

# Corporate Ownership Structure and Stock Liquidity of Islamic and Non-Islamic Stocks: The Indonesian Experience

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This study aims to analyse the effect of corporate ownership structure on the liquidity of Islamic and non-Islamic stocks in the manufacturing industry of the Indonesia Stock Exchange and prove whether the level of information asymmetry is lower than non-Islamic stocks. Sample data uses manufacturing firms listed in 2010-2013 from the Indonesia Stock Exchange. 46 stocks are on the List of Islamic Securities of Indonesia Stock Exchange, and 51 stocks are not listed. The results are Islamic stocks' relative spread is lower than non-Islamic stocks in the manufacturing industry. Insider and blockholder ownerships have no significant effects on the relative spread, while domestic and foreign institutional ownerships have significant influence. In terms of liquidity depth, insider ownership does not have significant influence on Islamic stock depth, while other variables have a significant influence. Foreign institutional ownership has no significant effect on non-Islamic stock depth, while other variables are a significantly influence.

**Key words:** *Ownership Structure, Indonesia Stock Exchange, Islamic Stock, Non-Islamic Stock, Stock Liquidity.*

## Introduction

According to Rahmi *et al.* (2016), the average stock return in Indonesia from January 1990 to December 2012 was observed to be higher, and more volatile, than in Thailand and Singapore. The Indonesian monetary crisis in 1997, however, changed things. The crisis shifted Indonesian people away from their paradigm to other financial systems that are more resilient and structurally equitable in addressing financial crises driven by moral hazards.

Many concerned parties decided to implement a financial system based on Islamic sharia principles. Islamic financial system is gradually being implemented in the banking sector, the insurance sub-sector, non-bank financial institutions, and, then, the stock market. Indonesian Islamic stock has several indices inside the Indonesian Stock Exchange (BEI): the Indeks Saham Syariah Indonesia (ISSI), and the Jakarta Islamic Index (JII). Even though JII first came into existence on 5 May, 2000 and ISSI was established on 12 May, 2011 (Sherif & Lusyana, 2017), JII is equivalent to LQ45 index, as JII is only comprised of 30 highly liquid Islamic stocks, while ISSI is equivalent to the Composite Index of all Islamic stocks listed on the Indonesian Stock Exchange. It is most interesting for us to study on Indonesian stock market experience, as Indonesia is a country that has a majority Muslim population with a Western-style stock exchange that tolerates practices that may not adhere to Islamic principles (Naughton & Naughton, 2000).

Having information access is crucial in the stock market. A trade decision could widely vary between informed and uninformed traders (Salehi and Sehat, 2018). As stated by Rhee and Wang (2009), emerging markets may develop information asymmetry, as capital market efficiency in developing countries is weak. Brennan and Subrahmanyam (1996) also found that the presence of informed traders could significantly enhance information asymmetry and enhance adverse selection cost from the uninformed trader's side. The advantage of using Islamic law is that it would powerfully inhibit information asymmetry and perhaps, if all concerned parties implement Islamic trade principles theoretically, would prevent it from occurring at all. In regard to this, the Indonesian National Sharia Board (MUI) guidance No.80/DSN-MUI/III/2011 about The Application of Sharia Principles in Trading Mechanism of Equity Securities stated that it is not allowed to trade with *taghrir* (persuading other parties with falsified statements to make transactions), *talaqqi al-rukban* (seller ignorance on market price resulted into buy-sell process below market price), *tadlis* (concealing akad object defects to deceive buyers), and *ghisysy* (boasting product superiority to conceal its defects). This means that Islam believes in openness and transparency in the stock market (full disclosure) as a condition for a competitive and fair market.

If we look at the Indonesian Financial Service Authority (OJK) rule No.35/POJK.04/2017 about Criteria and Issuance of Sharia Stock regulations, it can be seen that firms which comply with Islamic sharia law have several basic rules, which can be interpreted as follows: (a) Not engaged in a business that antagonizes Islamic sharia law, namely usury funds, liquor trade, gambling, risk trade, and so on; (b) Not engaged and/or accompanying the trade of goods/services with false supply and demand manipulation; (c) The ratio of total interest-based debt to total asset does not exceed 45%; (d) The total of interest and other *non-halal* income does not exceed 10% of its total revenue. Overall, the general concept in assessing whether a stock is defined as sharia compliant (therefore simply called as Islamic stocks) is based on the business aspect and financial performance of each firm. We can infer that the

required financial ratios in point (c) for firms categorized as Islamic stocks are certainly lower than firms that are not, as investors would prefer to avoid holding and trading firm stocks which have high debts and affect a wider spread of its bid-ask prices.

Several prior studies have had an interesting view on the link between liquidity and corporate ownership structure. There are categories on ownership structures which have been identified as having different effects in stock liquidity, including insider or employee ownership (Alsahlawi & Ammer, 2017; Ismiyanti & Mahadwartha, 2017), blockholders (Iskandrani & Al-Amarneh, 2017), and domestic and foreign institutional ownership (Deng *et al.*, 2018). Overall, those instances in the above theories are taken from non-Islamic stocks as study objects, so what about the performance on the liquidity of Islamic stocks? Several similar studies have various levels and countries in assessing Islamic stocks, such as the experience of the Pakistan Islamic Index (KMI-30) (Shaikh, 2010), the experience of the Malaysian Islamic Index (SI) (Sadeghi, 2008), the experience of the Turkey Islamic Index (KATILIM 50), Islamic modelling on S&P500 (Kia, 2015), and comparisons on Islamic and non-Islamic stock performances in the Dow Jones Islamic indexes (Dewandaru *et al.*, 2014; Farooq & Reza, 2014; Jawadi *et al.*, 2014). In the Indonesian stock market, similar studies have focused on the topics of Islamic stock returns (Sherif & Lusyana, 2017) and Islamic stocks' volatility (Listyaningsih & Krishnamurti, 2016; Rahmi *et al.*, 2016). However, assessments about corporate ownership structures on the liquidities of both Islamic and non-Islamic indices in the Indonesian stock market are lacking. It is found that prior studies are either only discussing conventional stock liquidities or ownership structure and liquidity without assessing Islamic stocks (Sukmana and Kholid 2012). Thus, this paper aims to re-assess whether the existing theoretical and empirical studies on corporate ownership structure have some effects on the Indonesian stock market, while also comparing the liquidities between Islamic and non-Islamic stock indices. This study thereby contributes to the literature by taking the stock ownership structure and its effects on the liquidities of Islamic and non-Islamic stock indices as its main concern.

## Literature Review

Liquidity is one of the main concerns in investing; it is believed that dispersed ownership structure leads to better stock liquidity (Jacoby & Zheng, 2010). According to Reilly and Brown (2003), stock liquidity is the performance of a stock, which is rapidly traded without any reduction in the present price from the previous price. The implication is the investor could trade and convert their stocks swiftly into cash. High liquidity means that investors could have the expected return and avoid a significant risk of loss at the right time. Crockett (2008) stated that there are four dimensions of liquidity: (1) 'Depth', which shows the number of absorbed transactions in the market without affecting stock prices, is calculated from the amount of buy-sell orders; (2) 'Tightness', which shows the transaction costs

underwritten by investors on each transaction, is calculated by the difference of bid-ask prices; (3) 'Immediacy', which shows the speed of transactions that could be done - the faster a stock could be transacted means the lower the investor risk - thus decreases the difference on the bid-ask prices; and (4) 'Resilience', which shows the speed of a stock to regain its lost position after its fall. Based on this theory, we calculate the stock liquidity using tightness, depth, and immediacy with relative spread and depth measurements.

Insider ownership is the existence of a more informed trader (as privately informed traders are the insiders of a firm) which causes the illiquidity of a stock (Ali & Hashmi, 2018; Suresha & Murugan, 2014). Boujelbéne *et al.* (2011) also stated that insiders have access to a firm's privileged information and do trades based on said information, thus contributing to stock market information asymmetry and liquidity. Suresha and Murugan (2014) stated that insider ownership is usually recognized as an ownership consisting of the firm manager's share in a stock. As insiders are expected to be informed, market leaders would also make a larger adverse selection in the quoted bid-ask, leading to a wider spread and smaller depth. Dang *et al.* (2018) found that stock liquidity tends to be higher for firms with fewer insiders and controlling shareholders. Ginglinger and Hamon (2012) asserted that insiders tend to liquidate their holdings, unlike institutional investors, reducing the probability of trades against informed traders because double voting right shares are present, and implying an increase of liquidity for outside investors.

Blockholder ownership is an entity that holds at least 5% of the firm's outstanding shares and is expected to monitor a firm's operation; high blockholder ownership also increases the liquidity spread because of higher probability of informed trades. If large blockholders have access to a firm's private information and obtain superior information on firm value, blockholder monitoring might be impacted by reduced liquidity caused by wider spreads and lower depths (Boujelbéne *et al.*, 2011; Heflin & Shaw, 2000). Alsahlawi and Ameer (2017) stated that large stakes of blockholders could minimize floating stocks and the oversight role of insiders' blockholders, thus resulting in a higher cost in market liquidity. Ginglinger and Hamon (2012) asserted that blockholders lead to higher probability of informed trading because, as liquidity providers are widening spreads, the existence of a second large blockholder could increase oversight competition over the largest blockholder and improve information flow to the market, thus enhancing liquidity.

Institutional ownership is the existence of institutions that have had shares in a stock from its total outstanding shares; institutional ownership also plays a significant role in stabilizing liquidity (Ali & Hashmi, 2018). Also, institutional ownership prefers stocks with narrower spreads since they are more liquid (Boujelbéne *et al.*, 2011; Suy, Choun & Chhay 2018). The importance in distinguishing insider and institutional ownership is stated by Ginglinger and Hamon (2012), as previous empirical studies on market liquidity with the U.S. stock markets

as the main data had ambiguous results. Results from Rubin (2007) indicated that the involvement and incentive of institutional investors in a firm affects their informational advantages and trading behaviours. Thus, it is concluded that different ownership type behaviours are dependent on their firm ownership stakes.

Results from Bekaert *et al.* (2002) showed that market liquidity increases after the liberalization of the stock market in a growing economy. There is positive influence on the openness level of foreign investors to liquidity in emerging stock markets. Rhee and Wang (2009) stated that the shares of ownership by foreign institutions could reduce the liquidity of the stock, and large institutional shareholdings may become major factors in increasing the level of information asymmetry. The presence of these large transactions may result in an imperfect competition on liquidity offer, even after controlling the informational environment (Brockman *et al.*, 2009; Pritsker, 2005; Rubin, 2007), which ultimately decreases stock liquidity. Lee and Chung (2015) postulated that foreign ownership increases the price impact of trades and the result of large foreign ownerships is in a reduction of the bid-ask spread. Foreign investors bring an advantage to the market, in that they lower transaction costs by increasing competition in the price discovery process. An overall increase in the number of foreign investors in emerging markets after the global financial crisis brings higher price impacts and lower spreads in the financial market.

Dividend is a component that is expected by investors who invest in the relatively long term, such as sharia stocks, as investors will always look at the risks of firm bankruptcy related to debt burden (Agarwal, 2007). Firms categorized as sharia stocks have a lower bankruptcy risk on average than firms categorized as non-sharia stocks. Investors with long-term orientation tend to choose Islamic stock investments. Therefore, dividend policy is a factor that determines sharia stocks' liquidity in manufacturing companies. Adversely, non-Islamic stock investors have a tendency to invest in the relatively short term with more speculative and capital gain expectations. Correia and Amaral (2014) considered the influence level of corporate governance on U.S. stock markets and its distinct characteristics of dividend policy. They found that liquidity increases with governance, financial slack and return on sales, and that less liquid stock pays more dividends.

Islamic stock liquidity is theoretically different from non-Islamic stock liquidity, but Farooq and Reza (2014) assert that a tradable sharia-compliant index could follow, or that other currently non-tradable indices will become tradable. This means the existence of any Islamic index could assist the liquidity of a stock market. In the Islamic view, one of the main concerns with the stock exchange is *Qimar* (gambling). This concept covers the speculations within the stock market, which is the trades of securities with pure short-term gains that result from the uncertainties within the market (Naughton & Naughton, 2000). In the Indonesian case, there are two main guides in a theoretical view of Islamic stock performance. The first

is The MUI guidance No.80/DSN-MUI/III/2011, and the second is the OJK rule No.35/POJK.04/2017. These guides, which were explained in the introduction section, suggest that the liquidity of Islamic stock is better than non-Islamic stock, thus underlying the first hypothesis in this study.

**H1:** Non-Islamic stocks' liquidities are worse than Islamic stocks.

There is a view to reduce the effect of asymmetrical information in the stock market, which is implementing the concept of openness and transparency (full disclosure) to suppress the level of *tadlis* (fraud and manipulation) in any form. Islam prohibits transactions of informed traders with uninformed traders, which damages the latter. Islam requires transactions with full disclosure. Ideally, the information asymmetry phenomenon will not occur if both parties apply Islamic trade principles (Nafik, 2008). Although there are mixed research results regarding the debt effects on company stock liquidity (positive and negative), early indications show that, in the Indonesian stock market, for 45 of the most liquid stocks traded (LQ45), most of them (about 60%) were categorized as Islamic stock. This view underlies the second hypothesis of this study.

**H2:** The level of information asymmetry in non-Islamic stock trade is greater than Islamic stock.

## Research Method

This research uses a quantitative approach, which focuses on hypothesis testing through independent t-test between two independent samples, followed by correlation and regression analysis, and finally resulting in general conclusions. Starting with hypotheses and theoretical review, it then explores the effect of corporate ownership structure on Islamic and non-Islamic stocks' liquidity, this study uses manufacturing industry as the study object as the manufacturing industry in Indonesia has completeness and easier access in public disclosure of financial reports. The population of manufacturing firms is then compared with the Jakarta Islamic Index, as 60% of JII Index is also composed of manufacturing firms.

Dependent variables used are liquidity spread (hereafter LQSP) and liquidity depth (LQDP) as defined by Crockett (2008), and the calculation of liquidity is done by using two factors, namely spread and depth. Spread is calculated using the difference of bid price and ask price, while depth is calculated using the number of bid-ask orders, as used by Sadeghi (2008), Chung *et al.* (2010), Yaghoobnezhad *et al.* (2011), and Listyaningsih and Krishnamurti (2016).

The first independent variable is Insider Ownership (hereafter INOW), which is defined as the number of a firm's shares owned by related parties inside the firm (managers and commissioners), or, in other words, all related parties directly involved in the firm's policies and have direct information from inside the firm. The second independent variable is Blockholder Ownership (hereafter BLOW), defined as the level of concentration of a firm's shareholders who have an ownership level above or equal to 25% as defined by the Indonesian Stock Exchange Director's Decision No.Kep-305/BEJ/07-2004. The third and fourth independent variables are Domestic Ownership (hereafter DMOW) and Foreign Insider Ownership (hereafter FROW), which are the number of shares owned by domestic or foreign legal entities, usually in the form of mutual funds, pension funds, insurances, endowments, and banks. All of the independent variables are as used by Brockman *et al.* (2009), Chung *et al.* (2010), Boujelbéne *et al.* (2011), Suresha and Murugan (2014), Lee and Chung (2015), Alsahlawi and Ammer (2017), Iskandrani and Al-Amarnah (2017), and Dang *et al.* (2018).

This research also uses three control variables to assess stock liquidity in Islamic and non-Islamic stocks through controlling some variables in the stock market environment. Namely stock price (hereafter STOP), firm size (hereafter FIZE), and dividend policy (hereafter DIPO) as a dummy variable for firms that gave dividends in the study period. Several studies have linked these variables as control variables that affect stock liquidity, such as Heflin and Shaw (2000), Chung *et al.* (2010), Jacoby and Zheng (2010), Boujelbéne *et al.* (2011), Liu (2013), Iskandrani *et al.* (2015), Lee and Chung (2015), and Dang *et al.* (2018).

Data used in this study are secondary data in the form of Islamic and non-Islamic stock liquidity, institutional ownership, blockholder ownership, trading volume, and stock price. Source of data used are secondary data obtained from each firm's financial statements and trading activities of Islamic and non-Islamic stocks from 2010 to 2013 on the Indonesia Stock Exchange. The formulated multiple regression models used are:

Model I:

$$LQSP_{it} = \alpha + \beta_1 INOW_{i,t} + \beta_2 BLOW_{i,t} + \beta_3 DMOW_{i,t} + \beta_4 FROW_{i,t} + \beta_5 STOP_{it} + \beta_6 DIPO_{i,t} + \beta_7 FIZE_{i,t} + \epsilon_{i,t}$$

Model II:

$$LQDP_{it} = \alpha + \beta_1 INOW_{i,t} + \beta_2 BLOW_{i,t} + \beta_3 DMOW_{i,t} + \beta_4 FROW_{i,t} + \beta_5 STOP_{it} + \beta_6 DIPO_{i,t} + \beta_7 FIZE_{i,t} + \epsilon_{i,t}$$

Description:

$LQSP_{i,t}$  : Relative stock spreads of firm  $i$  in  $t$  period

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LQDPit	: Stock depths of firm i in t period
$\alpha$	: Intercept of regression models
$\beta$	: Regression coefficients
INOWi.t	: Insider ownership of firm i in t period
BLOWi.t	: Blockholder ownership of firm i in t period
DMOWi.t	: Domestic ownership of firm i in t period
FROWi.t	: Foreign insider ownership of firm i in t period
STOPi.t	: Stock price of firm i in t period
DIPOi.t	: Dividend policy of firm i in t period
FIZEi.t	: Size of firm i in t period
$\epsilon$ i.t	: Error term

## Results and Discussions

The number of firms in the manufacture industry of the Indonesian Stock Exchange throughout the study period of 2010-2013 consisted of 46 firms which were listed in the Jakarta Islamic Index (JII) and 51 firms not listed in JII. Table 1 shows the results of an independent sample t-test, which includes relative spread and depth difference tests between Islamic stocks and non-Islamic stocks in manufacturing firms within the time period of 2010-2013.

From Table 1, we could infer that the relative spreads of Islamic stocks are lower than the relative spreads of non-Islamic stocks in the manufacturing firms, Islamic stock spread is valued at 0.0656 while non-Islamic stock is valued at 0.1209. This means that adverse selection cost of Islamic stock is lower than non-Islamic stock liquidity. This is due to the fact that one of the criteria of the Islamic stock classification states that the capital structure consists of 45% debts and 55% from its own capitals. In other words, the risk of Islamic stocks is lower than the risk of non-Islamic stocks and might lead to the minimization of the transaction cost from the price-maker dealers so that the bid and ask spread will be smaller.

Results of this study support the view that investors have lowered their interest to trade and hold shares in firms that have high debts, thus causing the bid-ask spread to become wider (illiquid) (Frieder & Martel, 2006). Dennis and Weston (2001) also found a negative relationship between leverage and liquidity of a firm's stock. Furthermore, according to Naughton and Naughton (2000), speculation creates volatility. Speculation affects the stock market's orderly functions as speculators' profits are achieved at the expense of other investors. Any potential benefits of a speculation, such as injecting liquidity into the market, is not considered as outweighing the negative aspects.

The inability to classify stocks results in Islamic stocks having better stock depth than non-Islamic stocks. This is due to several reasons. Most investors in BEI are speculating with the method of short-term buy and sell, not to mention Islamic and non-Islamic investors. So, the value of stock transactions, which can be absorbed by the market without causing a deep fall in the stock price, is indifferent. Moreover, in the period 2010-2013s, the Indonesia Stock Exchange underwent a high growth. This momentum encouraged some investors to conduct stock transactions with relatively fast term to gain profits without considering said stocks as having the classification of Islamic or not. Supporting the study results, Listyaningsih and Krishnamurti (2016) found that Jakarta Islamic Index stocks have unique characteristics besides being based on Islamic principles. They have high market capitalization and high liquidity. Herwany and Febrian (2013) also found that non-Islamic stock portfolio tends to be affected by spread movement and unanticipated inflation while Islamic stock portfolio is determined to be more resilient to unanticipated rate. During an economic slump, it is found that non-Islamic stock portfolio is cured using more earning per share and price-to-book value, while liquidity drives portfolio return of Islamic stock.

Based on Table 2, it can be interpreted that the insider ownership variable has an insignificant influence on both spread and depth variables (stock liquidity). This result differs from the results of studies conducted by Sarin *et al.* (2000), Comerton-Forde and Rydge (2006), and Rubin (2007). According to Sarin *et al.* (2000), insider ownership is positively associated with bid-ask spreads and information asymmetry. However, the result of this study indicates that greater insider ownership does not lead to the probability of insider trading, which makes greater adverse selection cost (cost of information asymmetry), resulting in higher spreads. The high growth of the Indonesian Stock Exchange during the study period indicates high investor confidence in both domestic and foreign investors after the global financial crisis in 2008. This also shows very high trading activity and high market liquidity (low spread), so, in making investment decision, investors do not consider ownership of insiders as a component that leads to high adverse selection cost. In addition, many investors are speculating and applying a technical analysis approach without considering the ownership factor in analysing stocks. R-Square value varies across liquidity depth and spread, which means that even liquidities in the Indonesian manufacturing industry have mixed goodness-of-fit value.

Table 2 shows that insider ownership has a significant negative effect on non-Islamic stock depth. This means greater insider ownership lowers the value of stock transactions that can be absorbed by the market without causing a deep fall in price. It also shows that large shareholdings by insiders have the potential that such stocks are rarely traded in large quantities in the capital market, because shareholders who are concurrently within the management of the firm are aiming to maintain control; therefore, the depth of non-Islamic stocks could decrease further. This is in accordance with Iskandrani *et al.* (2015) who, their study based on the London Stock Exchange experience, found that insider and blockholder

ownership affects negatively to bid ask-spread while institutional ownership has positive effect. Ginglinger and Hamon (2012) found that French firms' liquidity is significantly reduced for firms which have a large portion of insider ownership. This result is robust with the controlling shareholder as a direct or ultimate ownership. They also found that the approach to separate control from ownership has important consequences on liquidity and information asymmetry. Rubin (2007) showed that institutional holding has a positive influence on liquidity, while institutional blockholding has a negative effect on stock liquidity.

Results of this study also indicate that blockholder ownership does not have a negative effect on the relative spread on both Islamic and non-Islamic stocks in manufacturing firms. The study results are different from Haflin and Shaw (2000) and Rubin (2007) who found blockholder ownerships affect stock liquidity negatively. Therefore, the results of this study do not support the view that blockholders are obtaining superior information on firm value, and that the potential benefit of partial blockholder oversight will be in terms of full conversion with a wider spread. However, this study also indicates that blockholder ownerships have significant negative effects on stock depth. This indicates that higher blockholder ownership could lower the stock depth. This is attributed to the fact that stakeholder dealings with blockholders is infrequent, as blockholder ownership is usually intended for corporate control purposes. In contrast, Jacoby and Zheng (2010) found that blockholder ownership has a positive relation on spread and the adverse selection component of spread in the NASDAQ market. Brockman *et al.* (2009) showed that block ownership significantly reduces the firm's trading activity according to a diffusion in ownership structure. This result occurs primarily through fewer trades rather than a decline in the average trade size. The reduced trading activity has a real friction effect on the firm's liquidity: block ownership increases the firm's bid-ask spread, increases the adverse selection component, increases the price impact, and decreases the depth.

Domestic and foreign institutional ownerships in Islamic stocks have significant positive effect on stock spread and a significant negative effect on stock depth. It also shows that greater proportions of share ownership by both domestic and foreign institutions could lower the liquidity of Islamic stocks. Results of this study also support some research that indicates institutional transactions are more likely to control information (Bushee & Goodman, 2007; Ke & Petroni, 2004), and the effect of large institutional ownership on asymmetry information (Brockman *et al.*, 2009; Dennis & Weston, 2001; Rhee & Wang, 2009) and volatility return (Gabaix *et al.*, 2006; Wang, 2007), so institutional ownership has a negative effect on stock liquidity. Rhee and Wang (2009) stated that, in emerging markets such as Indonesia, information asymmetry could be applied. In addition, the results of this study do not support Kothare (1997), who stated that the value of institutional ownerships indicates a lesser number of shareholders of a firm, so the amount of asset trade transactions is decreased

per unit time. This causes the bid-ask spread to increase, which means that the liquidity of the traded assets decreases. Liu's (2013) research used a sample of stocks listed on the NYSE and the AMEX and found that stocks with large increase in institutional investors tend to be more liquid than other stocks. Further analysis reveals that this effect tends to be stronger for stocks with more severe asymmetric information. Moreover, active institutional investors, such as independent advisors, and mutual funds exerted larger impacts on stock liquidity than passive institutions.

The study also shows that domestic institutional ownership and foreign institutional ownership have a non-significant effect on non-Islamic stock spread. Similarly, foreign institutional ownership has a non-significant negative effect on non-Islamic stock depth. However, the results of this study also indicate that domestic institutional ownership has a significant negative effect on non-Islamic stock depth. The inconsistency of domestic and foreign ownership on the spread of non-Islamic stocks can be caused by most investors in IDX speculating in buying and selling shares in the capital market and doing short-term transactions; this includes both Islamic and non-Islamic equity investors. Non-Islamic stock investors were found to be more dominant in speculation trading than Islamic stock investors. Investors like this tend to influence decisions of buying and selling stock without clear fundamental information that is based on rumours that are in circulation. Therefore, this type of investor has fewer considerations about high ownership of both domestic and foreign institutions as a factor, which leads to high adverse selection cost as a component of non-Islamic share spread on manufacturing companies. In addition, domestic institutional investors generally invest in the long term and with the intention of controlling the company, so transaction frequency made by institutional investors is relatively rare and this affects the low stock depth of companies owned by domestic institutions. This is in contrast to foreign institutional investors who generally invest in stocks in the relatively long term. Foreign stock trading transactions are relatively frequent so that the ownership of these foreign institutions has no impact on their non-Islamic stock depth.

Lee and Chung's (2015) research on 20 emerging markets revealed that the bid-ask spread decreases with foreign ownership. They interpreted these results as evidence that foreign investors contributed to increasing adverse selection risks for liquidity providers, as foreign investors brought net benefit to the market, lowering trading costs by increasing the price discovery competition. The general increase in foreign ownership in emerging markets after the global financial crisis resulted in higher price impacts and lower spreads. Dang *et al.* (2018) used a comprehensive data set across 41 countries and found that institutional ownership is positively correlated with stock liquidity. More importantly, the positive association between institutional ownership and stock liquidity is stronger (weaker) for countries with opaque (transparent) information environments or poor (good) institutional characteristics. Additional analysis revealed that the positive association between institutional

ownership and liquidity is attributable to non-block institutional investors. Ali and Hashmi (2018) analysed 84 firms in Pakistani Stock Exchange and found the tendency of institutional ownership to significantly increase stock liquidity in the cross-section.

Jacoby and Zheng (2010) found that firm size affected the relation of ownership dispersion and market liquidity in small NYSE/AMEX stocks, thus implying that most of the relations between ownership dispersion and market liquidity still existed. Alsahlawi and Ammer (2017) found that a greater level of ownership could influence liquidity, as retail investors are expected to be net sellers with more foreign capital injected to the market. In the current times, the retail investors constitute 85% of the trading, despite the fact that ownership accounts for only 1/3rd of the market. Iskandrani and Al-Amarneh (2017) found that with all controlled shareholders (investment companies, foreign, government, and pension fund) there is a negative association between these controlled shareholders and stock liquidity.

## **Conclusion**

Islamic stock classifications make the spread of stock better than non-Islamic stocks. This indicates that the information asymmetry which gives rise to adverse selection cost in manufacturing companies whose shares are categorized as Islamic is lower than companies whose shares are categorized as non-Islamic. However, there is no strong evidence to support the hypothesis that Islamic stock depth will be higher than non-Islamic stock depths in the manufacturing industry.

Most investors in the period of this study did not consider insider ownership as a component that led to high adverse selection cost of both Islamic and non-Islamic stock spread in manufacturing companies. This was caused by booming capital market conditions, so the action of quickly taking advantage was common at such time. In addition, the number of investors who speculated and applied a technical analysis approach without considering the ownership type in analysing stocks resulted in the insider ownership factor not having a significant effect on both Islamic and non-Islamic stock spread in manufacturing companies.

Blockholder ownership does not have a negative effect on the relative spread on both Islamic and non-Islamic stocks. In addition, low frequency of stock trading conducted by Islamic and non-Islamic blockholders resulted in a higher proportion of ownerships of stock blocks, thus lowering the depth of Islamic and non-Islamic stocks. Domestic institutional ownership and foreign institutional ownership in Islamic stocks have a significant positive effect on stock spread as well as having a significant negative effect on stock depth on manufacturing companies. However, the domestic institutional ownership and foreign institutional ownership have a non-significant effect of non-Islamic stock spread.

**Table 1:** Test of Liquidity (Relative Spread and Depth) on Islamic and Non-Islamic Stocks

Assessment	Average Spread	Average Depth (Ln)
Islamic	0.0656	18.7281
Non-Islamic	0.1209	18.8322
T-test (sig.)	0.001	0.635
Decision	Significant	Insignificant

**Table 2:** OLS Regression on The Determinants of Liquidity (Relative Spread and Depth) on Islamic and non-Islamic stock

Independent Variables	Islamic Stock		Non-Islamic Stock	
	<i>Spread</i>	<i>Depth</i>	<i>Spread</i>	<i>Depth</i>
<i>Constant</i>	0.542*** (0.000)	1.685 (0.129)	0.380*** (0.000)	15.495*** (0.000)
<i>INSD</i>	-0.008 (0.213)	0.054 (0.486)	-0.062 (0.273)	-2.520** (0.021)
<i>BLOCK</i>	-0.021 (0.127)	-0.658** (0.034)	-0.010 (0.409)	-1.334*** (0.007)
<i>DOMS</i>	0.051* (0.073)	-1.220** (0.038)	-0.015 (0.405)	-1.633** (0.016)
<i>FINST</i>	0.060** (0.030)	-1.752*** (0.002)	0.019 (0.375)	-0.540 (0.228)
<i>PRICE</i>	0.021*** (0.000)	-0.166* (0.075)	0.100*** (0.000)	-0.604*** (0.000)
<i>DEV</i>	0.057*** (0.000)	-1.044*** (0.001)	-0.003 (0.893)	0.045 (0.869)
<i>SIZE</i>	-0.025*** (0.000)	0.738*** (0.000)	-0.088*** (0.000)	1.019*** (0.000)
<b>R<sup>2</sup></b>	<b>0.268</b>	<b>0.518</b>	<b>0.533</b>	<b>0.443</b>

Description: \*significant at 10%, \*\*significant at 5%, \*\*\*significant at 1%



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