is not used to draw broader conclusions. The explanatory causal method is a research method used to determine the influence of one or more independent variables (independent variables) on the dependent variable (dependent variable).

Data collection technique

The data collection technique used was secondary data collection, where data was not obtained directly from the object but from other sources. The data in this study were obtained from the official website of the Indonesia Stock Exchange, www.idx.co.id, and the official websites of each company for the period 2022-2024. This study also utilized various journals, articles, and reference books as references.

Population

The population in this study were companies listed on the Indonesia Stock Exchange (IDX) during the 2022-2024 period that conducted stock splits and published their reports on www.idx.co.id. The research sample was determined using purposive sampling, namely companies that met the following criteria:

(1) Listed on the. (2) Indonesia Stock Exchange for a two-year period, namely 2022 and 2024. (3) Announce stock distribution in the form of stock split in 2022 and 2024. (4) Stock trading volume and stock price data are available at T-5 and T+5. (5) The stock split announcement date is available.

4. RESULTS AND DISCUSSION

Table 1. Statistics Descriptive

	N	Minimum	Maximum	Means	Deviation Standard
Price t-5	33	400	283000	13283.03	48657.642
Price t+5	33	248	29025	1952.61	4981.028
Trading Volume t-5	33	1300	48595300	5495966.67	11404130.867
Trading Volume t+5	33	900	85477100	11746881.82	20105896.847
N valid (based on list)	33				

Hypothesis Testing: Hypothesis testing using descriptive statistics and the two-mean difference test (paired sample test)

Descriptive Statistics

Descriptive statistics are used to find out the description of the standard deviation, average, minimum, and maximum of the variables studied.

From results calculation statistics descriptive can depicted variables as following:
(1) Variable Before Stock Split can described that mark minimum 400 while the maximum value is 283000. The overall average is 13283.03 and the standard deviation is 48657.642. (2) Variable After Stock Split can described that mark minimum 248while the maximum value is 29025. The overall average is 1952.61 and the standard deviation is 4981.028 (3) Variable Before Stock Split can described that mark minimum 1300 while the maximum value is 48595300. The overall average is 5495966.67 and the standard deviation is 11404130.867 (4) Variable After Stock Split can described that mark minimum 900 while the maximum value is 85477100. The overall average is 11746881.82 and the standard deviation is 20105896.847.

Data Normality Test

Table 2. Results of Data Normality Test

	Shapiro-Wilk		
	Statistics	df	Signature.
Price t-5	0.234	33	.000
Price t+5	0.317	33	.000
Trading Volume t-5	0.557	33	.000
Trading Volume t+5	0.655	33	.000

The normality test results showed a significance level of <0.05 for each variable, indicating that the data was not normally distributed. Therefore, a non-parametric test was used to compare the two averages. To compare two paired data sets, the Wilcoxon Signed-Rank test was used.

Test of 2 Averages (Test Sample In pairs)

The difference test of 2 means used in this study is the Wilcoxon Signed-Rank test, which is a non-parametric statistical test used to compare two paired (independent) data groups when the data does not meet the assumption of normality.

The results of the Wilcoxon Signed-Rank test are as follows:

Table 3. Results Wilcoxon Signed-Ranks Price Test Share

		N	Average Rating	Amount Ranking
Price t+5 - Price t-5	Ranking Negative	32 years old	17.47	559.00
	Ranking Positive	1 b	2.00	2.00
	Tie	0 seconds		
	Total	33		

a. Price t+5 < Price t-5
b. Price t+5 > Price t-5
c. Price t+5 = Price t-5

	Price t-5 - Price t+5
Z	-4.976 b
Assimilation (2-tailed)	.000

a. Test Ranking Wilcoxon Signed
b. Based on ranking positive .

From the table can explained that from 33 samples on price before And After the stock split, there were 32 samples that experienced decline And there is 1 sample that experienced increase . Because mark significance price shares < of 0.05 So it can be concluded that there is a difference in share prices before and after the stock split announcement.

Table 4. Results Wilcoxon Signed-Ranks Test Trading Volume

		N	Average Rating	Amount Ranking
Trading Volume t+5 – Trading Volume t-5	Ranking Negative	10 years	13.05	130.50
	Ranking Positive	23 b	18.72	430.50
	Tie	0 seconds		
	Total	33		

a. Trading Volume t+5 < Trading Volume t-5
Trading Volume t+5 > Trading Volume t-5
Trading Volume t+5 = Trading Volume t-5

	Trading Volume t+5 - Trading Volume t-5
Z	-2,680 b
Assimilation (2-tailed)	.007

a. Test Ranking Wilcoxon Signed
b. Based on ranking negative .

From the table can explained that from 33 samples on trading volume share before And After the stock split there were 10 samples that experienced this decline And there are 23 samples that experienced increase . Because mark significance of trading volume shares < of 0.05 So it can be concluded that there is a difference in stock trading volume before and after the stock split announcement.

5. CONCLUSION AND SUGGESTIONS

After carrying out the analysis steps, several conclusions were obtained, namely (1) There were changes in prices share before And solution share . (2) The existence of Changes in stock trading volume before and after a stock split (3) With a stock split, stock liquidity can increase because stock prices become more affordable for investors (4) Stock splits have a positive impact on a company because they are a sign/signal to investors that the company is serious about improving business performance. From the results of this study, it is necessary to re-examine (1) whether there is other factors that influence change price and trading volume share besides than is there a stock split (2) ? after stock split price share will increased (in term short / term length) for can conclude whether stock split strategy is good strategy For increase performance share The results of this study are expected to help investors become more discerning about stock split signals in Indonesia , resulting in more informed decisions about buying and selling shares.

LIST OF REFERENCES

As'ari, A. G. P., & Pertiwi, T. K. (2021). Fundamental ratios to profit growth: Firm size as a moderating variable. Journal of Information Systems, Applied Management, Accounting, and Research, 5(1), 261–270. https://doi.org/10.52362/jisamar.v5i1.382

Brigham, E. F., & Houston, J. F. (2019). Financial management. Jakarta: Erlangga.

Connelly, B. L., Certo, T., Ireland, D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. Journal of Management, 37(1), 39–67. https://doi.org/10.1177/0149206310388419

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. Australian Journal of Management, 16(1), 49–64. https://doi.org/10.1177/031289629101600103

Hirmawan. (2020). Comparative analysis of abnormal returns and trading volume activity before and after the stock split in the 2015–2016 period. Journal of Economics and Business, 13(2), 39–52. https://doi.org/10.31942/akses.v13i2.3240

Januar, Putranto, & Susanto. (2024). Analysis of the effect of stock split and reverse stock split on abnormal returns (Case study of companies listed on the Indonesia Stock Exchange for the 2017–2018 period). Jurnal Masharif al-Syariah: Jurnal Ekonomi dan Perbankan Syariah, 9(2), 909–919.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. Journal of Financial Economics, 3, 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Jogiyanto, H. (2014). Portfolio theory and investment analysis (10th ed.). Yogyakarta: BPFE.

Kasmir. (2015). Financial statement analysis. Jakarta: Rajawali Persada.

Maksimovic, V., & Zechner, J. (1991). Debt, agency costs, and industry equilibrium. Journal of Finance, 46(4), 1619–1644. https://doi.org/10.2307/2328566

Munawir, S. (2010). Financial statement analysis (4th ed.). Yogyakarta: Kemerdekaan.

Zuhri, M., & Novitasari, R. (2023). Stock split and its implications for abnormal returns, stock prices, and stock trading volume 2016–2019. Journal of Management and Banking. https://doi.org/10.55963/jumpa.v10i1.509

Mustofa, & Widodo. (2024). Comparison of stock prices, TVA, and abnormal returns before and after a stock split. Revitalization: Journal of Management Science, 13(2). https://doi.org/10.32503/revitalisasi.v13i2.6502

Ross, S. A., Westerfield, R. W., Jordan, B. D., Lim, J., & Tan, R. (n.d.). Fundamentals of corporate finance. Singapore: McGraw Hill Education.

Ross, S. A. (1977). Determining financial structure: An incentive signaling approach. Bell Journal of Economics, 8, 23–40. https://doi.org/10.2307/3003485

Yunitasari, S., Mursalin, S., & Stiawan, E. (2024). Analysis of the impact of stock split on stock trading volume and stock returns on the Indonesia Stock Exchange. Jurnal Edunomika, 8(4). https://doi.org/10.29040/jie.v8i4.16165

Spence, M. (1973). Labor market signals. Quarterly Journal of Economics, 87, 355–374. https://doi.org/10.2307/1882010

Weston, J. F., & Copeland, T. E. (2010). Financial management (Vol. 2). Jakarta: Binarupa Aksara Publisher.

Indonesia Stock Exchange. (n.d.). Indonesia Stock Exchange. https://www.idx.co.id