



Impact of Net Foreign, Return, Rupiah Exchange Rate on Capital Market Liquidity in Indonesia

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Abstract—Trading volume (liquidity) is one of the important indicator for investors to monitor the movement of stock prices on the Indonesian stock exchange (IDX). Investors are attracted to stocks that provide high returns, have a tendency to rise in price, and have high liquidity. One of the factors that affect liquidity is investment in foreign stocks, where foreign investors are still the catalyst for stock movements in the Indonesian Capital Market. This study uses time-series data obtained from all listed stocks as a component of the calculation of the Composite Stock Price Index (IHSG) based on the average daily trading transaction value during the 2017–2019 period. This study consists of four variables where one dependent variable is liquidity with value proxy and three independent variables which are net foreign, return, and the exchange rate of the rupiah against the US dollar. These variables were then analyzed qualitatively in the form of descriptive statistics and multiple linear regression analysis. The result of the research shows that net foreign exchange increases trading volume. Based on the results of the descriptive analysis for the period 2017–2019, foreign investors still dominate the stock market in Indonesia. The dominance of foreign stocks can be interpreted as high investor confidence in the ability of the Indonesian government and the positive perception of foreign investors in the Indonesian capital market which is still very profitable for their investment. The opposite result is in the variable return where liquidity increases in a bearish market. In contrast, the depreciation of the rupiah against the dollar increased trading volume, although not significantly.

Keywords: Net Foreign; Liquidity; Return; Rupiah Exchange Rate; Trading Volume

1. INTRODUCTION

The capital market has a very important role as an alternative means for establishing sources of funds or financing for businesses, both government and private. Almost all countries in the world have capital markets and have the same function of providing financing facilities for the interests of corporations registered on the capital market, in order to meet the demand and supply of capital. In Indonesia, after the implementation of the automated trading system called JATS (Jakarta Automated Trading System), investment in finance through stock trading on the stock exchange has attracted many investors, both domestic and foreign investors especially after the enactment of the Minister of Finance Regulation Number: 20/POJK.04/2016 which allows foreign parties to control up to 99 percent of the ownership portion of securities.

Based on CNBC's data, in the short and long term, the flow of foreign funds has a major influence in moving IHSG shares. The proportion of foreign ownership in scrippless shares listed on the Indonesia Stock Exchange (IDX) until December 2019 reached 51.85% which is greater than compared of domestic investors. In line with the increasing share of foreign ownership in the domestic capital market, this raises concerns for the Indonesian economy. On the one hand, the inflow of foreign capital increases liquidity, but on the other hand, the mobility of foreign capital can cause extreme volatility which is considered by some to dominate price movements. This is inseparable from experience, where the global crisis in 2008 had a significant impact on the stock exchanges in the Asia Pacific region, resulting in a decline in the IHSG on these exchanges, state that an increase in foreign inflow will cause stock liquidity to increase, thus, the demand for stocks increases. However, the presence of foreign investors in the Indonesian capital market can have a negative impact if market dominance occurs. (Bobbi and Haryanto, 2017).

Apart from the flow of foreign investment, another variable that also affects the liquidity of the capital market is stock returns. The objective of investors in conducting stock transactions is the optimal return. Based on trader feedback theory, foreign investors make investment decisions based on market movements. Hence, it can be identified that lagged return affects current investment. Furthermore, market returns are also influenced by bullish conditions where the market is experiencing an increase in stock prices, this increase can be influenced by economic conditions in a country and even the whole world is experiencing economic growth, thus, it will increase trading liquidity. Whereas in a bearish situation where the stock market is experiencing a downtrend or weakening, resulting in a decline in the stock market liquidity (Chen, 2019).

Deduced that part, the level of share returns has a positive effect and is the main factor determining the level of sectoral returns in all industries, both up and downstate (Respati, Purwanto, and Irwanto, 2018). On the other hand, interest rates and exchange rates do not consistently affect the sectoral rate of return in different industries. Furthermore, stock issuers that have a negative value beta and positive returns in the bullish and bearish segments have the potential for positive returns because of forming a wider portfolio of diversity. The result study from Chen,



2019 show that the difference between the bullish and the bearish market is significant, the stock liquidity in the bullish market is significantly higher than in the bearish market, and the difference industries also exists.

Moreover, the exchange rate of the rupiah against the dollar affects trading liquidity in the stock market. The exchange rate measures the value of one domestic currency that is being balanced by the government through imposing exchange rate barriers on trade, intervening in foreign exchange, and influencing various macro variables such as inflation, interest rates, and income levels (Asnawi,2021). Furthermore, it is known that fluctuations in the exchange rate greatly affect stock returns because America is one of the most important export market countries for Indonesian products (Zaretta, 2015).

From the investor's point of view, it is very important to see the movement of shares through stock trading volume which describes the condition of securities traded in the Capital Market, the more shares traded means the higher the trading volume of shares, thus investors are interested in investing their capital which causes the share price to increase. Theoretically, there has been much evidence of the relationship between stock returns and foreign investment flows, because the increasing presence of foreigners diversifies risk and makes stocks more liquid (Clark and Berko, 1997) quoted from (Zareta, 2015). In addition, the flow of foreign capital into and out of the Indonesian capital market can affect market sentiment, especially in the event of a crisis. When the subprime crisis occurred, many foreign investors withdrew their funds to look for safer investment countries, and this affected IHSG. Changes in stock returns on capital markets in developed countries will affect index returns in developing countries including Indonesia. This is supported by the same risk factor and risk premium so that the return obtained also adjusts accordingly (Hikmah, 2014). Furthermore, (Elfarij, Wahyudi, and Raharjo, 2015) conclude that IHSG returns as a proxy for domestic returns have a significant positive effect on foreign investment in IDX flows. Higher IHSG returns will attract net buys so that it will increase liquidity. In addition, (Ng et al, 2016) deduced that foreign portfolio ownership is positively related to various measures of stock liquidity through both trading activities and information channels.

2. RESEARCH METHODOLOGY

2.1 Theoretical Framework

The liquidity of the Indonesian stock market is influenced by macroeconomic factors, including returns, the influx of foreign investors and the exchange rate of IDR/\$, which also affect the fluctuation of stock prices in the capital market. Liquidity is a multi-dimensional concept that generally refers to the ability to execute large trades with limited price impact, normally associated with transaction costs. Based on current global market conditions, there are at least three trends driving global market liquidity, including: (i) stable global monetary conditions that support overall liquidity throughout the economy; (ii) electronic enhancement and digitization of financial markets, which reduce transaction costs and connect buyers and sellers (iii) Alternative market financing providers are more involved in some aspects of market creation.

Thus, the above-mentioned macroeconomic factors pose a systematic risk that needs to be taken into account for their influence on the movement of the IHSG value on the Indonesia Stock Exchange. In summary, the framework of this research is as follows:

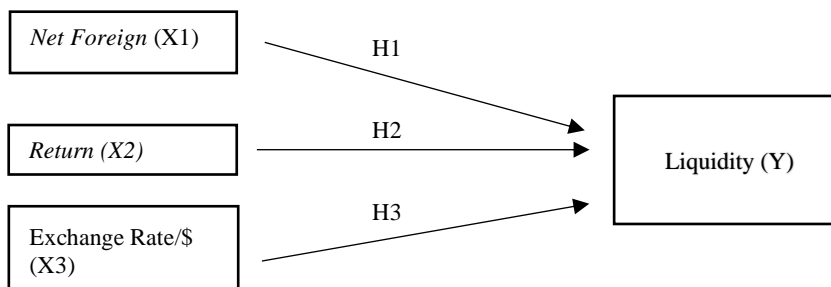


Figure 1. Theoretical Framework

From the illustration of the framework above, it can be explained that stock liquidity is influenced by several factors including buying shares by foreign investors, the situation of price changes directed at stock returns, and the rupiah exchange rate against the US dollar.

2.2 Hypotesis Formulation

2.2.1 Effect of Net Foreign on Stock Liquidity

Net Foreign (net purchase) of shares by foreign investors on stock liquidity has a positive effect (Asnawi, 2021); (Zaretta, 2015); (Lee and Chung, 2018); and (Bobbi and Haryanto, 2017). Additionally, according to the Feedback trader theory, foreign investors make investment decisions based on market movements in different countries. This



can be identified statistically by the correlation between foreign investment and market returns that occurred in previous periods (Clark and Berko, 1997) quoted from (Zaretta, 2015).

From the capital market side, the inflow of foreign investment provides benefits, especially in increasing liquidity and establishing market efficiency. These benefits can be obtained because foreign investors have larger capital, broad access to world capital markets, experience, and better analysis. When net foreign exchange the demand for shares increases, thus, stock liquidity increases. Therefore, it can be concluded that:

H1: Net Foreign has a positive influence on liquidity.

2.2.2 Effect of return on stock Liquidity

Return is a result obtained from the investment of funds that depends on the ability of investors to analyze stock prices. The concept of return is that the higher the expected return, the higher the risk to be accepted. Research on stock returns conducted by (Bobbi and Haryanto, 2017) concluded that foreign inflows have a significant effect on stock returns. Foreign investment has a positive effect, meaning that when foreign inflows occur, stock returns will increase. Investment is influenced by the return of the previous period and if the expected return in the current period cannot be realized, then the consequent investment flow will decrease (Froot et al., 2001) quoted from (Zaretta, 2015). On the other hand, if stock returns increase, stock liquidity increases because when the demand for stock increases, the stock price will increase and cause stock returns to increase. Hence, it can be deduced that:

H2: Return has a positive effect on liquidity.

2.2.3 The effect of exchange rate on Stock Liquidity

The exchange rate is one of the macroeconomic variables that affect the economic development of a country that can affect stock price volatility. Rupiah depreciation will encourage investors to move their funds to US dollars, and vice versa. Furthermore, every 1% increase in the rupiah exchange rate against the dollar will cause a decrease in the IHSG by 57.9% (Astuti, Susanta, and Apriatni, 2013). The instability of the rupiah exchange rate against the US dollar resulted in unstable stock prices. Hence, when the rupiah exchange rate appreciates against the US dollar, liquidity increases and vice versa. Therefore, it can be concluded that:

H3: The exchange rate has a positive effect on liquidity.

2.3 Research Methods

In this study, the variables operated are net foreign, return and the rupiah exchange rate of IDR/\$ against the liquidity capital market in Indonesia. While the method used in this study is a verification explanation by using a predetermined hypothesis test. The study used linear regression analysis to explain the data obtained based on the facts found during the period of observation in order to obtain an overview of the object under study.

2.3.1 Operational of Variables

The research data used is quantitative and illustrates the value of the variable magnitude being studied. This study consists of four variables where one dependent variable is liquidity with a proxy value and three independent variables: Net Foreign, return, and the exchange rate which is further explained in Table 1.

Tabel 1. Operationalization of Variables

| Variable | Variable Concept | Measurement | Proxy |
|--------------------|---|-------------|----------------|
| Net Foreign (X1) | Stock net purchase of foreign investors | Ratio | Rupiah |
| Return (X2) | IHSG price margin | Ratio | Percentage |
| Exchange rate (X3) | Rupiah exchange rate to USD | Ratio | Rupiah/USD |
| Liquidity (Y) | Stock trade volume | Ratio | Value (Rupiah) |

2.4 Sampling

The population used in this study uses the value of stock trading transactions as a proxy for liquidity. The data used in this study is time-series data taken from IHSG data based on the average daily transaction value which is at the closing price. This research was conducted to study and explain the effect of several macroeconomic factors on changes in stock liquidity including net foreign exchange, returns, and the exchange rate of the rupiah against the dollar.

2.5 Analysis Method

The data used in this study uses the time-series data of the IHSG. Data were obtained from the IDX for the period 2017-2019. The data were analyzed through classical assumption tests which included testing data normality, heteroscedasticity, multicollinearity, autocorrelation, and linearity assumptions. The results of the analysis use multiple regression analysis that is preceded by descriptive statistical analysis and correlation analysis.

3. RESULT AND DISCUSSION



Liquidity is a very important indicator for investors to see the movement of shares in the capital market in a certain period. Furthermore, (Asnawi 2021) deduced that liquidity is a measure of stock exchange activity, if time weight refers to price changes, then dollar weight refers to the value of the rupiah. Liquid stocks will of course provide returns to shareholders. In addition to interest rates, exchange rates and net foreign also affect liquidity in the stock market. Based on feedback theory, foreign investment traders make investment decisions based on market movements. Meanwhile, the rupiah exchange rate where the greater the depreciation, the lower the liquidity. As stated in this research method, the study uses linear regression analysis to answer whether the selected variables affect the trading volume, especially its relationship with foreign investment, stock returns, and the rupiah exchange rate.

3.1. Research result

In this study, qualitative analysis will be carried out in the form of elaboration of descriptive statistical data and research variables. The explanation of the data is complemented by the minimum value, maximum value, mean and standard deviation as shown in table 2 below: The following are descriptive statistics of research data for the period 2017-2019:

Tabel 2. Descriptive Statistics of the period of 2017-2019

| Period | N Statistic | Descriptive Statistics | Value (Rp billion) | Volume (million) | Frequency (thousand) | Variable | | |
|--------|-------------|------------------------|--------------------|------------------|----------------------|--------------------------|------------|-----------------------|
| | | | | | | Net foreign (Rp billion) | Return (%) | Exchange Rate (Rp/\$) |
| 2017 | 233 | Minimum | 4.189 | 4.986 | 167 | -7.058 | -1,8 | 13.154 |
| | | Maximum | 42.159 | 35.700 | 480 | 2.487 | 2,6 | 13.630 |
| | | Mean | 7.702 | 12.130 | 314 | -183 | 0,08 | 13.385 |
| | | Std Deviation | 3.389 | 6.176 | 48 | 954 | 0,53 | 4,2 |
| 2018 | 240 | Minimum | 4.888 | 5.954 | 268 | -2.450 | -3,76 | 13.290 |
| | | Maximum | 38.849 | 342.349 | 559 | 1.965 | 2,67 | 15.253 |
| | | Mean | 8.530 | 12.431 | 389 | -212 | -0,005 | 14.247 |
| | | Std Deviation | 3.389 | 3.389 | 48 | 954 | 1,02 | 552 |
| 2019 | 245 | Minimum | 5.479 | 6.514 | 300 | -11.539 | -2,59 | 13.913 |
| | | Maximum | 61.247 | 39.559 | 657 | 52.087 | 1,97 | 14.513 |
| | | Mean | 9.132 | 15.020 | 478 | -209 | -0,009 | 14.147 |
| | | Std Deviation | 4.133 | 3.586 | 60 | 3.647 | 0,71 | 124 |

Based on Table 2 it can be inferred that the average value of share trading transactions continues to increase in the selected years (2017: Rp. 7.7 trillion, 2018: Rp. 8.5 trillion, 2019 Rp 9.1 trillion). Consequently, volume and frequency experienced similar trends.

An increase in the value of share sales transactions and share trading volume in the Indonesian capital market is one of the important indicators of economic growth development in Indonesia. Additionally, the fluctuations of a country's capital market index are influenced by several factors such as domestic interest rates, foreign exchange rates, international economic conditions, a country's economic cycle, inflation rates, tax regulations, and the amount of money in circulation (Hikmah, 2014).

Furthermore, from the descriptive analysis data, the net purchase value by foreign investors increased from the period 2017 to 2019, even in 2019 from stock trading transactions worth Rp. 61.2 trillion, there was the recorded value of stock transactions by foreign investors amounted to 52 trillion.

This condition leads to an interesting question, namely whether the main factor driving the increase in shares is mainly seen from the more dominant foreign share ownership. The results of this study illustrate that foreign investors are very active and are still a catalyst in stock movements on the IDX. Factors that encourage foreign funds to enter the Indonesian stock market which increase quite high include Indonesia's economic growth which is seen as adequate so that Indonesia is seen as a prospective country. In line with the increasing share of foreign ownership in the domestic capital market, the level of blue-chip share ownership is followed by domestic investors, this shows that foreigners are still a strong signal in increasing the value of stock transactions in Indonesia. This study is a continuation of the previous literature review where an increase in foreign stock transactions has a positive impact, because it makes the stock market more liquid (Asnawi, 2021).

Furthermore, the return variable from 2017 to 2019 decreased. From table 2 stock returns have a standard deviation that is greater than the mean, thus, it can be said that the data are more varied and heterogeneous. In 2017 the mean value was 0.08 with a standard deviation of 0.53, in 2018 the mean value was -0.005 with a standard deviation of 1.02 and in 2019 the mean value was -0.009 with a standard deviation of 0.71.



The results of the study deduce that the stock market from 2017 and 2019 was in a bearish condition where the stock market experienced a decline. The results of this study are very interesting to be studied in more depth related to the factors that influence market movements which tend to be more active in the bearish market.

The results of the descriptive analysis of the exchange rate against liquidity in table 2 can be seen that from 2017 to 2018 the rupiah exchange rate depreciated against the US dollar. In 2017 the mean value of Rp. 13,385 and Rp. 14,247 in 2018 while in 2019 the value of the rupiah appreciated with a mean value of Rp. 14,147. The instability of the rupiah exchange rate against the US dollar resulted in unstable stock prices. When the rupiah exchange rate decreases against the US dollar, investors tend to prefer investing in the foreign exchange market, thus, investors sell their shares in the IDX. This will affect stock prices, and cause stock prices to fall and stock returns will decrease. Based on the results of this study, when the rupiah exchange rate increases (appreciation) against the US dollar, stock returns will increase and vice versa. Meanwhile, the results of research by (Asnawi, 2021) show that the rupiah exchange rate has a positive effect on the Amihud liquidity ratio (AIR), where the greater the depreciation and the higher the interest rate, the lower the liquidity.

3.1.1. Classical Assumption Testing in Regression

The results of the classical assumption test produce the following data:

1. Research data is stationary
2. Research data is not normally distributed
3. No multicollinearity was found
4. The data for the three variables used is only the return variable which has heteroscedasticity symptoms
5. The research data shows that there are symptoms of autocorrelation from the three proxies

3.2. Results of analysis and discussion

3.2.1. Correlation analysis results

Based on the results of the analysis of the magnitude of the correlation between net foreign exchange, return and the rupiah exchange rate with trading volume, the values are positive as shown in the table below:

Tabel 3. Results of Correlation Analysis with Net Foreign Variables, Returns, and Exchange Rates

| Variable | Value | Net Foreign | Return | Exchange Rate |
|---------------|-------|-------------|--------|---------------|
| Value | 1,000 | ,501 | ,053 | ,045 |
| Net foreign | | 1,000 | ,121 | ,042 |
| Return | | | 1,000 | -,031 |
| Exchange rate | | | | 1,000 |

Based on the magnitude of the correlation between net foreign and trading volume which is positive it can be concluded that with more foreign investors will increase the movement of the stock market. These results are in accordance with the research of (Asnawi, 2021) which deduced that foreign investors affect trading volume in the stock market. Furthermore, (Ding, Suardi, and Nilsson 2013) concluded that foreign institutional investors encourage liquidity in both SOEs (State-Owned Enterprises and non-SOEs. Additionally, research results (Lee and Chung, 2018) stated that foreign investors have a positive effect on liquidity amihud, but harm the bid-ask spread. However, the results are different from the research of (Rhee & Wang, 2009) quoted from (Asnawi, 2021), (Nguyen, 2017), (Thanatawee, 2019), and (Vo, 2016) which deduce that foreign investors have a negative effect on liquidity. One of the liquidity proxies in Rhee & Wang's research is the bid-ask ratio. These results indicate that foreign investors are not a catalyst for the capital market as expected.

Meanwhile, the relationship between foreign investment and market returns was stated that foreign investment does not significantly affect stock market returns (Zaretta, 2015). This result is not in line with the trader feedback theory, where the return of the previous period is a consideration for investing in the current period. Therefore, the behavior of foreign investors in investing their funds in Indonesia is not solely influenced by the fluctuation in the stock market. The factor of trust in the Indonesian government and the competent authorities to maintain a conducive investment climate and increase economic growth in Indonesia needs to be considered as a factor that is quite influential.

Furthermore, the degree of the correlation of return with trading volume is positive, where every increase in market return will increase trading volume. These results are in line with the research of (Pathirawasam, 2011), which states that stock returns are positively related to contemporary changes in trading volume. In addition, it was found that past trading volumes were negatively related to stock returns, where the investor's misspecification associated with low-volume stock liquidity could be the reason for the negative relationship between trading volume and stock returns.

In addition, the magnitude of the correlation between the exchange rate of the rupiah against the dollar has a positive correlation with liquidity, where every appreciation of the value of the rupiah will increase the volume of trade, this is because during the research period the value of the rupiah has appreciated against the US dollar. The



results of this study are in line with (Asnawi, 2021) who deduced that the rupiah exchange rate and interest rates have a positive effect on liquidity, where a controlled floating exchange rate pattern caused the rupiah exchange rate to change dynamically according to the market demand. Depreciation of the rupiah will increase transactions but it will also induce panic selling. Furthermore, depreciation is a consideration for foreign investors to make transactions in the capital market which will increase transactions but in the form of net selling. Depreciation also causes a decrease in the required investment. This also reduces the return obtained because the determinants of return in addition to the return of nominal assets are also changes in the exchange rate. If the exchange rate changes sharply it will cause psychological effects.

Data analysis in this study was conducted using multiple linear regression methods. The analysis was conducted to see the effect of net foreign, return and rupiah exchange rate on stock liquidity. The data analysis was carried out partially and simultaneously to determine whether the variables of net foreign, return, and the rupiah exchange rate had a significant effect on liquidity. The results of hypothesis testing using t-statistical calculations and correlation coefficients can be seen in Table 4 below:

Table 4. Multiple Regression Results with Dependent Variable: Value (in IDR billion)

| Variable | Predicted sign | Unstandardized Coefficients B | Standardized Coefficients Beta | t | Sig. | Description |
|---------------|----------------|-------------------------------|--------------------------------|--------|-------|-------------------------|
| (Constant) | | 6135,906 | | 0,953 | 0,028 | |
| Net foreign | + | 0,806 | 0,5 | 15,324 | ,000* | F = 2,102 R2 = 0,248 |
| Return | + | 33,262 | 0,007 | -0,22 | 0,413 | DW = 1,487 |
| Exchange Rate | + | 0,171 | 0,231 | 0,739 | 0,23 | |

3.2.2. Discussion

Based on the results of the regression analysis test, it can be concluded that the effect of each independent variable on the dependent variable is as follows:

3.2.2.1. The effect of net foreign on stock liquidity

The net foreign variable has a significant and positive effect on the value of stock trading transactions on the IDX, meaning that the purchase of shares by foreign investors influences the increase in the value of selling shares in the Indonesian capital market. Therefore, it can be said that H1 is rejected. The results of this study are in accordance with the research of (Asnawi, 2021) and (Lee and Chung, 2018) that foreign investors influence liquidity.

Foreign investors are generally more informed than domestic investors, in emerging markets information asymmetry can increase stock liquidity (Lee and Chung, 2018). However, (Vo, 2016) and (Thanatawee, 2019) deduced that share ownership by foreign institutional investors has a negative effect on stock liquidity.

The results of this study inferred that foreign institutional ownership increases the degree of information asymmetry between foreign investors and domestic investors. Additionally, foreign investors also adopt a buy-and-hold strategy after high ownership in local companies. Furthermore, high information asymmetry and inactive trading activity reduce liquidity.

Furthermore, the results of the analysis of stock selection by foreign investors inferred the presence of foreign investors (Chandra, 2011). On the one hand, it has a positive influence because it makes the stock market more liquid. But on the other hand, the dominance of share ownership by foreign investors makes the performance of the capital market very volatile due to the potential for withdrawal of funds at any time, thus, the role of domestic investors is needed. The results are different from research conducted by (Vo, 2016) which deduced that share ownership by foreign investors has a negative effect on stock liquidity and can increase the degree of information asymmetry between foreign and local investors.

In addition, foreign ownership increases the volatility of returns, trading volume, and risk (assets and equity) in Indonesian companies. Foreign companies increase the volatility of returns and trading volume because foreign-owned shares can attract other investors, especially domestic investors that affect prices. Furthermore, the risk will be higher if foreign investors increase because they do not reduce risk but on the contrary carry global risk and thus become a source of risk for the whole investors.

3.2.2.2. Effect of stock returns on stock liquidity

The return variable shows no effect on the value of stock trading transactions. Thus, it can be said that **H1 is rejected**. The results of this study indicate that stock returns in bearish conditions tend to increase in trading transactions compare to in bullish markets. This condition could be a signal of rational behavior from investors to make a cut loss in reducing the impact due to the decline in stock prices. Cut loss is a strategy that must be done as part of risk management because psychologically investors' concerns are driven by panic selling. Investors who do not cut loss



are taking the risk, but there is hope that the stock price will rise again. Meanwhile, when the market is in a bullish condition, investors are more likely to postpone transactions. These results are in accordance with research conducted by Zareta (2015) where return is not an important factor in stock selection by foreign investors. The return variable shows how the stock has performed in the past. Different results from previous studies stated that very high volume trading activities on an exchange would be interpreted as a sign that the market would improve (bullish). An increase in trading volume followed by an increase in price is a sign of a stronger bullish condition. Furthermore, it is said that the long-term trend of the capital market in Indonesia is on an upward trend, characterized by more bullish periods and longer duration than bearish periods. Other findings show that the probability of moving from a bullish to a bearish condition is 33.3% and a bearish condition of 12.4% means that there is a positive sentiment that the market tends to be bullish rather than vice versa (Respati, 2016).

Meanwhile, according to Chen (2019) forecasting market trends is another important effect of stock liquidity, as market trend forecasts have a significantly different effect on bearish and bullish markets. With a bear market forecast investors will adopt a more defensive strategy, whereas in a bullish forecast to reduce losses of the stock price, trading volume and circulation agility will also be affected and thus lead to low liquidity.

3.2.2.3. Effect of Rupiah exchange rate on stock liquidity

The rupiah exchange rate variable on the transaction value and trade volume resulted in a positive effect that is not significant. Therefore, it can be said that H3 is rejected. The results of this study are in line with (Asnawi 2021) where the greater the depreciation and the higher the interest rate, the lower the liquidity. Furthermore, (Haryandini 2012) concluded that the rupiah exchange rate has a significant effect on the IHSG, where the appreciation of the rupiah exchange rate against the US dollar has an impact on the rise and fall of stock prices. In contrast, (Astuti, Susanta, and Apriatni, 2013) deduced that the variables have a significant negative, meaning that if there is an appreciation it will be followed by a decrease in the IHSG. Furthermore, it is said that the depreciation of the rupiah causes a decrease in the value of the required investment which also reduces the returns obtained. Theoretically, depreciation will increase transactions, but its effect will encourage panic selling, thus, depreciation will be a consideration for foreign investors to make transactions in the capital market.

4. CONCLUSION

This study is a continuation of several previous studies that looked at the effect of foreign stock investment, returns and exchange rate fluctuations on stock movements or liquidity. This study found that in general net foreign exchange was able to increase stock liquidity. Based on the analysis results, the shares purchased by foreign investors are blue-chip and liquid stocks, thereby increasing the purchase of shares by domestic investors. The results are different for the return variable, which in bearish conditions tends to increase the movement of stock trading transactions. Therefore, the results of this analysis show that when stock prices are down, investors tend to cut losses to avoid continuous losses due to falling stock prices. Meanwhile, changes in the exchange rate of the rupiah against the US dollar have a significant impact on stock movements in the capital market, especially when the rupiah depreciates. Depreciation will increase transactions, but the impact will encourage panic selling, thus, it is suggested that domestic investors can contribute by buying more shares owned by foreign investors.

Furthermore, based on the results of research on stock returns in bearish conditions, the movement of the stock market tends to increase even though it is not significant, it is suggested that there is a need for risk management education to minimize losses in stock trading.

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