http://ejournal.seaninstitute.or.id/index.php/Ekonomi
**Jurnal Ekonomi, Volume 11, No 03, 2022**
ISSN: 2301-6280 (print) ISSN: 2721-9879 (online)

# THE INFLUENCE OF STOCK TRADING VOLUME AND COMPANY SIZE ON STOCK PRICE VOLATILITY IN IDX80 BANKING COMPANIES DURING THE COVID-19 PANDEMIC

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**ARTICLEINFO**

***Keywords***:
Stock Trading Volume, Firm Size, Stock Price Volatility

**ABSTRACT**

This study was conducted to determine the effect of stock trading volume and company size on stock price volatility in IDX80 Banking Companies during the Covid-19 Pandemic. The place and time of the author's research was carried out on banks listed on the Indonesia Stock Exchange starting from 2020 to 2021. The population of this study was a banking company listed on the IDX in 2020 and 2021. The sample in this study used the sampling technique, namely Purposive Sampling. The results of the study found that the results of the analysis with panel data regression, namely Y = 17.49811 + 0.552606 - 0.853274 showed that the Stock Trading Volume had a positive effect of 0.552606 and not significant at 0.6997 > 0.05. The technique used is panel data regression. The results showed that: (1) Stock trading volume had a positive and insignificant effect on stock price volatility. (2) Firm size has a negative and significant effect on stock price volatility. (3) Stock trading volume and firm size have a positive and significant effect on stock price volatility.

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## 1. INTRODUCTION

One important aspect that is interesting to understand in the capital market is the volatility of stock prices. The existence of these changing prices makes the stock exchange attractive to several groups of investors, where with an increase in share prices investors will benefit from the difference in selling the share price (capital gain) although they can also bear losses if the price of the shares purchased experiences a decrease in the selling price (capital loss).

The level of stock price volatility can be influenced by macro and micro factors. Macro factors are factors that affect the economy as a whole, including GDP, national income, trade balance, interest rates, balance of payments, inflation, national productivity levels, politics, and others that have an important impact on a company's profit potential. Micro factors are factors that have a direct impact on the company itself, such as changes in management, prices and availability of raw materials, labor productivity, company size and other factors that can affect the profit performance of individual companies (Fauziah, 2013).

Increased volatility in stock prices means that the possibility of rising or falling stock prices is also getting bigger (Sova, 2015). Stock price volatility occurs due to the entry of new information into the market or stock exchange. Stock volatility is a concern for market participants to determine the right investment strategy.

The Indonesia Stock Exchange added a new index called IDX80 as an alternative reference for investment managers. This index consists of 80 stocks and is traded from February 1 to July 2019. According to Verdi Ikhwan, this index was created because many investment managers use indexes with more constituents such as the JCI. The 80 shares in IDX80 can represent 80% -90% of the stock market in terms of transaction value, transaction volume, and so on (IDX, 2020). The IDX80 amount is considered sufficient and can be used as a reference for the investment manager's investment portfolio.

The IDX80 is similar to the IDX30 and LQ45, but the IDX80 has more numbers. Once done with backtesting since 2012, return IDX80 is quite competitive with JCI. The specialty of the IDX80 is free float 100%. Free float is the number of outstanding minority shares that can be transacted in the regular market. The IDX selects 80 shares that are members of the IDX80 selectively. Initially, the IDX chose JCI constituent stocks that had been listed for more than six months. Then, narrow it down to 150 shares based on the total transaction value in the regular market. Of the 150, 80 index constituent stocks were then selected. According to Verdi Ikhwan, the 80 shares were obtained based on the highest liquidity, seen from the transaction value, transaction frequency, number of transaction days, and stock market capitalization free float. Apart from these several things, the IDX also looks at it from a fundamental perspective, namely from financial performance, compliance, and so on. As long as the shares are traded, the issuer monitoring and recording division will continue to monitor the development of issuers who are members of IDX80.

In this study, researchers will focus on banking companies that are in IDX80. The phenomenon of volatility is reflected in stock price fluctuations as follows:

Tabel 1. IDX80 Banking Company Stock Price Data Year 2019-2021

| No | Bank/Tahun | 2019 | 2020 | 2021 |
|---|---|---|---|---|
| 1 | BBCA | Rp 6.419,06 | Rp 6.633,99 | Rp 7.300,00 |
| 2 | BBRI | Rp 4.158,84 | Rp 4.080,73 | Rp 4.080,00 |
| 3 | BBNI | Rp 7.561,46 | Rp 6.127,93 | Rp 6.650,00 |
| 4 | BBTN | Rp 2.115,57 | Rp 1.725,00 | Rp 1.685,00 |
| 5 | BJBR | Rp 999,81 | Rp 1.457,54 | Rp 1.345,00 |
| 6 | BJTM | Rp 551,31 | Rp 600,93 | Rp 755,00 |
| 7 | BMRI | Rp 7.064,94 | Rp 6.116,28 | Rp 7.075,00 |
| 8 | BRIS | Rp 330,00 | Rp 2.250,00 | Rp 1.855,00 |
| 9 | BTPS | Rp 4.117,28 | Rp 3.712,84 | Rp 3.350,00 |

Source :www.idx.co.id

From the table above it can be seen that of the 9 IDX80 banking companies, there are banks that have experienced an increase in share prices from year to year, such as BJTM. For banks that have experienced a decline in share prices, BBRI, BBTN, BTPS, the three banks, experience a decline in share prices every year. BJBR and BRIS experienced fluctuating share prices, in contrast to the BBCA, BBNI, and BMRI banks where these banks experienced fluctuating stock prices from year to year. From these conditions it is illustrated that the volatility varies between companies.

Volatility is related to several factors, including stock trading volume and company size. The relationship between trading volume and stock price volatility is influenced by information, where the information causes a positive relationship between trading volume and volatility. In models information asymmetric (Widya, 2019),informed trader trade on the basis of nonpublic information received. An increase in volatility occurs when informed traders traded large volumes because of the emergence of such nonpublic information. This non-public information causes differences in the information held by market participants and actions in responding to market situations. If there is no information about stocks, market participants or investors tend not to carry out trading transactions, as a result, trading volume decreases because not many shares are being traded, which also results in low volatility (Khan, Azeem & Sarwar, 2017)

The size of the company is widely perceived by market behavior which is thought to be able to provide information for capital market players because large companies can manage their business activities well (JPEPA, 2022). This condition can affect investors in making decisions to purchase company shares.

Investment decisions are closely related to understanding market conditions and movements. Understanding market conditions is done by fundamental and technical analysis. Fundamental analysis tries to predict stock prices in the future by estimating the value of the fundamental factors that affect

stock prices in the future. Technical analysis focuses on studying the market based on the demand and supply in the market. According to Tandelilin (2010) in particular, there are several reasons someone makes an investment, namely: 1) Getting more decent life in the future. A wise person will think about how to improve his standard of living from time to time or at least try to maintain his current level of income so that it doesn't decrease in the future. 2) Reducing inflationary pressure, by investing in the ownership of companies or other objects, a person can avoid the risk of decreasing the value of his wealth or property due to the influence of inflation. 3) The urge to save on taxes. Several countries in the world carry out many policies that encourage the growth of public investment through the provision of tax facilities to people who invest in certain business fields.

During the Covid-19 pandemic, there was a decrease in the composite stock price index between 2019 and 2020. This had an impact on many investors who suffered losses. Subsequent impact they tend to liquidate their assets because of concerns over uncertain conditions. Conditions like this encourage investors to behave irrationally, so that it will have an impact on stock price movements in the market. Stock markets in developing countries were more vulnerable to a pandemic than stock markets in developed countries. Waryati (2021) also stated that investor sentiment over the Covid-19 pandemic would have an impact on the stock market. Researchers chose IDX80 as an index that represents the Composite Stock Price Index (IHSG) on the Indonesian Stock Exchange (IDX). For this reason, IDX80 was chosen because it has a wider selection of stocks than indices with large capitalization and high liquidity, so they are considered to represent market conditions (Huo & Qiu, 2020).

Based on the description above, there are problems that need to be investigated further regarding the factors that influence the volatility of stock prices, including shares in banking companies in the IDX80 group.

The number of problems referred to can be identified as follows:

1. The link between inflation and stock price volatility where when there is an increase in inflation it will increase volatility.
2. The instability of the rupiah exchange rate against the value of foreign currencies will have an impact capital outflow and the increase in production costs which resulted in a decrease in the level of investor confidence in the capital market.
3. Interest rates indirectly affect the value of stock prices, but their volatility directly creates a shift between the money market and capital market instruments.
4. The association between trading volume and stock price volatility results in a positive relationship between trading volume and volatility.
5. The relationship between firm size and stock price volatility can provide information for capital market participants.

The objectives of this study are as follows:

1. To find out the effect of stock trading volume on stock price volatility at the IDX80 Banking Company during the Covid-19 pandemic.
2. To find out the effect of stock trading volume on stock price volatility at the IDX80 Banking Company during the Covid-19 pandemic
3. To determine the effect of stock trading volume and company size simultaneously on stock price volatility at the IDX80 Banking Company during the Covid-19 pandemic.

## 2. METHOD

This type of research is associative research that aims to determine the relationship of one or more variables and how a variable affects other variables. According to Sugiyono (2016) "associative research is research that aims to find out the relationship between two or more variables". In this study the authors wanted to see how the effect of stock trading volume and company size on stock price volatility in IDX80 companies listed on the Indonesia Stock Exchange.

The research was conducted on IDX80 companies listed on the Indonesia Stock Exchange (IDX), the official website is www.idx.co.id by obtaining quarterly financial reports for 2020-2021. The research was conducted in December 2021- July 2022.

The populations in this study are all banking companies at IDX80 which are listed on the Indonesia Stock Exchange (IDX) in 2020, namely 9 banks.

According to Sugiyono (2016) "the sample is part of the number and characteristics possessed by the population". If the population is large, it is impossible for the researcher to study everything in the population, for example due to limited funds, manpower and time, the researcher can use samples taken from that population. For this reason, samples taken from the population must be the correct representative (represent). Sampling was done by methodPurposive Sampling, namely sampling with certain criteria.

According to Sugiyono (2016) "Purposive Sampling Is a sampling technique with certain considerations. The criteria used in this study are:

1. Conventional banking companies registered at IDX80 for the 2020-2021 period which researchers can access via www.idx.co.id or www.bei.co.id.
2. Quarterly banking financial reports listed in the IDX80 for the 2020-2021 period consecutively.

From the criteria above, the samples obtained are:

Table 2. A sample of IDX80 Banking Companies listed on the Indonesia Stock Exchange for 2020-2021

| No | Banking code | Banking Name |
|---|---|---|
| 1 | BBCA | Bank Central Asia Tbk. |
| 2 | BBRI | Bank Rakyat Indonesia (Persero) Tbk. |
| 3 | BBNI | Bank Negara Indonesia (Persero) Tbk. |
| 4 | BBTN | Bank Tabungan Negara (Persero) Tbk |
| 5 | BJBR | Bank Pembangunan Daerah Jawa Barat dan BantenTbk. |
| 6 | BJTM | Bank Pembangunan Daerah Jawa Timur Tbk. |
| 7 | BMRI | Bank Mandiri (Persero) Tbk. |

Data Types and Sources

The type of data needed and collected in this study is quantitative data. According to Jusuf (2012) "quantitative data are facts or information expressed in the form of numbers or a numeric scale (number)". Quantitative data is in the form of financial reports at the IDX80 banking company listed on the Indonesia Stock Exchange (IDX) for 2020-2021.

Source of data used in this research is to use secondary data. According to Sugiyono (2016) "secondary data sources are data sources that do not directly provide data to data collectors, for example through other people or through documents". The source used to obtain these data in this study is from the Indonesia Stock Exchange (IDX), from the official website, namely www.idx.co.id, which is in the form of the financial statements of the banking company IDX80 for 2020-2021 which are listed on the Indonesia Stock Exchange (BEI).

Research variable

The research variable is anything in any form determined by the researcher to be studied in order to obtain information about it. This variable is divided into two types, namely the independent variable (Independent Variable) and the dependent variable (Dependent Variable).

1. Independent Variable (X)

Independent variables are variables that do not have a dependency or are dependent or independent. According to Sugiyono (2016) "independent variables are variables that affect or are the cause of changes or the emergence of dependent (dependent) variables". In this study the variable used was stock trading volume (X1) and company size (X2).

2. Variable Depends (Y)

Dependent variables are variables that have dependencies or variables that can be influenced by other variables. According to Sugiyono (2016) "the dependent variable is a variable that is affected or becomes the result of an independent variable". In this study the variable used is stock price volatility (Y)

Data Collection Techniques

The data collection technique used is the documentation method which retrieves the data that is already available. And according to Jusuf (2012) the notion of data collection techniques using the documentation method is how to find data or information from books, notes, transcripts, newspapers, inscription magazines, meeting minutes, agendas, and others. The data used is documentation data in the form of financial reports in the form of figures and in the form of secondary data and library studies by reading and summarizing the literature related to the problem to be studied.

In carrying out this research, the researchers obtained data and information from the financial statements of the IDX80 banking company which had been published through the Indonesia Stock Exchange (BEI). Data collection techniques by recording and calculating data related to research.

Data analysis technique

The data analysis technique used in this quantitative research is simple linear analysis and is reinforced by the opinion of Ghozali (2011) "based on a causal or functional relationship of one independent variable with the dependent variable. The regression coefficient aims to determine whether the independent variables contained in the regression equation individually affect the value of the dependent variable.

Data analysis method

The data analysis technique used in this quantitative research is panel data regression analysis and is reinforced by the opinion of Ghozali (2011) "based on a causal or functional relationship of one independent variable with the dependent variable. The regression coefficient aims to ascertain whether the independent variables contained in the equation the regression individually affects the value of the dependent variable.

The stages of data analysis in this study are Panel Data Regression Model Estimation which is carried out with three approaches, 1) Common Effect Model (CEM), 2) Fixed Effect Model (FIVE),3) Random Effect Model (BRAKE). In estimating the panel data regression model, a model selection will be carried out. To select the most appropriate model to use in managing panel data, there are several tests that can be carried out, namely: 1) Chow test or Likelihood test i.e. this test is used for selection between model fixed effect and common effect. 2) The Hausman test is a statistical test to choose whether the model fixed effect random is the most appropriate to use. 3) Lagrange Multiplier (LM) Test is testing to determine whether the model is using a command effect or random effect.

## 3. RELUST AND DISCUSSION

Descriptive Analysis

In order to obtain a clear picture of the research results, the data that the authors obtained from the data analysis will be presented in detail. The sample in this study is the IDX80 banking company's quarterly financial reports for the 2020-2021 period. This study involves 3 variables consisting of two independent variables and one dependent variable. The first independent variable is Stock Trading Volume (X1) and the second is Firm Size (X2), while the dependent variable is Stock Price Volatility (Y). The description of the research variables can be seen from the data tabulation of the variables as follows:

Table 3. Descriptive Statistics

| | Y | X1 | X2 |
|---|---|---|---|
| Mean | 0.389589 | 0.008775 | 20.05613 |
| Median | 0.379635 | 0.005350 | 20.60190 |
| Maximum | 0.675310 | 0.067600 | 21.26885 |
| Minimum | 0.190420 | 0.000520 | 18.06001 |
| Std. Dev. | 0.112966 | 0.010354 | 1.087068 |

Source: Output Eviews 12

Table 3, describes descriptively the variables in this study. The stock price volatility variable (Y) in the banking companies that became the study sample had an average of 0.389589, a standard deviation of 0.112966, this illustrates that stock price volatility is said to be good because the standard deviation is smaller than the mean. The highest value is 0.675310 and the lowest value is 0.190420 in the data range where it is assessed that the distance between the maximum and minimum stock price volatility is quite far.

Stock Trading Volume Variable (X1) in the banking companies that were the sample of the study had an average of 0.008775, a standard deviation of 0.010354, the highest value was 0.067600 and the lowest value was 0.000520 where it can be seen that the trading volume of the maximum and minimum stocks is very far away. Stock trading volume data is said to be unfavorable because the standard deviation is greater than the average value.

And the variable Company Size (X2) in the banking companies that are the research sample has an average of 20.05613, a standard deviation of 1.087068. The size of the company is said to be quite good as seen from the standard deviation value which is smaller than the average. The highest value is 21.26885 and the lowest value is 18.0600. This illustrates that the distance between the maximum and minimum values is not too far.

Panel Regression Model Estimation Method

Panel data regression can be done with three models namely common effect, fixed effect and random effect. Each model has its own advantages and disadvantages. The selection of the model depends on the assumptions used by the researcher and the fulfillment of the correct statistical data processing requirements so that they can be statistically accounted for. Therefore the first step that must be done is to choose a model from the three available. Panel data that has been collected is regressed using the method commonly affect the results of which can be seen in table 4 while for the regression results with the model fixed effect can be seen in table 5.

Table 4. Panel Data Regression Results Using CEM

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.716091 | 0.275344 | 2.600711 | 0.0120 |
| X1 | 2.576969 | 1.442482 | 1.786483 | 0.0797 |
| X2 | -0.017407 | 0.013739 | -1.266934 | 0.2107 |
| R-squared | 0.078221 | Mean dependent var | | 0.389589 |
| Adjusted R-squared | 0.043437 | S.D. dependent var | | 0.112966 |
| S.E. of regression | 0.110485 | Akaike info criterion | | -1.515789 |
| Sum squared resid | 0.646969 | Schwarz criterion | | -1.407288 |
| Log likelihood | 45.44210 | Hannan-Quinn criter. | | -1.473724 |
| F-statistic | 2.248750 | Durbin-Watson stat | | 0.845252 |
| Prob(F-statistic) | 0.115508 | | | |

Source: Output Eviews 12

Tabel 5. Panel Data Regression Results Using FEM

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 17.49811 | 2.627595 | 6.659364 | 0.0000 |
| X1 | 0.552606 | 1.423778 | 0.388126 | 0.6997 |
| X2 | -0.853274 | 0.130825 | -6.522255 | 0.0000 |

| Effects Specification | | | |
|---|---|---|---|
| Cross-section fixed (dummy variables) | | | |
| R-squared | 0.575162 | Mean dependent var | 0.389589 |
| Adjusted R-squared | 0.502849 | S.D. dependent var | 0.112966 |
| S.E. of regression | 0.079651 | Akaike info criterion | -2.076102 |
| Sum squared resid | 0.298181 | Schwarz criterion | -1.750599 |
| Log likelihood | 67.13085 | Hannan-Quinn criter. | -1.949905 |
| F-statistic | 7.953807 | Durbin-Watson stat | 1.669558 |
| Prob(F-statistic) | 0.000001 | | |

Source: Output Eviews 12

Regression results using random effect model can be seen in table 6.

Tabel 6. Panel Data Regression Results Using REM

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.937577 | 0.358366 | 2.616256 | 0.0116 |
| X1 | 2.977369 | 1.232733 | 2.415259 | 0.0192 |
| X2 | -0.028625 | 0.017844 | -1.604169 | 0.1146 |

| Effects Specification | S.D. | Rho |
|---|---|---|
| Cross-section random | 0.042782 | 0.2239 |
| Idiosyncratic random | 0.079651 | 0.7761 |

| Weighted Statistics | | | |
|---|---|---|---|
| R-squared | 0.082568 | Mean dependent var | 0.214205 |
| Adjusted R-squared | 0.047948 | S.D. dependent var | 0.107422 |
| S.E. of regression | 0.104815 | Sum squared resid | 0.582268 |
| F-statistic | 2.384968 | Durbin-Watson stat | 0.965478 |
| Prob(F-statistic) | 0.101909 | | |

| Unweighted Statistics | | | |
|---|---|---|---|
| R-squared | 0.065783 | Mean dependent var | 0.389589 |
| Sum squared resid | 0.655698 | Durbin-Watson stat | 0.857356 |

Source: Output Eviews 12

After the results of the model common effect, fixed effect and random effect were obtained, and then the chow test and the Hausmant test were carried out. The test was carried out to choose the right model between the two models.

Test resultschow test can be seen in table 7.

Tabel 7. Chow Test

| Effects Test | Statistic | d.f. | Prob. |
|---|---|---|---|
| Cross-section F | 9.162809 | (6,47) | 0.0000 |
| Cross-section Chi-square | 43.377503 | 6 | 0.0000 |

Source: Output Eviews 12

The results of the chow test in table 7 show that the probability value cross section is 0.0000 or <0.05, then H0 rejected. Therefore the selected model is the model fixed effect. Furthermore, regression is performed with the model random effect, to determine the correct model.

To see the test results hausman test can be seen in table 8.

Tabel 8. Hausman Test

| Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
|---|---|---|---|
| Cross-section random | 40.778552 | 2 | 0.0000 |

Cross-section random effects test comparisons:

| Variable | Fixed | Random | Var(Diff.) | Prob. |
|---|---|---|---|---|
| X1 | 0.552606 | 2.977369 | 0.507515 | 0.0007 |
| X2 | -0.853274 | -0.028625 | 0.016797 | 0.0000 |

Source: Output Eviews 12

Based on the results of the test hausman test above, it can be seen that the probability valueCross-section random namely 0.0000 where the value is smaller than the value α (0.05), which indicates that H0 rejected and H1 accepted so that the model used is fixed effect model. Therefore there is no need to test Lagrange Multiplier (LM).

Panel Data Linear Regression Analysis

In this study, multiple regression analysis aims to determine how much influence the variables of Stock Trading Volume and Company Size have on Stock Price Volatility. The results of multiple linear regression can be seen from the model regression fixed effect in this study can be seen in the following table:

Table 9. Multiple Linear Regression Results

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 17.49811 | 2.627595 | 6.659364 | 0.0000 |
| X1 | 0.552606 | 1.423778 | 0.388126 | 0.6997 |
| X2 | -0.853274 | 0.130825 | -6.522255 | 0.0000 |

Effects Specification

Cross-section fixed (dummy variables)

| | | | |
|---|---|---|---|
| R-squared | 0.575162 | Mean dependent var | 0.389589 |
| Adjusted R-squared | 0.502849 | S.D. dependent var | 0.112966 |
| S.E. of regression | 0.079651 | Akaike info criterion | -2.076102 |
| Sum squared resid | 0.298181 | Schwarz criterion | -1.750599 |
| Log likelihood | 67.13085 | Hannan-Quinn criter. | -1.949905 |
| F-statistic | 7.953807 | Durbin-Watson stat | 1.669558 |
| Prob(F-statistic) | 0.000001 | | |

Source: Output Eviews 12

The EViews12 processing data obtained the panel data regression equation as follows:

$\hat{Y} = a + b1\ X1 + b2\ X2 + e$

$\hat{Y} = 17{,}49811 + 0{,}552606\ X1 - 0{,}853274\ X2$

The description of the test results above is explained as follows:

Konstanta (a)

From the results of the panel data regression analysis test, it can be seen from the constant of 17.49811. This means that if the variables Stock Trading Volume and Company Size have a value of zero, the Share Price Volatility will increase by Rp. 17.49811 per share.

Regression coefficient (β1) Stock Trading Volume

The regression coefficient value of the Stock Trading Volume variable is 0.552606. This shows that for every increase in Stock Trading Volume by 1, the stock price volatility will increase by Rp. 0.552606 per lot.

Regression coefficient (β2) Firm Size

The regression coefficient value of the Company Size variable has a value of –0.853274. This shows that for every increase in company size by 1, the volatility of stock prices will decrease by (-0.853274 Million Rupiah).

The FEM model assumes that differences between individuals can be accommodated from differences in intercept, and to estimate panel data the FEM model must use variables dummy to uncover intercepts between firms.

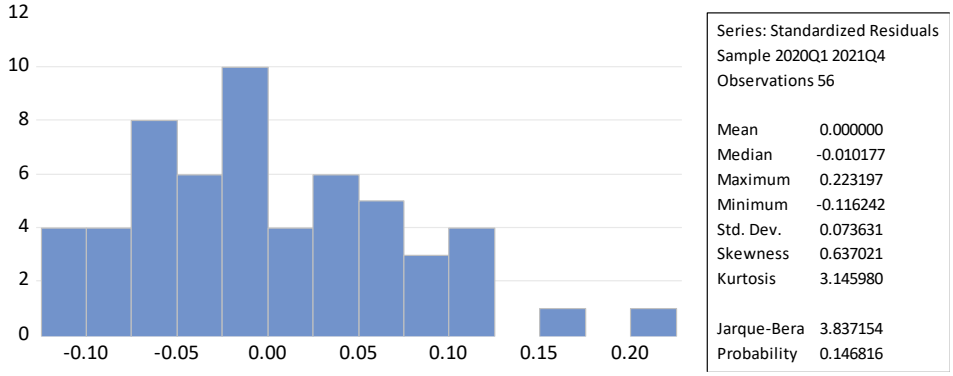
Classic assumption test

Normality test

The normality test aims to test whether the residual or confounding variables in the regression model have a normal distribution or not. The test used isKolmogorov Semirnov, namely subjects with a significant level (α) of 0.05 if the value of p> α is normally distributed or vice versa.

Following are the results of the normality test output in table 10

Table 10. Normality Test Results




Source: output eviews 12

Based on the results of the normality test above, it can be seen that the probability value is 0.146816 which indicates that the p value > α, then the regression model is normally distributed.

Multicollinearity Test

In this study the multicollinearity test will be carried out usingcorrelation matrix to detect the presence of multicollinearity. The criterion is that each independent variable must have a correlation value of less than |0.8| (Ghozali, 2016), so it can be concluded that between the independent variables there is no multicollinearity. The results of multicollinearity testing using the correlation matrix can be seen from table 11.

Table 11. Multicollinearity Test

| | X1 | X2 |
|---|---|---|
| X1 | 1.000000 | 0.071107 |
| X2 | 0.071107 | 1.000000 |

Source: output eviews 12

Based on the results of the multicollinearity test above, it can be seen that there is no relationship between the independent variables with a value greater than 0.8. So it can be concluded that there is multicollinearity between the variables of Stock Trading Volume and company size.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether the regression model has unequal variances and residuals from one observation to another. To determine whether there is heteroscedasticity in this study, a test was used park test which regresses the residual squared value to the variable. Stock price volatility is significant above the 5% confidence level, meaning that the regression does not contain heteroscedasticity.

Following are the output results of the heteroscedasticity test in table 12.

http://ejournal.seaninstitute.or.id/index.php/Ekonomi
Jurnal Ekonomi, Volume 11, No 03, 2022
ISSN: 2301-6280 (print) ISSN: 2721-9879 (online)

Table 12. Heteroskedastisitas Test

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 3.001000 | 2.388378 | 1.256502 | 0.2151 |
| X1 | -1.842191 | 1.294157 | -1.423468 | 0.1612 |
| X2 | -0.144710 | 0.118915 | -1.216924 | 0.2297 |

Source: output eviews 12

Based on the results of the heteroscedasticity test that has been carried out, it is found that the two independent variables have a probability value greater than 0.05. So it can be concluded that there is no heteroscedasticity problem.

Autocorrelation Test

In this study the autocorrelation test used the test methodDurbin-Watson (DW) to find out whether or not there is an autocorrelation problem. The results of the autocorrelation test can be adjusted based on the characteristics in chapter 3, to find out the autocorrelation. To see the results of the autocorrelation test can be seen in table 13.

Tabel 13. Autokorelasi Test

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 17.49811 | 2.627595 | 6.659364 | 0.0000 |
| X1 | 0.552606 | 1.423778 | 0.388126 | 0.6997 |
| X2 | -0.853274 | 0.130825 | -6.522255 | 0.0000 |

Effects Specification

Cross-section fixed (dummy variables)

| | | | |
|---|---|---|---|
| R-squared | 0.575162 | Mean dependent var | 0.389589 |
| Adjusted R-squared | 0.502849 | S.D. dependent var | 0.112966 |
| S.E. of regression | 0.079651 | Akaike info criterion | -2.076102 |
| Sum squared resid | 0.298181 | Schwarz criterion | -1.750599 |
| Log likelihood | 67.13085 | Hannan-Quinn criter. | -1.949905 |
| F-statistic | 7.953807 | Durbin-Watson stat | 1.669558 |
| Prob(F-statistic) | 0.000001 | | |

Source: output eviews 12

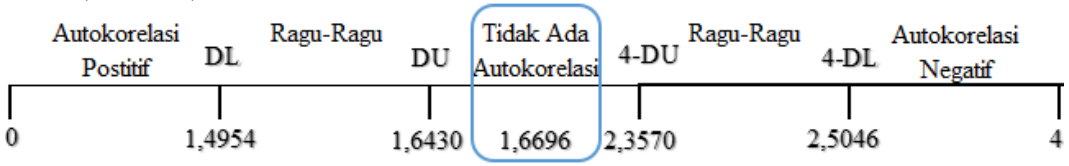
Based on the output results from the data processing above with the EViews12 output, it can be seen that the DW value = 1.6696, so that the DL and DU values are obtained from the critical value table DW α = 5% as follows:

DL = 1,4954

DU = 1.6430

4 – DL = 4 - 1,4954 = 2,5046

4 – DU = 4 – 1,6430 = 2,3570




Picture 1. Autocorrelation Table Test Graph

From the calculation resultsDurbin-Watson it can be seen that the position of DW is between DU and (4 – DU). So that in this autocorrelation test it can be concluded that there is no correlation.

Test Models

Hypothesis Test (t test)

To see the magnitude of the effect of the banking company's fundamental variables partially on stock price volatility, the t test is used. This partial test or t test is used to see the effect of the independent variable on the dependent.

If the probability value of f is less than 0.05, the result is significant, meaning that there is influence from the independent variables individually on the dependent variable.

Partially testing the hypothesis using the t test can be seen from table 4.12 as follows:

Table 14. Uji Hipotesis T Test

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 17.49811 | 2.627595 | 6.659364 | 0.0000 |
| X1 | 0.552606 | 1.423778 | 0.388126 | 0.6997 |
| X2 | -0.853274 | 0.130825 | -6.522255 | 0.0000 |

Effects Specification

Cross-section fixed (dummy variables)

| | | | |
|---|---|---|---|
| R-squared | 0.575162 | Mean dependent var | 0.389589 |
| Adjusted R-squared | 0.502849 | S.D. dependent var | 0.112966 |
| S.E. of regression | 0.079651 | Akaike info criterion | -2.076102 |
| Sum squared resid | 0.298181 | Schwarz criterion | -1.750599 |
| Log likelihood | 67.13085 | Hannan-Quinn criter. | -1.949905 |
| F-statistic | 7.953807 | Durbin-Watson stat | 1.669558 |
| Prob(F-statistic) | 0.000001 | | |

Source: Output Eviews12

From the t test table above it can be explained as follows:

Effect of Stock Trading Volume on Stock Price Volatility

From table 14, it can be seen that the stock trading volume variable has a probability value of 0.6997 > 0.05 where the coefficient ( 1) of 0.552606. This shows that the variable Stock Trading Volume has a positive and insignificant effect on Stock Price Volatility.

Effect of Company Size on Stock Price Volatility

From table 14, it is known that the probability value is 0.000 <0.05 where the coefficient ( 2) of -0.853274. This shows that the variable Firm Size has a negative and significant effect on Stock Price Volatility.

Uji F

The f test is conducted to test whether the model used is significant or not, so that it can be ascertained whether the model can be used to predict the effect of the independent variables simultaneously on the dependent variable. If the probability (f-statistic) < sig (0.05) then the multiple linear regression model is acceptable. However, if the value of the f-statistic is > 0.05, the multiple linear regression model does not have a significant effect simultaneously from the independent variables on the dependent variable.

Based on the output of EViews12 in table 14,, there is a probability value (f-statistic) of 0.000001 < sig 0.05. This indicates that the multiple linear regression models are accepted or this model indicates that the independent variables simultaneously influence the dependent variable. So it can be concluded that the variables Stock Trading Volume and Company Size have a positive and significant effect on Stock Price Volatility.

Determination Test (R2)

This test is used to test goodness-fit from the regression model, where to measure how far the model's ability to explain variations in the dependent variable. Scoreadjustes R-square which is close to one means that the ability of the independent variable provides almost all the information needed to analyze the dependent variation.

Based on the value of table 14, it is found that the value of R2is 0.502849. This shows that the percentage of the independent variable's influence on the dependent variable is 50.28%. Or it can be

interpreted that the independent variables used in this study are able to explain 50.28% of the dependent variable. The remaining 49.72% is influenced by other factors outside the independent factors of the regression model.

Discussion of Research Results

The regression analysis that has been carried out aims to determine the relationship that can be measured from Stock Trading Volume and Company Size to Stock Price Volatility. The following is a table that summarizes the relationship that occurs in the independent variables to the dependent variable.

Table 15. Relationship of Bound Variables to Independent Variables

| Variabel | Relationship found | Significance |
|---|---|---|
| Stock Trading Volume | Positive influence | Not significant |
| Company Size | Negative influence | Significant |
| Stock Trading Volume and Company Size | Positive influence | Significant |

Source: Output EViews12

The relationship between stock trading volume and stock price volatility

From table 15, it is known that stock trading volume has a positive and insignificant effect. This shows that the variable Stock Trading Volume has a positive influence on stock price volatility. The results of the regression equation show that the coefficient for this variable is positive so that it can be interpreted that the effect exerted by Stock Trading Volume on stock price volatility is positive. This shows that when the volume of stock trading increases there will also be an increase in the volatility of the stock price.

The table also illustrates that there is no significant effect between stock trading volume on stock price volatility. This means that the stock trading volume variable does not really affect changes in the stock price volatility variable. Because there is other information that affects volatility such as financial reports. This study is inversely proportional to research conducted by Dewi & Suaryana (2016), with the results of the study that stock trading volume has a positive effect on stock price volatility. In research conducted by Rahmayani, Riyadi & Ginanjar (2020), the results of the research are the same as the findings of this study, that stock trading volume has a significant effect on stock price volatility.

The concept of Supply and Demand shows that stock prices will rise due to the large number of investors who want these shares (Gupta & Ahmed, 2017). However, the factors that determine changes in stock prices are not only the size of the volume of shares traded, but there are also non-technical factors that often affect stock market participants more, including political conditions, global and regional security, pandemics and others. On March 31, 2021, the government issued a regulation regarding Large-Scale Social Restrictions (PSBB). Various responses from investors about the JCI. There are those who think that the JCI will fall, there are also those who think that the JCI willrebound among investors. Even though there was a high increase in the number of investors, the volume of stock trading in 2019 was higher than in 2020. It can be seen that in 2019 the trading volume was 36,534,971,048, but in 2020 it was 27,495,947,445. This reflects investors tend to wait for the right time to make transactions

Based on this explanation, it is necessary to disseminate comprehensive information to investors. Information or signal theory provides an overview for investors to make the right decision, whether to buy, sell or maintain their shares. In the world of stocks, there are two investors in the stock market, namely long-term investors where these investors expect dividends rather than capital gains. The second is that investors who carry out investment activities to get capital gains are called short-term investors. The more fluctuating stock prices are, this is where short-term investors seek profits or capital gains.

The Relationship between Firm Size and Stock Price Volatility

In this study it appears that company size has a negative and significant effect on stock price volatility. This shows that the perception of stock market participants, especially investors, is that the smaller the size of the company, the greater the short-term risk. In other words, the company's shares are smaller in size or more sensitive to stock prices, so the higher the volatility of the stock price.

Investors who invest in the capital market are oriented to get margins for buying and selling short-term shares (Ardiansyah, 2023). Of course, they will be more interested in stocks with prices that fluctuate or have high volatility. This negative and significant result means that the level of stock volatility is higher in smaller companies. This happens because the share price of small companies is more sensitive. This also happened in research conducted..

The relationship between stock trading volume and company size on stock price volatility

In the partial test it was found that the larger the size of the company, the smaller the volatility of stock prices. That means market participants who chase margin tend to buy stocks that have high volatility. Where the level of volatility of companies with small sizes is higher than larger companies. Thus the trading volume of small companies tends to be higher than companies with larger company sizes.

The simultaneous test is intended to test the feasibility of the model, if the results of the simultaneous test show significant results, it means that the research model is correct. The volatility of stock prices is higher for companies that are smaller in size, when the volatility is high, investor interest will be high because investors are looking for gains. This is what causes the volume of stock trading to be high.

## 4. CONLUSION

Based on the results of data processing and the analysis and discussion that has been carried out in the previous chapter, the following conclusions can be drawn:

1. Stock Trading Volume had a positive and insignificant effect on Stock Price Volatility at the IDX80 Banking Company during the Covid-19 Pandemic. It is known that the stock trading volume variable has a probability value of 0.6997> 0.05 where the coefficient ( ) of 0.552606.
2. Company size has a negative and significant effect on stock price volatility in the IDX80 banking company during the Covid-19 pandemic. It is known that the probability value is 0.000 <0.05 where the coefficient ( ) of -0.853274.
3. Share Trading Volume and Company Size simultaneously have a positive and significant influence on the share price of IDX80 Banking Company shares during the Covid-19 Pandemic. It is known that there is a probability value (f-statistic) of 0.000001 < sig 0.05.

Based on the research results from the data processing that has been done, there are several suggestions that can be considered by several parties:

1. For investors whose motivation in investing in the capital market is to seek margin, the consideration that must be considered is the large volume of stock trading.
2. For investors before deciding to invest in the capital market, even though stock trading volume is the main attraction, it is necessary to look at the condition of the trading volume in the long term or pay more attention to it.track record and the stability of the company's trading volume. Because there are several companies whose trading volumes values are high at certain times.
3. For companies, to be able to increase shareholder confidence in the company, the company must show good company performance and convey relevant and reliable information to investors regarding company developments that make them confident to invest.
4. In addition to paying attention to micro factors, companies should also pay more attention to macro factors that can have an impact on stock price volatility such as exchange rates, interest rates and inflation.
5. For future researchers, it is expected to increase the number of research samples and independent variables besides stock trading volume and company size. Of course it is very important to look at other variables, especially external variables or variables that most influence the volatility of stock prices or the rise and fall of stock prices.

## REFERENCES

[1] Fauziah, N. (2013). Analisis Pengaruh Volume Perdagangan, Inflasi, Dividend Yield dan Dividend Payout Ratio Terhadap Volatilitas Harga Saham Perusahaan Yang Terdaftar di LQ45. (Invotec,

Volume IX, No.2, Agustus 2013: 117-128.
[2] Sova, M. (2015). Pengaruh Ratio Leverage Terhadap Volatilitas Saham Pada Industri Barang Konsumsi di Bursa Efek Indonesia Tahun 2004-2008. E-Journal Widya Ekonomika, 1(1), 36-48.
[3] Widya, P. O. (2019).Influence of specialization, size and tenure of Audit Firm on earning management of manufacturing companies listed on bei during 2014-2016. Russian Journal of Agricultural and Socio-Economic Sciences, 87(3), 140-151.
[4] Khan, A. R., Azeem, M., & Sarwar, S. (2017).Impact of Overconfidence and Loss Aversion Biases on Investment Decision: Moderating Role of Risk Perception. International Journal of Transformation in Accounting, Auditing, & Taxation, 1(1).
[5] JPEPA, A. (2022).The Effect Of Independent Commissioners, Company Size And Profitability On Tax Avoidance In Companies Listed In The Idx80 Index Of The Indonesia Stock Exchange. Journal of Economic, Office, and Accounting Education, 3(3), 228-238.
[6] Tandelilin, Edward (2010).Portfolios and Investments: Theory and Applications. First edition. Yogyakarta: Kanisius
[7] Waryati, S. Y., Widiyanti, N., Suwarni, M. G., & Nandhya, A. N. (2021, March).The Impact of the Covid-19 Pandemic on Share Prices and Trade Volume of Shares in Indonesia Stock Exchange. In The 3rd International Conference on Banking, Accounting, Management and Economics (ICOBAME 2020) (pp. 107-111). Atlantis Press.
[8] Huo, X., & Qiu, Z. (2020). How does China's stock market react to the announcement of the COVID-19 pandemic lockdown?. Economic and Political Studies, 8(4), 436-461.
[9] Sugiyono. (2016). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: PT Alfabet.
[10] Soewadji, Jusuf. (2012). Pengantar Metodologi Penelitian. Jakarta: Mitra Wacana Media.
[11] Ghozali, Imam. (2011). Aplikasi Analisis Multivariate Dengan Program SPSS. Semarang: Badan Penerbit Universitas Diponegoro.
[12] Ghozali, Imam. (2016). Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23 (Edisi 8).Cetakan ke VIII. Semarang: Badan Penerbit Universitas Diponegoro.
[13] Dewi, N. M. A. K., & Suaryana, I. G. N. A. (2016). Pengaruh Volume Perdagangan Saham, Leverage, dan Tingkat Suku Bunga Terhadap Volatilitas Harga Saham. ISSN: 2302-8556, E-Jurnal Akuntansi Universitas Udayana, Vol.17.2: 1112-1140.
[14] Rahmayani, M. W., Riyadi, W., & Ginanjar, Y. (2020). Pengaruh Volume Perdagangan Saham Dan Leverage Terhadap Volatilitas Harga Saham: Studi Empris Pada Perusahaan Indeks LQ-45 Yang Terdaftar Di Bursa Efek Indonesia Tahun 2012-2014. Eco-Iqtishodi: Jurnal Ilmiah Ekonomi dan Keuangan Syariah, 1(2), 133-141.
[15] Gupta, Y., & Ahmed, S. (2017). The Impact of Behavioral Biases on Investor's Behavior in Indian Stock Market. International Journal of Management and Social Science Research Review, 1(37), 175–183.
[16] Ardiansyah, M. N., Zulaihati, S., & Mardi, M. (2023). The Effect Of Independent Commissioners, Company Size And Profitability On Tax Avoidance In Companies Listed In The Idx80 Index Of The Indonesia Stock Exchange. International Journal of Multidisciplinary Research and Literature, 2(1), 87-97.