Jurnal Ekonomi Syariah Teori dan Terapan p-ISSN: 2407-1935, e-ISSN: 2502-1508. Vol. 10 No. 1 Januari 2023: 69-81; DOI: 10.20473/vol10iss20231pp69-81

# The Effect of Stock Price, Trade Volume, Trade Frequency and Market Value on the Determinants of Share Liquidity of Sharia Bank Listed on the Indonesian **Stock Exchange during the Covid-19 Pandemic**

# Pengaruh Harga Saham, Volume Perdagangan, Frekuensi Perdagangan dan Market Value terhadap Determinan Likuiditas Saham Bank Syariah yang Terdaftar di Bursa Efek Indonesia Selama Pandemi Covid-19

Zanuba Ainindya El Fanani<sup>D</sup>, Rizky Nur Ayuningtyas Putri<sup>D</sup> Perbankan Syariah, Ekonomi dan Bisnis Islam, UIN Raden Mas Said, Surakarta, Indonesia ainindyazanuba1@gmail.com\*, rizky.nayuputri@iain-surakarta.ac.id

#### **ABSTRACT**

Investment has a positive impact on the country's infrastructure development stock investment is one of the economic activities that support the government's development efforts and will also grow a business. The goal of this research is to analyze the impact of factors that can have an impact on the liquidity of Islamic Bank shares listed on the IDX in 2019-2021 and provide information to investors before investing in stocks using the variables of stock prices, stock trading volume, stock trading frequency, and market value. The method in this research is quantitative. This study uses secondary data. Selective sampling of three Islamic Bank shares is a technique used in collecting this research sample. Data analysis used panel data regression. During the covid-19 pandemic, stock buying and selling transactions were relatively high because trading volume and market value increased. Islamic banks reduce share prices, which increases the frequency of share trading in tandem with the volume of stock trading. The result of this research is that the balanced liquidity of Islamic Bank shares is the effect of the covid-19 pandemic. Stock prices and stock frequency have no significant effect on stock liquidity. Even though trading volume and market value have a significant impact on stock liquidity, This research can be used by bank management as a reference for making decisions, especially regarding share prices, trading volume, trading frequency, market value, and stock liquidity of Islamic banks. The results of this study can be used as a reference to see the condition of the stock liquidity of an Islamic bank as decision material before investing for investors.

Keywords: Stock Price, Trading Volume, Trading Frequency, Market Value, Stock Liquidity.

#### ABSTRAK

Investasi berdampak positif terhadap pembangunan infrastruktur negara, investasi saham merupakan salah satu kegiatan perekonomian yang mendukung upaya pembangunan pemerintah dan juga akan menumbuhkan sebuah bisnis. Analisis faktor-faktor yang mampu memberikan dampak dan menjadikan informasi kepada investor sebelum melakukan investasi saham dengan menggunakan variabel harga saham, volume perdagangan saham, frekuensi perdagangan saham dan market value terhadap likuiditas saham Bank Syariah yang terdaftar di BEI tahun 2019-2021 merupakan tujuan dari penelitian ini. Penelitian kuantitatif dengan data sekunder menjadi metode dalam penelitian ini. Teknik *purposive sampling* pada 3 saham Bank Syariah adalah Teknik dalam pengumpulan sampel penelitian ini. Analisis data menggunakan regresi panel. Saat pandemi covid-19 transaksi jual beli saham terbilang tinggi karena volume perdagangan dan market value meningkat. Bank Syariah menurunkan harga saham yang mengakibatkan frekuensi perdagangan saham beriringan dengan volume perdagangan saham. Hasil dari penilitian ini adalah likuiditas saham Bank syariah yang seimbang merupakan efek dari adanya pandemi covid-19. Karena harga saham dan frekuensi saham tidak berpengaruh signifikan terhadap likuiditas saham. Meskupun volume

#### **Article History**

Submitted: 12-12-2022 Reviewed: 11-01-2023 Accepted: 29-01-2023 Published: 31-01-2023

\*Correspondence: Zanuba Ainindva El Fanani

Open access under Creative Commons Attribution-Non Commercial-Share A like 4.0 International Licence (CC-BY-NC-SA)



perdagangan dan *market value* berdampak signifikan terhadap likuiditas saham. Penelitian ini bisa digunakan manejemen bank sebagai salah satu acuan untuk mengambil keputusan khususnya harga saham, volume perdagangan, frekuensi perdagangan, *market value* dan likuiditas saham Bank Syariah. Hasil penelitian ini diharapkan dapat menjadi acuan guna melihat kondisi dari likuiditas saham suatu Bank Syariah sebagai bahan keputusan sebelum melakukan investasi untuk investor.

Kata Kunci: Harga Saham, Volume Perdagangan, Frekuensi Perdagangan, Market Value, Likuiditas Saham.

## I. INTRODUCTION

Economic development in Indonesia is increasing, therefore an institution is needed that is able to regulate finance such as banking (Pradani, 2016). The operational system is one of the different things between Islamic banks and conventional banks lies (Islam, 2022). Conventional banks apply general interest rates and agreements based on national regulations. Meanwhile, Islamic banks apply profit sharing or ratios to buying and selling transactions and leases.

The capital market is proof of the development of the Islamic financial market through Islamic banking (Setiawan, 2020). With the increasing needs of life, changes in inflation, and changes in the value of daily needs Then the right solution for dealing with these changes is to make transactions or invest in the sharia-based capital market. Understanding the capital market entails obtaining funds through the sale of securities or bonds, accompanied by an agreement by the seller to buy back the securities or bonds at a later date (Hardyanto, 2019). Meanwhile, the sharia-based capital market encompasses all sharia-compliant activities that will serve as capital for sharia-compliant businesses and investments (Ali, 2021). The existence of a Muslim majority in Indonesia will help advance the sharia-based capital market because Muslim investors can make transactions on the sharia capital market, stocks are in great demand by investors.

There are three types of Islamic bank shares, namely those from the Sharia National Pension Savings Bank (BTPS), BRI Syariah Bank (BRIS), and Panin Dubai Syariah Bank (PNBS). When trading stocks, investors generally look for information about stocks. According to (Muhardi, 2013) the main factor that investors consider before investing is the company's stock liquidity. Other information is the amount of transaction costs in the trading mechanism, stock trading volume to find out information on volume changes in the capital market, and stock trading frequency to see how many times the shares have been traded. Whereas the higher the stock price, the greater the volume of stock trading, and the greater the frequency of stock trading, the dealer will not keep the stock for long (Surya, 2016).

Research by Sezgin Alp et al. (2022) shows that stock liquidity is positively impacted by stock prices. Research by Sitorus & Elinarty (2017) shows that The growth of stock prices is positively impacted by liquidity. Research conducted by Ariesanti (2015) shows that stock prices affect stock liquidity, and stock trading volume affects stock liquidity. Research conducted by Surya (2016) shows that the bid-ask spread on Islamic stocks is unaffected by trading volume, market value affects the spread favorably, and stock prices are negatively correlated with the spread.

According to Khoirayanti & Sulistiyo (2020), trading volume has a detrimental impact on the bidask spread while stock prices have no bearing on it. Sidanti & Istikhomah (2021) demonstrates that a stock's trading volume affects the bid-ask spread as well as the relationship between stock price variations and trading volume. Muna & Khaddafi (2022) finds that trading volume has a detrimental impact on stock splits. The stock bid-ask spread is negatively impacted by trading volume, according to research by Djuniardi et al. (2022).

Research by Wahyuliantini and Suarjaya (2015) shows that the bid-ask spread is not affected by stock prices and trading volume of a stock. Research by Abidin (2015) shows that stock prices, trading volume, and interest rates have an effect on stock liquidity, and trading volume has an effect on stock liquidity. Research by Ningsih & Asandimitra (2017) shows that market value affects the holding period of shares. Trading frequency has no impact on stock return rates, according to Yusra (2019).

Then research by Patoni & Lasmana (2015) shows that the frequency of stock trading has an

influence on the bid-ask spread. Research by Hadya (2013) shows that stock prices have a positive influence on stock liquidity. Research by Taslim & Wijayanto (2016) shows that the frequency of stock trading affects the company's liquidity value. Research by Aswir & Misbah (2018) shows that trading frequency has a positive effect on stock prices.

Based on the differences between the several studies above, the authors use different independent variables for this latest study, namely stock prices, trading volume, trading frequency, and market value. There has been no previous research using all four comparison variables simultaneously to detect stock liquidity. The research subjects focused on Islamic banks listed on the IDX in 2019-2021, The subject of this study distinguishes it from earlier studies. Banks that have the initiative to look at stock liquidity will often change the value of their stock prices, trading volume, trading frequency, and market value.

Whether or not there is an effect of stock prices, trading volume of a stock, trading frequency of a stock, and market value on stock liquidity in Islamic banking listed on the IDX is the aim of this research. The novelty of this research is the finding of the influence of the liquidity of Islamic Bank shares on the IDX from 2019 to 2021 because in that year Indonesia experienced the covid-19 pandemic, which caused shares to fall in early 2019, and the IHSG touched its lowest level, thus affecting stock liquidity at Islamic Banks with an increase in investors in 2021, where in 2019 it was 53.41% lower than in 2020. The existence of these findings is expected to be useful in improving Islamic banking in Indonesia. Another benefit is to see and make decisions, especially on stock prices, trading volume, trading frequency, market value, and liquidity of Islamic Bank shares, or it can be used as a reference for evaluation to determine the state of stock liquidity before investing.

# **II. LITERATURE REVIEW**

## **Stock Liquidity**

The liquidity of a stock is its consistency which shows the ease with which investment capital can be paid. Stock liquidity is a measure of the number of stock transactions in the capital market over a certain period. So The stock is more liquid the more often it is traded. The number of shares circulating in the market and their trading volume are significantly impacted by a stock's trading frequency. since investors frequently purchase these stocks (Rahma, 2015).

# Signal Theory and Stock Liquidity

Signal theory is a theory that discusses investor decisions that are influenced by fluctuations in market prices, so this information will have an impact on an investor's decisions. Before investing, one of the most important things for investors to understand is information. It can be concluded that this signal theory is used to distinguish between good and bad companies because companies that have good quality will provide signals or information to the market. Thus, investor transactions are influenced by information signals and the liquidity of the company.

# **Stock Price and Stock Liquidity**

A sign of a person's capital participation or business entity in a limited liability company or company is called a share. The share price is the value of the shares resulting from the sale and purchase of shares. There are market forces that affect the price of shares, including supply and demand. If the demand is lower than the supply the price will fall and vice versa. A high share price offers a high yield, which makes the share popular with investors, and a high share price means that the share is often traded. A stock price that is too high causes the stock to be illiquid or difficult to trade, so the stock price will affect the liquidity of the stock (Munthe, 2017). Therefore, the hypothesis is:

Ha1: Stock prices affect the liquidity of shares of Islamic banks listed on the IDX.

## Share Trading Volume and Share Liquidity

According to the number of shares exchanged each day, stock trading volume is a method for performing stock research that is used to gather data on the size of the share volume traded by observing capital market behavior. To consider stock performance, can use stock trading volume. Shares that are often traded mean that these shares are of interest to investors and are considered active shares. Market participants generally do not like transactions in less liquid stocks, which reduces the pressure on the spread, but market participants are more inclined to invest in liquid stocks. Therefore, the hypothesis is:

Ha2: Stock trading volume affects the liquidity of Islamic Bank shares listed on the IDX.

# Stock Trading Frequency and Share Liquidity

Before investing in stocks, it is necessary to consider the impact of stock trading frequency on stock liquidity. By looking at how often a stock is traded, it can be concluded whether the stock is popular among investors or not. In addition, the frequency of stock trading is also influenced by trading volume because stocks that are favored by investors have a high trading volume, It has an effect on raising how frequently these shares are traded. The increased volume of stock trading will impact both the increase in share prices and the shares' liquidity (Khoirayanti & Sulistiyo, 2020). Therefore, the hypothesis is:

Ha<sub>3</sub>: The frequency of stock trading affects the liquidity of shares of Islamic banks listed on the IDX.

## Market Value and Share Liquidity

Market value is the price of a company in the capital market. The price is the value that investors use to buy shares of a company. Market value is generated from the calculation of the average share price multiplied by the average volume of shares. Higher stock prices and high stock turnover suggest that investors may not hold these stocks for long. This affects the liquidity of these shares (Surya, 2016). Therefore, the hypothesis is:

Ha4: Market value affects the liquidity of Islamic Bank shares listed on the IDX.

# **III. RESEARCH METHOD**

# **Types Of Research**

In this study, the method used is descriptive quantitative by analyzing, collecting, presenting, and interpreting the data used to generate information and also explaining the variance of the numbers to be processed according to standards. Sharia Bank shares listed on the IDX are the population of this study. While the sample was chosen using the purposive sampling method, we obtained three Islamic Banks that met the criteria, including Islamic Banking stocks that published the required information but had different ups and downs. Data analysis used panel data regression and the 2019-2021 data collection period during the covid-19 pandemic.

No.		KPO/KC	KCP/UPS	KK
	Sharia Commercial Banks	499	1.345	192
1	PT. Sharia Aceh Bank	27	96	27
2	PT. BPD Nusa Tenggara Barat Syariah	12	25	6
3	PT. Bank Muamalat Indonesia, Tbk	80	131	29
4	PT. Bank Victoria Syariah	5	1	-
5	PT. BRI Sharia Bank	-	-	-
6	PT. Bank Jabar Banten Syariah	9	55	2
7	PT. Bank BNI Syariah	-	-	-
8	PT. Mandiri Syariah Bank	-	-	-
9	PT. Mega Syariah Bank	30	29	5
10	PT. Bank Panin Dubai Syariah, Tbk	10	-	1
11	PT. Bukopin Sharia Bank	13	7	4
12	PT. Syariah BCA	15	16	43
13	PT. Sharia National Pension Savings Bank	24	-	-
14	PT. Islamic Aladin Bank	1	-	-
15	PT. Indonesian Sharia Bank, Tbk	273	985	75

# Table 1. List of Sharia Commercial Banks

Source: Financial Services Authority (data processed by researchers, 2022)

#### Table 2. List of Sharia Bank Shares Registered on the IDX

No.	Share Code	Company Name	Listing Date
1	BRIS	BRI Sharia Bank Tbk	09-05-2018
2	BTPS	Sharia National Pension Savings Bank Tbk	08-05-2018
3	PNBS	Bank Panin Dubai Syariah Tbk	15-01-2014

Source: Indonesia Stock Exchange (data processed by researchers, 2022)

#### **Data Collection Procedures**

The data published by the IDX is secondary data in this study. Secondary data comes from information that can be accessed on the internet, financial reports, research documents, and information publications. The data used in this research is panel data. The data contains information on the issuance of Shariah-compliant shares on the IDX, namely BRIS, BTPS, and PNBS, for the 2019-2021 period. Data collection techniques are carried out through documentation. Documentation, namely data on the publication of Islamic Bank shares (BRIS, BTPS, and PNBS) listed on the IDX in 2019-2021. and library research, which entails gathering information by comprehending literature such as books, local and international scientific journals, and other sources relevant to this research.

# **Variable Operational Definitions**

# **Dependent Variable (Y)**

Stock liquidity is used as the dependent variable. A stock's liquidity is the ease with which capital can be disbursed from investments that can be paid by demonstrating consistency. Stock liquidity is defined as the number of stock buying and selling transactions in the capital market over a specific time period. As a result, in this study, stock liquidity is measured at the level of spread. The measurement of the bid-ask spread is determined as follows:

$$Spread_{it} = \frac{(ask_t - bid_t)}{(ask_t + bid_t)}$$
 (1)

# **Independent Variable (X)**

1. Share Price (X1)

One of the factors that affect stock liquidity is the price of a stock. The stock price is also the basis that must be considered by investors when investing in stocks. Information about the company's performance can be known through the price of the stock, In theory, the higher the price of a stock, the greater the value of the company. The share price that has been set by the company will enter the capital market as the market price of the shares. The share price used is the average closing price per month, then added up for a year.

Stock Price = *Avg*. (*Closing Price*)

2. The Volume of Stock Trading (X2)

Trading volume is the number of shares traded per day. this information is used to see capital market activity. The higher the stock price, the greater the trading volume (Hadya, 2013). The way to measure trading volume is by looking at the activity of that volume per share owned and calculating the relative value. Where the relative is measured by relative buying and selling transactions, which are expressed as follows: the trading volume seen is the average monthly closing volume multiplied by a year.

*Volume* = *Avg*. (Trading Volume)

3. Stock Trading Frequency (X3)

The number of times a stock is traded in a given time period is referred to as stock trading frequency. The greater a stock's trading frequency, the more actively it is traded. Transaction frequency is measured in units of time. In this study, the frequency of stock trading is the average of the trading frequencies at the end of each month, totaled over a year.

*Frequency* = *Avg*. (Trading Frequency)

4. Market Value (X4)

The price or amount of a company's assets, brand, or business in the target market, also known as market capitalization. The market value of a company is a number that represents its current market price. The price of transactions that occur in the market at a specific time and are determined by investors is known as market value. The formula for market value is:

 $Mrk Val_{it} = HS_{it} X VP_{it}$ (2)

Notes:

Brand Valid = Average market value of company i shares on day t;  $HS_{it}$  = The average stock price of company i on day t;  $VP_{it}$  = The average trading volume of company i on day t

In figure 1. explain the effect of variable X on variable Y with the empirical research model as follows:



#### Figure 1. Empirical Research Model

In the empirical research model above, the first step is to analyze the data by identifying Islamic banks on the IDX for 2019–2021. Then, stock prices, trading volume, trading frequency, and market value are checked and calculated every month. Tests are carried out to detect whether there are signs related to stock liquidity. By looking at the difference in sig. < 0.05 between the fifth and first, second, third, and fourth quarters, the relationship between the liquidity of these shares will be known.

### **Data Analysis**

The data collected in this study were analyzed using panel data regression and hypothesis testing. This research is a quantitative combination of data from time series and cross-sections. Data analysis and hypothesis testing will use e-views 10 and Microsoft excel 2010. The approaches are:

# **Panel Data Regression Equation**

The definition of panel data regression is an analysis that is able to determine whether there is a causal relationship between the dependent and independent variables. Which uses time series data and cross-sections. The dependent variable in this study is stock liquidity. While the independent variables used are stock prices, trading volume, trading frequency, and market value. The regression model of this study is:

Share Liquidity<sub>it</sub> =  $\alpha + \beta 1$  share price<sub>it</sub> +  $\beta 2$  trading volume<sub>it</sub> +  $\beta 3$  trading frequency<sub>it</sub> +  $\beta 4$  market value<sub>it</sub> +  $e_{it}$  (3)

Notes:

 $\alpha$  = constant;  $\beta$  = path coefficient; i = individual units of Islamic Bank shares on the IDX; t = year

## **Model Selection**

### **Chow Test**

The chow test is used to determine which method is superior between the fixed effect method and the common effect method, which employs panel data regression.  $H_0$  is the common effect model, and  $H_1$  is the fixed effect model. If  $H_1$  is rejected, the common effect model should be used. The theoretical hypothesis has a higher probability than the significance level. However, because  $H_1$  is accepted, the fixed effect is the correct model to use. The hypothesis theory states that the probability is less than the significance level.

#### Hausman Test

The Hausman test is a test conducted to find out which of the fixed-effect and random-effect models is better to use. With the hypothesis:  $H_0$ : random effect model,  $H_1$ : fixed effect model. Hausman test with k degrees of freedom using Chi-Square. The meaning of k is the number of independents. If  $H_0$  is rejected, then the correct model is the fixed effect. With the theory of Hausman, the statistical value is greater than the critical value. Conversely, if  $H_0$  is accepted, the random effect model is appropriate. With Hausman's statistical theory, it is smaller than the critical value.

#### Lagrange Multiplier Test (LM)

The Lagrange multiplier (LM) test is a test used to find out which random effect model or common effect model is most suitable for use. With the hypothesis: if the probability value is greater than (0.05), then H<sub>0</sub>: the common effect model is accepted. Conversely, if the probability is  $< \alpha$  (0.05), then the H<sub>1</sub>: random effect model is accepted.

#### **Classic Assumption Test**

To measure whether the data obtained is suitable for use in further hypothesis analysis, it must be tested using the classical assumption test. And to analyze certain differences in the data. Then use the classic assumption test, which includes normality, multilinearity, autocorrelation, and heteroscedasticity.

### **Normality Test**

The normality test is used to determine whether the residual variable is normally distributed in the regression model of the researcher. The Jarque-Bera (JB) test is the most frequently used residual normality test. With the following provisions: The data is said to be normally distributed when the probability value of Jarque-Bera is greater than the significance value of 0.05, while the data is said to be abnormal if the probability value of Jarque-Bera is lower than the significance value of 0.05.

## **Heteroscedasticity Test**

The heteroscedasticity test is used to test whether, in the regression model, there is an inequality of variance from one residual observation to another. The statistical test commonly used to detect whether there are symptoms of heteroscedasticity is the Glejser, White, Breusch-Pagan-Godfrey, Harvey, and ARCH tests. With the provisions: if the value of Obs\*R-squared has a Chi-Square probability value > 0.05, there are no symptoms of heteroscedasticity. If the value of Obs\*R-squared has a Chi-Square probability value < 0.05, there are signs of heteroscedasticity.

## **Multicollinearity Test**

The multicollinearity test is used to test whether there is a high or perfect correlation between the independent variables. This test can be done by looking at the tolerance value and the variance inflation factor (VIF). Where tolerance is used to measure the variability of the selected independent variables and those that are not explained by other independents, Therefore, a small tolerance value is synonymous with a high VIF value (VIF = 1 per tolerance). To determine the presence or absence of multicollinearity symptoms, the following conditions must be met: There is no multicollinearity if the tolerance value is < 0.1 and VIF < 10. Conversely, there is multicollinearity if the tolerance value is < 0.1 and VIF > 10.

# **Autocorrelation Test**

The autocorrelation test is a statistical analysis performed to find out whether there is a correlation between the variables in the prediction model with changes in time. If the sample used is large, then the autocorrelation test with the LM test is more suitable than the DW test. With the hypothesis: H0 denotes no autocorrelation, while Ha denotes autocorrelation. with conditions: H0 is rejected or there is a symptom of autocorrelation if the prob. The chi-square of Obs\*R-squared is smaller than the significant level (0.05). Conversely, H0 is accepted or there are no signs of autocorrelation if the problem of The chi-square of Obs\*R-squared is greater than the significant level (> 0.05).

### **IV. RESULTS AND DISCUSSION**

## **Descriptive Statistical Analysis**

#### **Table 3. Descriptive Analysis Test Results**

	N	Average	Minimum	Maximum	Standard Deviation
Y	108	0.051915	0.000	0.237885	0.042525
X1	108	1473.704	50	4420	1452.454
X2	108	69754538	300	1.57	1.84
X3	108	701.6357	1.024	23690	3233.738
X4	108	77351612	16	8.78	1.57

Table 3 shows the data (N) in this study totaled 108. Stock liquidity generates a minimum return of 0.000 and a maximum value of 0.237885. The average stock liquidity is 0.051915, and the standard deviation is 0.042525. This proves that the liquidity of these shares is focused on the numbers 0.051915  $\pm$  0.042525. For stock prices, the minimum return is 50, and the maximum value is 4420. The average stock price is 1473,704. The standard deviation is 1452.454. This proves that the stock price focuses on the numbers 1473,704  $\pm$  1452,454. The stock trading volume reaches a minimum yield of 300 and a maximum value of 1.57. The average trading volume is 69754538. The standard deviation is 1.84. This

proves that trading volume is focused at  $69754538 \pm 1.84$ . The trading frequency for the minimum yield is 1.024, and the maximum value is 23690. The average share trading frequency is 701.6357. The standard deviation is 3233.738. This demonstrates that the trading frequency is centered on the numbers 701.6357  $\pm$  3233.738. The market value obtained at the minimum yield is 16, and the maximum value is 8.78. The mean market value is 77351612. The standard deviation is 1.57. This demonstrates that the market price is 77351612  $\pm$  1.57.

# Uji Chow

# **Table 4. Chow Test Results**

Effects Test	Statistic	Probability
Cross-Section Chi-Square	86.524180	0.000

Table 4 shows the chow test the probability value is smaller than alpha ( $\alpha$ ) <0.05. Where the value of the Chi-Square Cross-Section probability value is 0.000. Therefore, it can be concluded that the hypothesis is accepted. Thus based on the chow model test chosen in this study is the fixed effect.

## Lagrange Multiplier Test (LM)

## Table 5. Lagrange Multiplier Test Results

	Probability
Breusch-Pagan	0.0027

From table 5, In the results of the Lagrange Multiplier (LM) test that the Breusch-Pagan probability value is 0.0027 < 0.05. This means that the probability is smaller than alpha ( $\alpha$ ). Therefore, it can be concluded that the hypothesis is accepted. Thus, based on the Lagrange multiplier test, the appropriate model in this study is the random effect.

### **Classic Assumption Test**

### Normality Test

### **Table 6. Normality Test Results**

215.2788
0.000000

From table 6, It is known that the probability value of the Jarque-Bera test is 215.2788. This means the probability value is greater than the alpha, which is 0.05. Therefore, it can be concluded that this study fulfills the assumption of normality or normally distributed residuals.

# **Heteroscedasticity Test**

### Table 7. Heteroscedasticity Test Results

	Probability	
X1	0.0696	
X2	0.1279	
X3	0.9146	
X4	0.0749	

The heteroscedasticity test is used to test whether in the regression model, there is an inequality of variance from one residual observation to another. According to Table 7. It can be concluded that the probability value of each independent variable is above the significance level. This value is greater than alpha (0.05). So, it can be concluded that there were no symptoms of heteroscedasticity in this study.

# **Multicollinearity Test**

# **Table 8. Multicollinearity Test Results**

	Y	X1	X2	X3	X4
Liquidity (Y)	1.000000	0.105768	0.597701	0.186908	0.441645
Share Price (X1)	0.105768	1.000000	-0.122584	-0.085196	0.257297
Stock Trading	0.597701	-0.122584	1.000000	0.289898	0.411799
Volume (X2)					
Stock Trading	0.186908	-0.085196	0.289898	1.000000	0.031833
Frequency (X3)					
Market Value (X4)	0.441645	0.257297	0.411799	0.031833	1.000000

The multicollinearity test is used to test whether there is a high or perfect correlation between the independent variables. Based on Table 8. It can be seen that the correlation value between variables

shows a value of < 0.8. So that the data avoids the symptoms of multicollinearity.

### **Autocorrelation Test**

#### Table 9. Autocorrelation Test Results

Durbin-Watson stat 1.934537		
	Durbin-Watson stat	1 934537

Based on an autocorrelation test. It is known that the value of durbin watson (dw) is 1.934537. The value between du and (4-du) is 1.74372 < 1.934537 < 2.23628. Therefore, it can be said that the data support the hypothesis that there is no autocorrelation.

#### **Hypothesis Test**

#### F Test (Simultaneous)

#### Table 10. F Test Results (Simultaneous)

F Statistic	18.47709
Prob (F Statistic)	0.000000

According to table 10, The known probability value (F-statistic) is 0.000000, meaning < 0.05. Thus, at the same time or concurrently variable X (stock price, trading volume, trading frequency, and market value) has a significant effect on the stock liquidity variable.

## T Test (Partial)

#### Table 11. T Test Results (Partial)

	Probability
Share Price (X1)	0.1295
Stock Trading Volume (X2)	0.0000
Stock Trading Frequency (X3)	0.6126
Market Value (X4)	0.0298

From table 11, it is known that: The probability value of the price of a stock (X1) is 0.1295 > 0.05 (alpha), so stock liquidity (Y) is not affected by the price of a stock (X1). The probability value of stock trading volume (X2) is 0.0000 < 0.05 (alpha), so stock liquidity (Y) is influenced by the trading volume of a stock (X2). The probability value of stock trading frequency (X3) is 0.6126 > 0.05 (alpha), so stock liquidity (Y) is not affected by the trading frequency (X3) and the probability value of market value (X4) is 0.0298 > 0.05 (alpha), so stock liquidity (Y) is influenced by market value (X4).

## **Determination Coefficient Test (R<sup>2</sup>)**

#### Table 12. Coefficient of determination (R2) test results

R-squared	0.417778
In table 12, it is known that the value of the coef	ficient of determination (r2) is 0.417778, or
41.7%. This means that variable x has a 41.7% chanc	e of explaining variable y. Meanwhile, the

remaining 58.3% is explained by variables other than the equation model in this study.

# Panel Data Regression Test

#### **Table 13. Panel Data Regression Test Results**

Variable	Coefficient	Probability
С	0.033763	0.0000
X1	3.61E-06	0.1295
X2	1.20E-10	0.0000
X3	5.27E-07	0.6126
X4	5.27E-11	0.0298
F Statistic	18.47709	
Prob (F Statistic)	0.000000	

From Table 13. It is known that the regression equation from panel data is:

 $Y = 0.033763 + 3.61 (X_1) + 1.20 (X_2) + 5.27 (X_3) + 5.27 (X_4) + e \quad (4)$ 

Based on the above equation it means: if the stock price increases by 1 unit, then liquidity increases by 3.61 units. with positive and significant share price results. If the stock trading volume increases by 1 unit, then liquidity increases by 1.20 units. with positive and significant stock trading volume results. If the frequency of stock trading increases by 1 unit, then liquidity increases by 5.27 units. with positive and significant stock trading frequency results. If the market value increases by 1 unit, then liquidity

increases by 5.27 units. with positive and significant share price results. While the prob (F-statistic) value indicates that the X variable has a significant effect on the Y variable, which is below the significance level of 0.05.

### Discussion

#### Effect of Stock Prices on Stock Liquidity

In this study, the results obtained indicated that there was no significant effect on stock prices on stock liquidity with a probability value of 0.1295, which is > 0.05. bigger than alpha. This means that stock liquidity is not affected by high and low stock prices. However, liquidity was affected by high stock prices, which impacted the diminishing ability of investors to conduct stock transactions. Given the insignificant results of this study, investors believe that the liquidity of a stock is not so affected by the stock price.

Furthermore, the impact of stock prices on stock liquidity is negligible because stock prices continue to fluctuate depending on the condition of the company (Abidin, 2015). During the covid-19 outbreak, the share price fell from the beginning of January 2019 to 2021, although the share price will not affect the liquidity of the shares. It's just that if the stock price falls, investors will be more interested in doing stock transactions. When the stock price is low, the company is at a disadvantage. other conditions that are not good for the company to accept, namely when the stock price is high, the stock transaction will decrease due to the inability of investors to participate in stock transactions. This study backs up previous research (Sitorus & Elinarty, 2017; Sezgin Alp et al., 2022; Hadya, 2013) which concluded that stock prices have no significant effect on stock liquidity.

# Effect of Stock Trading Volume on Stock Liquidity

The findings of this study revealed that stock trading volume has a significant effect on stock liquidity with a probability value of 0.0000, which equals 0.05. Smaller than alpha. As a result, the number of outstanding shares influences the liquidity of the shares. The liquidity of a stock rises as trading volume on the stock market rises.

The trading volume of shares increased during the COVID-19 outbreak, which means that the number of shares outstanding is very large due to the decrease in share prices. This makes investors interested in stock transactions. If there is an increase in the number of investors buying shares, it will increase trading volume on the stock market, which will affect the liquidity of these shares. In accordance with previous research (Abidin, 2015; Sidanti & Istikhomah, 2021; Muna & Khaddafi, 2022) which found that trading volume on the stock market has a significant effect on stock liquidity.

### Effect of Stock Trading Frequency on Stock Liquidity

The results of this study showed that the frequency of stock trading had no significant effect on stock liquidity, with a probability value of 0.6126, which means > 0.05 and greater than alpha. so that these shares can be said to be in demand by investors. With increased frequency, dealers don't hold stock for too long which reduces both owning as well as reduces spreads.

During the covid-19 pandemic, what was produced was that trading frequency did not affect stock liquidity, but trading frequency was related to trading volume, so it can be concluded that investors can always trade stocks safely. In accordance with previous research by Patoni & Lasmana (2015) and Yusra (2019), they found that the bid-ask spread is not affected by the trading frequency of a stock. The greater the volume of stock trading, the greater the frequency of stock trading, and vice versa. If the trading frequency is high, it can be said that investors are interested in the stock. The increased frequency of stock trading also affects the ability of investors to change their share ownership. In other words, dealers don't hold stock for long, which reduces the cost of ownership as well as the spreads.

# Effect of Market Value on Stock Liquidity

In this study, the results obtained indicated that market value had a significant effect on stock liquidity with a probability value of 0.0298, meaning > 0.05. bigger than alpha. The effect of this research is that when the stock price is high and the trading volume is high, the market value is also high. During the covid-19 outbreak, namely from the beginning of 2019 to the beginning of 2021, share prices decreased and trading volume increased, thereby increasing market value and increasing market value, which had an impact on stock liquidity.

Islamic banking has a high market value, which means it is less risky and can provide good

financial reports and information, although dealers are not forced to sell shares immediately. According to previous research by (Ningsih & Asandimitra, 2017; Surya, 2016). This research shows that shares are actively traded and are popular among investors, causing the dealer to hold shares for a long time. Thus, dealers will try to hold shares longer in the hope that these shares will still be favored by investors and they will get a bigger profit. This causes an increase in the cost of holding shares and widens the bid-ask spread of Islamic stocks.

#### The Effect of the Pandemic on the Liquidity of Sharia Bank Shares

The new findings of this study in the context of the covid-19 outbreak on the liquidity of Islamic banking stocks on the IDX are that changes in stock prices and trading frequency have no effect on stock liquidity. While trading volume and market value affect the liquidity of a stock, During the covid-19 outbreak, stock trading transactions had dropped and were now relatively high again due to an increase in trading volume and market value. Islamic banks lower stock prices so that the frequency of stock trading is parallel to the volume of stock trading. This was offset by stock liquidity when the covid-19 pandemic hit in 2019 until 2021.

## V. CONCLUSION

This study concludes that stock liquidity is not significantly influenced by stock prices. Trading volume can significantly affect stock liquidity. While trading frequency does not significantly influence stock liquidity, Furthermore, market value has a significant impact on the liquidity of Sharia Banking shares on the IDX from 2019 to 2021.

This determines that the existence of the covid-19 outbreak has a balancing effect on the liquidity of Islamic Bank shares. Because stock prices and stock frequency have no significant effect on stock liquidity. While trading volume and market value have a significant influence on stock liquidity, where the demand for and purchase of shares have increased. To increase the liquidity of Islamic Bank shares so that they are of good value to investors, Sayriah Bank must try to balance share prices, trading volume, trading frequency, and market value.

The novelty of this research is to reveal the effect of the liquidity of Islamic Bank shares on the IDX for the period 2019 to 2021 because that year Indonesia experienced the covid-19 pandemic, which caused shares to fall in early 2019 and the IHSG had touched its lowest level. Thus affecting stock liquidity at Islamic Banks, this has a balanced impact with the proof of the testing variable. This finding implies that this research can be used by bank management as a reference for making decisions, especially regarding share prices, trading volume, trading frequency, market value, and share liquidity of Islamic banks. For investors, it is hoped that the results of this study can be used as a basis for thinking about determining the liquidity conditions of Islamic Bank shares as a reference before making investment decisions. Based on the research that has been done by the author, it is hoped that the results of this study can be used as a reference for other researchers by adding other variables that may be useful and that can affect stock liquidity in Islamic banks both externally and internally as well as being able to add a larger sample for research, not only in Islamic banks in IDX but across the board.

#### REFERENCES

- Abidin, K. (2015). Pengaruh harga saham, volume perdagangan, dan suku bunga terhadap likuiditas saham pada perusahaan food and beverage yang terdaftar di bursa efek Indonesia. *Jurnal Equilibrium*, *13*(1), 33–46. http://dx.doi.org/10.30742/equilibrium.v13i1.308
- Ali, F. (2021). Pasar modal syariah. Retrieved from https://www.ojk.go.id/id/kanal/syariah/tentang-syariah/pages/pasar-modal-syariah.aspx
- Aswir, & Misbah, H. (2018). Pengaruh frekuensi perdagangan, harga saham masa lalu, dan volume perdagangan saham terhadap harga saham idx30. *Photosynthetica*, 2(1), 1–13. http://dx.doi.org/10.1016/B978-0-12-409517-5.00007-3
- Djuniardi, D., Jumantin, E., & Jamhari, A. (2022). Trading volume, earnings per share and stock returns and their impact on bid-ask spreads on manufacturing industry sector stocks listed on the Indonesia stock exchange 2015-2018. *Jurnal Penelitian Pendidikan Indonesia*, 8(2), 383–389. https://doi.org/10.29210/020221467

- Hadya, R. (2013). Pengaruh harga dan risiko saham terhadap likuiditas saham pada perusahaanperusahaan. Jurnal BKP, 1(2), 208-231.
- Hardyanto, B. (2019). Repurchase agreement (REPO) buyers' protection after the issuance of the regulation of the financial services authority number 09/POJK.04/2015. *Padjadjaran Jurnal Ilmu Hukum (Journal of Law)*, 06(01), 109–127. https://doi.org/10.22304/pjih.v6n1.a6
- Khoirayanti, R. N., & Sulistiyo, H. (2020). Pengaruh harga saham, volume perdagangan, dan frekuensi perdagangan terhadap bid-ask spread. *JIAFE (Jurnal Ilmiah Akuntansi Fakultas Ekonomi)*, 6(2), 231–240. https://doi.org/10.34204/jiafe.v6i2.2305
- Muhardi, W. R. (2013). Pengaruh idiosyncratic risk dan likuiditas saham terhadap return saham. *Jurnal Manajemen dan Kewirausahaan, 15*(1), 33-40. https://doi.org/10.9744/jmk.15.1.33-40
- Muna, H., & Khaddafi, M. (2022). The effect of stock split on stock return, stock trading volume, and systematic risk in companies listed on the Indonesia stock exchange. *International Journal of Finance, Economics and Business*, 1(1), 51–56. https://doi.org/10.56225/ijfeb.v1i1.4
- Munthe, K. (2017). Perbandingan abnormal return dan likuditas saham sebelum dan sedudah stock split: studi pada perusahaan yang terdaftar di bursa efek Indonesia. *Jurnal Akuntansi*, 20(2), 254-266. https://doi.org/10.24912/ja.v20i2.57
- Ningsih, T. R., & Asandimitra, N. (2017). Pengaruh bid-ask spread, market value dan variance return terhadap holding period saham sektor pertambangan yang listing di bursa efek Indonesia (BEI) Tahun 2011-2015. Jurnal Ilmu Manajemen (JIM), 5(3), 1-10.
- Patoni, A., & Lasmana, A. (2015). Pengaruh harga saham dan frekuensi perdagangan saham terhadap bid-ask spread (studi empiris pada perusahaan manufaktur yang melakukan stock split di bursa efek indonesia selama periode 2009-2014. *I*(2), 1–12. https://doi.org/10.30997/jakd.v1i2.84
- Pradani. (2016). *Tinjauan umum tentang bank dan kredit bermasalah*. Skrispsi tidak dipublikasikan. STIE Ekuitas.
- Rachman, A. (2022). Dasar hukum kontrak (akad) dan implementasinya pada perbankan syariah di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 8(1), 47–58. http://dx.doi.org/10.29040/jiei.v8i1.3616
- Rahma, Q. A. (2015). Analisis pengaruh harga saham dan volume perdagangan terhadap likuiditas saham pada perusahaan go public yang melakukan stock split di bursa efek indonesia pada periode 2013-2014. Unpublished thesis. UIN Maulana Malik Ibrahim.
- Setiawan, A. E. (2020). Optimalisasi peran perbankan syariah dalam mengembangkan industri halal (Studi pada industri fashion busana Muslim di Provinsi Lampung). Unpublished thesis. UIN Raden Intan Lampung.
- Sezgin Alp, O., Canbaloglu, B., & Gurgun, G. (2022). Stock liquidity, stock price crash risk, and foreign ownership. *Borsa Istanbul Review*, 22(3), 477–486. https://doi.org/10.1016/j.bir.2021.06.012
- Sidanti, H., & Istikhomah, A. (2021). The effect of stock price, share return, share trading volume, and return variant on bid-ask spread on textile and garment companies listed on the Indonesia stock exchange, 2019-2020. *International Journal of Science, Technology & Management*, 2(4), 1357– 1366. https://doi.org/10.46729/ijstm.v2i4.269
- Sitorus, T., & Elinarty, S. (2017). The influence of liquidity and profitability toward the growth of stock price mediated by the dividen paid out (Case in banks listed in Indonesia Stock Exchange). *Journal of Economics, Business & Accountancy Ventura, 19*(3), 377–392. https://doi.org/10.14414/jebav.v19i3.582
- Surya, K. (2016). Pengaruh harga saham, volume perdagangan, market value dan varian return terhadap bid ask spread (Studi empiris pada perusahaan yang terdaftar di daftar efek syariah). *E-Jurnal Universitas Muhammadiyah Yogyakarta, 1*(1), 1–15. http://repository.umy.ac.id/handle/123456789/6390
- Taslim, A., & Wijayanto, A. (2016). Pengaruh frekuensi perdagangan saham, volume perdagangan saham, kapitalisasi pasar dan jumlah hari perdagangan terhadap return saham. *Management Analysis Journal*, 5(1), 1–6. https://doi.org/10.15294/maj.v5i1.5781
- Wahyuliantini, N. M., & Suarjaya, A. A. G. (2015). Pengaruh harga saham , volume perdagangan saham , dan volatilitas return saham pada bid-ask spread. *Matrik: Jurnal Manajemen, Strategi Bisnis dan Kewirausahaan*, 9(2), 146–155.
- Yusra, M. (2019). Pengaruh frekuensi perdagangan , trading volume, nilai kapitalisasi pasar, harga saham, dan trading day terhadap return saham pada perusahaan kosmetik dan keperluan rumah tangga di bursa efek Indonesia. *Jurnal Akuntansi Dan Keuangan*, 7(1), 65-74.

Fanani, et al/Jurnal Ekonomi Syariah Teori dan Terapan Vol. 10 No. 1 Januari 2023: 69-81

https://doi.org/10.29103/jak.v7i1.1841

Zahra, S. (2019). Analisis perbandingan harga saham dan volume perdagangan saham sebelum dan sesudah stock split dalam prespektif ekonomi Islam (Studi pada perusahaan manufaktur sektor industri dasar & kimia yang terdaftar di index saham syariah Indonesia tahun 2013-2017). Unpublished thesis. UIN Raden Intan Lampung.