

Investment Banks as Financial Advisors in Malaysian Mergers and Acquisitions

Cao Dinh Kien

*Foreign Trade University, Vietnam
Email: caokien@ftu.edu.vn*

Nguyen Thu Thuy

*Foreign Trade University, Vietnam
Email: thuy.nt@ftu.edu.vn*

Nguyen Minh Phuong

*Foreign Trade University, Vietnam
Email: phuongnm7@ftu.edu.vn*

Received: 18 July 2016 | Revised: 20 November 2016 | Accepted: 05 January 2017

Abstract

Our study examines the factors that affect the choice of hiring an investment bank as financial advisor in the merger and acquisition transactions of Malaysian acquirers. In the period from January 1995 to December 2012, approximately 38.6 percent of the Malaysian acquirers hire an investment bank when conducting M&A transactions. On the other hand, 23.8 percent of the target firms employ at least one investment bank as financial advisor when dealing with Malaysian bidders. Our findings reveal that both participants tend to hire an investment bank when the acquirer operates in the technology sector, the deal takes place in a crisis period and the value of the transaction is high. An acquirer who has a high debt ratio is less likely to employ an investment bank and a publicly traded target is more likely to employ an investment bank in their M&A transactions. Moreover, our results show that, in a complex environment, the hiring of an investment banking is not for the valuation purpose.

Keywords: Behavioral finance; investment policy; investment banking; market efficiency; mergers & acquisitions.

1. Introduction

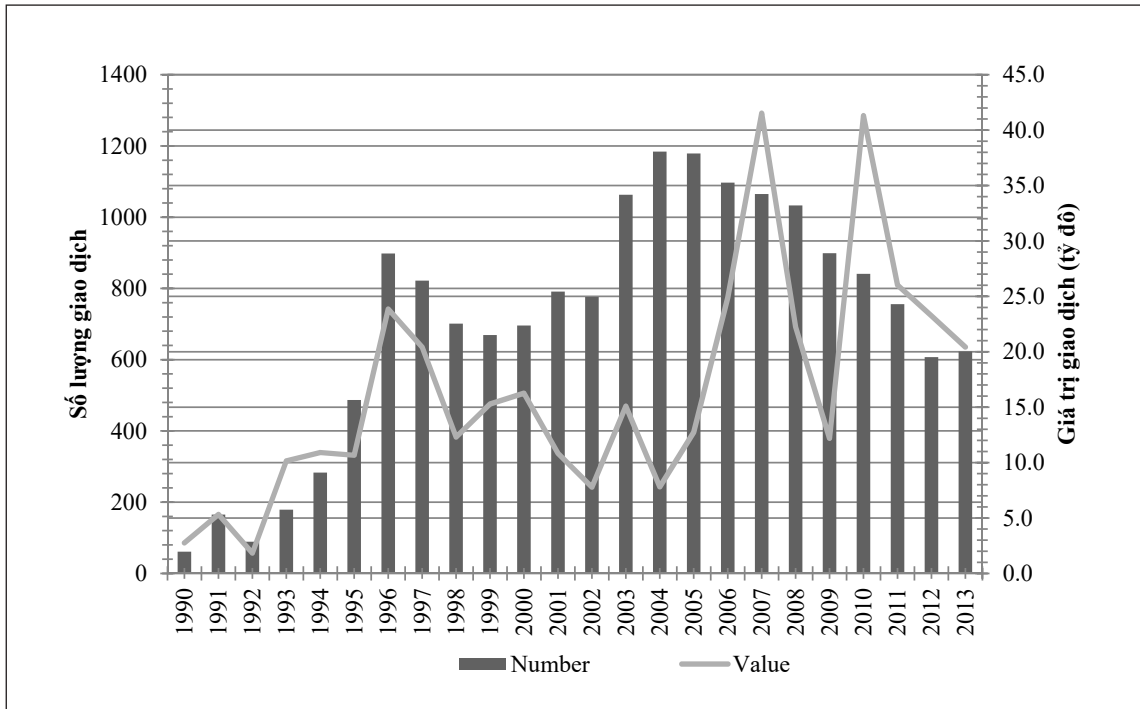
The role of investment banks as financial advisors in mergers and acquisitions (M&As) is extensively investigated in the literature. Theory suggests that investment banks can reduce information asymmetry, improve the matching quality, and accelerate the matching process in M&As. Given these advantages of employing an investment bank as financial advisor, the decision to use an investment bank should bring benefits to both acquirers and targets. However, prior literature shows mixed results when investigating the role of investment banks in M&As. Bowers and Miller (1990) examine the relationship between an acquiring firm's stock returns and the choice of investment banks. They conclude that the advisor's credibility (reputation) positively affects stock returns of bidders in acquisitions. McLaughlin (1992) shows that announcement returns are significantly lower for acquirers who hire high quality advisors. This result is attributed to the nature that high quality advisors are associated with more difficult transactions and the requirement for a higher premium, therefore the benefit for bidders is lowered. Moreover, the author argues that if the investment bank contract does not unambiguously contain provisions to maximize bidder returns, and if advisors are only interested in their fee income, transactions completed with investment banks will result in lower returns to the bidder. Rau (2000) reports no impact of advisors on acquirer abnormal returns; however, it is shown there is a positive relationship between investment bank market share and fees and deal completion rates. Accordingly, top-tier investment bank advisors create value by increasing the likelihood that

the deal will be completed. However, Rau also points out that announcement returns earned by acquirers in deals involving top-tier banks are not higher and in the long term the returns are lower than those involving lesser quality advisors, which is supported by Rau and Rodgers (2002).

Prior literature also shows various characteristics that affect the decision to use an investment bank as financial advisor. Servaes and Zenner (1996) compare acquisitions which are completed in-house to those that use investment bank advisors. It was found that an investment bank is used in more complex transactions where there is asymmetric information. This reports the importance of the information collection process in M &As. Da Silva Rosa et al. (2004) report that Australian M&A transactions involve financial advisors when the transaction is large, hostile and includes non-cash payment. In Forte et al. (2010), three factors influencing the decision for hiring an advisor of a public target are: (i) the intensity of the previous banking relationship, (ii) the reputation of the bidder company's advisor, and (iii) the complexity of the deal. Moreover, a survey of 142 executives by Angwin (2001) suggests that, in a cross-border acquisition, UK and French firms are more likely to hire an advisor for a due diligence process and that cultural differences influence their perceptions of how acquisitions should be managed. In the same manner, De Jong et al. (2008) find that cross-border transactions tend to need advisors of a certain nationality because of the difference in characteristics of acquirers and the target nation.

Our study aims to provide additional evidence to the mixed literature by exploring the

Figure 1: Announced mergers and acquisitions, Malaysia 1990-2013



Source: Thomson Financial, IMAA analysis, 2014.

role and determinants to employ an investment bank as financial advisor in the Malaysian M&A market. Malaysia is a great location to investigate the role of investment banks. It is a highly open, upper-middle income economy. According to a report from the Commission on Growth and Development in 2008, Malaysia was one of 13 countries who had recorded average growth of more than 7 percent per year for 25 years or more. Malaysia was hit by the Global Financial Crisis in 2009 but recovered rapidly, posting growth rates averaging 5.7 percent since 2010. Moreover, Malaysia has unique cultural characteristics. It is a multi-religious nation, where Islam is the official religion occupying more than 60% of the population. In Malaysia, Buddhism comes second with nearly 20% of the

population, Christian 9%, Hindu 6% and some other minority religions (Rodrigues, 2015). Given Malaysia's unique cultural characteristics, opinions regarding the fair value of the targets might be different. Moreover, purchasing a target will require more funding. Options available to a company wishing to raise funds include selling its shares or raising debt financing. The participation of Islamic banks creates more flexibility for the financing options of Malaysia's acquirers. Therefore, this is a perfect setting to investigate the role of investment banking in a complex environment. From 1990 to 2013, the number of M&A transactions in Malaysia increased by more than 500%. In this study, 1695 M&A transactions completed in Malaysia in the period from 1995 to 2012 were

investigated since this is a great opportunity to test whether the participants in a takeover market in a multi-religious nation behave differently in comparison with those in other countries.

In the period from January 1995 to December 2012, approximately 38.6 percent of the Malaysian acquirers hired an investment bank when conducting M&A transactions. On the other hand, 23.8 percent of the target firms employed at least one investment bank as financial advisor when dealing with Malaysian bidders. We find that both participants tend to hire an investment bank when the acquirer operates in the technology sector, the deal takes place in a crisis period and the value of transaction is high. An acquirer who has a high debt ratio is less likely to employ an investment bank and a publicly traded target is more likely to employ an investment bank in their M&A transactions. Moreover, our results show that employing investment banks as financial advisors has no impact on the valuation of the targets. In a complex environment, the hiring of an investment bank is not for the valuation purpose.

2. Hypothesis development

2.1. Factors affecting the decision to hire an investment bank as financial advisor

2.1.1. High transaction cost leads to the decision to hire an investment bank

Servaes and Zenner (1996) argue that transaction cost is the main determinant of advisor choice in M&A. One of the proxies they use for transaction cost is the transaction size. Moreover, it is apparent that a high-risk level is attached to a large value transaction; therefore, it might lead to the need for advice from a professional agent when the transaction value is high. In our study, we use transaction size as an

explanatory variable and hypothesize that size has a positive impact on the likelihood of the acquirers and target firms to hire an investment bank. The variable is denoted by SIZE which is the natural logarithm of the transaction value in US dollars.

In addition, the relative size of a transaction should also have an impact on the decision to use an investment bank. A transaction that has a huge relative size should have a more influential impact compared to that of a small scale transaction. Therefore, we add relative transaction size as another explanatory variable. This variable is measured by the proportion of the transaction size to the size of the bidding firm and denoted by RELSIZE.

2.1.2. High information asymmetry leads to the decision to hire an investment bank

Information asymmetry is expected to have an influence on the decision of firms to hire an advisor in the way that larger information asymmetry leads to a higher need for financial advice. In this research, we use six variables to proxy for information asymmetry. The variables are method of payment, industry relatedness, bidder's technological status, target's technological status, cross-border transaction and target's public status.

As stated in Cao and Madura (2014), the method of payment can affect the degree of complexity of a transaction and cash payment is easy for both bidding and target firms to evaluate. Obviously, when payment is settled by equity, the target firm may want to verify the value of the bidder's equity; on the other side, the bidder may also want to re-evaluate their equity. We expect that, when the transaction involves equity payment, the likelihood

of bidder or target firms hiring an investment bank is higher compared to the situation when the transaction involves a cash only payment. Therefore, we use a dummy variable, METHOD, which has a value of 0 in the case of a 100 percent cash payment and 1 otherwise.

Industry relatedness refers to whether bidding and target firms are in the same industry. It is believed that when both participants in the transaction operate in the same industry, their understanding about the field reduces the level of information asymmetry (Chemmanur et al., 2009). It is also argued in Servaes and Zenner (1996) that firms cannot rely on their own expertise to value targets when the targets are in unrelated industries. Therefore, we hypothesize that when bidders and targets are not in the same industry, the likelihood of hiring an investment bank is higher. A dummy variable, RELATE, which equals 1 when bidding and target firms have the same 4-digit SIC code and 0 otherwise, is used to proxy for industry relatedness.

Mason and Harrison (2004) mention the high risk of information asymmetry when investing in technology-based ventures. This implies that when firms operate in the technology sector, they might need the expertise of investment banks to (re)evaluate the value of participants in M&A transactions. Therefore, we hypothesize that when target firms or acquiring firms operate in the technology sector, the likelihood of hiring an investment bank is higher. Two dummy variables bidTECH and tarTECH are used to test this hypothesis. The variables take the value of 1 when the firm operates in the technology sector and 0 otherwise. Firms with the following SIC code are identified as tech-

nology companies: 3571, 3572, 3575, 3577, 3578, 3661, 3663, 3669, 3674, 3812, 3823, 3825, 3826, 3827, 3829, 4899, 7370, 7371, 7372, 7373, 7374, 7375, 7379.

In transactions involving foreign characteristics, information asymmetry might emerge because of the differences in culture, law system and other national dissimilarities (Angwin, 2001). In comparison with a domestic transaction, a cross-border transaction is more challenging for the acquiring firm to gain a comprehensive understanding about the target. On the other hand, it is also more difficult for the target to evaluate the chance of the combined firm. Therefore, we expect that participating firms will need an investment bank in the case of a cross-border transaction. We use a dummy variable, CROSS which equals 1 in the case of a cross-border transaction and 0 otherwise, to proxy for this hypothesis.

Information regarding a publicly traded company is obviously more transparent compared to that of a non-publicly traded company. Consequently, the risk of information asymmetry is lower when the target is a publicly traded one. Thus, we hypothesize that bidder and target firms tend to use an M&A advisor when the target firm is a non-publicly traded company. To test this hypothesis, we use a dummy variable, tarSTATUS which equals 0 when a target firm is a publicly traded one, and 1 otherwise.

2.1.3. High contracting cost leads to the decision to hire an investment bank

The risk which acquirers bear, for example the burden of debt, is believed to affect the caution of the target firms and advocate for them to employ investment banks. Therefore, we believe that the financial leverage of acquirers

affects the decision to employ an investment bank. We investigate the impact of the financial leverage of the acquirers on the decision to hire an investment bank by using the variable *bidDEBT*, which is the debt ratio of the bidder.

Moreover, we also examine the effect of financial crisis periods on the decision of hiring investment banks in M&As. Since hiring an investment bank is expensive, especially in tight credit periods, it is believed that firms are reluctant to use the services of an investment bank during those periods. We use a dummy variable *CRISIS*, which equals 1 if the transaction takes place during a financial crisis (from Q1/2001 to Q4/2002 and from Q3/2007 to Q4/2010) and 0 otherwise, to test this hypothesis.

In addition to testing the determinants of whether acquirers and target firms hire investment banks as financial advisors in M&As, we also examine factors that affect the firms' decision in hiring top-tier investment banks. For this purpose, we use the same hypotheses established above with a different set of dependent variables representing the usage of top-tier investment banks. Investment banks are ranked using the average market share of each investment bank as a percentage of the total value of transactions advised by investment banks in any single year (Rau, 2000). In our research, for the convenience of data analysis, we distinguish between banks in the top 10 and others, referring to the top 10 banks as top-tier banks. The rankings are stable across the sample period.

2.2. Impact of hiring an investment bank on the valuation of the targets

Bowers and Miller (1990), Kale et al. (2003), and Golubov et al. (2012) show evidence that

top-tier investment banks acting as financial advisors create value for firms in M&A transactions. However, other studies by Servaes and Zenner (1996) and Da Silva Rosa et al. (2004) document that the prestige of the advisors does not have an impact on the wealth creation of the transaction, while Ismail (2010) finds weaker wealth gains from using higher quality investment banks. Since the value creation of the M&A transactions depend much on the valuation of the targets, we also investigate the impact of hiring an investment bank on the valuation of the targets in Malaysian M&A transactions.

A popular technique to evaluate firm value is the comparable valuation method, in which a firm's value is estimated by applying a valuation multiple to the firm's earnings before interest, taxes, depreciation, and amortization (EBITDA), earnings before interest and taxes (EBIT), sales, or some other performance measures. Following Officer (2007), we test the impact of hiring an investment bank on the acquisition price paid to target firms using three ratios, including offer price to book value (*PRICetoBOOKVAL*), offer price to earnings per share (*PRICetoEPS*) and offer price to earnings before interests and taxes (*PRICetoEBIT*).

3. Methodology and data

3.1. Methodology

To investigate the determinants of firms to employ an investment bank, we run two binary logistic regressions. In the first regression model, dependent variable *bidIB* equals 1 when bidders use an investment bank and 0 otherwise. In the second regression model, dependent variable *tarIB* equals 1 when target

firms use an investment bank and 0 otherwise. The regressions use QML (Huber/White) heteroskedasticity-consistent standard errors. The two models are as follows:

$$P(\text{bidder uses an investment bank})=f(\text{SIZE, RELSIZE, METHOD, RELATE, bitTECH, tarTECH, CROSS, tarSTATUS, bidDEBT, CRISIS}) \quad (1)$$

$$P(\text{target firm uses an investment bank})=f(\text{SIZE, RELSIZE, METHOD, RELATE, bitTECH, tarTECH, CROSS, tarSTATUS, bidDEBT, CRISIS}) \quad (2)$$

To investigate the determinants of firms to employ a top-tier investment bank, we also run two binary logistic regressions with the same explanatory variables. Two dependent variables are bidTOPTIER and tarTOPTIER which equal 1 when bidder or target firm hires a top-tier bank and 0 otherwise.

$$P(\text{bidder uses a top-tier bank})=f(\text{SIZE, RELSIZE, METHOD, RELATE, bitTECH, tarTECH, CROSS, tarSTATUS, bidDEBT, CRISIS}) \quad (3)$$

$$P(\text{target firm uses a top-tier bank})=f(\text{SIZE, RELSIZE, METHOD, RELATE, bitTECH, tarTECH, CROSS, tarSTATUS, bidDEBT, CRISIS}) \quad (4)$$

To investigate the impact of hiring an investment bank on the valuation of the targets, we apply OLS regression models with three dependent variables, including PRICEtoBOOKVAL, PRICEtoEPS and PRICEtoEBIT. In the regression models, the main independent variables are bidIB, tarIB, bidTOPTIER and tarTOPTIER, using White heteroskedasticity-consistent standard errors and covariance. The regression models are as follows:

$$DV_1=f(\text{bidIB, tarIB, SIZE, RELSIZE, METH-$$

$$\text{OD, RELATE, bitTECH, tarTECH, CROSS, tarSTATUS, bidDEBT, CRISIS}) \quad (5)$$

$$DV_2=f(\text{bidTOPTIER, tarTOPTIER, SIZE, RELSIZE, METHOD, RELATE, bitTECH, tarTECH, CROSS, tarSTATUS, bidDEBT, CRISIS}) \quad (6)$$

Where:

DV₁ is PRICEtoBOOKVAL

DV₂ is PRICEtoEPS

DV₃ is PRICEtoEBIT

3.2. Data

Our initial sample consists of all acquisitions of Malaysian acquirers from January 1992 to December 2012. We obtain the observations from Thomson Financial Securities Data's SDC database that satisfy several screening criteria. First, the acquirers' nationality must be Malaysia. Second, only successful transactions that have a value greater than \$1 million and are worth more than 5 percent of the market value of equity of the bidders are investigated. The final sample consists of 1695 observations.

4. Results

4.1. Descriptive statistics

Among the independent variables, we have 3 continuous variables. Table 1 shows some useful descriptive information for these 3 variables.

It is noticeable that the mean and median value of SIZE, which is a natural logarithm of the transaction size, is considerably higher for firms that hire investment banks. This result supports our hypothesis that firms employ investment banks in larger transactions. On the other hand, there is no difference in the relative transaction size and the debt ratio of bidders between two categories of firms.

Table 1: Descriptive statistics for continuous variables

Variable	Bidders do not hire investment bank		Bidders hire investment bank		Targets do not hire investment bank		Targets hire investment bank		Total	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
SIZE	3.715	3.449	4.181	3.911	3.695	3.467	4.535	4.346	3.895	3.632
RELSIZE	0.670	0.079	0.511	0.099	0.631	0.096	0.420	0.067	.583	.090
bidDEBT	0.564	0.497	0.507	0.463	0.533	0.483	0.533	0.489	.533	.483
# of Obs	1041		654		1292		403		1695	

Table 2 shows the descriptive statistics of binomial independent variables. For most of the variables, the proportion of firms that hire an investment bank are lower than the proportion of those that do not.

4.2. Factors affecting the decision to hire an investment bank as financial advisor

Table 3 reports the results from applying binary logistic regression for variables that might affect the decision of acquirers to hire an in-

Table 2: Descriptive statistics for binomial variables

Variable	Category	Bidders not hire investment bank		Bidders hire investment bank		Targets not hire investment bank		Targets hire investment bank	
		Count	%	Count	%	Count	%	Count	%
METHOD	Pay in cash	512	58.5%	363	41.5%	628	71.8%	247	28.2%
	Pay with equity	529	64.5%	291	35.5%	664	81.0%	156	19.0%
	Valid N	1041	61.4%	654	38.6%	1292	76.2%	403	23.8%
RELATE	Same industry	238	60.7%	154	39.3%	303	77.3%	89	22.7%
	Different industry	803	61.6%	500	38.4%	989	75.9%	314	24.1%
	Valid N	1041	61.4%	654	38.6%	1292	76.2%	403	23.8%
bidTECH	Non-technology sector	1029	61.7%	639	38.3%	1274	76.4%	394	23.6%
	Technology sector	12	44.4%	15	55.6%	18	66.7%	9	33.3%
	Valid N	1041	61.4%	654	38.6%	1292	76.2%	403	23.8%
tarTECH	Non-technology sector	1018	61.4%	640	38.6%	1266	76.4%	392	23.6%
	Technology sector	23	62.2%	14	37.8%	26	70.3%	11	29.7%
	Valid N	1041	61.4%	654	38.6%	1292	76.2%	403	23.8%
CROSS	Domestic	806	62.3%	487	37.7%	1013	78.3%	280	21.7%
	Cross-border	235	58.5%	167	41.5%	279	69.4%	123	30.6%
	Valid N	1041	61.4%	654	38.6%	1292	76.2%	403	23.8%
tarSTATUS	Public company	275	52.4%	250	47.6%	328	62.5%	197	37.5%
	Non-public company	766	65.5%	404	34.5%	964	82.4%	206	17.6%
	Valid N	1041	61.4%	654	38.6%	1292	76.2%	403	23.8%
CRISIS	Not in crisis period	801	65.9%	415	34.1%	969	79.7%	247	20.3%
	In crisis period	240	50.1%	239	49.9%	323	67.4%	156	32.6%
	Valid N	1041	61.4%	654	38.6%	1292	76.2%	403	23.8%

Table 3: Logistic regression explaining bidder's choice of hiring investment banks

	Panel A: Dependent variable is bidIB		Panel B: Dependent variable is bidTOPTIER	
	Coefficient	p-value	Coefficient	p-value
SIZE	.263***	.000	.135***	.000
RELSIZE	-.037	.387	.317***	.003
METHOD	-.230	.155	.367	.366
RELATE	-.284	.138	.444***	.000
bidTECH	1.088*	.095	-8.276	.998
tarTECH	-.699	.240	1.464	.275
CROSS	-.311	.105	.514	.226
tarSTATUS	.010	.955	.092	.823
bidDEBT	-.444**	.046	.198	.814
CRISIS	.720***	.000	-.369	.428
Constant	-.419	.277	-.048***	.000
# of Obs.	712		712	
Adjusted R ²	7.8%		17.2%	

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

vestment bank. Panel A of Table 3 shows the determinants of acquirers to hire an investment bank in general. Coefficients of SIZE and CRISIS are positive and significant at a 1 percent level, indicating that acquirers are more likely to employ an investment bank in larger transactions and during financial crisis periods. Moreover, the coefficient of bidTECH is positive and significant at a 10 percent level, which provides limited support for the hypothesis that high technology acquirers are more likely to use an investment bank. Interestingly, the coefficient of bidDEBT is negative and significant at a 5 percent level. This result indicates that acquirers with higher debt ratios are less likely to hire an investment bank as a financial advisor in M&A. Since employing an investment bank is expensive, the financial distress means acquirers do not want to spend money for the services of an investment bank.

Panel B of Table 3 shows the determinants of acquirers to hire a top-tier investment bank. Following Rau (2000), we measure the average market share of each investment bank as a percentage of the total value of transactions advised by investment banks in any single year. We classify the top five investment banks as top-tier to distinguish them from the others. The rankings are stable across the sample period¹. The coefficients of SIZE, RELATE and RELSIZE are positive and significant at a 1 percent level, indicating that acquirers are more likely to employ a top-tier investment bank when the absolute and relative size of the transactions are high. Moreover, they have a tendency to use top-tier investment banks when purchasing firms in the same industry.

Table 4 reports the results from applying binary logistic regression for variables that might affect the decision of target firms to hire an in-

Table 4: Logistic regression explaining target's choice of hiring investment banks

	Panel A: Dependent variable is tarIB		Panel B: Dependent variable is tarTOPTIER	
	Coefficient	p-value	Coefficient	p-value
SIZE	.530***	.000	2.022***	.000
RELSIZE	-.112	.160	-3.253***	.004
METHOD	-.251	.216	.213	.673
RELATE	-.106	.652	-.203	.715
bidTECH	1.418**	.034	4.478***	.006
tarTECH	-.251	.714	-20.180	.998
CROSS	.239	.294	1.871***	.000
tarSTATUS	-.890***	.000	-.111	.828
bidDEBT	-.063	.838	-1.191	.270
CRISIS	.512**	.013	-.035	.949
Constant	-2.809	.000	-12.583***	.000
# of Obs.	712		712	
Adjusted R ²	19.3%		27.2%	

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

vestment bank. Panel A of Table 4 shows the determinants of targets to hire an investment bank in general. The results show that the coefficients of SIZE, CRISIS and bidTECH are positive and significant, supporting our hypotheses that target firms are more likely to hire an investment bank when transaction size is higher, the deal takes place in a crisis period and bidding firm operates in the technology sector. The coefficient of tarSTATUS is negative and significant, indicating that targets are more likely to use an investment bank when they are publicly traded companies.

Panel B of Table 4 shows the determinants of targets to hire a top-tier investment bank. The coefficients of SIZE, bidTECH and CROSS are positive and significant at a 1 percent level, suggesting that transaction size, the technology status of the bidder and cross border status are important determinants in the decision to use a

top-tier investment bank. The results show that targets are very cautious when dealing with foreign acquirers from Malaysia.

4.3. Impact of hiring an investment bank on the valuation of the targets

Table 5 contains the results from our analysis of the impact of hiring an investment bank on the ratio of offer price to book value of the targets. The results show that the ratio of offer price to book value of the target is not affected by the decision of the acquirers and targets to hire an investment bank, regardless of the prestige of the investment bank. Regarding the control variables, 3 variables significantly affect the valuation. TarTECH and bidDEBT have positive impact and bidTECH has negative impact. These results reveal that Malaysian acquirers tend to pay higher for high technology targets. On the other hand, Malaysian high technology acquirers pay lower when acquiring

Table 5: OLS regression explaining the impact of hiring an investment bank on offer price to target book value of the targets

	Coefficient	p-value	Coefficient	p-value
(Constant)	-1.306	.863	-2.209	.778
SIZE	.009	.898	-.013	.862
RELSIZE	-.028	.693	-.025	.730
METHOD	.058	.411	.068	.334
RELATE	.049	.466	.046	.501
bidTECH	-.136*	.077	-.144*	.062
tarTECH	.400***	.000	.401***	.000
CROSS	.088	.196	.086	.212
tarSTATUS	-.065	.360	-.050	.482
bidDEBT	.158**	.025	.165**	.021
CRISIS	-.042	.539	-.062	.367
bidIB	-.063	.376		
tarIB	-.082	.266		
bidTOPTIER			-.035	.635
tarTOPTIER			.000	.998
Adjusted R^2	18%		17%	

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

Table 6: OLS regression explaining the impact of hiring an investment bank on offer price to earnings per share of the targets

	Coefficient	p-value	Coefficient	p-value
(Constant)	.069	.295	.240	.585
SIZE	.094	.272	.037	.679
RELSIZE	-.003	.970	.012	.886
METHOD	.051	.530	.045	.576
RELATE	-.074	.348	-.061	.437
bidTECH	-.045	.609	-.047	.594
tarTECH	.069	.430	.069	.421
CROSS	.093	.240	.074	.349
tarSTATUS	.164**	.049	.162**	.047
bidDEBT	-.042	.608	-.056	.492
CRISIS	-.046	.563	-.040	.604
bidIB	.025	.765		
tarIB	.048	.570		
bidTOPTIER			.127	.130
tarTOPTIER			.102	.248
Adjusted R^2	6%		9%	

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

Table 7: OLS regression explaining the impact of hiring an investment bank on offer price to earnings before interests and taxes of the targets

	Coefficient	p-value	Coefficient	p-value
(Constant)	.043	.578	.133	.830
SIZE	.037	.667	-.020	.822
RELSIZE	.029	.732	.043	.611
METHOD	.088	.289	.088	.285
RELATE	-.031	.698	-.021	.791
bidTECH	-.088	.334	-.092	.305
tarTECH	.147	.100	.148*	.095
CROSS	.133	.102	.116	.151
tarSTATUS	.150*	.077	.156*	.061
bidDEBT	-.010	.901	-.018	.824
CRISIS	-.064	.433	-.069	.390
bidIB	-.014	.866		
tarIB	.002	.983		
bidTOPTIER			.095	.267
tarTOPTIER			.076	.398
Adjusted R^2	8%			10%

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

other targets. The results support the argument that high technology firms have high growth opportunity; thus, these firms have a higher valuation in the evaluation process. Moreover, the coefficient of bidDEBT is positive and significant, indicating that financial distress firms are willing to pay more in order to acquire targets. Another explanation is that, due to the risk of default of the acquirers, the targets demand a higher price in the evaluation process.

Table 6 and Table 7 show the results from our analysis of the impact of hiring an investment bank on the offer price to earnings per share and offer price to earnings before interest and taxes of the targets. The results are very similar to those found in Table 5, suggesting that the hiring of an investment bank does not have any impact on the valuation of the targets. In the context of Malaysia, the employing of an investment bank, regardless of its reputation, is

not for the valuation purpose.

5. Conclusion

The role of investment banks in M&A transactions is intensively investigated in the literature. However, most of the prior studies focus on the U.S. and other developed countries. This study shifts the focus to Asia when it examines the role of investment banks in the Malaysian takeover market. Because of Malaysia's success in developing its economy and its unique cultural characteristics, this is a great opportunity to test whether the participants in the takeover market of an Islamic multi-religious country behave differently in comparison with those in other countries.

In our study, we find three common factors that influence the decision to use an investment bank as the financial advisor of both acquiring and target firms. First of all, the size of the transaction is an important determinant for ac-

quirers and targets to hire an investment bank. Firms are more likely to hire an investment bank when transaction size is higher. Secondly, our findings also show that firms are more likely to hire an investment bank when the acquiring firm operates in the technology sector. Finally, our findings show evidence that during crisis periods, firms have a higher tendency to use investment banks in their M&A transactions.

Moreover, we find that the debt ratio of acquiring firms has a negative impact on the decision of bidders to use an investment bank. The higher the debt ratio, the lower the likelihood of bidders using an investment bank. On the target side, the target's public status has an impact on the decision to use an investment bank. Publicly traded targets are more likely to employ an investment bank as a financial advisor. It is worth noting that the debt ratio of the bidding firm is proved to be a significant determinant in our research but not in others. This finding reveals the fact that Malaysian firms are cau-

tious in spending cash for investment banks when they have a high default risk. This may be attributed to religious reasons which are identified in many studies such as Siddiqui (2008) where it is stated that "the Islamic approach to risk is realistic but cautious".

Overall, Malaysian acquirers tend to pay higher for high technology targets and Malaysian high technology acquirers pay lower when acquiring other targets. This result confirms the direction of Malaysia to move towards a technology-driven and high-tech production-based pattern of development. However, when Malaysian acquirers purchase both domestic and foreign targets, the hiring of an investment bank does not have any impact on the valuation of the targets. This result implies that the purpose of hiring an investment bank in Malaysia is not to establish fair value for the target in a transaction. Malaysian acquirers might use in-house expertise to evaluate the value of the targets.

Acknowledgement:

This research was supported and funded by Vietnam's National Foundation for Science and Technology Development (NAFOSTED) under grant number II3.1-2013.28. It is also a result of the Research group on Financial Management, Foreign Trade University

Notes:

1. In addition to the global ranking of investment banks, we also employ the ranking of investment banks in Malaysia provided by Dealogic (<http://www.mmaa.com.my/insights.html>). The results are similar to those that are reported in Table 3 and Table 4.

References

- Angwin, D (2001), 'Mergers and Acquisitions across European Borders: National Perspectives on Preacquisition Due Diligence and the Use of Professional Advisers', *Journal of World Business*, 36, 32-57.
- Bowers, H. M, and Miller, R. E (1990), 'Choice of investment banker and shareholders wealth of firms involved in acquisitions', *Financial Management*, 19(4), 34-44.

-
- Cao, K., and Madura, J. (2014), 'Role of Investment Banks in Acquisitions of Private Targets', *Banking and Finance Review*, 5(2), 1-22.
- Chemmanur, T.J, Paeglis, I and Simonyan, K. (2009), 'The medium of exchange in acquisitions: Does the private information of both acquirer and target matter?', *Journal of Corporate Finance*, 15, 523–542.
- Da Silva Rosa, R., Lee, P., Skott, M. and Walter, T (2004), 'Competition in the market for takeover advisers', *Australian Journal of Management*, 29, 61–92.
- De Jong, A, Ongena, S, and Van Der Poel, M (2008), 'Thinking about Going Abroad: The Choice of Advisor in Cross-Border M&A Deals', *EFA 2008 Athens Meetings Paper*.
- Forte, G., Iannotta, G and Navone, M (2010), 'The banking relationship's role in the choice of the target's advisor in mergers and acquisitions', *European Financial Management*, 16, 686-701.
- Golubov, A., Petmezas, D., and Travlos, N. (2012), 'When it pays to pay your investment banker: New evidence on the role of financial advisors in M&As', *Journal of Finance*, 67, 271–311.
- Ismail, A. (2010), 'Are good financial advisors really good? The performance of investment banks in the M&A market', *Review of Quantitative Finance and Accounting*, 35, 411–429.
- Kale, J., Kini, O., and Ryan, H. (2003), 'Financial Advisors and Shareholder Wealth Gains in Corporate Takeovers', *Journal of Financial & Quantitative Analysis*, 38, 475-501.
- Mason, C., and Harrison, R. (2004), 'Does investing in technology-based firms involve higher risk? An exploratory study of the performance of technology and non-technology investments by business angels', *Venture Capital: An International Journal of Entrepreneurial Finance*, 6(4), 313-332.
- McLaughlin, R.M. (1992), 'Does the form of compensation matter? Investment banker fee contracts in tender offers', *Journal of Financial Economics*, 32, 223–260.
- Officer, M (2007), 'The price of corporate liquidity: Acquisition discounts for unlisted targets', *Journal of Financial Economics*, 83, 571–598.
- Rau, P (2000), 'Investment bank market share, contingent fee payments and the post-acquisition performance of acquiring firms', *Journal of Financial Economics*, 56, 293-324.
- Rau, R., and Rodgers, K. (2002), 'Do Bidders Hire Top-Tier Investment Banks to Certify Value?', Working Paper, Purdue University and Penn State University.
- Rodrigues, N. (2015), 'The Malaysia Report: National Landscape, Current Challenges and Opportunities for Growth', *Institute for Societal Leadership*, Singapore Management University.
- Servaes, H. and Zenner, M (1996), 'The role of investment banks in acquisition', *The Review of Financial Studies*, 9, 787–815.