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OWNERSHIP STRUCTURE AND BID-ASK SPREAD: EVIDENCE FROM MALAYSIAN MARKET

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Abstract

Liquidity is a vital feature of any financial market. It reflects the attractiveness of a capital market and the confidence of investors. Malaysia is an emerging market, where family firms control 65% of firms, while government-linked corporation dominated 70% of market capitalization. This research aims to investigate the relationship between ownership structure, namely family ownership, conglomerate ownership, government ownership, foreign ownership, and dispersed ownership, towards market liquidity, measured as bid-ask spread. The study uses a total sample of 206 Malaysia manufacturing firms from 2011 to 2015. Despite the findings that show family, government, and dispersed ownership have an insignificant positive relationship with the bid-ask spread, and these imply the severity of information asymmetry despite its significant is lesser. However, conglomerate ownership and foreign ownership significantly and negatively affecting bid-ask spread, suggesting a lower agency cost and information asymmetry in this market. A lower conglomerate firm's bid-ask spread indicates the creation of an internal capital market which reduce agency cost in this structure. The negative and significant relationship in foreign ownership suggesting foreigner investors emphasis the value of transparency and reduce the cost of the transaction in the market. The research provides theoretical implications about the determinants that affect the bid-ask spread and thus affect the market liquidity. The study provides the insights to the understanding of the influences of the ownership structure to the market liquidity.

Keywords: Ownership structure, bid-ask spread, liquidity.

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1. Introduction

Liquidity is a vital feature of any financial market because it is the lubricating agent that facilitates the allocation of the capital of the financial markets. Liquidity is an essential part of a stock market as much as the efficiency is (Sharma, 2005). The lower level of the market liquidation level, the lesser the attraction of that stock for investments. A market with high liquidity suggests that the fast transaction of a high volume of securities at a lower cost. Therefore, asset prices would not significantly change from order time to purchase time (Nekounam, Zanjirdar, & Nasr, 2012).

Market liquidity is a well-known determinant of market volatility (Boermans, Frost, & Bisscho, 2016). Market liquidity can be measured by using various methods. One of the most popular way would be by measuring the bid-ask spread (Attig, Gadhoum, & Lang, 2003). Bid-ask spread is defined as the difference between the bid and ask quote divided by their arithmetic average (Kini & Mian, 1995). Therefore, liquidity can be defined as the ability of the market to absorb trades without causing a drastic change in the asset's price and liquid markets refer to places where a transaction can take place with ease and at a low cost.

Various studies have been carried out to identify the dominant determinants factors that affect the market liquidity. The seminal work of Holmstrom and Tirole's (1993) "Market Liquidity and Performance Monitoring" addressed that concentrated ownership would decrease the level of the trading activity, and so will reduce the stock liquidity. The concentration of ownership will affect investors to sell their stock. The illiquidity of the stock is usually vulnerable to manipulation and malpractices. The vulnerability often leads to abnormally high gains for some market players at the cost of the uninformed retail investors.

Rubin (2007) conducted a test to examine the relationship between the liquidity of a firm's stock and its ownership structure. The study focused on insider and institutional ownership. The research found that the liquidity-ownership relationship is mostly driven by institutional ownership rather than insider ownership.

This paper focuses on the liquidity of the Malaysian stock market. From the policy-making perspective, improving the liquidity of Bursa Malaysia has always been a critical objective for the stock exchange regulators. A study by Lim et al. (2015) focused on the investor groups. However, the studies on the liquidity of the Malaysian stock market, are limited particularly on the relationship between ownership structure and bid-ask spread.

As a conclusion, the ownership structure seems to be one of the essential factors that affecting market liquidity. The study, therefore, looks into whether a different type of ownership structure illustrates the different degree of market liquidity.

1.1 Market Liquidity

A liquid market is equal to an efficient market. Moreover, a liquid market tends to be more stable and can absorb systemic risks, where a buyer can buy, and a seller can sell at a price closer to their expectation, i.e., a narrow spread of bidding and asking prices. According to Sarin, Shastri, and Shastri (1998), the transaction is reflected via the bid-ask spread. It is an essential determinant of trading costs

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and thus will impact the performance of financial markets (Hanousek & Podpiera, 2002). The market liquidity reflects the depth and breadth of a market. In a market which has the depth would be able to absorb a large volume of order without affecting the price of a stock, while a breath market will allow the movement of upwards and downwards. The spread of the bidding price by a buyer and offer price by a seller, therefore, reflects the breadth of a market. A wider spread will reflect a more volatile market and vice-versa.

1.2. Family Ownership

Gursoy and Aydogan (2002) suggest that family firms are controlled by individual directly via private limited firms. Generally, the initial founder remains the thrust of entrepreneurship although have to raise funds from the external market. A family firms also involved more than two or more family members via indirect control structure.

A research done by Ali, Chen, and Radhakrishnan (2007), shows that family firms in U.S. have a larger number of analyst following, more informative analyst' forecasts, and smaller bid-ask spreads. The finding implies that the family-owned firms tend to have more liquid share than non-family firms. However, similar research done by Attig, Gadhoum and Lang (2003) indicated a different result. They researched the 1,167 Canadian traded corporations. Their results suggest that the presence of the family increases the bid-ask spread. Furthermore, they document that mechanisms of enhancing control, say pyramid at the presence of family, significantly affect bid-ask spreads.

Heflin and Shaw (2000) argue that in a firm which has higher concentrated ownership structure, the large shareholders will have access to the private information, unlike the dispersed owners. Therefore, their trading increases the adverse selection by market makers. For market makers to overcome such a situation, the market makers are forced to increase the bid-ask spread for the stocks and thus to increase the illiquidity of the stocks.

1.3. Government Ownership

Government ownership firms mean a national federal or provincial government or a foreign national government, a local authority including county, a municipality, a government agency controlling a certain percentage in a firm (Attig, Gadhoum & Lang, 2003). Research by Choi, Sami, and Zhou, (2010) examines the effect of corporate ownership on information asymmetry measured by the bid-ask spread in the emerging markets of China showed that government ownership has noteworthy and positive impacts on bid-ask spread during the period 1995-2000. However, with more active control transfer and the appearance of private controlling shareholders, changes of regulatory in ownership structure and corporate governance mechanisms, and thus an improved legal and institutional environment, the link between the government ownership and information asymmetry turns to be insignificant in the later period.

Similar research was found in Boubakri, Chen, Ghoul, and Guedhami (2017) which showed that the relationship between state ownership structure and stock liquidity is non-monotonic. A study done by Attig, Gadhoum & Lang (2003), showed a similar result as well. They found weak evidence that government control is highly associated with a lower bid-ask spread. In Malaysia, the government has

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vested ownership in some of the firms as part of the strategic importance to the country. The government-linked companies are operating like other private firms. However, their goal could be conflicting with the commercial objectives of the enterprise. Also, enhancing shareholder value might not be their primary objective. Often the government-linked company will have the privilege of funding from the government and benefits from special information. Thus, this causing the issue of information asymmetry in government-linked company.

1.4. Dispersed Ownership

Dispersed ownership is defined as the fraction of voting shares of one shareholder which is below 5% of the whole company (Strik, 2011). In a more dispersed ownership structure, the number of uninformed trading shareholders is higher, which implies a lower probability of informed trading (PIN) in each trade (Bolton & Thadden, 1998). It is concluded that small shareholders have not enough power for monitoring the management.

The effectiveness of informed trading is very much dependent on market efficiency. According to a study by Jacoby and Zheng (2010), their test results show that the higher ownership dispersion improves market liquidity, which means smaller bid-ask spread. The dispersed structure may reduce the probability of informed trading (PIN), which could make the stock more liquid (Jacoby & Zheng, 2010). However, another similar research conducted by Omet (2007), stated otherwise. Omet concluded that higher ownership dispersion does not improve market liquidity. An assumption made by Liza Marwati (2008), the informed investors trade with the objective to maximize gain while the non-informed investors trade for liquidity.

1.5. Foreign Ownership

The companies with foreign ownership are those companies whose share capital consists entirely or partially by foreign investors. The foreign direct investment is a long investing relation between a local entity and a non-local entity, which indicates that the investor exerts a significant managerial influence upon the enterprise he invested in (Mihai, 2014).

According to a study done by Choi, Lam, Sami, and Zhou (2013), they found a remarkable and positive impact of foreign ownership on information asymmetry measured by bid-ask spread. They suggested that high foreign ownership is associated with high information asymmetry issues. The issues could relate to stock liquidity, which had a positive affect the bid-ask spread.

Similar research done by Levine and Schmuckler (2006) found evidence that supports the internationalization does have a negative impact on the local stock market's liquidity. There are several reasons that associated with such a phenomenon. A foreign institution often being perceived as being more experienced, better trained or even more informed, in other words, to have an asymmetric information environment (Rhee & Wang, 2009).

1.6. Conglomerate Ownership

According to Chu and Cheah (2006), a conglomerate is a more complicated structure where a public-listed firm owned or controlled by another public-listed firm. Although some of the firms still

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owned by its initial founder, however, its objectives already diverted from the original vision which is from the family-controlled structure whose owner is entrepreneurial. Usually, another public-listed firm owns the conglomerate ownership as block shareholders.

Heflin and Shaw (2000) show that firms with greater blockholder ownership tend to have larger quoted spreads, effective spreads, adverse selection spread of components, and smaller quoted depths. Stated by Marques (2016) in IMF Working Paper, countries where corporate conglomerates are large (high cross holdings) and own a substantial portion of the country's market of capitalization, the liquidity could be low. This is due to the lower degree of transparency. Not limited to that, higher cross holdings are usually related to lower ownership by institutional investors who usually opted for a higher degree of transparency. When the transparency degree is low, there is a greater chance that asymmetric information environment will be used to the disadvantage of market makers, as a result, higher bid-ask spread.

Boujelbene and Bouri (2008) showed that ownership concentration by blockholders is positively related to market liquidity in Tunisia. According to the research done by Marques (2016), there is a higher chance that the liquidity of the stocks will be low if the corporate conglomerates are large. Moreover, the conglomerate firm is usually owned by another firm, which creates chances of internal capital transfer via purchasing of each other shares.

2. Problem Statement

Despite the significant progress and numerous studies being for the better understanding of the market liquidity, the relationship between ownership structure and market liquidity (researcher will be using bid-ask spread as proxy for market liquidity) remain elusive. Kumar & Misra (2015) stated that liquidity has prominent implications for traders, regulators, stock exchanges and the listed firms. In recent years a huge amount of literature has emerged that deals with liquidity. An unresolved area in the field of finance is the relation between share ownership structure and liquidity (Rubin, 2007).

The bid-ask spread issue is never new nor outdated in the share market. Through the bid-ask spread, one can get the early impression about the stock liquidity. In this study, the researcher will categorize the ownership structure into four categories; family ownership, government ownership, dispersed ownership, and also foreign ownership. Two types of the ownership were mentioned in the research carried by Boujelbéne and Bouri (2008) as future research target that are family ownership and foreign ownership.

The information asymmetry has always been related to market illiquidity. To overcome the asymmetric information environment, the market maker has no choice but to widen the bid-ask spread. In the paper titled "Investor relations and information asymmetry" by Rodrigues and Galdi (2016), they used the the Brazilian companies with investor relations (IR) website as a proxy to measure the information asymmetry. The result shown that companies that have well informative IR websites able to decrease the bid-ask spread. Thus, the paper strongly encourages the company to provide more information to the stakeholder to reduce the information asymmetry.

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3. Research Questions

There are three research questions in this study.

i. Are bid-ask spread affect market liquidity in this market?

ii. How does ownership structure affect bid-ask spread?

iii. What are the consequences of bid-ask spread on stock price?

4. Purpose of the Study

This paper focuses on the liquidity of the Malaysian stock market. From the policy-making perspective, improving the liquidity of Bursa Malaysia has always been a critical objective for the stock exchange regulators. A study by Lim, Thian, and Hooy (2015) focused on the investor groups. However, the studies on the liquidity of the Malaysian stock market, are limited particularly on the relationship between ownership structure and bid-ask spread. The purpose of this study is to study the relationship between ownership structure and bid-ask spread in Malaysian market. The specific objective would be including as follows:

5. Research Methods

To test the influences of ownership structure on market liquidity, the equation is presented as follow:-

$$ABS = \beta_1 + \beta_2(OS) + \beta_3 log(MC) + \beta_4 log(TV) + \beta_5(TA) + \beta_6(\frac{D}{E}) \qquad \text{Equation 1}$$

Where ABS means average bid-ask spread, it is measured as $ABS = \frac{(Ask-Bid)}{[\frac{(Ask+Bid)}{2}]}$. OS stands for ownership structures- family ownership, government ownership, foreign ownership, dispersed ownership, and conglomerate ownership. Log(MC) is the natural logarithm for market capitalization, for the log(TV) would means natural logarithm for turnover by volume of the shares, TA is defined as the total assets of the firm, and lastly D/E is the total debt over equity ratio.

The study focuses on the manufacturing sector which contributes 22.7% to the Malaysia economy. The study randomly identified the firms in the sector, and found the sample of about 206 firms with ownership categorization for the study. The sample of the study covers the data from 2011- 2015. The financial data were collected from Datastream. The breakdown of the sample firms is shown in Table 1.

Table 01. Ownership Structure and Sample of Firms

Ownership Structure	Number of Firms	Percentage
Family	151	73.30%
Conglomerate	8	3.88%
Government	6	2.91%
Foreign	20	9.71%
Dispersed	19	9.22%
Others	2	0.97%
Total	206	100%

Source: Data Collection

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6. Findings

Table 2 shows the different type of ownership structure and their relationship with market liquidity. There is no apparent relationship to prove that ownership structure could significantly affect market liquidity in this market. Family ownership is found to have an insignificant relationship to the bid-ask spread. The findings indicate that family ownership although cause the market to become illiquid, but it is not significant to affect the transaction in Malaysia stock market. Given the context of the Malaysia market, where 60% are family controlled, the illiquidity of the market is not negatively related. This may due to the efficiency of regulations of trade in Malaysia equity market.

The similar finding is found in Ali et al. (2007). The reason given by Ali et al. is family firms have a more number of analysts following. Hence, the analysts will be able to provide the market with the relevant information and reduce the problem of transactions. The number of analysts' analyzation lower the dispersion of the forecast and minimize the forecast error, and improve market liquidity. As the results, the bid-ask spread is smaller. Besides, the research also found that family firms with the founder CEO, are primarily responsible for family firms to exhibit a better disclosure practice.

The issues of conglomerate firms which will improve market liquidity is not aligned with Marques (2016), but against the suggestion, that conglomerate firms are associated with illiquidity problem. However, the transaction in conglomerate firms may due to higher cross-holdings transaction, which in fact is tunneling activities. There is a possibility of the low degree of transparency, and low bid-ask spread, in fact, benefits cross-holdings affiliations.

Similar to family-owned, the t-test results declared that the ownership structure for government-owned firms is not individually crucial in explaining the bid-ask spread. GLCs in Malaysia are also always in the spotlight of the analyst. The result obtained was supported by the study by Choi et al. (2010). Choi's research found out that initially there is a significant relationship between bid-ask spread and government ownership firm. However, in the later period, the relationship became insignificant. This was due to the more active control transfer and the emergence of private controlling shareholders, regulatory changes in ownership structure. Most important is the corporate governance ownership being improved, thus, causing the relationship between the ownership structure turns out to be insignificant.

Table 02. Ownership Structure and Market Liquidity

Variables	Family	Conglomerate	Government	Foreign	Dispersed
OS	0.0026	-0.0106	0.00237	-0.0061	0.0045
	1.5680	-1.7262*	0.3719	-3.0035***	1.4157
log(MC)	-0.01274	-0.0132	-0.01321	-0.0119	-0.0132
	-16.0117***	-16.1027***	-15.5385***	-16.1812***	-15.6075***
log(TV)	-0.0083	-0.0084	-0.00821	-0.0084	-0.0083
	-14.4028***	-16.0408***	-16.0702***	-12.9028***	-16.3723***
log(TA)	0.00224	0.00297	0.0028	0.0016	0.0028
	2.4754**	3.7693***	3.4544***	1.8787*	3.5568***
D/E	0.001	0.0003	0.0002	0.0004	0.0001
	0.3621	0.32927	0.2281	0.5068	0.1941
R^2	0.4889	0.4892	0.4856	0.4878	0.4894
Adj. R^2	0.4862	0.4865	0.4829	0.4852	0.4868
Prob	0.0000	0.0000	0.0000	0.0000	0.0000

Notes: ownership structure (os). Market capitalization (mc). Turnover by volume (tv). Total assets (ta). Total debt over common equity (d/e). *significant at the 10% level. **significant at the 5% level. ***significant at the 1% level.

In the context of foreign-owned firms, foreign-owned firms are found to improve market liquidity, as shown in the negative and significant bid-ask spread. The finding is supported by Choi et al. (2013), Rhee and Wang (2009), and Levine and Schmuckler (2006). They agreed that the major shareholder in a firm would cause a negative impact on the bid-ask spread. This is because foreign ownership usually will increase the adverse selection and thus resulting in a narrow spread.

The t-test results showed that the ownership structure for dispersed-owned firms is individually insignificant in explaining the bid-ask spread. The finding is contradicting the researches done by Jacoby and Zheng (2010) and Bolton and Thadden (1998) which stated that with owner dispersion, the market would be more liquid. However, the researcher's finding was back-up Omet (2007) finding. Omet (2007) stated that the risk itself is the primary determinant factor of spread, and with higher ownership dispersion, it does not improve market liquidity.

7. Conclusion

Table 3 indicates the relationship between bid-ask spread and the ownership structure of selected Malaysian firms. Different type of ownership structure – conglomerate firms and family firms showed higher liquidity as compared to family, government and dispersed structure. The findings on foreign-owned firms are expected, as generally foreign firms attract attention from the investors and are more transparent as compared to other ownership structure. The liquidity in conglomerate firms, however, may suggest the different perspective on the equity market, as the transaction may due to inter-affiliation trading which attempts to boost up the share price.

For the family ownership, government ownership, and dispersed ownership, the positive relationship although insignificant indicates that the issues of agency conflicts prevail. However, the insignificant result indicates that the current rules and regulation in the market are sufficient to ensure Malaysia equity market is liquid enough to attract investments from investors

Table 03. Summary of Findings and Empirical Evidences

Variables	Result (t-test)	Consistency
Family Ownership	Positive but insignificant.	Ali *et al.* (2007)
Conglomerate Ownership	Negatively significant at 10% significant level	Marques (2016)
Government Ownership	Positive but insignificant.	Choi *et al*. (2010)
Foreign Ownership	Negatively significant at 1% significant level.	Choi *et al* (2013) Rhee and Wang (2009) Levine and Schmuckler (2006)
Dispersed Ownership	Positive but insignificant.	Omet (2007)

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