The Influence of Stock Price and Stock Trading Volume on the Liquidity of Bank Shares Listed on the Indonesian Stock Exchange, 2017-2021

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Abstract

The share price is a price that has been determined by demand and supply so that a share price can be formed. A share price that is too high will make a share illiquid or difficult to trade. Share prices and share trading volumes are information that can be taken into consideration when investing. Investors will look at the trading volume of a share before they invest. If the trading volume is large or high then it shows that the shares are actively traded.The type of research used in this research is quantitative research, namely research oriented towards data processing in the form of numbers contained in financial reports, used to examine certain populations or samples, sampling techniques and generally carried out randomly, data collection using analytical research instruments quantitative or statistical data with the aim of testing the hypothesis that has been applied through this analysis, data is explained, organized and presented in the form of numbers or graphs, which makes it easier to understand the patterns, distribution and variations of the data being observed. One of the functions of descriptive statistical analysis is to provide a general description of the data center. By using central metrics such as mean, maximum value, minimum value, and standard deviation, researchers can understand the mean or trend of the data. Share prices have a positive and significant effect on the liquidity of bank shares listed on the Indonesian Stock Exchange in the categories of Total assets Very Large, large, medium and small. In 2017-2021, share trading volume has a positive and significant effect on the liquidity of bank shares listed on the Indonesian Stock Exchange with categories of total assets are very large, medium and small in 2017-2021. Share prices and share trading volume have a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the categories of very large, large, medium and small total assets in 2017-2021.

Keywords: share price; share trading volume; bank share liquidity

1. Introduction

Stock markets serve as a conduit for money and liquidity, which are necessary for economic growth and stability [1]. In the capital market, the share price is a critical factor influencing investors' purchasing power. Share prices are established through the interaction of demand and supply, reflecting the market's valuation of a company's financial health and potential. However, excessively high share prices can render shares illiquid, making them difficult to trade [2]. Investors typically consider both share prices and trading volumes before committing capital, as these factors signal market activity and liquidity. High trading volume indicates active trading and attracts investor interest, as it suggests a vibrant and liquid market [3].

Liquidity, a vital characteristic of capital markets, is closely tied to trading volume. An increase in trading volume generally correlates with enhanced liquidity, enabling easier buying and selling of shares without significant price fluctuations. Trading volume, measured through indicators such as Trading Volume Activity (TVA), reflects the market's responsiveness to investor demand. Low transaction volumes, on the other hand, signal a stagnant market with limited trading incentives for investors. Share prices in the stock market are determined by demand and supply dynamics but are also influenced by intrinsic factors like earnings per share (EPS) and the price-to-earnings (P/E) ratio [4].

The interplay between share prices, trading volume, and liquidity is essential for understanding market dynamics. Liquidity, influenced by trading activity and investor confidence, reduces transaction costs and risk. For investors, high trading volumes indicate active markets and provide flexibility for transactions. Empirical evidence suggests that increased trading volume positively impacts stock liquidity, highlighting the importance of market participation [5].

From 2017 to 2021, studies focusing on the Indonesian Stock Exchange reveal that share prices and trading volumes significantly affect the liquidity of banking stocks. These findings emphasize the role of descriptive statistical analyses in identifying trends, variations, and patterns in market data. Quantitative research further supports that both variables—share prices and trading volumes—play a positive and significant role in enhancing stock liquidity across different asset categories, making them critical considerations for investors and policymakers in optimizing financial decision-making [6].

2. Literature Review

2.1. Market Microstructure Theory

This clearly states that this study discusses how asset prices are formed in the market with existing trading rules. This statement explains that market microstructure is a branch of financial economics that investigates stock trading and market organization. Market microstructure theory is used as the basis for hypotheses regarding changes in stock liquidity due to changes in trading rules. Market microstructure is a new theory that discusses competition on prices, liquidity, trading rules, market information, and stock trading costs in the market. Market microstructure is a theory that explains how trading rules determine asset (share) prices in the capital market. Market microstructure theory contains four main things consisting of price formation and discovery, transaction costs and time, market structure and design, and information and disclosure [7]. Thus, market microstructure literature provides a tool to analyze traders' behavior and market design, and offers a rationale for a large array of stylized facts and empirical findings [8].

2.2. Capital Market

The capital market is a means of meeting between parties who have excess funds and parties who need funds by buying and selling securities [9].

2.3. Stock

In general, stock are securities issued by a company in the form of a limited liability company or what is usually called an issuer, which states the owner of the shares, so that if someone buys shares they will become the owner of the company.

2.4. Stock Price

In general, shares are securities issued by a company in the form of a limited liability company or what is usually called an issuer, which states the owner of the shares, so that if someone buys shares they will become the owner of the company.

2.5. Stock Trading Volume

Stock trading volume is the number of shares traded by the issuer on the market. Stock trading volume reflects the strength between supply and demand which is a manifestation of investor behavior.

2.6. Stock Liquidity

Stock liquidity is a measure of the number of transactions of a stock in the capital market in a certain period. So the more liquid the stock, the higher the transaction frequency [10].

3. Research Method

The research used in this research is quantitative research, namely research oriented towards data processing in the form of numbers contained in financial reports, used to examine certain populations or samples, sampling techniques and generally carried out randomly, data collection using data analysis research instruments which is quantitative or statistical in nature with the aim of testing the hypothesis that has been applied. This research is empirical in nature, which was carried out on banking companies in 2017-2021 which were listed on the Indonesia Stock Exchange (BEI) via the official website of the Indonesia Stock Exchange (www.idx.co.id) and on the websites of each company.The population in this research is all conventional banking companies listed on the Indonesia Stock Exchange (BEI) in 2017-2021.

Multiple regression analysis is used to determine the influence (independent variables) of Stock Prices and Stock Trading Volume, as variables that influence (dependent variables) Stock Liquidity with the formula:

$$Y = a + \beta 1X1 + \beta 2X2 + e$$

3.1. Model Specification Test

Model specification test To determine the best model for panel data regression analysis among CEM, FEM and REM, several stages of testing are needed. The test consists of three stages, namely the Chow Test and the Hausman Test and Lagrange Multiplier test . The following is an explanation of each model specification test:

1. Chow Test
2. Hausman Test
3. Lagrange Multiplier Test

4. Results and Discussion

Through the results of testing the selection of panel data regression analysis models, researchers have succeeded in determining that in the context of this research, the most appropriate approach is the Common Effect Model (CEM). Therefore, to carry out panel data regression analysis in this research, the Common Effect Model (CEM) was chosen as the most relevant and appropriate approach to answer the existing problems. The results of the panel data regression in this research can be seen in:

Tabel 1. Panel Data Regression Results

Total Assets Category	Variabel	Coefficient
	C	49,25984
Very Large	X_1	0,002502
	X_2	0,538463
	C	40,86133
Large	X_1	0,008398
	X_2	0,229543
	C	36,36217
Medium	X_1	0,003537
	X_2	1,422042
	C	44,73061
Small	X_1	0,002793
	X_2	0,321143

Equality 1   : $Y = 49{,}259\,C + 0{,}002\,X_1 + 0{,}538\,X_2$
Equality 2   : $Y = 40{,}861\,C + 0{,}008\,X_1 + 0{,}229\,X_2$
Equality 3   : $Y = 36{,}362\,C + 0{,}003\,X_1 + 1{,}422\,X_2$
Equality 4   : $Y = 44{,}730\,C + 0{,}002\,X_1 + 0{,}321\,X_2$

Based on the results of the panel data regression equation, the following explanation can be described:
1. Very Large Total Assets Category
   a. The constant value of 49.259 shows the stock liquidity value (Y) when the stock price (X1) and stock trading volume (X2) are at position 0 (zero). This means that when the share price (X1) and share trading volume (X2) have no movement, the stock liquidity value is 49,259.
   b. The stock price coefficient (X1) value of 0.002 shows the stock liquidity value (Y) when the stock price (X1) increases by 1 (one). A positive coefficient value means that share price (X1) has a positive relationship with share liquidity (Y).
   c. The stock trading volume coefficient (X2) value of 0.538 shows the stock liquidity value (Y) when the stock trading volume (X2) increases by 1 (one). A positive coefficient value means that stock trading volume (X2) has a positive relationship with stock liquidity (Y).

2. Large Total Assets Category
   a. The constant value of 40.861 shows the stock liquidity value (Y) when the stock price (X1) and stock trading volume (X2) are at position 0 (zero). This means that when the share price (X1) and share trading volume (X2) have no movement, the stock liquidity value is 40,861.
   b. The share price coefficient (X1) value of 0.008 shows the share liquidity value (Y) when the share price (X1) increases by 1 (one). A positive coefficient value means that the stock price (X1) has a positive relationship with stock liquidity (Y).
   c. The stock trading volume coefficient (X2) value of 0.229 shows the stock liquidity value (Y) when the stock trading volume (X2) increases by 1 (one). A positive coefficient value means that stock trading volume (X2) has a positive relationship with stock liquidity (Y).

3. Medium Total Assets Category
   a. The constant value of 36.362 shows the stock liquidity value (Y) when the stock price (X1) and stock trading volume (X2) are at position 0 (zero). This means that when the share price (X1) and share trading volume (X2) have no movement, the stock liquidity value is 36,362.
   b. The share price coefficient (X1) value of 0.003 shows the share liquidity value (Y) when the share price (X1) increases by 1 (one). A positive coefficient value means that the stock price (X1) has a positive relationship with stock liquidity (Y).
   c. The stock trading volume coefficient (X2) value of 1.422 shows the stock liquidity value (Y) when the stock trading volume (X2) increases by 1 (one). A positive coefficient value means that stock trading volume (X2) has a positive relationship with stock liquidity (Y).

4. Small Total Assets Category
   a. The constant value of 44.730 shows the stock liquidity value (Y) when the stock price (X1) and stock trading volume (X2) are at position 0 (zero). This means that when the share price (X1) and share trading volume (X2) have no movement, the stock liquidity value is 44,730.
   b. The stock price coefficient (X1) value of 0.002 shows the stock liquidity value (Y) when the stock price (X1) increases by 1 (one). A positive coefficient value means that the stock price (X1) has a positive relationship with stock liquidity (Y).
   c. The stock trading volume coefficient (X2) value of 0.321 shows the stock liquidity value (Y) when the stock trading volume (X2) increases by 1 (one). A positive coefficient value means that stock trading volume (X2) has a positive relationship with stock liquidity (Y).

5. Conclusion

Based on the results of this research, the following conclusions can be outlined:
1. Share prices have a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the very large asset category in 2017-2021.
2. Stock trading volume has a positive and insignificant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the very large asset category in 2017-2021.
3. Share prices and share trading volume have a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the very large asset category in 2017-2021.
4. Share prices have a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the large asset category in 2017-2021.
5. Stock trading volume has a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the large asset category in 2017-2021.
6. Share prices and share trading volume have a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the large asset category in 2017-2021.
7. Share prices have a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the medium asset category in 2017-2021.
8. Stock trading volume has a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the medium asset category in 2017-2021.
9. Share prices and share trading volume have a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the medium asset category in 2017-2021.
10. Share prices have a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the small asset category in 2017-2021.
11. Stock trading volume has a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the small asset category in 2017-2021.
12. Share prices and share trading volume have a positive and significant effect on the liquidity of bank shares listed on the Indonesia Stock Exchange in the small asset category in 2017-2021.

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