Financing Acquisitions in ASEAN Countries

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Abstract:

This paper examines the determinants of methods of payment in M&A transactions in ASEAN countries. We take into account the effects of characteristics of bidders, targets and countries on the choice of method of payment. The findings document the importance of bidders' technology status, targets' ownership status, relative size of bidders and targets, and especially the corporate governance variables in the countries that involved in those M&A transactions. In addition, crisis periods also distinguish the choices of payment method for domestic and cross-border M&As in ASEAN countries.

Keywords: Methods of payment, ASEAN countries, Mergers, Acquisitions

I. Introduction

The financing of an acquisition is relevant because it can influence gains to the bidder shareholders (Travlos, 1987; Chang, 1998), gains to target shareholders (Loughran and Vijh, 1997; Linn and Switzer, 2001), and the combined firm's cost of capital (Harford, Klasa, and Walcott, 2009). Proposed explanations include information asymmetry regarding the value of the target and the bidder's shares (e.g., Hansen, 1987; Shleifer and Vishny, 2003), agency costs associated with managerial incentives (e.g., Stulz, 1988; Shleifer and Wolfenson, 2002; Faccio and Masulis, 2005), financial leverage and growth opportunities (Martin, 1996), and tax effects (Huang and Walking, 1987).

Similar explanations have been proposed to explain merger financing in cross-border deals, although differences in the laws and regulations of the countries involved also have an effect. Consistent with theoretical predictions (e.g., Shleifer and Wolfenson, 2002), the literature has found a strong association between the use of stock as a means of payment and the degree of investor protection in the acquirer country. More specifically, the literature has found i) the use of stock financing in cross-border transactions increases with the degree of investor protection in the acquirer country, and ii) stock financing is more common in countries with stronger shareholder protection. The interpretation is

that target shareholders are not willing to accept equity financing when they fear expropriation.

Starks and Wei (2004) study cross-border acquisitions of U.S. targets and find that bidders from countries with better shareholder protection and disclosure rules are more likely to use stock than bidders from countries with weaker shareholder protection. Rossi and Volpin (2004) find that cross-border deals are more likely to use cash than domestic deals, and that the use of stock as a method of payment is positively associated with the degree of investor protection in the acquirer country. Martynova and Renneboog (2009) assess European corporate takeovers in the 1993-2001 period, and find that bidders are more likely to finance with equity when their home country shareholder rights protection is strong. Ahern, Daminelli, and Fracassi, (2012) find that equity is more common when concerns about asymmetric information are relatively low.

Developing market acquisitions do not receive much attention in academic literature, even though they are becoming more prominent anddeveloping-market firms are increasingly acquiring targets based in both developed and developing markets.Generalizations from other studies about acquisition financing do not necessarily apply to bidders in developing markets because of peculiar market conditions that distinguish them from developed countries. Developing markets are distinguished from developed markets in many ways that could discourage the use of equity financing by the bidders. First, information disclosure surrounding

firm valuations is limited, which causes more uncertainty about the valuations of these firms. Target shareholders may be unwilling to accept equity that is subject to so much uncertainty, even if governance is not a concern. Second, stocks in developing markets suffer from limited liquidity, which could discourage the use of equity to finance acquisitions. Third, economic conditions tend to offer more promise for growth, but more exposure to major declines in the stock market to correct for excessive optimism. Consequently, targets might prefer to avoid the potential downside risk of the bidder's equity.

Yet, some equity-financed acquisitions by bidders in developing markets will subject the target to weaker governance standards than what they have in their own country. These cases are especially intriguing because it prompts us to investigate why target shareholders would be willing to accept payment in stock when the legal protection of the bidder is weaker than the target. Clearly, the financing decision in these cases by bidders from developing markets is not driven by the quest for better governance. Thus, we attempt to develop a more complete explanation for the financing of acquisitions in developing markets.

On the other hand, the impact of asymmetric information on financing decision may be especially acute for the bidders based in developing markets. Many of the targets pursued by bidders in developing markets are based in developing markets. There may be much uncertainty surrounding the targets in these countries, because of limited financial disclosure of public information about

the target, and much uncertainty about the environment where the target conducts its operations. Therefore, bidders may prefer to use equity so that the target shares the risk of the acquisition, and target shareholders may perceive that risk to be no greater than the existing risk of the target itself.

Much of the existing evidence, however, comes from samples heavily concentrated in developed countries (the U.S. and/or Western European countries). One exception is a study by Chari, Ouimet, and Tesar (2010) which foundthat when bidders from developed countries announce bids for targets in developing markets, they experience a favorable share price response. This result is distinctly different from most other studies in recent years, which tend to find negative valuation effects of bidders. Their study further reinforces their unique result by assessing a control group of announced bids by bidders based in developed countries on targets based in developed countries, but finding that the results are not favorable for this control group of bidders. The authorsattribute their results to a weaker contracting environment and a higher degree of intangible assets surrounding the value of target firms within developing markets. Since intangible assets are commonly associated with a high degree of asymmetric information, these results imply that there may be much asymmetric information surrounding the valuation of target firms in developing markets. If the market valuations of targets in developing markets are discounted for this reason, potential bidders have opportunities to acquire targets at relatively low prices.

Our study is related to that of Chari, Oumet, and Tesar (2010) in that it is focused on developing market acquisitions, but it is distinctly different in that our objective is to identify how firm-specific, deal-specific, and country factors influence the decision to finance acquisitions of developing market bidders. Specifically, we examine the financing decision in acquisitions made by bidders from ASEAN countries. Spanning a region of 591 million people and many rapidly growing economies, the ASEAN Economic Community (AEC) isarguably the most ambitious and sophisticated initiative of its kind in the developing world. Despite the fact that the world economy plunged into a deep and prolonged recession, ASEAN's economy has held up quite well. Given the severe setbacks that the ASEAN economies had suffered in the Asian financial crisis of 1997-98, the region has still been achieving impressive and sustained growth. The region has grown up to become a counterpoise of rising China and India in Asia, being attractive to investors from various perspectives while many other regions tend to get mature in terms of growth. Thus, AEC is probably the most suitable target to investigate the factors that influence the decision to finance acquisitions of developing market bidders.

II. Characteristics that influence the method of payment in developing market acquisitions

We develop hypotheses regarding the bidder, seller, and deal characteristics that determine the use of cash and/or equity as methods of payment to finance developing market acquisitions.

1. Characteristics of the bidders

Bidder's Financial Leverage. According to Myers (1984), bidder firms should be more willing to use stock to finance mergers if they have very limited debt capacity. A recent study by Harford, Klasa, and Walcott (2009) suggests that bidders are more likely to finance mergers with equity when their prevailing financial leverage is high. We use debt ratio of the bidders, LEV is measured as total liabilities divided by total assets of the bidder, to examine the impact of financial leverage on the method of payment in acquisitions of developing market bidders.

Bidder's Size. Larger firms are more accessible to debt market and incur a lower cost of issuing debt, especially for developing markets where the degree of information asymmetry is high. Moreover, because larger firms have lower bankruptcy costs (Faccio and Masulis, 2005), larger bidders from developing markets tend to use more debt to finance their acquisitions. We use SIZE which is the log of bidder's total assets to find the impact of bidder's size on the method of payment.

*Bidder's Technology Status.*Bidders in the high technology industries have the ability to use the company's innovative potentials inorder to maintain good competitive edge, based onkey competences. Thus, it might be easier for those bidders to convince targets to accept their equity as a mean of payment. Moreover, those bidders tend to have relatively high growth prospects and managers of firms with high growth opportunities prefer to finance their investments with equity compared to debt financing (Jung, Kim and Stulz, 1996). TECHBID, which equals to 1 if the bidder has their primary SIC codes as 3571, 3572, 3575, 3577, 3578 (computer hardware), 3661, 3663, 3669 (communications equipment), 3674 (electronics), 3812 (navigation equipment), 3823, 3825, 3826, 3827, 3829 (measuring and controlling devices), 4899 (communication services), and 7370, 7371, 7372, 7373, 7374, 7375, 7379 (software) and 0 otherwise, is used to test the impact of high technology status of the bidders on the method of payment.

*Bidder's Constraints during Financial Crisis.*Since the financial crises (in 1997-1998, 2001-2002, and 2007-2010), banks are less willing to finance M&A transactions. Normally, M&A transactions need a large amount of capital; thus, bidders might face financial constraints during the financial crisis and use more equity during these times. However, many economists have argued that the spillover effects of the U.S. subprime mortgage crisis on the ASEAN economic activity will be relatively limited. If the growth prospects of Asian economies remain robust, banks might provide more credit in ASEAN market. CRISIS,

which equals 1 if the transaction happened in the periods of 1997-1998, 2001-2002, and 2007-2010 crisis (from Q3/1997 to Q4/1998, from Q1/2001 to Q4/2002 and from Q3/2007 to Q4/2010)and 0 otherwise, is used to investigate impact of the financial crisis on the method of payment in ASEAN market[4].

2. Characteristics of the targets

Relatedness of Bidder and Target. When the bidder and target are in the same industry, the degree of asymmetric information between bidder and target should be reduced (see Chemmanur, Paeglis, and Simonyan (2009)). The target may be better able to assess the true value of the bidder, and therefore may be more willing to accept stock as payment. We use the variable RELATED that is set equal to 1 when the bidder and target are in the same 2-digit SIC code and zero otherwise, to examine the impact of relatedness on the method of payment in acquisitions of developing market bidders.

Target's Ownership Status. When bidders pursue unlisted targets, there is much uncertainty surrounding the true value of the targets, because the target has not been valued by the market. For this reason, bidders may prefer to use stock as payment, so that the target also shares in the risk of the deal. Moreover, the use of stock could convert the prominent target owner into a new blockholder of the bidder firm (see Chang (1998)). Thus, some bidder firms may prefer to use cash so

[4]There are more characteristics from the bidders that we wish to include in our analysis. However, due to data limitation from Thomson Financial Securities Data's SDC and Compustat global, we cannot collect other variables to use in this study.

that they can avoid loss of control of the firm (see Shleifer and Vishny (2003)). Confronting the different ways of possible explanations, the impact of target's ownership status in ASEAN countries' cases is still an empirical issue. We use a dummy variable called PUBLIC that is set equal to 1 when the target is a publicly traded company and zero otherwise, to test the impact of target's ownership status of the bidders on the method of payment.

Target's Technology Status. High technology targets have high growth opportunities, but are commonly viewed as risky. Thus, bidders may be more likely to use stock as payment so that the high-tech targets share the risk of the deal. We include a dummy variable, TECHSELL, which is set equal to 1 if the seller is categorized in primary SIC codes 3571, 3572, 3575, 3577, 3578 (computer hardware), 3661, 3663, 3669 (communications equipment), 3674 (electronics), 3812 (navigation equipment), 3823, 3825, 3826, 3827, 3829 (measuring and controlling devices), 4899 (communication services), or 7370, 7371, 7372, 7373, 7374, 7375, 7379 (software) and 0 otherwise.

Target's Relative Size. Relatively large targets require a larger investment for bidders, so that bidders may not have sufficient cash to purchase these targets. Thus, they are more likely to use equity financing. In addition, a relatively large target makes the bidder more vulnerable to major losses due to a bad investment decision (see Hansen (1987), Faccio and Masulis (2005), and Starks and Wei (2004)). By using equity, they can make the target share in the risk of the deal. We

use the variable RELSIZE, which represents the merger value divided by total assets of the bidder, to examine the impact of relative size on the structure of the payment.

3. Characteristics of the countries

Cross-Border Transactions. When bidders based in one developing market pursue targets in another market, the environment of each country deserves consideration. In general, target shareholders in cross-border mergers might prefer a cash payment because they may have limited information about a stock outside of their own country. We introduce a dummy variable, CROSS, to distinguish cross-border mergers from mergers within a single developing market country.

Corporate Governance Variables. According to Rossi and Volpin (2004), bidders prefer to use stock as payment in cross-border acquisitions when the target country's investor protection is weaker than the bidder country's investor protection.Cao and Madura (2011) show that bidders are more likely to use equity when investing in assets based in countries where the corporate governance practices are relatively weak.In addition, target shareholders may be more willing to accept stock when they are in countries with weak shareholder rights, because the swap of stock might improve their shareholder rights. We use three proxies to measure corporate governance practices. First, we use a dummy variable COMMON, which is set equal to 1 for common law systems and zero otherwise, to examine the impact of shareholder rights since common law systems have

relatively strong shareholder rights. Second, we use a measure of shareholder rights that developed by La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997). The index is assigned a value from 0 to 5, in which a higher number reflects better shareholder protection. RIGHTS is a dummy variable that distinguishes target fromcountry with high and low shareholder rights compared to bidder's country[5] (see Moeller and Schlingemann (2005)). Moreover, when bidders pursue targets based in countries with great economic freedom, they may be more willing to pay with cash. To measure economic freedom per country, we use the Heritage website that reflects the economic freedom index (see Gwartney, Lawson, and Norton (1996)), which accounts for a country's trade policy, taxation, government intervention, foreign investment policy, banking, pricing controls, property rights, and regulation. RELFREEDOM equals the economic freedom rating of the target country divided by the economic freedom rating of the bidder country.

III. Methodology and sample

1. Methodology

We are attempting to investigate the factors that affect the method of payment in M&As and our dependent variable is the equity proportion of the transaction consideration. Since the dependent variable must be in the interval [0, 100], we apply a Tobit multivariate model. The Tobit model or censored regression model is designed to estimate linear relationships between variables

[5] RIGHTS equals one if the antidirector rights index is three or above

when there is either left- or right-censoring in the dependent variable. In other words, we use Tobit model when there is censoring from below and above.

Specifically, we employ a general model of the form:

$$y_i^* = \beta X_i^{'} + u_i$$

where$y_i = y_i^* \; if \; 0 < y_i^* < 100$,

$X_i^{'} \; is \; the \; vector \; of \; explanatory \; and \; control \; variables$

u_i *isan independently distributed error term assumed to be normal with zero mean and variance* σ^2.

When applying this model to our sample, the quasi-maximum likelihood (QML) White/Huber standard errors are used to correct for heteroscedasticity. For each hypothesis of a characteristic that we believe affects the proportion of cash used versus stock used, an independent variable is used to proxy for that characteristic.

2. Sample

From Thomson Financial Securities Data's SDC, we obtain our initial sample from Jan 1995 to Dec 2012. Only transactions that satisfy certain screening criteria are included in our sample. Since our study is about transactions in ASEAN countries, bidders must be firms who located in 10 ASEAN countries, including Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Cambodia, Laos, Myanmar (Burma), and Vietnam.Since our interest is the

behavior of ASEAN bidders who want to expand internationally, there is no restriction on target country. Only successful deals that have the value greater than $10 million are included. Moreover, we only consider merger and acquisition of majority-interest deals. There are 1846 transactions that satisfy our criteria.

Various characteristics of the bidders, targets, and transactions are collected using SDC. Other information is collected from Compustat global. There are 780 transactions with complete information that we can use in the analysis. In addition, the information about antidirector index is from La Porta et al. (1997), about economic freedom rating is from Heritage website[6], and about the origin of the legal system is from the World Factbook[7].

IV. Data description

Table I provides some useful information about the sample. Out of 10 ASEAN countries, 6 countries actively participate in the takeover market, including Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. These 6 countries also are leading members of ASEAN and play an important role in the economic development of the region. Among 6 countries, Malaysia and Singapore have the highest amount in terms of both number of transactions and value of transactions. For Malaysian bidders, the number of transaction and value of transaction are 313 and $51,047 mil, respectively. Meanwhile, for

[6] http://www.heritage.org/index/
[7] https://www.cia.gov/library/publications/the-world-factbook/

Singaporeanbidders, the number of transaction and value of transaction are 222 and $54,868 mil, respectively.

[TABLE I ABOUT HERE]

ASEAN bidders pay attention to various countries and territories. Out of 780 transactions in our sample, 255 transactions are cross-border deals. Australia, China, and Hong Kong are among the most attractive destinations for ASEAN bidders. In our sample, cash payment is the most popular payment since 34.6 percent of the number of transaction is pure cash financing deals. However, in terms of value, cash payment transactions account for only 26.45 percent of the total value. Equity payment transactions account for 19.5 percent of the number of transaction and 29.26 percent of the total value. On the other hand, mix financing deals account for 45.9 percent of the number of transaction and 44.29 percent of the total value.

Table II shows the descriptive statistics for our variables. Mean and median of debt ratio of the bidders are 0.53 and 0.48, respectively. Size of these bidders is quite big with an average of $3,394.5 mil and a median of $451 mil. There is one interesting result that the mean of RELSIZE is 1.96, indicating that there are bidders who bought targets that are much bigger than themselves. Nevertheless, RELSIZE has a median of 0.13, indicating that these leveraged transactions are not common. PUBLIC has an average of 0.24 and a median of 0. This result suggests that ASEAN bidders are more interested in non-publicly traded targets. It

seems that ASEAN bidders tend to believe in their private estimation about the future growth of non-public targets, and are willing to take some risks.

[TABLE II ABOUT HERE]

V. Multivariate results

1. Results of Tobit regression for full sample

The results from Table III show evidence of the factors that influence the method of payment used in M&A transactions of ASEAN bidders. The dependent variable is measured as the percentage of the M&A transaction value that is paid in equity.There are three models applied, as the three country variables are correlated and only one of them is included in any model. Yet, all three models yield qualitatively similar results for all other variables.

Regarding the characteristics of bidders, the coefficient for SIZE is negative and significant at 1 percent level, indicating that bigger bidders are more likely to use cash to finance their purchases. This result is in line with the results for bidders from developed countries. There is also signal that bidders in high technology industries are more likely to use equity payment. The coefficient for TECHBID is positive and significant at 10 percent level, offering evidence that hi-tech bidders are able to use their innovative potentials to convince targets to accept their equity as a mean of payment.

[TABLE III ABOUT HERE]

Regarding the characteristics of the targets, the PUBLIC variable is positive and significant at 1 percent level. This result suggests that bidders use more equity payment when buying publicly traded targets. One reasonable explanation is that the public targets' shareholders have a stronger belief in the future growth of bidders in ASEAN region, which is the most dynamic region of high growth in the last few decades, especially in times of crisis. Therefore, the targets find easier to accept equity financing to share in the future growth. Non-public targets seem to be more conservative in taking the risks, also partly because they are not that familiar with the functioning of the securities markets.The coefficient for RELSIZE is also positive and significant, indicating that bidders use more equity payment in large transactions. A plausible explanation is that bidders from ASEAN have lower chance to access international capital market, thus, they have tendency to use more equity to buy relatively large targets.

Turning to the characteristics of the countries, there isevidence that ASEAN bidders use more cash payment in cross-border transactions since the CROSS variable is negative and significant. However, the corporate governance variables show different results. The coefficient for COMMON, RIGHTS, and RELFREEDOM are positive and significant in all 3 models. In model 1, the COMMON variable has a value of 37.11 and z-statistic of 4.45, suggesting that ASEAN bidders use more equity payment to purchase targets in countries with common law system, which are considered to have the best shareholder rights. In

model 2, the RIGHTS variable has a value of 66.44 and z-statistic of 6.12, indicating that the bidders use more equity payment to purchase targets in countries with high shareholder rights protection. In model 3, the coefficient for RELFREEDOM is 55.75 and has a z-statistic of 4.16. This outcome offers evidence that ASEAN bidders pay more equity payment for targets in countries with relatively high economic freedom rating. The results are not in line with argument from Hansen (1987) that bidders may be more likely to use equity to purchase assets in countries with weaker governance, so that they can induce risk sharing. Thus, bidders from ASEAN countries may use more equity payment when purchasing targets in countries with strong governance to strengthen their internal corporate governance. It is possible that ASEAN bidders persuade targets with better governance practice to become their blockholders, thereby inspiring a better corporate governance mechanism to evolve within themselves.In addition, the results support Henisz's (2000) suggestion that multinational firms that do business in foreign markets are more likely to share ownership with local partners, because such behavior will shift some of the risk to foreign investors who can bear the risk in a less costly manner.

Regarding the power of the Tobit regression, the McFadden's R^2 has a range from 3.14 percent to9.31 percent and the likelihood ratio indicates that the model is significant at the 1% level. The above results show that characteristics of

bidder, target, and country variables are jointly significant and have reasonable explanatory power.

2. Results of Tobit regression for cross-border sub-sample

Table IV shows the results from applying Tobit regression model to explain the method of payment used in cross-border M&A transactions of ASEAN bidders. The dependent variable is measured as the percentage of the cross-border M&A transaction value that is paid in equity.

[TABLE IV ABOUT HERE]

Table IV yields several interesting results. We have evidence that bidders who have high debt ratio tend to use more equity payment in their transactions. The LEV variable is positive and significant at 5 percent level in model 2 and 3. Similar to the results in Table III, the coefficient for SIZE is negative and significant at 1 percent level, suggesting that bigger bidders are more likely to use cash to finance their cross-border purchases. Moreover, the CRISIS variable is positive and significant at 1 percent level, indicating that the ASEAN bidders can use more equity when purchasing foreign targets. This finding supports the argument that bidders might face financial constraints during the financial crisis and use more equity during these times. This result also shows that the spillover effects of the financial crisis on the ASEAN economic activity is be relatively large and ASEAN bidders also face the financial constraints during the financial crisis.

Next, we focus on variables that represent the characteristics of the targets. The TECHSELL variable is positive and significant at 5 percent level, which supports the argument that bidders are more likely to use stock as payment in purchasing high technology firms so that these targets share in the risk of the deal. The coefficient for RELSIZE is positive and significant at 5 percent level. This result supportsthe findings in Table III that bidders use more equity payment in large transactions.

The variables measuring corporate governance are significant and support the results in Table III.Again, the COMMON, RIGHTS, and RELFREEDOM variables are positive and significant in model 1, model 2, and model 3, respectively. The results show that when ASEAN bidders pursue targets in another market, the environment of the target country matters. Specifically, these bidders use more equity payment in purchasing targets in relatively stronger corporate governance. It is plausible that targets from those countries with better corporate governance practice wish to expand their influence (as bigger shareholders of the bidders) in ASEAN region, which is believed to have the leading role in regional economic development as a counterpoise of the rising China. The targets in these M&A cases might have a strong confidence on the increasing role of ASEAN bidders[8] as a whole, and therefore wish to share part of the game and to penetrate into a huge potential market. By using their better governance mechanism to

[8]There is a fact that is widely cited in the news that, besides the massive acquisitions by Singaporean firms, the Philippines and Indonesia have recently appeared as aggressive bidders in many large cross-border M&As.

positively influence ASEAN bidders, the targets might also hope for afterwards improved valuation of their claims in the region. This is a win-win game where both bidders and targets can fulfill their own interests by using equity as method of payment.

Regarding the power of the Tobit regression, the McFadden's R^2 has a range from 8.23 percent to24.79 percent and the likelihood ratio indicates that the model is significant at the 1% level. The above results show that characteristics of bidder, target, and country variables are jointly significant and have reasonable explanatory power.

3. Results of Tobit regression for domestic sub-sample

Table V shows the results from applying Tobit regression model to explain the method of payment used in domestic M&A transactions of ASEAN bidders. The dependent variable is measured as the percentage of the domestic M&A transaction value that is paid in equity.

[TABLE V ABOUT HERE]

The SIZE variable is negative and significant at 1 percent level, which supports the argument that larger bidders tend to rely on a higher proportion of cash, presumably because they have easier access to funding. The coefficient for TECHBID is positive and significant at 1 percent level, which supports the argument that bidders in high-tech industries are more likely to use equity as the method of payment than bidders based in other industries due to their relatively

high growth prospects. However, the CRISIS variable is negative and significant, suggesting that ASEAN bidders are more likely to use cash during financial crisis period when purchasing domestic targets.This result suggests that ASEAN bidders behave differently when purchasing domestic and cross-border targets during financial constraint period. It is highly possible that during crisis periods, domestic targets face the problem of financial exhaustion with limited access to funding. Thus, if the targets are on sale, it is possible that they are in urgent need for cash. Nevertheless, foreign targets understand the situation of financial constraints but might be in a better situation to receive cash and believe in the strong potentials of bidders' rebound after the crisis, then they find it easier to accept equity in the M&A transaction. The reality also provides evidence for the substantial recovery with high and stable growth rates of ASEAN region after each of the crises[9]. With a new economic community in the corner, Southeast Asia is poised for massive growth.

Furthermore, the coefficient of the PUBLIC variable is positive and significant at 1 percent level, which offers support for the hypothesis that a greater proportion of equity is used when the target is unlisted firms.The coefficient for RELSIZE is positive and significant at 5 percent level, which indicates that the bidders are more likely to use equity when purchasing relativelylarge targets.

[9]After the Asian financial crisis during 1997-1998, both Malaysia and Singapore quickly gained GDP growth rate of 8.9 percent in 2000, many other ASEAN countries surpassed the rate of 6 percent. Similarly, after the difficult period of 2008-2009, Thailand's GDP growth rate attained 7.8 percent in 2010 and 7.7 percent in 2012, Singapore - 15.2 percent in 2010, and Malaysia - 7.4 percent in 2010 (World Development Indicators, 2014).

Regarding the power of the Tobit regression, the McFadden's R^2 has a value of1.99 percent and the likelihood ratio indicates that the model is significant at the 1% level. The above results show that characteristics of bidder, target, and country variables are jointly significant and have reasonable explanatory power.

VI. Conclusions

This study examines the financing of M&A transactions in developing markets, specifically involving ASEAN bidders. Taking into account various determinants of method of payment in those M&As in ASEAN during 1995-2012, from bidders' and targets' characteristics to country factors, we show that ASEAN bidders use more stock payment when they come from high-tech industries, when they buy publicly traded targets, and also when they buy targets from countries with stronger corporate governance practices.

The findings also highlight that the behavior of ASEAN bidders during crisis periods differs when purchasing domestic (using more cash) and cross-border targets (using more equity).Especially, the corporate governance differences in those countries that are involved in the M&A transactions do really matter in determining the choice of payment methods. However, the direction of impact of governance variables seems to be in contradiction with what has been documented in the literature. The finding can be explained by the increasingly vital role of ASEAN region in the global economic context, and targets from

countries with stronger corporate governance practice might wish to share the win-win game by accepting equity payment to penetrate into this dynamic region.

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Table I

A sample of mergers and acquisitions (M&As) of ASEAN's bidders with cash, mixed, or equity payments is collected from Thomson Financial Securities Data's SDC for the period from January 1995 to December 2012. Only successful deals that have the value greater than $10 million are included. The final sample includes 780 transactions. This table describes the distribution of transactions according to various criteria.

Panel A

M&A transactions by bidder countries

Country of Acquirer	Number of Transactions	Percentage of Total Transactions (%)	Value of Transactions ($ mil)	Percentage of Total Value (%)
Indonesia	76	9.7	12,417.78	8.01
Malaysia	313	40.1	51,046.84	32.94
Philippines	73	9.4	13,237.86	8.54
Singapore	222	28.5	54,867.46	35.41
Thailand	90	11.5	22,608.72	14.59
Vietnam	6	0.8	797.18	0.52
Total	780	100	154,975.84	100

Panel B

M&A transactions by target countries

Country of Target	Number of Transactions	Percentage of Total Transactions (%)	Value of Transactions ($ mil)	Percentage of Total Value (%)
Australia	14	1.8	12,886.56	8.32%
Austria	1	0.1	126.45	0.08%
Bermuda	1	0.1	110.66	0.07%
British Virgin	4	0.5	199.87	0.13%
Canada	1	0.1	59.40	0.04%
Cayman Islands	1	0.1	32.00	0.02%
China	23	2.9	2,080.34	1.34%
Croatia	1	0.1	20.96	0.01%
Finland	1	0.1	200.00	0.13%

France	4	0.5	1,207.90	0.78%
Germany	2	0.3	146.27	0.09%
Hong Kong	33	4.2	11,074.79	7.15%
India	6	0.8	328.48	0.21%
Indonesia	78	10.0	12,777.16	8.24%
Italy	1	0.1	86.54	0.06%
Japan	4	0.5	169.07	0.11%
Malaysia	290	37.2	45,580.83	29.41%
Mauritius	2	0.3	263.33	0.17%
Mongolia	1	0.1	26.08	0.02%
Myanmar(Burma)	1	0.1	17.29	0.01%
Netherlands	1	0.1	839.00	0.54%
Norway	2	0.3	326.74	0.21%
Philippines	66	8.5	11,121.84	7.18%
Poland	1	0.1	45.00	0.03%
Singapore	136	17.4	34,316.10	22.14%
Solomon Is	1	0.1	18.86	0.01%
South Korea	1	0.1	13.00	0.01%
Sweden	1	0.1	318.57	0.21%
Taiwan	2	0.3	269.76	0.17%
Thailand	85	10.9	18,220.92	11.76%
United Kingdom	7	0.9	1,025.18	0.66%
Vietnam	8	1.0	1,066.92	0.69%
Total	780	100	154,975.84	100

Panel C				
M&A transactions by financing method				
Financing Method	**Number of Transactions**	**Percentage of Total Transactions (%)**	**Value of Transactions ($ mil)**	**Percentage of Total Value (%)**
Cash Financing	270	34.6	40,997.96	26.45%
Equity Financing	152	19.5	45,342.14	29.26%
Mix Financing	358	45.9	68,635.74	44.29%
Total	780	100	154,975.84	100%
Panel D				
M&A transactions by location				
	Number of Transactions	Percentage of Total Transactions (%)	Value of Transactions ($ mil)	Percentage of Total Value (%)
Cross Border Transaction	555	71.2	106418.03	68.67%
Domestic Transactions	225	28.8	48557.81	31.33%
Total	780	100	154975.84	100.00%

Table II

This table provides the descriptive statistics of the variables that are used in the paper. LEV equals total liabilities divided by total assets of the bidder. SIZE is the bidder's total assets (in $ million). TECHBID equals to 1 if the bidder is a high technology firm and 0 otherwise. CRISIS equals 1 if the transaction happened in the periods of 1997-1998, 2001-2002, 2007-2010 crisis and 0 otherwise. RELATED equals to 1 when the bidder and target are in the same 2-digit SIC code and 0 otherwise. PUBLIC equals to 1 when the target is a publicly traded company and 0 otherwise. TECHSELL equals to 1 if the targetis a high technology firm and 0 otherwise. RELSIZE equals the transaction value divided by total assets of the bidder. CROSS equals to 1 if the bidder and targetare located in different countries and 0 otherwise. COMMON equals one if the target is from a country with a British legal tradition.RIGHTS equals one if the antidirector rights index of the target country is three or above.RELFREEDOM equals the economic freedom rating of the target country divided by the economic freedom rating of the bidder country.

Variables	Number of Observations	Mean	Median	Std. Deviation
LEV	780	0.53	0.48	0.45
SIZE	780	3,394.5	451	9745.8
TECHBID	780	0.03	0.00	0.18
CRISIS	780	0.41	0.00	0.49
RELATED	780	0.37	0.00	0.48
PUBLIC	780	0.24	0.00	0.43
TECHSELL	780	0.05	0.00	0.22
RELSIZE	780	1.96	0.13	11.92
CROSS	780	0.29	0.00	0.45
COMMON	780	0.63	1.00	0.48
RIGHTS	736	0.87	1.00	0.34
RELFREEDOM	773	0.99	1.00	0.14

Table III

Tobit regression explaining the portion of equity financing in M&A transaction of ASEAN bidders.The estimation is based on a two-boundary Tobit model to reflect lower and upper bound constraints on the percentage of cash used in the transaction. The z-stats are based on QML (Huber/White) heteroskedasticity- consistent standard errors. LEV equals total liabilities divided by total assets of the bidder. SIZE is the log of bidder's total assets. TECHBID equals to 1 if the bidder is a high technology firm and 0 otherwise. CRISIS equals 1 if the transaction happened in the periods of 1997-1998, 2001-2002, 2007-2010 crisis and 0 otherwise. RELATED equals to 1 when the bidder and target are in the same 2-digit SIC code and 0 otherwise. PUBLIC equals to 1 when the target is a publicly traded company and 0 otherwise. TECHSELL equals to 1 if the targetis a high technology firm and 0 otherwise. RELSIZE equals the transaction value divided by total assets of the bidder. CROSS equals to 1 if the bidder and targetare located in different countries and 0 otherwise. COMMON equals one if the target is from a country with a British legal tradition.RIGHTS equals one if the antidirector rights index of the target country is three or above.RELFREEDOM equals the economic freedom rating of the target country divided by the economic freedom rating of the bidder country.

***, **, and * indicate statistical significance at the 0.01, 0.05 and 0.10 level, respectively.

	Model 1		**Model 2**		**Model 3**	
Variable	**Coefficient**	**z-Statistic**	**Coefficient**	**z-Statistic**	**Coefficient**	**z-Statistic**
LEV	7.19	0.72	4.50	0.38	12.82	1.07
SIZE	-34.19	-9.20***	-44.22	-10.38***	-43.42	-8.85***
TECHBID	32.61	1.78*	19.04	0.95	31.34	1.68*
CRISIS	-0.89	-0.10	-6.56	-0.73	-8.28	-0.93
RELATED	7.10	0.77	7.76	0.82	-0.21	-0.02
PUBLIC	50.33	4.63***	43.59	3.99***	48.77	4.49***
TECHSELL	20.18	1.21	18.14	1.08	17.85	1.07
RELSIZE	0.63	2.66***	0.35	1.37	0.47	1.79*
CROSS	-17.07	-1.75*	-15.80	-1.51	-19.53	-2.00**
COMMON	37.11	4.45***				
RIGHTS			66.44	6.12***		
RELFREEDOM					55.75	4.16***
N	780		736		773	
Pseudo R-Squared	3.14%		9.31%		4.19%	

Table IV

Tobit regression explaining the portion of equity financing in cross-border M&A transaction of ASEAN bidders.The estimation is based on a two-boundary Tobit model to reflect lower and upper bound constraints on the percentage of cash used in the transaction. The z-stats are based on QML (Huber/White) heteroskedasticity- consistent standard errors. LEV equals total liabilities divided by total assets of the bidder. SIZE is the log of bidder's total assets. TECHBID equals to 1 if the bidder is a high technology firm and 0 otherwise. CRISIS equals 1 if the transaction happened in the periods of 1997-1998, 2001-2002, 2007-2010 crisis and 0 otherwise. RELATED equals to 1 when the bidder and target are in the same 2-digit SIC code and 0 otherwise. PUBLIC equals to 1 when the target is a publicly traded company and 0 otherwise. TECHSELL equals to 1 if the targetis a high technology firm and 0 otherwise. RELSIZE equals the transaction value divided by total assets of the bidder. CROSS equals to 1 if the bidder and targetare located in different countries and 0 otherwise. COMMON equals one if the target is from a country with a British legal tradition.RIGHTS equals one if the antidirector rights index of the target country is three or above.RELFREEDOM equals the economic freedom rating of the target country divided by the economic freedom rating of the bidder country.

***, **, and * indicate statistical significance at the 0.01, 0.05 and 0.10 level, respectively.

	Model 1		**Model 2**		**Model 3**	
Variable	**Coefficient**	**z-Statistic**	**Coefficient**	**z-Statistic**	**Coefficient**	**z-Statistic**
LEV	-5.06	-0.34	55.10	2.08**	48.79	2.04**
SIZE	-47.29	-7.50***	-60.93	-8.33***	-62.87	-7.88***
TECHBID	16.54	0.64	-8.38	-0.24	7.54	0.29
CRISIS	59.58	4.03***	58.02	3.37***	51.47	3.28***
RELATED	-17.01	-0.98	-11.84	-0.61	-17.60	-0.98
PUBLIC	29.33	1.33	34.43	1.46	34.48	1.53
TECHSELL	67.03	2.50**	61.49	2.14**	59.28	2.18**
RELSIZE	1.44	2.42**	0.83	1.93*	1.02	2.16**
COMMON	37.97	2.47**				
RIGHTS			36.57	1.80*		
RELFREEDOM					47.79	2.07**
N	225		187		218	
Pseudo R-Squared	8.23%		24.79%		12.96%	

Table V

Tobit regression explaining the portion of equity financing in domestic M&A transaction of ASEAN bidders.The estimation is based on a two-boundary Tobit model to reflect lower and upper bound constraints on the percentage of cash used in the transaction. The z-stats are based on QML (Huber/White) heteroskedasticity- consistent standard errors. LEV equals total liabilities divided by total assets of the bidder. SIZE is the log of bidder's total assets. TECHBID equals to 1 if the bidder is a high technology firm and 0 otherwise. CRISIS equals 1 if the transaction happened in the periods of 1997-1998, 2001-2002, 2007-2010 crisis and 0 otherwise. RELATED equals to 1 when the bidder and target are in the same 2-digit SIC code and 0 otherwise. PUBLIC equals to 1 when the target is a publicly traded company and 0 otherwise. TECHSELL equals to 1 if the targetis a high technology firm and 0 otherwise. RELSIZE equals the transaction value divided by total assets of the bidder. CROSS equals to 1 if the bidder and targetare located in different countries and 0 otherwise. COMMON equals one if the target is from a country with a British legal tradition.RIGHTS equals one if the antidirector rights index of the target country is three or above.RELFREEDOM equals the economic freedom rating of the target country divided by the economic freedom rating of the bidder country.

***, **, and * indicate statistical significance at the 0.01, 0.05 and 0.10 level, respectively.

Variable	Coefficient	z-Statistic
LEV	17.47	1.39
SIZE	-23.97	-6.03***
TECHBID	60.09	2.67***
CRISIS	-18.32	-1.72*
RELATED	7.69	0.71
PUBLIC	45.92	3.70***
TECHSELL	9.78	0.46
RELSIZE	.64	2.42**
N	555	
Pseudo R-Squared	1.99%	