

THE EFFECT OF TRADING VOLUME, TRADING FREQUENCY, AND ORDER IMBALANCE ON THE STOCK PRICE VOLATILITY OF LQ45 COMPANY IN 2017 - 2019

Siti Hamidah^{1*}, Cepi Pahlevi², Andi Aswan²

¹Universitas Hasanuddin; sitihamidah2797@gmail.com

²Universitas Hasanuddin; cepipahlevi@gmail.com

³Universitas Hasanuddin; andiaswamp@yahoo.com

Abstract

The Effect of Trading Volume, Trading Frequency, and Order Imbalance on the Stock Price Volatility of LQ45 Company in 2017-2019 (Supervised by Cepi Pahlevi and Andi Aswan). The volatility of a stock will also reflect the risks and opportunities that investors can obtain. The Risks can come from the external of the company, and the specific risks are called non-systematic risk. Non-systematic risk can be avoided through diversification, while systematic risk is unavoidable, and every company will definitely be affected. Besides paying attention to risk, investors also need to pay attention to other indicators in technical analysis that will affect stock price volatility, such as trading volume, trading frequency, and the absolute differences between demand and supply volume (order imbalance). These indicators will assist investors in making decisions to make transactions in the capital market. This research aimed to analyze the effect of trading volume, trading frequency, and order imbalance on the stock price volatility of LQ45 company in 2017-2019. The research design used in this research was quantitative research. This research was conducted on LQ45 company in the IDX. The population in this research was all the companies listed on LQ45 in 2017-2019. The sampling technique used the purposive sampling technique. The results showed that there was an effect of trading volume, trading frequency, and order imbalance on stock price volatility of LQ45 company in 2017-2019; therefore, it is recommended that the potential investors who want to invest in stocks need to pay attention to the factors that influence stock price volatility, those are trading volume and orders imbalance because those factors are proven to have a significant effect on stock price volatility in companies listed in the LQ45 index.

Key words: volatility, trading volume, frequency, order imbalance

INTRODUCTION

Stock price volatility occurs due to the new incoming information into the market or stock exchange, and as a result, market participants reassess the assets they traded. In an efficient market, the price level will adjust quickly in order that the formed price reflects the new information. (Anton, 2014). The volatility of a stock will also reflect the risks and opportunities that investors can obtain. The relationship between volatility and the return of a stock is following the principle of “*high-risk, high-return*”, which means that the higher the price volatility of a stock, the higher the risk and the rate of return is. Risks can come from the external of the company, such as exchange rates, inflation, and market conditions, which are called systematic risks. The specific risks are called non-systematic risk. Non-systematic risk can be avoided through diversification, while the systematic risk is unavoidable, and every company will definitely be affected. Besides paying attention to risk, investors also need to pay attention to other indicators in technical analysis that will affect stock price volatility, such as trading volume, trading frequency, and the absolute differences between demand and supply volume (order imbalance). These indicators will assist investors in making decisions to make transactions in the capital market (Agustinus, 2013).

Some previous studies that have been conducted related to the stock trading volume and systematic risk or stock price volatility, such as (Tiara, 2018), (Rizqin & Muhammad, 2017), (Dewi & Suaryana, 2016) resulted that the stock trading volume has a positive and significant impact on the stock price volatility and the stock trading frequency has a high relationship with the systematic

risk on the European Stock Exchange. Meanwhile, (Rahmawati, 2017) resulted that the stock trading volume has no significant effect on the stock price volatility.

However, there were some problems in several companies listed on the LQ45 index in 2013 and 2014; as stated (I Wayan, 2017) showed that the high trading volume does not guarantee the high volatility. This can be seen in 2014, PT Astra Agro Lestari Tbk. experienced an increase in stock trading volume by 27 million, but this made the volatility decrease by 0.8%. PT. Astra International Tbk. experienced an increase in stock trading volume by 442 million, but had a decrease in stock price volatility by 0.8%. PT. PP London Sumatra Tbk. experienced an increase in stock trading volume by 1,439 million, but experienced a decrease in stock price volatility by 2%. PT. Bank Central Asia Tbk. experienced an increase in stock trading volume by 361 million, but had a decrease in share price volatility by 0.03%. It shows that an increase in the stock trading volume does not guarantee the high or low volatility of a stock. All informations or signals can be obtained on the Indonesia Stock Exchange (IDX). In the IDX, the selected 45 companies are classified in the LQ45 index. The LQ 45 index is a combination of stocks with leading categories and consists of 45 companies with stable incomes selected based on specific criteria so that companies in the LQ45 index can be good estimators. Therefore, the researcher was interested in examining the effect of the trading volume, trading frequency, and order imbalance on the stock price volatility in LQ45 company in 2017 - 2019.

LITERATURE REVIEWS

A. Stock Price Volatility

Volatility is a statistical measurement of price fluctuations over a certain period (Firmasnyah, 2016). The measure shows the decline and increase in prices in a short period and does not measure the price level, but the degree of variation from one period to the next. Considering that the standard deviation can represent volatility, the public also perceives volatility as a risk. The higher the volatility level, the higher the uncertainty level of the stock returns obtained. One of the ten principles of financial management states that investors will not want to take a higher risk unless they can get compensation in a higher return (*high risk, high return*) (Keown, 2013). Stock price volatility is the distance between the fluctuations in stock prices influenced by capital market information. The increase in stock price volatility means the possibility of fluctuating stock prices is also getting more significant. Stock price volatility occurs due to the new incoming information into the market or stock exchange. In an efficient market, the price level will adjust rapidly so that the price formed reflects new information. Stock price volatility concerns market participants to determine the right strategy for investing (Krisna, 2016). In other words, this theory states that stock price moves in random and unpredictable directions. So, an investor cannot get a return that exceeds the market return without taking on more risk.

B. Trading Volume

Stock trading volume is the ratio between the number of shares traded in a certain period and the number of outstanding shares. The number of outstanding shares can be known because the number of shares is the same as when the company issued shares plus shares listed later. An increase in the volume of demand and supply of shares will cause stock prices to fluctuate even more or increase the volatility. It shows the tendency of stock trading volume to affect stock price volatility positively (Agustinus, 2013). The higher the stock trading volume and frequency, the higher the liquidity is. Therefore, if the trading frequency of a stock is getting bigger, then the stock is considered as an actively traded stock. The effect of trading volume and stock price volatility can be seen in how much data is traded on the stock exchange. With this, investors can make investment decisions from information on stock trading volume, which can change at any time. It is because there are so many factors affect the trading volume of investors, both individually and rationally trading. Stock trading volume is one of the information or signals that affect the stock price

volatility. Therefore, the high and low stock trading volume is often a consideration for an investor in investing. In various theories, the model of the relationship between volume and volatility is that the volume affects volatility because volume reflects the information received by market participants. Therefore, trading volume has a positive relationship with stock price volatility. Investors will be more likely to hold on to their shares if there is no information about stocks, so the trading volume decreases, resulting in low volatility. Vice versa, if investors receive a lot of information about stocks, investors will sell a lot of theirs, increasing the trading volume. As a result of the increase in trading volume, the volatility will also increase (I Wayan, 2017).

H₁: Trading volume has a positive and significant effect on the stock price volatility of LQ45 Company in 2017 – 2019.

C. Trading Frequency

Trading frequency is also an indication for market participants in making transactions. Therefore, if the trading frequency of a stock is more significant, then the stock price volatility caused by mechanisms in the secondary market will increase. It indicated that the stock trading frequency is positively related to stock price volatility. The stock trading frequency dramatically affects the number of outstanding shares, if the number of trading frequencies is large, the stock will be declared as the most actively traded stock and indirectly affects the trading volume of the stocks. Stocks with a significant trading frequency are thought to be influenced by very active stock transactions. This is due to a large number of investors' interests. Therefore, the increasing demand for stocks will indirectly increase the trading frequency. Trading frequency describes the number of an issuer's stocks traded in a certain period. Market participants' interest in certain trading stocks can be seen here. Frequency is positively related to the number of stockholders, which means that the frequency describes whether the stocks are active in market trading.

The effect of trading frequency and stock trading volatility can be seen on the number of buying and selling transactions that occur at a particular time. Trading frequency can be used to see the liquidity of a stock. Stocks with a high trading frequency indicate that they are actively traded in the capital market. The high frequency also shows the high interest of investors in the stock. An increase will usually follow high interest from investors in the number of requests for shares. An increase in demand for shares will indirectly increase the trading frequency. The increasing frequency of trading causes market interaction in trading which causes stock prices to move up or down, increasing stock price volatility. Based on this description, it can be concluded that trading frequency affects stock price volatility (Wawan, 2016).

H₂: Trading Frequency has a positive and significant effect on the stock price volatility of LQ45 Company in 2017 – 2019.

D. Oder Imbalance

Order imbalance is also known as net order flow, which is the absolute difference between the bid price volume and the asking price per share for each day. In Chan and Fong research, order imbalance is proven to affect stock price volatility. Similar to the research conducted by Chordia, it showed that order imbalance has a strong influence on past market returns, as evidenced by a contrarian attitude. The study also stated that order imbalance affects the liquidity and the rate of return at the aggregate market level. Volatility is affected by net order inflow. Because market participants cannot distinguish supply or demand orders from informed or liquidity traders, they will interpret information from net order inflow. In the capital market, the formation of prices is a tug of war between the power of buyers and sellers. Prices will rise if there is excess demand and will fall if there is excess supply. Then, the order imbalance (measured by the absolute difference between supply and demand volumes) hypothesized will affect stock price volatility. The order imbalance states that more in-depth information is related to the volume of stock trading and the stock trading frequency because investors' interest in a stock can be known. The composition of the

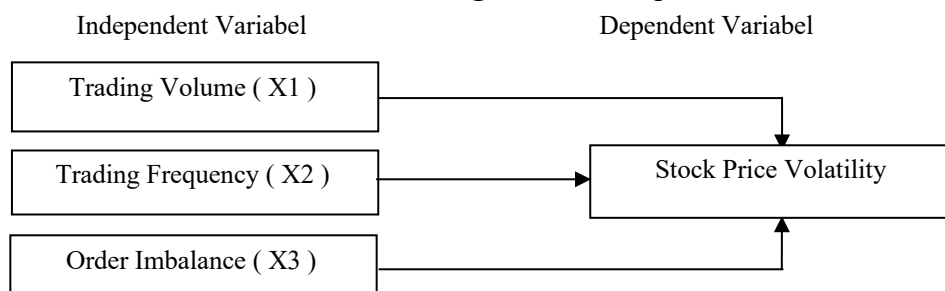
total value of the transaction volume for a stock can be determined by the proportion of demand and supply orders through order imbalance. Order imbalance indicates investor interest in a stock, where this interest will affect stock price volatility caused by emerging market mechanisms (Agustinus, 2013).

Order imbalance is also known as net order flow, which is the absolute difference between the bid price volume and the asking price per share for each day. In the capital market, the formation of prices is a tug of war between the power of buyers and sellers. Prices will rise if there is excess demand and will fall if there is excess supply. Then, the order imbalance (measured by the absolute difference between supply and demand volumes) hypothesized will affect stock price volatility in Indonesia stock exchange (IDX). Volatility is affected by net order inflow. Because market participants cannot distinguish supply or demand orders from informed or liquidity traders, they will interpret information from net order inflow. Based on this description, it can be concluded that order imbalance affects stock price volatility (Wawan, 2016).

H₃: Order Imbalance has a positive and significant effect on the stock price volatility of LQ45 Company in 2017 – 2019.

Conceptual Framework

Figure 1. Conceptual Framework



Note :

: Researched variables

RESEARCH METHOD

Location and Research Design

This research was conducted on LQ45 Company through the website www.idx.co.id, and used quantitative research. According to (Sugiyono, 2017), quantitative research methods are research methods based on the philosophy of positivism, used to examine specific populations or samples, collect data using research instruments, and analyze quantitative or statistical data to test established hypotheses.

Population and Sampel

The population is a generalization area consisting of objects or subjects with specific qualities and characteristics determined by researchers to study and draw conclusions (Sugiyono, 2016). The population in this research were all companies included in LQ45 Company in 2017 – 2019. This research took 34 companies listed in the LQ45 Index in 2017-2019 as samples using the *purposive sampling method*, that is, sampling with the criteria or considerations set.

Data Collection Method

The data needed was secondary data. Secondary data is data obtained from other parties in ready form and published for the public.

Data Analysis Method

In analyzing the data, this research used the multiple linear regression method. Multiple linear regression is an analysis to determine the effect of more than one independent variable on the dependent variable. Before carrying out linear regression analysis, it must be tested using the classical assumption test to ensure that the regression model used does not have normality problems. If it is fulfilled, then the analysis model is feasible to use. The classic assumption test in this research was the normality test and the multicollinearity test. Regression analysis in statistics is one method to determine the causal relationship between one variable and others. Multiple linear regression equations can be formulated as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

notes:

Y = Stock Price Volatility

α = Constant

X1 = Trading Volume

X2 = Trading Frequency

X3 = Order Imbalance

$\beta_1, \beta_2, \beta_3$ = Regression Coefficient

e = Standard Error

Meanwhile, to determine how much influence the independent variables partially have on the dependent variable, the t-test is used. And simultaneously, the F-test is used.

EMPIRICAL RESULTS

Descriptive Statistics

Table 1. Descriptive Statistics

Variable	Maximum	Minimum	Mean	Standard Deviation
Trading Volume	31.672,025.486	26.7871.831	504.368	654.415
Trading Frequency	1.263.777	20.591	436.163,03	255.196, 463
Order Imbalance	0,8566	0,0129	0,2232	0,1819
Stock Price Volatility	0,3272	0,0659	0,1637	0,0496

Source: processed data, 2022

Based on the descriptive statistical data above, it is known that the minimum value of stock price volatility (Y) is 0.0659, and the maximum is 0.3272. The result indicates that the stock price volatility in LQ45 company, which was the research sample, ranges from 0.0659 to 0.3272 with an average of 0.1637 with a standard deviation of 0.0496. While the descriptive statistical value of the trading volume variable (X1) is known, the minimum value of the trading volume is 31,672,025,468, and the maximum is 26,787,831. The result indicates the trading volume of LQ45 Company ranges from 31,672,025,468 to 26,787,831 with an average of 504,368 with a standard deviation of 654,415. In the trading frequency variable (X2), it is found that the minimum value of trading frequency is 20,591, and the maximum is 1,263,777. The result indicates that the trading frequency of LQ45 company ranges from 20,591 to 1,263,777 with an average of 436,163.03 with a standard deviation of 255,196.463. The descriptive statistics value on the order imbalance variable (X3) is known, the minimum order imbalance value is 0.0129 and the maximum is 0.8566. The result indicates that the order imbalance amount of the LQ45 Company ranges from -0.0129 to 0.8566 with an average of 0.2232 with a standard deviation of 0.1819.

Table 2. Normality Test
 One-Sample Kolmogorov-Smirnov Test

	Trading Volume	Trading Frequency	Order Imbalance	Stock price volatility
N	102	102	102	102
Normal Mean	21.6533	12.758205	.217910	.163721

Parameters ^a	Std. Deviation	1.27165	.7883854	.1768643	.0495705
Most Extreme Differences	Absolute	.118	.148	.136	.072
	Positive	.118	.087	.136	.072
	Negative	-.100	-.148	-.123	-.039
Kolmogorov-Smirnov Z		1.190	1.299	1.371	.729
Asymp. Sig. (2-tailed)		.118	.072	.086	.663

Based on normality test using *Kolmogorov Smirnov test*, it is found that k-s value on trading volume is 1,190, and *Asymp. Sig. (2-tailed)* is 0,118 > $\alpha = 0,05$, means the data distributed normally. The k-s value on order imbalance is 1,371 and *Asymp. Sig. (2-tailed)* is 0,086 > $\alpha = 0,05$, means the data distributed normally. Meanwhile, k-s value on stock price volatility is 0,729 and *Asymp. Sig. (2-tailed)* is 0,663 > $\alpha = 0,05$, means the data distributed normally.

Table 3. Multicollinearity Test

Variable	Collinearity Statistics	
	Tolerance	VIF
Trading Volume	0,931	1,067
Trading Frequency	0,911	1,047
Order Imbalance	0,935	1,070

Source: processed data, 2022

Based on the multicollinearity test in table 5.3, the calculation shows that no independent variable has a tolerance value of $\leq 0,1$. As demonstrated by the VIF value, where there is no independent variable with a VIF value of ≥ 10 , it can be concluded that the regression model in this research does not occur multicollinearity and the regression model is feasible to use.

Table 4. Simultaneous Test (Uji F)
ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.089	3	.030	18.291	.000 ^a
	Residual	.159	98	.002		
	Total	.248	101			

Source: processed data, 2022

Based on the table above, it can be seen that there is an effect of trading volume, trading frequency, and order imbalance on the stock price volatility. From the table, the calculated F value is 18.291, and the significance is 0.000, so it can be seen that the significance value is less than 0.05, indicating the trading volume, trading frequency, and order imbalance affect the stock price volatility of the LQ45 Company in 2017 - 2019.

Table 5. Determination Coefficient Test

Model	R	R Squade	Adjusted R Squade	Std. Error of the Estimate
1	.599 ^a	.359	.339	.0402920

Source: processed data, 2022

The *adjusted R2* test result in this research obtained a value of 0.339. Furthermore, it shows that stock price volatility is influenced by trading volume, trading frequency, and order imbalance by 33.9%. In comparison, the remaining 66.1% is influenced by other factors.

Table 6. Multiple Linear Regression Test

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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	B	Std. Error	Beta		
1 (Constant)	.001	.086		.011	.991
Trading Volume	.011	.003	.286	3.417	.001
Trading Frequency	.006	.001	.232	3.106	.004
Order Imbalance	.101	.014	.584	6.979	.000

Source: processed data, 2022

The results of the regression equation test can be explained as follows: $Y = 0,001 + 0,011 (X1) + 0,006 (X2) + 0,101 (X3) + e$

Based on the results of multiple linear regressions, the regression coefficient value is 0.011. It shows that the effect of trading volume on stock price volatility is unidirectional. The trading volume variable has *t-count* of 3.417 with a probability of 0.001. The significance value is smaller than the expected significance level ($0.000 < 0.05$), indicating that the trading volume variable has a positive and significant effect on the stock price volatility of LQ45 Company in 2017 - 2019, so the first hypothesis is accepted. The multiple linear regression test results also obtained a regression coefficient of 0.006. It shows that the effect of trading frequency on stock price volatility is unidirectional. The trading frequency variable has *t-count* of 3.106 with a probability of 0.004. The significance value is greater than the expected significance level ($0.004 < 0.05$), indicating that the trading frequency variable has a positive and significant effect on the stock price volatility of LQ45 Company in 2017 - 2019, so the second hypothesis is accepted. While the multiple linear regression test obtained a regression coefficient of 0.101. It shows that the effect of order imbalance on stock price volatility is unidirectional. The order imbalance variable has *t-count* of 6,979 with a probability of 0.001. The significance value is smaller than the expected significance level ($0.000 < 0.05$), indicating that order imbalance variable has a positive and significant effect on the stock price volatility of LQ45 company in 2017 - 2019, so the third hypothesis is accepted.

DISCUSSION

The Effect of Trading Volume on Stock Price Volatility

The statistical analysis result for the trading volume variable shows that the effect of trading volume on stock price volatility is unidirectional. The trading volume variable has *t-count* of 3.417 with a probability of 0.001. The significance value is smaller than the expected significance level ($0.000 < 0.05$), indicating that the trading volume variable has a positive and significant effect on the stock price volatility of LQ45 Company in 2017 - 2019, so the first hypothesis is accepted. Stock trading volume is essential for an investor because the stock trading volume describes the condition of securities traded in the capital market that can impact stock prices. Thus, logically the stock trading volume will have a positive effect on stock prices (Naimatul, 2017).

Trading volume plays an essential role in the capital market because trading volume is widely used as the information content indicator which enters the market. Chan and Fong said that various theories explain the relationship between volatility and trading volume and conclude that trading arises from the asymmetric information flow received by investors. Trading volume can monitor how much data is being traded on the exchange. With this, investors can make investment decisions from information on stock trading volume, which can change at any time. It is because so many factors affect the trading volume of investors, both individually and rationally trading. Stock trading volume is one of the information or signals that affect the volatility of stock prices. Therefore, the high and low stock trading volume is often a consideration for an investor in investing. In various theories, the model of the relationship between volume and volatility is that volume affects volatility because volume reflects the information received by market participants. Therefore, trading volume has a positive relationship with stock price volatility. Investors will be

more likely to hold on to their shares if there is no information about stocks, so the trading volume decreases, resulting in low volatility. Vice versa, if investors receive a lot of information about stocks, investors will sell a lot of theirs, increasing the trading volume. As a result of the increase in trading volume, the volatility will also increase (I Wayan, 2017).

Trading volume is the number of shares of an issuer traded in the capital market every day at a price level agreed upon by the seller and the buyer of the stocks. Trading volume will reflect the information available in the capital market. Market participants will always try to interpret the data obtained, both public and non-public. Different interpretations of information by each market participant on this various information affect the preferences of market participants to sell, buy or hold their shares, which will affect the volatility of stock prices. The result of this research is in line with research conducted by (Bambang, 2017), which showed a positive relationship between volatility, trading frequency, and trading volume. And the result is also in line with a search conducted by I Wayan (2017), which found the stock trading volume affects the stock price volatility.

The Effect of Trading Frequency on Stock Price Volatility

The statistical analysis result for the trading frequency variable shows that the effect of trading frequency on stock price volatility is unidirectional. Furthermore, the trading frequency variable has *t-count* of 3.106 with a probability of 0.004. Therefore, the significance value is greater than the expected significance level ($0.004 < 0.05$), indicating that the trading frequency variable has a positive and significant effect on the stock price volatility of LQ45 company in 2017 - 2019, so the hypothesis is accepted. The stock trading frequency affects stock price volatility. It is due to the higher the stock trading frequency, the higher the stock price volatility. The result of a study is said to be significant if, based on the statistical test result, a significance value obtained is greater than the expected level of significance of $0.004 < 0.05$. Ang in Indah (2021) stated that the high trading frequency indicates the high interest of investors in these stocks, thereby increasing the demand for the stocks. In addition, the increasing frequency of trading causes market interaction which causes stock prices to move up or down, causing stock price volatility to increase. The higher the stock trading frequency, the greater the stock price volatility.

The result of this research is in line with research conducted by Bambang (2017), which showed a positive relationship between volatility and trading frequency and volatility and trading volume. He also concluded that stock trading frequency has a positive effect on stock price volatility.

The stock trading frequency is the number of buying and selling transactions that occur at a particular time. Trading frequency can be used to see the liquidity of a stock. Stocks with a high trading frequency indicate that they are actively traded in the capital market. The high frequency also shows the high interest of investors in the stock. An increase will usually follow high interest from investors in the number of requests for shares. An increase in demand for shares will indirectly increase the trading frequency. The increasing frequency of trading causes market interaction in trading which causes stock prices to move up or down, increasing stock price volatility. Based on this description, it can be concluded that trading frequency affects stock price volatility (Wawan, 2016).

The Effect of Order Imbalance on Stock Price Volatility

The statistical analysis results for the order imbalance variable shows that the effect of order imbalance on stock price volatility is unidirectional. Furthermore, order imbalance has *t-count* of 6.979 with a probability of 0.000. Therefore, the significance value is smaller than the expected significance level ($0.000 < 0.05$), indicating that the order imbalance variable has a positive and significant effect on the stock price volatility of LQ45 company in 2017 - 2019, so the hypothesis was accepted. The statistical test result is significant if the significance value is less than the expected significance level, which is $0.000 < 0.05$. It is based on the idea that the imbalance of buying or selling orders impacts stock price movements. When there is an imbalance in the selling order that exceeds buying order, the stock price will decrease because investors tend to avoid the

risk of bigger losses due to price changes. On the other hand, when there is an imbalance in the buying order that exceeds the selling order, the stock price will increase because investors expect the stock price they buy will continue to grow in the coming period. The Changes in stock prices caused by the order imbalance create intense price pressures. For example, the large amount of selling orders compared to buying orders for a stock causes the stock price to fall rapidly. It is because investors tend to want to sell their stocks to avoid a fall in the cost of the stocks they own. On the other hand, a large amount of the buying orders compared to the selling orders caused the stock price to increase significantly. It is because investors tend to buy particular stocks. Therefore, they expect that the stock price they buy will continue to grow in the coming period. (Jamli, 2018).

In the capital market, the formation of prices is a tug of war between the power of buyers and sellers. Prices will rise if there is excess demand and will fall if there is excess supply. The order imbalance, measured by the absolute difference between supply and demand volumes, affects stock price volatility because the order imbalance reflects the difference in supply and demand in the capital market. The higher the order imbalance, the more distant the difference between supply and demand, which will affect the high volatility of stock prices. The result of this research is in line with a study conducted by (Wawan, 2016), where order imbalance has a positive and significant effect on Stock Price Volatility. As indicated by the obtained regression coefficient, which is equal to 0.098, and the t-count is 7.723 with a probability error rate of 0.000 is smaller than the expected significance level, which is less than 0.05. Research conducted by Waluyo also supports the result of this study. The analysis result shows that the trading volume variable and order imbalance positively and significantly affect stock price volatility.

The result also shows a simultaneous effect of trading volume, trading frequency, and order imbalance on stock price volatility. Based on the simultaneous test above, It obtained an F value is 18.291 and a significance is 0.000, so it can be seen that the significance value is less than 0.05. It shows that trading volume, trading frequency, and order imbalance affected the stock price volatility of LQ45 company in 2017 - 2019. Meanwhile, based on the *adjusted R2* test in this research, a value of 0.339 was obtained. Meanwhile, based on the adjusted R2 test in this research, a value of 0.339 was obtained. It explains the stock price volatility is influenced by trading volume, trading frequency, and order imbalance by 33.9%, while the remaining 66.1% is influenced by other factors not examined in this study.

CONCLUSION

Based on the data analysis regarding the effect of trading volume, trading frequency, and order imbalance on the stock price volatility of LQ45 company in 2017-2019, it can be concluded that trading volume has a positive and significant effect on stock price volatility, trading frequency has a positive and significant effect on stock price volatility, and Order Imbalance has a positive and significant effect on stock price volatility in LQ45 Company in 2017 - 2019.

The adjusted R2 test result in this research shows that the stock price volatility is influenced by trading volume, trading frequency, and order imbalance by 33.9%, while the remaining 66.1% is influenced by other factors not examined in this study.

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