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STOCK LIQUIDITY: THE ROLES OF FOREIGN AND LOCAL INSTITUTIONS

LIKUIDITAS SAHAM: PERAN INSTITUSIONAL ASING DAN LOKAL

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I N F O A R T I K E L

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A B S T R A C T

High or low liquidity of stocks can affect investment decisions, liquid stocks tend to attract the attention of investors. One factor that can affect stock liquidity is institutional ownership. This study aims to determine the effect of foreign and local institutional ownership on stock liquidity. This research sample uses stock data on IDX and stock ownership data on KSEI in 2021. Stock liquidity data is calculated using the bid-ask spread. The hypothesis was tested using the quantile regression method. The results of this study indicate that foreign and local institutional ownership has a positive effect on stock liquidity. However, the coefficient value of foreign institutions is greater than that of local institutions, which means that foreign institutional ownership dominates in driving stock liquidity. These findings contribute theoretically to the validity of agency conflicts and some practically. First, these results can be used for investors in considering their investment decisions in stocks that have foreign and local institutional ownership structures. Second, these results can be used by management to consider the impact of the institutional ownership structure within the company.

Kata Kunci: Institusional Asing, Institusional Lokal, Likuiditas Saham

A B S T R A K

Tinggi atau rendahnya likuiditas saham dapat mempengaruhi keputusan investasi, saham likuid cenderung menarik perhatian investor. Salah satu faktor yang dapat mempengaruhi likuiditas saham adalah kepemilikan institusional. Penelitian ini bertujuan untuk mengetahui pengaruh kepemilikan institusi asing dan lokal terhadap likuiditas saham. Sampel penelitian ini menggunakan data saham di BEI dan data kepemilikan saham di KSEI tahun 2021. Data likuiditas

saham dihitung menggunakan spread bid-ask. Hipotesis diuji menggunakan metode regresi kuantil. Hasil penelitian ini menunjukkan bahwa kepemilikan institusi asing dan lokal berpengaruh positif terhadap likuiditas saham. Hasil penelitian menunjukkan bahwa kehadiran investor institusi asing dan lokal dapat mempengaruhi tinggi atau rendahnya likuiditas saham. Temuan signifikan ini dapat digunakan oleh manajemen untuk mempertimbangkan dampak investor institusi yang selain membantu mendanai perusahaan tetapi dapat mempengaruhi likuiditas saham, yang juga merupakan dasar keputusan investasi bagi investor lain.

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1. Introduction

Stock liquidity is a critical component in financial markets that influences market efficiency, transaction costs, expected returns, and overall financial stability (Ahmed et al., 2020; Bradrania et al., 2015; Chebbi et al., 2021; Shang, 2020). Highly liquid stocks tend to draw more investor interest, as they are perceived as less risky and can be sold quickly (Armitage et al., 2014; Ding et al., 2020; Tran et al., 2018). However, liquidity can deteriorate in times of heightened uncertainty and risk, such as during crises like the Covid-19 pandemic (Chebbi et al., 2021; Zaremba et al., 2021). The COVID-19 outbreak led to a stagnating world economy and an unprecedented global recession (Mdaghri et al., 2021), causing stock markets to plummet, volatility to surge, and resulting in some of the most dramatic stock price fluctuations in history (Zhang et al., 2021). This was evident in various markets, including Indonesia. Reduced liquidity has been identified as a major factor driving high volatility in emerging markets and poses a significant challenge to the development of financial markets (Rhee & Wang, 2009). Conversely, illiquid stocks are more difficult to trade due to the higher trading costs associated with such securities (Ahmed et al., 2020).

Stock liquidity is influenced by various factors, with institutional ownership being a significant one (Naik & Reddy, 2021). Institutional ownership refers to the holding of shares by entities such as government bodies, private, and both local and foreign institutions (Suparlan, 2019). It serves as a mechanism to mitigate agency conflicts, primarily through its capacity to exert control over management via an effective monitoring process (Suparlan, 2019). Institutional ownership can be categorized into two types: ownership predominantly by foreign institutions and ownership primarily by domestic or local entities (Ulfiyati et al., 2017).

In 2019, foreign entities held a significant portion of share ownership in Indonesia, accounting for 51.46% or IDR 1,907 trillion, compared to local ownership which stood at 48.54% or IDR 1,799 trillion (Sari & Hersugondo, 2021). This substantial presence of foreign ownership is believed to enhance the liquidity of the local market (Thanatawee, 2019). The rationale behind

this is that foreign institutions, when investing in local stocks, typically possess stronger and more professional capabilities for overseeing company operations than smaller and medium-sized retail investors (Shen, 2020). Both foreign and local institutional ownership are instrumental in improving corporate governance, enhancing the quality of information disclosure, and reducing the asymmetry of stock information. These factors collectively contribute to an increase in stock liquidity (Shen, 2020). Therefore, this research aims to investigate the extent to which institutional ownership, encompassing both foreign and local institutions, influences stock liquidity in the Indonesian market.

Several studies have indicated that the sentiment of foreign institutional investors positively influences the liquidity of stocks in emerging markets (Debata et al., 2018; Jacoby & Zheng, 2010; Kumari, 2019). This positive effect is partly attributed to the role of foreign institutional investors in enhancing corporate transparency, which in turn contributes to increased stock liquidity (Jacoby & Zheng, 2010). Furthermore, the entry of these investors into a market often leads to reduced trading costs and heightened competition, further benefiting market liquidity (Lee & Chung, 2018). However, contrasting views exist, with some research suggesting that an increase in foreign institutional ownership may actually detrimentally impact stock liquidity. Rhee & Wang (2009) found an inverse relationship, noting that higher levels of foreign ownership tend to correlate with reduced liquidity.

Research that simultaneously examines the effects of foreign and local institutional ownership on stock liquidity is notably absent, particularly in the context of Indonesia, where institutional ownership is distinctly categorized into these two groups. Most existing studies in stock liquidity focus predominantly on foreign institutional ownership, overlooking local institutional ownership. These studies generally explore aspects such as liquidity measurement (Będowska-Sójka, 2018; Marshall et al., 2013), factors influencing liquidity (Debata et al., 2018; Lee & Chung, 2018), market liquidity risk (Bradrania & Peat, 2014; Dang & Nguyen, 2020), expected returns (Shieh et al., 2012; Stereńczak et al., 2020), and the impact on cost of capital and firm value (Ali et al., 2017; Beaupain & Joliet, 2011). This research aims to fill this gap by analyzing the impact of both foreign and local institutional ownership on stock liquidity in the Indonesian market. It seeks to address how foreign and local institutional ownership individually influence stock liquidity, distinguishing itself from previous studies by incorporating local institutional ownership as an independent variable. The theoretical contribution of this research is to test the principles of agency theory in this context, while its practical contribution lies in enhancing the understanding of stock liquidity's importance in the market, providing valuable insights for investment decisions.

2. Literature Review

2.1 Agency Theory

Institutional ownership is recognized as a key aspect of corporate governance (Aggarwal et al., 2011; Huang & Zhu, 2015), and this research aims to explore its connection to stock liquidity based on the agency theory. Agency theory, a fundamental concept in understanding corporate governance discussions (Huang & Zhu, 2015), was described by Jensen & Meckling (1976) as a contractual relationship wherein one or more individuals (principals) engage others (agents) with the authority to make decisions on the principals' behalf. However, agency theory acknowledges the existence of two primary types of agency problems. The first type, Type 1 agency conflicts, arise from the divergent interests and potential conflicts between principals (the owners) and agents (the company management), often leading to information asymmetry (Messier et al., 2006). The second type, Type 2 agency conflicts, emerge from conflicts of interest between different principals (Cahyani & Sanjaya, 2014).

Agency theory contends that both principals and agents predominantly act in their own interests, which may not always align with maximizing firm value. This discrepancy stems from agents, typically company management, possessing informational advantages about the company's daily operations, while shareholders, as principals, may pursue their personal or group interests, bolstered by their power and authority (F. Chen et al., 2019). Such dynamics necessitate enhanced control and oversight mechanisms (Mursalim, 2009), a role effectively fulfilled by institutional ownership. Institutional ownership is instrumental in mitigating Type 1 agency conflicts between principals and agents by serving as a proxy for information asymmetry, with institutional investors generally favoring stocks characterized by lower information asymmetry (C. P. Chung et al., 2021; Hussain et al., 2020). Companies with substantial institutional ownership indicate robust capabilities in monitoring management. However, it is noteworthy that while institutional ownership can reduce Type 1 agency conflicts, it also harbors the potential to intensify Type 2 agency conflicts. This occurs when controlling shareholders, due to their significant ownership and control, exploit the interests of minority shareholders, often leading to decisions that are prejudicial to the latter group (F. Chen et al., 2019).

Agency theory provides a foundational perspective for understanding corporate governance. This theory suggests that effective governance, particularly through institutional ownership, can act as a key mechanism for overseeing and controlling managerial actions (Aggarwal et al., 2011). Furthermore, the presence of strong governance serves as a significant factor in attracting potential investors. It reassures them that the company is committed to ensuring a fair return on their investments. This level of confidence can increase investor preference for the company's shares, leading to enhanced stock liquidity (Ali et al., 2018; K. H. Chung et al., 2010; Prommin et al., 2014).

2.2 Hypothesis Development

Foreign institutional investors have become increasingly important in equity markets, with their presence especially pronounced in emerging stock markets where they often hold substantial capital (C. P. Chung et al., 2021; Kang et al., 2016; Lee & Ryu, 2019; Özel et al., 2021). These investors typically prefer companies with large market capitalizations, as such companies tend to have more stable stock prices, promising long-term profitability (Batten & Vo, 2015; Taechapiroontong & Suecharoenkit, 2011). Beyond their financial contributions, foreign institutional investors also serve as effective external supervisors, enhancing corporate governance mechanisms. Their involvement improves the quality of information in the local stock market, strengthens corporate control, and reduces stock volatility (Aggarwal et al., 2011; Beuselinck et al., 2017; Ferreira & Matos, 2008). This multifaceted role underscores their significance in shaping the governance and stability of the markets they invest in (Umutlu et al., 2010; Vo, 2015).

The impact of foreign institutional ownership on stock liquidity has been a subject of debate. Rhee & Wang (2009) argue that foreign institutional investors' participation can reduce market liquidity due to information asymmetry between foreign and local investors. These investors' sensitivity to macroeconomic and market shocks, especially in emerging markets, can offer insights into their behavior and impact on financial stability (Fang et al., 2017; Lee & Ryu, 2019). However, other studies counter this view, suggesting that foreign institutional investors tend to increase stock liquidity (Ajina et al., 2015; Z. Chen et al., 2013; Ghadhab, 2016; Lee & Ryu, 2019; Nguyen et al., 2019; Shang, 2020; Vo, 2017; Wei, 2010). Wei (2010) found that foreign ownership enhances liquidity in both developed and developing markets due to more efficient information dissemination from active trading. Chen et al (2013) note that foreign institutional ownership increases stock return volatility through higher liquidity, with more trading activity and higher sales volume (Dodd et al., 2015; Ghadhab, 2016; Vo, 2017). Ajina et al. (2015) also state that a greater proportion of institutional investor ownership positively impacts stock liquidity. Shang (2020) adds that higher liquidity, alongside effective external monitoring, can reduce managerial inefficiencies and minimize the risk of stock price declines. Based on these findings, this research proposes the following hypothesis:

H_1 : Foreign institutional ownership positively influence the stock liquidity

The ongoing debate regarding the comparative advantages of local versus foreign investors in the stock market continues to be unresolved (Chiang et al., 2012). From a theoretical standpoint, opening up stock markets to foreign investors could either increase or decrease the herding behavior among local investors (Zhao et al., 2021). Foreign institutional investors are often better equipped in terms of financial resources, international experience, access to global talent, diversified portfolios, and investment expertise, enabling them to analyze companies and make long-term investments effectively. Additionally, they are less likely to be influenced by local

political issues or business relationships with local companies when making stock trading decisions (Batten & Vo, 2015). However, foreign investors may face challenges in accessing information about local companies, a task that tends to be easier for local investors (Choe et al., 2005; Sensoy, 2017). One reason for this is that local companies often disseminate performance-related information primarily in the local language, which can hinder foreign investors' understanding and potentially reduce stock liquidity (Sensoy, 2017; Tran et al., 2018). In contrast, local institutional investors have a deeper understanding of the local culture, business environment, and nuances of local companies compared to their foreign counterparts (Yeh, 2021).

State-managed companies often suffer from poor transparency and high information asymmetry (Jian & Wong, 2010). Local institutional investors can navigate this challenge by leveraging their connections with state-owned enterprise (SOE) management to gather information, in contrast to foreign institutional investors who primarily rely on financial reporting for investment decisions (Ding et al., 2020). Boubakri et al (2016) discovered that foreign institutional investors tend to have lower share ownership in companies with higher state ownership, attributed to their informational disadvantage relative to local investors. Nevertheless, in terms of global market information, foreign investors are in a more advantageous position than local investors (Kang et al., 2016). This global insight can prompt local investors to mimic the trading decisions of investors from developed markets, potentially reducing information asymmetry and increasing stock liquidity (Bae et al., 2012; Wang & Zhang, 2015). Baker et al (2020) found that, unlike foreign investors, local investors tend to have higher share ownership and prefer stocks with high dividend yields. Additionally, local investors are better at predicting future stock returns, an advantage not shared by foreign investors (Ding et al., 2020). The investment decisions of local investors indirectly contribute to stock liquidity (Shive, 2012). Furthermore, the sentiment of both foreign and local investors positively impacts the liquidity of emerging market stocks (Debata et al., 2018). Based on these considerations, the second hypothesis is proposed as follows:

H_2 : Local institutional ownership poisitively affects the stock liquidation

3. Research Method

This is an explanatory quantitative research focusing on companies listed on the Indonesia Stock Exchange (IDX) during the year 2021. The year 2021 was selected for this research due to the significant increase in the number of investors and the substantial growth in the value of share management funds held by institutional investors, which reached IDR 4,149.3 trillion, accounting for 82% of the total funds. Additionally, this period was marked by the ongoing Covid-19 pandemic, making it a unique context for analysis (Melani, 2021). The sample for this research includes all shares listed on the IDX, following the approach of previous studies (Lee & Chung,

2018; Lee & Ryu, 2019). A purposive sampling technique was employed with the criterion being companies listed on the IDX during 2021 (n=769). We removed 36 suspended stocks and 33 companies which had listed in 2021, ultimately resulting in a final sample of 700 companies.

To measure stock liquidity, this research regarded the results of various research efforts (Fong et al., 2017; Goyenko et al., 2009; Marshall et al., 2013). Chung & Zhang (2014) recommend using the bid-ask spread as a proxy for measuring stock liquidity, as it has shown superior performance compared to other proxies (K. H. Chung & Zhang, 2014; Fong et al., 2017). Furthermore, this measure demonstrates much higher correlations than other liquidity measures (Fong et al., 2017). Therefore, for an accurate assessment of stock liquidity in this context, the bid-ask spread has been selected as the liquidity measure for stocks on the Indonesia Stock Exchange.

$$\mathrm{SPREAD_i} = (\mathrm{ASK_i} - \mathrm{BID_i})/\mathrm{M_i} \quad (1)$$

ASKi is the ask price of share i, BIDi is the bid price of share i, and Mi is the mean of ASKi and BIDi. For each dependent, independent and control variable in this research, monthly data was calculated for 2021 (Lee & Chung, 2018).

This research examined the influence of foreign and local share ownership on stock liquidity in the Indonesian Stock Exchange (IDX). Data on strategic ownership in categories such as companies, pension or endowment funds, banks or investment institutions, employees/families, and foreign investors were sourced from KSEI (Warganegara, 2018). Foreign institutional ownership was quantified as the ratio of shares held by foreign institutional investors to the total outstanding shares, and local institutional ownership was similarly measured (C. P. Chung et al., 2021; Lee & Ryu, 2019). The research encompassed a variety of industrial sectors, including basic industry, consumer cyclicals and non-cyclicals, energy, financials, industrials, healthcare, infrastructure, property, and technology, to provide comprehensive insights into the impact of foreign and local institutional ownership on stock liquidity across different segments of the Indonesian market.

The control variable (Z) was used to minimize the influence of external factors on the relationship between the independent and dependent variables and to avoid bias. Several control variables were included, such as return volatility, trading volume, and company size, following previous research (Al-Jaifi, 2017; Lee & Chung, 2018). Return volatility was measured using the standard deviation of daily stock returns for one month, while trading volume was measured by the value of trading volume for the same period (Lee & Chung, 2018; Lee & Ryu, 2019).

$$\mathrm{VOLATILITAS\ RETURN} = \mathrm{Std}\{(\mathrm{P_t} - \mathrm{P_{t-1}})/\mathrm{P_{t-1}}\} \quad (2)$$

$$\mathrm{VOLUME} = \mathrm{Value\ of\ monthly\ trading\ volume} \quad (3)$$

Company size was measured using monthly market capitalization, calculated from the average closing price multiplied by the total daily shares outstanding (Lee & Chung, 2018).

$$\text{SIZE} = \text{Ln}\ (\text{Monthly equity market value}) \quad (4)$$

Before conducting regression analysis, it was necessary to test for classical assumptions (Hair et al., 2019). This involved assessing normality and checking for multicollinearity and heteroscedasticity (Pavelescu, 2004). The normality test, conducted using the Jarque-Bera test, determined whether the independent and dependent variables were normally distributed. In this research, a Jarque-Bera probability value greater than 0.05 indicated normal distribution (Putri & Dewi, 2019); however, the p-value was less than 0.05, suggesting that the data was not normally distributed. The multicollinearity test aimed to detect correlations between independent variables in the regression model. A variance inflation factor (VIF) value of 10 or less indicated no multicollinearity (Hair et al., 2019), and the results confirmed that the VIF value was within this threshold. The heteroscedasticity test, using the Breusch Pagan Godfrey test, examined if there was variance inequality in the residuals from one observation to another. A Prob. chi square(2) in Obs*R-Squared value greater than 0.05 indicated no heteroscedasticity (Widarjono, 2018). However, the value was less than 0.05, showing signs of heteroscedasticity in the data.

This research employed quantile regression analysis due to issues with classical assumptions, specifically non-normal data distribution and the presence of heteroscedasticity. Quantile regression is advantageous in such situations as it can effectively explore conditional distributions (Khan et al., 2020). This method is particularly suitable for data that is not normally distributed (Xie et al., 2021) and exhibits heteroscedasticity (Bui et al., 2021; Zhu et al., 2016). Errors in estimates can lead to incorrect results and biases (Binder & Coad, 2011; Khan et al., 2020; Liu et al., 2021). Quantile regression offers two primary benefits. First, it is more robust than Ordinary Least Squares (OLS) when dealing with outlier data (Xie et al., 2021; Zhu et al., 2016). Second, it can estimate the impact of extreme values effectively (Liu et al., 2021). The basic form of the quantile regression technique, particularly for the median, was introduced by Koenker & Bassett (1978).

$$Q_{y_i}(\tau|x_i) = x_i^T \beta_\tau \quad 0 < \tau < 1 \quad (5)$$

Equation (6) in this research delineates the conditional quantile form of yi with xi. However, in the context of panel regression, it is essential to include fixed effects to control for unobserved individual heterogeneity. Describes the fixed effect panel quantile regression form as follows (Koenker, 2004):

$$Q_{y_{it}}(\tau|\alpha_i, x_{it}) = \alpha_i + x'_{it}(\tau_k) \quad (6)$$

The regression analysis model in this research is represented by the following equation:

$$Y_i = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 Z_{1i} + \beta_4 Z_{2i} + \beta_5 Z_{3i} + Industry + \varepsilon_i \quad (7)$$

There are:

Y = Stock liquidity

X_1 = Foreign institutional ownership

X_2 = Local institutional ownership

Z_1 = Volatility or standard deviation of a company's monthly stock return

Z_2 = Log Vol or the company's average monthly trading volume

Z_3 = Size or monthly market capitalization for the company

α = Constant

β = Regression coefficient

i = Company

ε = Error

The next phase involves hypothesis testing using the F test and t test (Hair et al., 2019). The F test determines the collective effect of all independent variables on the dependent variable. A p-value less than 0.05 suggests that the model is a good fit for the regression equation. The partial (t) test assesses the significance of the influence of each independent variable on the dependent variable, assuming other variables are held constant. If the p-value is less than 0.05, it indicates that the null hypothesis H_0 is rejected, and vice versa.

4. Result and Discussion

Table 1 presents data indicating a relatively high average bid-ask spread, suggesting that shares on the Indonesia Stock Exchange (IDX) typically exhibit lower liquidity (Rhee & Wang, 2009). This is evidenced by the minimum bid-ask spread value of 0.000809, representing the most liquid shares. Conversely, the maximum bid-ask spread value reaches 0.245729, indicating certain shares with notably low liquidity. Regarding foreign institutional ownership, the average stands at 20.3% across IDX-listed shares. A notable example is Fap Agri Tbk, with a peak foreign institutional ownership of 99.98% in 2021, indicating predominant foreign investor control. In contrast, local institutional investors have an average ownership of 43.8% on the IDX. For instance, Reliance Sekuritas Indonesia Tbk reached a maximum local institutional ownership of 99.83%, signifying major local investor dominance. The minimum values for both foreign and local institutional ownership suggest instances where companies lack any such investors.

Table 1
Descriptive Statistics

Variables	Mean	Max	Min	Std. Dev
Bid-Ask Spread	0.017079	0.245729	0.000809	0.018782
Foreign Inst.	0.203172	0.999782	0.000000	0.263717
Local Inst.	0.438129	0.998304	0.000000	0.313071
Volatilitas Return	0.031295	0.197517	0.000000	0.019652
Volume	1.89E+10	3.39E+12	89933.33	7.64E+10
Size	28.15266	37.60180	23.33538	1.963131

Source: Processed Data, 2023

The comparative mean values of foreign and local institutional ownership in 2021 imply a stronger presence of local institutions in the Indonesian capital market. This lesser foreign institutional involvement could be attributed to the uncertainties in the Indonesian stock market during the COVID-19 pandemic, along with a foreign preference for investing in larger-cap companies (Utami, 2021). Table 1 also reveals that the average company size, as indicated by the mean value of 28.15, points to generally low market capitalization on the IDX (Utami, 2021). In terms of return volatility, the mean value is 0.03, suggesting low volatility. This low volatility is indicative of stable returns, although these returns are typically not very high (Sari & Hersugondo, 2021). The trading volume data shows an average of IDR 18,761,931,392, with the highest recorded value being IDR 3,388,795,383,071, further indicating that the overall stock market trading volume tends to be on the lower side.

Table 2 shows that foreign and local institutional ownership variables have no correlation with stock liquidity. In the control variables, return volatility has a positive correlation with stock liquidity, while trading volume and size have a negative correlation. It is thought that trading volume and company size are negatively correlated with stock liquidity because liquid shares will be traded frequently, which ultimately increases trading volume and market capitalization (Utami, 2021). Apart from that, the low volatility of returns makes investors interested, because shares have low risk (Sari & Hersugondo, 2021).

Table 2
Correlation

Variables		(1)	(2)	(3)	(4)	(5)	(6)
(1)	Y Bid-Ask Spread	1.000					
(2)	X1 Foreign Inst.	0.002	1.000				
(3)	X2 Local Inst.	0.020	-0.481**	1.000			
(4)	Z1 Vol. Return	0.229**	-0.073**	0.006	1.000		
(5)	Z2 Volume	-0.157**	0.068**	-0.019	0.047**	1.000	
(6)	Z3 Size	-0.252**	0.303**	0.008	-0.184**	0.378**	1.000

Note: Significant coefficient on ** $p < 0.01$
Source: Processed Data, 2023

Table 3 shows the results of the quantile regression analysis which shows that the value of the coefficient of determination in model 2 has increased from model 1 at each quantile. Referring to Table 2, the control variables return volatility, volume and size are moderately correlated with the foreign institutional variable, so this causes the regression results in model 2 to experience an increase in the value of the coefficient of determination. The coefficient of

determination value in model 2 shows that the independent variable is only able to explain 11% of the variation in stock liquidity at each quantile. The F test results in Table 3 show that the regression model used is declared fit.

Table 3
Quantile Regression Results

Variables	Model 1			Model 2		
	Q1	Q2	Q3	Q1	Q2	Q3
Constant	0.0417**	0.0593**	0.0779**	0.0447**	0.0627**	0.0814**
(X1) Foreign Inst.				0.0024**	0.0043**	0.0074**
(X2) Local Inst.				0.0012**	0.0022**	0.0040**
(Z1) Vol. Return	0.0129**	0.0549**	0.3585**	0.0129**	0.0578**	0.3652**
(Z2) Volume	-1.86E-15	-4.62E-15	-9.52E-15	-7.21E-16	-1.13E-15	-7.46E-15**
(Z3) Size	-0.0012**	-0.0017**	-0.0024**	-0.0013**	-0.0019**	-0.0026**
R^2	0.1066	0.1053	0.1078	0.1101	0.1094	0.1121
Uji F	0.0000**	0.0000**	0.0000**	0.0000**	0.0000**	0.0000**

Note: Significant coefficient on ** p < 0.01, * p < 0.05
Source: Processed Data, 2023

The findings presented in Table 3, Model 2, reveal a noteworthy relationship between foreign institutional ownership (X1) and the bid-ask spread. The results indicate a positive correlation, suggesting that an increase in foreign institutional ownership correlates with a higher bid-ask spread. Since a higher bid-ask spread is typically associated with lower stock liquidity – given that high liquidity is characterized by a lower bid-ask spread – it can be inferred that increased foreign institutional ownership negatively impacts stock liquidity in Indonesia. This aligns with the studies conducted by Rhee & Wang (2009) and Yasmin (2021). Comparatively, the Indonesian stock market exhibits high foreign institutional ownership and lower retail investor participation, a dynamic different from many other markets (Lai & Windawati, 2017). The predominance of foreign institutional investors may lead to decreased stock liquidity. This is attributed to the tendency of these investors to adopt buy-and-hold strategies, which can elevate information asymmetry (Rhee & Wang, 2009). The lack of regulations restricting foreign ownership on the IDX further exacerbates this situation (Peranginangin et al., 2016). Moreover, suggest that a high concentration of institutional investors can result in reduced stock liquidity due to increased information asymmetry and stock volatility (Chia et al., 2020). Additionally, research by Chung et al. (2017) indicates that stock liquidity tends to decline in correlation with activities by institutional investors. This is partly because local institutional investors, leveraging their informational advantage, may exploit the uninformed decisions of individual investors, who are often characterized as uninformed. This scenario is exemplified by PT Batavia Prosperindo Internasional Tbk (BPII), which in September 2021 had a maximum share liquidity value of 0.245, concurrent with a foreign institutional ownership of 87.55%. The high volatility of the company's stock returns, potentially stemming from increased information asymmetry, could deter investors, resulting in lower liquidity for the shares.

This research's findings present a contradiction to the research by Lee & Chung (2018), Lee & Ryu (2019), and Bousnina et al. (2022), which assert that foreign institutional ownership

negatively impacts stock liquidity. These studies suggest that increased foreign institutional ownership is associated with enhanced stock liquidity. This is attributed to foreign institutions typically contributing to better information quality disclosure, enhanced management supervision, and improved corporate governance (Aggarwal et al., 2011). Such improvements can lead to reduced stock return volatility (Vo, 2016) and minimized earnings management practices (AL-Duais et al., 2022), subsequently increasing stock liquidity (Thanatawee, 2019). The discrepancy in findings could be attributed to varying levels of information asymmetry (Lang et al., 2012). Emerging markets, like Indonesia, are often characterized by higher information asymmetry compared to developed markets, which have lower asymmetry levels. Stock liquidity in emerging markets is more susceptible to fluctuations due to the variability in information asymmetry (Bakri et al., 2020).

Similarly, local institutional ownership (X2) is found to have a positive effect on stock liquidity in this research. The results indicate that higher levels of local institutional ownership correlate with lower stock liquidity. This conclusion aligns with the findings of Tran et al. (2018) and Chia et al. (2020). Although local institutions share similarities with their foreign counterparts, they possess an advantage in terms of information proximity (Chhaochharia et al., 2012). Unlike foreign institutions, local institutions have the ability to directly inspect local companies and more readily acquire knowledge about their management and internal operations (Chhaochharia et al., 2012).

The research indicates that while both foreign and local institutional ownership positively affect stock liquidity, the impact of foreign institutional ownership is more pronounced. The coefficient value for foreign institutional ownership is larger than that for local, suggesting that foreign institutions play a more dominant role in reducing stock liquidity. Additionally, the control variable of return volatility (Z1) is positively correlated with stock liquidity, meaning that higher return volatility leads to lower stock liquidity. Stock return volatility is commonly linked to investment risk (Che, 2018). Research by Rösch & Kaserer (2014) demonstrates that investors often avoid stocks perceived as high-risk, consequently decreasing stock liquidity. Both foreign and local institutional ownership significantly amplify stock return volatility in developing countries, including Indonesia. This heightened volatility can make investors wary, thereby diminishing stock liquidity (Z. Chen et al., 2013). However, contrasting findings exist, such as research by (Che, 2018) indicating that foreign institutional investors increase return volatility, while local institutional investors have the opposite effect.

In this research, company size (Z3), as measured by market capitalization, negatively impacts stock liquidity. This suggests that larger market capitalization correlates with greater stock liquidity. A consistently high level of market capitalization is often associated with high stock liquidity (Mishra et al., 2020). Furthermore, smaller companies are known to enhance liquidity

through merger activities (Nielsson, 2009; Yang & Pangastuti, 2016). It is widely acknowledged that large-cap stocks are typically the most liquid, easy to trade, and attract considerable interest from both individual and institutional investors (Kumar et al., 2020).

5. Conclussion

This research provides novel empirical insights into the impact of both foreign and local institutional ownership on stock liquidity. Utilizing the bid-ask spread as a proxy for stock liquidity measurement, the findings reveal that both foreign and local institutional ownership exert a positive influence on stock liquidity, with the implication that increased ownership by these institutions leads to reduced liquidity. Notably, foreign institutions demonstrate a more substantial impact on decreasing stock liquidity compared to local institutions.

This research significantly contributes to the existing literature on stock liquidity by examining the effects of foreign and local institutional ownership. Theoretically, it supports the principles of agency theory, which focuses on the conflicts of interest between different principals. When a company is predominantly owned by either foreign or local institutional investors, it could potentially exploit the interests of other shareholders, leading to reduced share liquidity. Conversely, concentrated ownership by these institutions can enhance corporate governance monitoring, thereby mitigating managerial failures within companies. Moreover, the findings of this research offer practical insights for company management, emphasizing the need to consider the impacts of foreign and local institutional ownership on stock liquidity, which is a crucial factor in investment decision-making. Investors can also utilize these results when making investment decisions, taking into account the proportion of foreign and local institutional ownership in a company. This research encountered issues related to normality and heteroscedasticity in the data. To address these challenges, the research employed the quantile regression method. Future research could further enrich the field by employing various stock liquidity measurement models and alternative methods to address classical assumption problems.

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