

# COUNTRY-LEVEL DETERMINANTS, TAKEOVER LOCATIONS, AND THE GAINS TO TARGET FIRMS

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**Abstract** - This study enhances the understanding of imperfect factor markets by examining the impact of country-level factors on takeover location decisions and the gains to target firms. The focus of this study is on eight East and Southeast Asian countries, where there have been significant changes regarding corporate governance structures and practices following the 1997-1998 Asian financial crisis. The results suggest that the likelihood that a completed deal is a cross-border acquisition rather than a domestic acquisition is higher for target countries with lower government quality, weaker investor protection, stronger restrictions on capital mobility, lower corporate tax rates, and more depreciated currencies. Further, the study documents that target firm shareholders experience positive and significant abnormal returns in both cross-border and domestic acquisitions around the announcement date; but cross-border target firms gain significantly higher returns than domestic target firms.

**Key words** - Mergers and acquisitions; Target firm; Takeover locations; Country-level factors

## 1. Introduction

This study empirically examines the explanatory power of country-specific factors in determining takeover location decisions and the gains to target firms, in the context of domestic and cross-border acquisitions located across eight East and Southeast Asian economies. The main idea here is that, if country-specific attributes or variations across such countries provide potential acquisition motives or sources of value creation, then it is reasonable to expect that they should also be correlated with bidder decision-making and target return outcomes.

Recent research has paid more attention to what motivates the bidders' choice between domestic and cross-border takeovers. Bhagat et al. [3] find that domestic bidders tend to select poor-performing firms as their strategic targeted firms, while foreign bidders prefer local firms which exhibit good performance at the time of takeovers. However, what is less clear is if institutional characteristics from the lens of target country is associated with the bidders' acquisition location preferences and the gains to target firms.

Prior studies have indicated the effects of macroeconomic and institutional characteristics on corporate acquisition activities [1-5]. However, the current literature has not provided a more complete picture of how differential country-level characteristics between the target and acquirer countries influence acquisition region decision-making and value creation for target firms. This study contributes to the existing literature by combining, and taking into account, how these factors influence takeover region decision-making and the gains to target firms. The focus on the country-level variables makes this study distinct from existing research in several important ways.

Firstly, unlike [6-7] which only examine the correlation of differences in laws and acquisition activity, this study employs six dimensions of governance developed by [8] as determinants of a government quality index, to investigate whether there is a significant association between the quality of government and takeover locations. Secondly, the current literature has provided clear evidence about the influence of investor protection mechanisms across countries on the bidders' acquisition choice process. However, it neither shows if the difference in investor protection regimes between the target country and bidder countries influences the premiums (or returns) paid to target firms [6], nor documents the impact of differential investor protection mechanisms on the acquisition region choice [2, 7, 9]. This study fills this research gap. Thirdly, existing research confirms that the degree of economic openness of the target country is an important determinant of the gains to bidders via cross-border takeovers [4]. However, no prior study has directly examined the implications of the difference in economic mobility between the host and home countries on takeover geographic preferences and the gains to target firms. This study addresses this omission by investigating the impact of the differences in the degree of economic openness on the bidders' takeover location preferences and target shareholder gains.

Further, a few studies, for example [3], have documented that corporate tax rate differences between the target country and bidder countries can determine the gains of acquiring firms in cross-border acquisitions. Nevertheless, the evidence on the association between the corporate tax effect and acquisition choice decisions, as well as the value creation for target firm shareholders, is still rare. Finally, previous studies in the finance and international business literatures have documented a significant correlation between the exchange rate effect and cross-border acquisitions. Yet, while most studies indicate that an appreciation in the bidder's currency (or an equivalent depreciation in the target's currency) can lead to an increased probability of cross-border acquisitions [10], the effect of the exchange rate on target firms' gains still remains unclear [11]. Based on all of the existing research gaps above, this study tests related hypotheses and models empirically, and contributes new insights to the existing literature and provides implications for investors and policy-makers in the East and Southeast Asian acquisition market.

Using a comprehensive sample of completed acquisitions across eight East and Southeast Asian countries over 2000-2013, this study provides evidence that the probability that a completed deal is cross-border rather than domestic is higher if target firms are located in countries

with poorer government quality, inferior shareholder protection mechanisms, stronger restrictions on capital controls, and lower corporate tax rates relative to the bidder country. In terms of the gains to target firms, the results indicate that government quality, shareholder protection mechanisms, the level of capital controls, corporate tax differentials, and the exchange rate effect are important determinants of target firms' gains from acquisitions across eight East and Southeast Asian countries. Consistent with the current literature, the results of the univariate analysis report that target shareholders gain positive abnormal returns in both domestic and cross-border acquisitions around the takeover announcement date, although cross-border target firms tend to gain higher returns than domestic targets.

## 2. Hypotheses development

### 2.1. Country-level characteristics and takeover locations

Previous studies in the international business literature have documented that variation in the quality of government significantly affects the flow of FDI to developing and emerging countries [12]. In the finance literature, existing research has also indicated a relationship between the quality of laws and regulations and acquisition activities. [6] find that the volume of mergers and acquisitions is higher in countries with better laws and regulatory frameworks. Also, they show that the probability that a given deal is of the cross-border form rather than domestic decreases with the level of quality of law enforcement provided in the target country. However, the existing evidence merely focuses on the nature of laws and regulation rather than measuring a government quality-related index. In terms of country-level differences, relatively weaker target country government quality may manifest itself in increasing target firm corruption or self-interest which could impact on the transparency of the acquisition process and the enforcement of acquisition regulation, providing potential advantages to bidding firms. In a similar vein, [6, 13] examine the correlation between cross-border acquisitions and the difference in the institutional quality between the home and host countries, and suggest that acquisitions are triggered by the poor quality of institutions, and particularly the presence of corruption and poor governance, in the host country.

In terms of shareholder protection, it has become increasingly obvious that investor protection regulation plays a fundamental role in corporate finance, particularly corporate policy choices. Following the ground-breaking study of [14], current investigations have extended and attempted to identify the impact of differential investor protection mechanisms across countries on capital market participants in general, and on corporate decision-making processes in particular. [6, 15] report a negative association between cross-border acquisition propensity and the level of investor protection provided in the target country. This is also consistent with improvements in investor protection or bonding effects representing a perceived source of value creation. This means that firms in less protective countries are more likely to be targets of cross-border mergers than targets of domestic mergers. However, little work has been done with respect to the effect of differential investor

protection mechanisms on the bidder's acquisition location decisions [2, 7, 9]. On the other hand, [7, 16] document a positive association between the difference in investor protection legislation and returns to bidding firm shareholders. [17] report that bidders from countries with strong investor protection frameworks experience significant gains when obtaining majority control of an acquired firm based in a poor investor protection country. It follows that lower investor protection in target countries relative to bidding countries may be associated target shareholders having less involvement or influence in the corporate decision-making process, resulting in less resistance and implementation of actions to increase target bargaining power, which is expected to both lower the share of acquisition gains going to target shareholders and increase the relative probability of acquisition success.

Regarding economic mobility, [18-19] examine the wealth effects of U.S. targets and bidders engaged in cross-border acquisitions with firms in other countries, and find that whether diversification via cross-border acquisitions creates wealth for firms depends on the existence of inverse economic co-movements between the host and home countries. [4] employ a capital control index developed by [20] to measure the degree of control over capital mobility in target nations, and document that acquiring a firm in markets with larger restrictions on capital mobility, or stricter capital controls, can add more value to the bidder shareholders' wealth. However, the implications of the difference in the degree of economic openness between the host and home countries on the bidders' acquisition location choices has not been examined in the current literature. It may be expected that foreign bidders of firms in countries with capital controls benefits from restricted capital availability, suggesting that bidders are more likely to attempt cross-border acquisitions if target countries have stronger restrictions on capital mobility relative to bidding countries.

The relationship between international ownership and corporate tax levels is well documented. [21-22] find that the difference in tax systems between the two countries is a powerful motive for cross-border deals. [23] examine if income taxation affects foreign ownership, and indicate that high home country-based taxes tend to increase cross-border takeover activity. [24] also document that countries in which low levels of taxation are imposed are more likely to attract foreign bidders via cross-border takeovers. To date, little research has been done on the effect of differences in corporate tax rates between the target and bidder countries on the bidders' acquisition region choice. In line with the above discussion, a negative differential between target and bidder country tax rates should encourage greater investment and transfer of resources into the target country through cross-border acquisition.

The current literature has also confirmed a significant correlation between exchange rates and cross-border acquisitions. Accordingly, a target firm is increasingly attractive to a foreign bidder when the currency of the target country is cheaper than that of the bidder country, other things being equal. [25] supports the exchange rate effect hypothesis, and confirms that an appreciation in risk-

adjusted foreign currency can lead to a lower foreign capital cost, therefore, stimulating cross-border acquisitions. Similarly, studies by [26-28], which are based on the existence of information asymmetry in integrated capital markets, show that exchange rate changes play an important role in determining cross-border acquisitions. Specifically, they explain that the higher the depreciation in the target country's currency the greater the opportunity to buy the target firm's assets at a cheap price. [10] also supports that a real depreciation of the bidder's currency decreases the probability of acquiring a foreign target firm.

Motivated by these above discussions, I propose the following research hypothesis:

**Hypothesis H1** - *The likelihood that a completed deal is a cross-border acquisition rather than a domestic acquisition is higher for target countries with lower government quality, weaker investor protection, stronger restrictions on capital mobility, lower corporate tax rates, and more depreciated currencies.*

## 2.2. The gains to target firms in domestic and cross-border acquisitions

There are various empirical studies examining the gains in domestic and cross-border acquisitions. However, compared to the rich evidence for bidding firms, studies on the target firm's gains in domestic and cross-border takeovers are still rare. Existing empirical results tend to show that target firm shareholders experience substantial returns around the announcement date [11, 17]. Regarding acquisition location, previous studies document that cross-border target firms experience larger abnormal returns than those in domestic deals. The main explanation for such a positive cross-border effect on target firms' gains relates to the imperfections and asymmetries in capital markets. [2, 11, 18, 29-31], indicate that the principle reason that target company shareholders are likely to experience considerably higher abnormal returns on the announcement of a cross-border acquisition, as compared to a domestic acquisition, is that cross-border acquisitions serve as a method to overcome various market imperfections across national barriers experienced by multinational corporations. These can be (1) Differences in product costs or factor markets, creating both a barrier to entry and monopoly power through patents; (2) Biases in government and regulatory policies through tariff, trade policy, or accounting regulations which can have substantial effects on incentives for cross-border transactions; (3) Information asymmetries in capital markets, with a focus on tax effects; (4) Exchange rate effects, leading foreign bidders to have a purchasing advantage when their currency, for instance, is strong against the target currency. If the international investment creates greater value for foreign bidders, they are more likely to pay a higher price for a local firm than domestic acquirers. In contrast, [11, 32-33] provide an alternative explanation. They do not find any evidence supporting the imperfections view in capital markets. Instead, they find that the cross-border effect significantly depends on bid characteristics, such as the method of payment and the existence of multiple bids.

On the basis of the above discussion, I propose the following research hypothesis:

**Hypothesis H2** - *Target firm shareholders experience positive and significant abnormal returns in both cross-border and domestic acquisitions around the announcement date; but cross-border target firms gain significantly higher returns than domestic target firms.*

## 3. Sample and Methods

### 3.1. Sample, Data Sources and Sample Selection

In the study, information regarding acquisition announcement dates and bid-specific factors has been obtained from the SDC Platinum database. Also, to ensure the sample captures transactions that are motivated by control, the study only focuses on acquisitions of majority interests (control bids), in which the bidder owns less than 50% of the target firm's stock before the transaction, and more than 50% after the transaction. To avoid the potential effects of very small deals, the sample only includes deals with a value of at least US\$1 million. Moreover, target firms are required to be publicly-listed firms, and have stock price data and financial data available in the DataStream, Thomson Reuters Worldscope, or the Bureau Van Dijk Electronic Publishing Mint Global databases. In order to eliminate the sample selection bias problem, we still include dead, delisted, and suspended firms that experienced trading on and following the acquisition announcement date. Further, deals involving financial and property firms are excluded because they operate under different regulatory systems and the format of their financial reporting is different compared to that of non-financial firms. Additionally, information used to represent the target country-specific factors and the host-home country relationship-specific characteristics has been obtained from the World Bank database, the Annual Reports of the Economic Freedom of the World, KPMG, and from datasets used in the cross-country studies by [8, 14, 20].

After discarding observations associated with the above requirements, the final sample consists of 469 target firms involved in domestic acquisitions, and 162 observations involving target firms in cross-border acquisitions in eight East and Southeast Asian countries over the 2000-2013 period.

Table 1 below shows the distribution of the sample according to the nationality of target firms involved in both domestic and cross-border acquisitions. The results show that the domestic sample size is approximately three times larger than the cross-border sample, suggesting that domestic targets are generally more attractive to domestic bidders than foreign acquirers. Not surprisingly, the change in the number of transactions has taken place mainly in the top 4 "tiger" countries, South Korea, Hong Kong, Singapore and Malaysia, especially during the 2005-2009 period, as total M&A deals in such countries are annually higher than others. Further, cross-border bidders more commonly employ toeholds and the cash method of payment in their deals than domestic bidders. They also avoid diversifying their business focus by increasingly acquiring target firms which have similar business activities. Further, about 90% and 86% deals involve friendly targets in domestic and cross-border acquisitions, respectively.

Finally, Figure 1 shows return volatility and changes in transaction values for the completed acquisitions over the

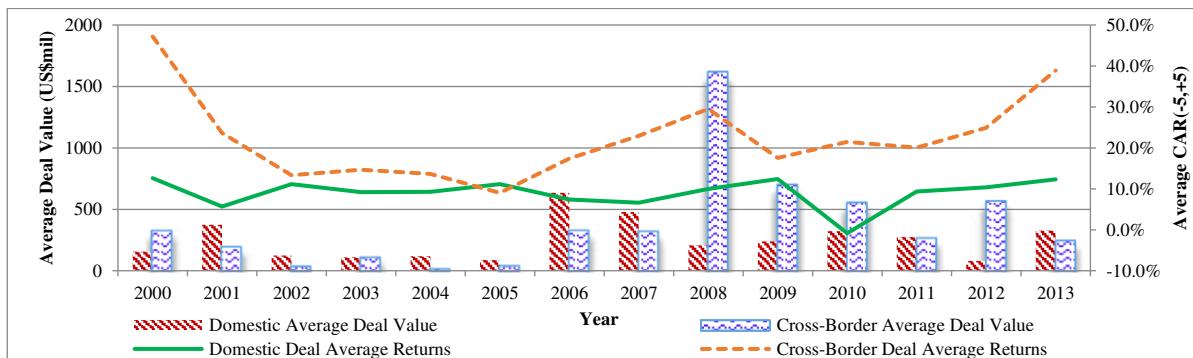
sample period years. The figure indicates that there is no strong variation in excess returns of domestic targets in the sample period and these remained at average levels of 10% during the 2000-2013 period. Conversely, cross-border target returns tend to increase from 2005 to 2013 following a dramatic decrease between 2000 and 2004. On the other hand,

there is an observable trend in the change in transaction values, as transaction values appear to have increased substantially, especially during the most recent period from 2006 to 2013 for both domestic and cross-border takeovers. This suggests that a number of very large transactions have been completed during the most recent eight years.

**Table 1.** Distribution of sample according to the target country

Target Nation	Total deals	Total value of transactions (\$mil, current dollars)	Toehold (%)	Relatedness (%)	Cash (%)	Hostile deals (%)
<b>Panel A: Domestic acquisitions</b>						
South Korea	124	30,836.67	45.97	24.19	61.29	7.26
Hong Kong	108	11,210.13	47.22	10.19	85.19	15.74
Malaysia	73	25,453.78	53.42	17.81	68.49	9.59
Singapore	61	10,630.51	40.98	18.03	73.77	11.48
Thailand	40	15,270.86	47.50	22.50	67.50	12.50
Taiwan	36	18,788.99	22.22	38.89	19.44	0.00
Indonesia	16	1,868.79	06.25	43.75	81.25	18.75
Philippines	11	2,125.78	18.18	36.36	63.64	9.09
Total	469	116,185.52	43.07	21.11	67.59	10.45
<b>Panel B: Cross-border acquisitions</b>						
Singapore	42	19,370.48	45.24	42.86	90.48	9.52
Hong Kong	26	33,297.63	61.54	26.92	76.92	15.38
South Korea	21	1,094.84	52.38	52.38	71.43	4.76
Malaysia	21	3,510.86	52.38	38.10	76.19	23.81
Indonesia	19	4,357.47	21.05	47.37	94.74	15.79
Thailand	14	2,649.72	57.14	42.86	92.86	28.57
Taiwan	13	3,238.85	30.77	46.15	61.54	0.00
Philippines	6	586.48	50.00	33.33	66.67	16.67
Total	162	68,106.34	46.91	41.36	81.48	13.58

Source: SDC Platinum



**Figure 1.** Return volatility and changes in transaction values during the 2000-2013 period (Source: Datastream, SDC Platinum)

### 3.2. Methods

#### 3.2.1. The Event Study Methodology

The event study methodology is used to measure the effect of an unanticipated event on a firm's stock prices, by examining whether there is an "abnormal" stock price effect (known as abnormal returns) associated with such an event. The analysis in this study follows the approach proposed by [34] to estimate the market model parameters. Specifically, the market model parameters are estimated over a period of 220 days, from day  $t-260$  to  $t-41$ , where  $t=0$  refers to the date of the bid announcement. The market portfolio returns are calculated from the returns on the host country stock market

indices, and obtained from DataStream International.

Further, to examine whether cumulative abnormal returns (CARs) associated with domestic and cross-border acquisitions differ and whether the differences are statistically significant, the cross-border effect has also been analyzed.

#### 3.2.2. Determinants of M&A activity

The analysis starts by examining the determinants of cross-border acquisitions relative to domestic deals. Logistic regressions are applied to examine the influences of different variable attributes on the two sample groups: domestic acquisitions and cross-border acquisitions. The estimated logit model is as follows:

$$Prob(CROSS-BORDER = 1) = \alpha + \beta X + \gamma Z_t + \delta Z_b + \varepsilon \quad (1)$$

where, CROSS-BORDER = 1 if the acquisition is cross-border and 0 if it is domestic.

In the formula above, X represents the set of control variables, including CASH (An indicator variable taking on the value of one if an acquisition is financed with cash, and zero if it is financed with stock or a mixed cash and stock form of payment), RELATED (An indicator variable taking on the value of one if the target and the acquirer have the same areas of operations, and zero for unrelated acquisitions), COMLAW (An indicator variable taking on the value of one if English common law served as the origin of the company law, and zero if otherwise), and target country's GDP growth (GDPGRT) and GNP per capita (GDPCPT).  $Z_t$  ( $Z_b$ ) represents the country-level test variables, including GOVQUAL, INVPRETECT, ECOOPEN, TAXEFT, and FOREXEF. Subscripts t and b refer to the target country and bidder country, respectively. Further, in all specifications, year and industry dummies are included to control for year effects and target industry effects, respectively.

Country-specific characteristics are identified as follows:

#### **GOVQUAL:**

Using [8] governance indicators and updated in the Worldwide Governance Indicators (the World Bank database), this study employs the approach of [35] to measure the quality of government. Accordingly, the government quality index is computed as follows:

$$GOVQUAL = RL + RQ + PS + GE + VA + CC \quad (2)$$

where: RL is the rule of law, RQ is regulatory quality, PS is political stability and absence of violence, GE is government effectiveness, VA is voice and accountability, and CC is control of corruption.

#### **INVPRETECT:**

As already indicated in various studies, we use a revised anti-director rights index proposed by [14] to proxy for the degree of investor protection. The index ranges from 0 to 6.

#### **ECOOPEN:**

In order to measure the effect of the degree of a country's economic freedom on firms' takeover choice, I employ an index of capital control reported in the Economic Freedom of the World (Annual Report between 2000 and 2013), representing economic openness. It ranges from 1.4 (for the least open economy) to 9.8 (for the most open economy).

#### **TAXEFT:**

In order to proxy for the corporate tax effect, this study employs the individual year corporate tax rate of sample countries during the research period [3, 36].

#### **FOREXEF:**

In this study, the exchange rate effect is constructed as the exchange rate of the target country relative to the currency of the bidder nation in the year of announcement less the average exchange rate during the study period, divided by the average exchange rate during the study period [4, 37].

#### *3.2.3. The determinants of target shareholder returns in takeovers*

In order to test the determinants of the cross-sectional variation in the CARs of target firms, this study expands existing models employed in prior studies and complements their research by considering target shareholder returns as a function of country-, firm-, and deal-specific characteristics. The general empirical model using the cross-sectional regression using OLS estimation is defined as follows:

$$\begin{aligned} CAR(-5, +5) = & \beta_0 + \beta_1 RELATED + \beta_2 CASH \\ & + \beta_3 HOSTILE + \beta_4 TOEHOLD \\ & + \beta_5 SHAREACQUIRED + \beta_6 SIZE \\ & + \beta_7 RELSIZE + \beta_8 TOBIN + \beta_9 LEVRG \\ & + \beta_{10} GDPGRT + \beta_{11} Z_t + \beta_{12} Z_b + \varepsilon \end{aligned} \quad (3)$$

where, CAR-5,+5 denotes the cumulative abnormal returns over the eleven days ranging from day t-5 to day t+5 around the acquisition announcement; Deal-specific characteristics, which have been considered as potential determinants of takeover returns in the literature, include RELATED, CASH, HOSTILE (An indicator variable taking on the value of one for hostile transactions, and zero for friendly takeovers), TOEHOLD (This continuous variable relates to the percentage shareholding stake by the bidder in the target firm at the time of the bid announcement), and SHAREACQUIRED (This continuous variable relates to the target ownership stake acquired by the acquirer). SIZE (The logarithm of Total assets), RELSIZE (The value of a transaction divided by bidder size), TOBIN (The market capitalization divided by the corresponding total assets), and LEVRG (Total Debt divided by Total assets) are relevant proxies for target firm-specific characteristics. GDPGRT indicates the nature of economic conditions in the target country.  $Z_t$  ( $Z_b$ ) is a separate proxy for each country-level test variable used in the regression. Subscripts t and b refer to the target country and the bidder country, respectively.

## **4. Empirical results**

### **4.1. Cross-border vs. Domestic Acquisitions**

Table 2 reports the determinants of cross-border acquisitions relative to domestic deals. Model (1) investigates the effect of the quality of government in the target country and bidder country on the bidders' acquisition location choice. The coefficient on the GOVQUAL<sub>t</sub> variable shows that the probability that a completed deal is cross-border-based rather than domestic-based is higher in target countries with lower government quality. Also, the results indicate that the better the bidder country's government quality, the greater the cross-border propensity (the coefficient on the GOVQUAL<sub>b</sub> variable is 0.329 and significant at the 1% level).

The coefficient on the INVPRETECT<sub>t</sub> variable (beta coeff = -1.223 and p < 0.01) is negative and significant at the 1% level, while the coefficient on the INVPRETECT<sub>b</sub> variable (beta coeff = 1.534 and p < 0.01) is positive and significant at the 1% level. These confirm that the likelihood of a cross-border deal is negatively (positively) correlated with the investor protection level in the target country (the bidder country).

Model (3) investigates if the countries' level of economic openness influences the location of acquisition activities. The beta coefficients on the  $ECOOPEN_t$  variable (beta coeff = -0.121 and  $p < 0.10$ ) and the  $ECOOPEN_b$  variable (beta coeff = 0.386 and  $p < 0.01$ ) indicate that the likelihood that a completed deal is cross-border rather than domestic is larger if target firms are located in countries with stronger restrictions on capital mobility and their bidding partners come from countries with more economic freedom.

Model (4) looks at the effect of the corporate tax rates in the target country and bidder country on the bidders' acquisition region decision. The coefficient on the  $TAXEFT_t$  variable (beta coeff = -31.044 and  $p < 0.01$ ) suggests that the likelihood of a cross-border deal is negatively correlated with the magnitude of corporate tax rates in the target country. I also find that the higher the

bidder country's corporate tax rate, the greater the cross-border acquisition propensity.

Model (5) in Table 2 shows that the  $FOREXEFT$  variable, which examines the effect of the exchange rate between the two currencies on takeover decisions, is not a significant determinant of acquisition location choice.

Model 6 provides the full model results incorporating all of the country-level factors and confirms that the coefficients' signs are consistent with the findings reported in models (1) through (5). These results provide evidence supporting Hypothesis H1, and suggest that the likelihood that a completed deal is cross-border rather than domestic is larger if target firms are located in countries with poorer government quality, weaker investor protection, stronger restrictions on capital controls, and lower corporate tax rates.

**Table 2. Multivariate analysis of country-level determinants of takeover location choice**

Variable	1	2	3	4	5	6
$GOVQUAL_t$	-0.119*					-0.333*
	(0.07)					(0.19)
$GOVQUAL_b$	0.329***					0.739***
	(0.06)					(0.23)
$INVPROTECT_t$		-1.223***				-1.516***
		(0.32)				(0.61)
$INVPROTECT_b$		1.534***				1.054*
		(0.31)				(0.57)
$ECOOPEN_t$			-0.121*			-0.348**
			(0.07)			(0.16)
$ECOOPEN_b$			0.386***			0.210
			(0.10)			(0.51)
$TAXEFT_t$				-31.044***		-74.971***
				(6.75)		(18.42)
$TAXEFT_b$				24.062***		57.417***
				(3.71)		(10.53)
$FOREXEFT$					-4.675	-35.158
					(9.86)	(26.32)
$COMLAW$	0.093	0.242	0.112	0.065	0.137	1.211**
	(0.24)	(0.32)	(0.24)	(0.25)	(0.28)	(0.51)
$GDPGRT$	10.292*	7.239	12.479**	4.516	9.537*	-2.447
	(6.03)	(5.71)	(5.94)	(5.78)	(5.68)	(8.35)
$Log(GDPCPT)$	-0.585	-0.223	-0.474**	-1.010***	-0.294**	-1.914**
	(0.46)	(0.18)	(0.24)	(0.27)	(0.15)	(0.74)
$CASH$	1.088***	0.847***	1.102***	0.995***	1.077***	0.701*
	(0.28)	(0.29)	(0.27)	(0.28)	(0.27)	(0.42)
$RELATED$	1.086***	0.918***	1.115***	0.789***	1.040***	0.767**
	(0.22)	(0.21)	(0.23)	(0.21)	(0.22)	(0.39)
<i>Constant</i>	1.561	-1.851	0.076	8.727**	0.621	18.670**
	(4.16)	(1.81)	(2.05)	(3.79)	(1.51)	(8.43)
<i>Year effects</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Industry effects</i>	Yes	Yes	Yes	Yes	Yes	Yes
$Wald \chi^2$	91.580***	82.940***	89.300***	133.900***	76.680***	173.950***
$Pseudo R^2$	0.216	0.241	0.164	0.250	0.128	0.540
<i>N</i>	623	606	623	623	623	606

Symbols \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% levels, respectively.

#### 4.2. Target shareholder returns around the M&A announcement and its determinants

Table 3 reports the announcement returns of the target firms in domestic and cross-border acquisitions for various event windows surrounding acquisition announcement dates.

For domestic target firms, the CARs during the pre-bid event windows from after day -20 are statistically significant and positive. In contrast, the sub-periods from -40 to -30 and -30 to -21 depict very low and statistically insignificant returns. In the post-acquisition period, the trend of CARs has again

increased with shareholders of the target firms experiencing positive returns from day 0 (the announcement day) to day +40 following the announcement. More importantly, all the sub-event windows exhibit statistically significant positive returns, especially the sub-period -5 to +5, which has shown the highest abnormal return (9.26, 8.91) compared to those of the other event windows. I can, therefore, deduce that domestic acquisitions have generated considerable positive announcement period gains for the target shareholders.

Table 3 also reveals that the trend of cross-border target firms is very similar to that concerning CARs for target firms in

domestic acquisitions. This refers to both the pre-acquisition periods and post-acquisition event windows. Indeed, target shareholders have gained statistically significant and positive returns across almost all of the sub-event periods from the tenth day before the announcement day. In addition, similar to that for the domestic acquisitions, the sub-period -5 to +5 CAR for the cross-border sample has also presented the highest abnormal return (13.88, 7.69) compared to those of the other event windows. In other words, it can be deduced that foreign acquisitions have also generated substantial positive announcement gains for the target shareholders.

*Table 3. The short-term stock performance of target firms*

Days	Domestic		Cross-border		Cross-border effect		
	CAR <sub>D</sub>	t-ratio	CAR <sub>CB</sub>	t-ratio	CAR <sub>CB</sub> -CAR <sub>D</sub>	t-ratio	P-value
(-40,-31)	0.0076	1.24	0.0065	1.00	-0.0011	-0.10	0.92
(-30,-21)	-0.0045	-0.70	0.0219	2.89***	0.0264	2.29**	0.02
(-20,-11)	0.0181	2.44**	0.0176	1.74*	-0.0004	-0.03	0.98
(-10,-1)	0.0340	5.81***	0.0605	6.03***	0.0265	2.32**	0.02
(-5,0)	0.0465	7.54***	0.0656	6.34***	0.0191	1.60	0.11
(-1,0)	0.0346	6.95***	0.0389	5.29***	0.0043	0.46	0.65
0	0.0249	5.51***	0.0218	3.83***	-0.0030	0.81	0.42
(-1,+1)	0.0707	9.00***	0.1104	6.42***	0.0397	2.38**	0.02
(-2,+2)	0.0799	9.31***	0.1241	7.13***	0.0442	2.51**	0.01
(-5,+5)	0.0926	8.91***	0.1388	7.69***	0.0462	2.27**	0.02
(0,+1)	0.0609	7.97***	0.0933	5.95***	0.0324	2.05**	0.04
(0,+5)	0.0710	7.30***	0.0951	6.15***	0.0240	1.29	0.20
(0,+10)	0.0763	6.68***	0.0967	5.90***	0.0205	0.96	0.34
(0,+15)	0.0723	6.32***	0.1029	5.82***	0.0307	1.41	0.16
(0,+20)	0.0698	5.81***	0.1059	6.08***	0.0361	1.60	0.11
(0,+30)	0.0686	5.15***	0.0942	5.11***	0.0256	1.04	0.30
(0,+40)	0.0727	4.97***	0.0946	4.70***	0.0219	0.81	0.42

*Notes:* The table reports the cumulative abnormal returns (CARs) of target firms in domestic and cross-border acquisitions for various event windows surrounding acquisition announcement dates. The difference in CARs between cross-border and domestic acquisitions is tested using t-test. Symbols \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% levels, respectively.

Further, Table 3 reports the difference in abnormal returns of the target companies in domestic and cross-border acquisitions (Cross-border effect). It demonstrates that foreign acquisitions have created higher returns for the target shareholders during the pre-acquisition period event windows, such as days -30 to -21, days -10 to -1, and days -5 to 0. Except for CARs during the three sub-periods above, the other CAR differences between domestic and cross-border acquisitions represent statistically insignificant return variation. As a result, there is a significant positive cross-border effect during the pre-acquisition period, suggesting that cross-border targets exhibit better performance, on average, during the pre-acquisition period. This is consistent with the strategic market entry hypothesis for cross-border bidders. Similarly, during the three-day window (-1, +1), the five-day window (-2, +2), and the eleven-day window (-5, +5) around the announcement day, the cross-border effect is statistically positive. Based on the findings reported in Tables 3, it appears that cross-border acquisitions generally provide greater returns to target shareholders than domestic deals, with part of this return differential related to country-level attributes, and particularly the institutional environment prevalent in target countries.

Overall, this study finds significant evidence supporting Hypothesis H2. Accordingly, target company

shareholders have gained positive returns around the announcement of both sets of acquisitions. Indeed, the results suggest that the target firms' gains largely reflect acquisition-related benefits. Additionally, the returns gained in domestic acquisitions are significantly less than those from cross-border acquisitions. Specifically, I find that cross-border target firms gain higher returns than domestic target firms in the small event windows around the announcement date and a positive cross-border effect exists until the twentieth day after the announcement day. More important, the cross-border effect is particularly prominent in the period from 5 days before acquisition announcement to 5 days following the announcement.

This study continues to examine the determinants of returns to target firms using the whole acquisition sample. The dependent variable is CAR(-5,+5), the cumulative abnormal return for the eleven-day window ranging from day t-5 to day t+5 around the acquisition announcement. Table 4 presents the results of six OLS regressions for the overall sample of individual deals derived from Equation (3). Model (1) examines the effect of quality of government on target returns. The coefficient on the GOVQUAL<sub>t</sub> variable (beta coeff = 0.010 and p < 0.10) suggests that target shareholders obtain larger returns if target firms are located

in countries with better government quality. Model (2) evaluates the influence of the investor protection regime on target returns. The coefficient on the  $INVPOTECT_t$  variable (beta coeff = 0.050 and  $p < 0.05$ ) is positive and significant at the 5% level. Model (3) investigates whether there is a significant association between the level of economic openness and the gains to target firms. The coefficient on the  $ECOOPEN_t$  variable (beta coeff = 0.011 and  $p < 0.10$ ) documents that the higher the level of economic freedom (lower capital controls) in the target country the larger the gains for target shareholders. In Model (4), this study captures the impact of corporate tax change on target returns. The coefficient on the  $TAXEFT_t$  variable (beta coeff = -0.743 and  $p < 0.05$ ) indicates that there is a negative association between the level of corporate tax rates imposed in the target country and target shareholder returns. Model (5) examines the effect of the exchange rate between

the two currencies on target returns. The coefficient on the  $FOREXEFT$  variable (beta coeff = -0.162 and  $p < 0.05$ ) is negative and significant at the 5% level, and suggests that the more valuable (relatively) the target currency the higher the gains for target firms. Model (6) investigates the effect of all expected country-level variables on the gains to target firms. The coefficients on the  $INVPOTECT_t$  variable (beta coeff = 0.026 and  $p < 0.10$ ), the  $TAXEFT_t$  variable (beta coeff = -0.569 and  $p < 0.10$ ), and the  $FOREXEFT$  variable (beta coeff = -0.156 and  $p < 0.10$ ), are statistically significant. These outcomes support the findings observed in Model (2), Model (4), and Model (5). Further, the coefficient on the  $GOVQUAL_t$  variable is positively insignificant, suggesting that once all of the target corporate governance variables are tested together, the effect of government quality on the targets' gains is statistically weaker than other country-level characteristics.

*Table 4. The determinants of the target returns*

Variable	1	2	3	4	5	6
$GOVQUAL_t$	0.010*					0.001
	(0.01)					(0.01)
$GOVQUAL_b$	0.005					-0.001
	(0.01)					(0.01)
$INVPOTECT_t$		0.050**				0.026*
		(0.02)				(0.02)
$INVPOTECT_b$		-0.029*				-0.022*
		(0.02)				(0.01)
$ECOOPEN_t$			0.011*			-0.005
			(0.01)			(0.02)
$ECOOPEN_b$			0.003			0.012
			(0.01)			(0.01)
$TAXEFT_t$				-0.743**		-0.569*
				(0.29)		(0.34)
$TAXEFT_b$				0.226		0.251
				(0.26)		(0.30)
$FOREXEFT$					-0.162**	-0.156**
					(0.10)	(0.10)
<i>Other country, deal- and firm-level controls</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Year effects</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Industry effects</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>F ratio</i>	1.780***	1.840***	1.770***	1.760***	1.790***	1.850***
<i>Adjusted R<sup>2</sup></i>	0.137	0.137	0.135	0.139	0.129	0.137
<i>N</i>	559	554	559	559	559	554

Symbols \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% levels, respectively.

These above results suggest that, once the effects of other factors are taken into account, target shareholders experience larger gains if target firms are based in countries with greater government quality, better investor protection regime, more economic openness, lower corporate tax rates, and stronger currency value.

It should also be noted that the results for the bidder country-level variables are generally not statistically significant apart from the  $INVPOTECT$  variable. This suggests that the target country environment is a more important determinant of target shareholder returns, which is consistent with acquisition motives and perceived sources of value creation being derived from target firm modification or institutional frictions or imperfections linked to target firms.

## 5. Conclusion

Using a relatively comprehensive sample of deals in eight East and Southeast Asian countries, over the period from 2000 to 2013, this study finds that target firms which are situated in countries with poorer government quality, weaker investor protection, stronger restrictions on capital controls, and lower corporate tax rates relative to the bidder country, are linked to more cross-border deals. Also, consistent with the current literature, target shareholders experience positive abnormal returns in both domestic and cross-border acquisitions following the announcement date, but cross-border target firms gain higher returns than domestic target firms. Finally, this study suggests that government quality, investor protection mechanisms, the level of economic freedom, the corporate tax effect, and the exchange rate effect are important

determinants of target firms' gains across eight East and Southeast Asian economies.

This study contributes to the literature by identifying the explanatory power of country-specific factors in determining the bidder's location choices, takeover outcomes, and target shareholder gains in one of the world's most active takeover markets. In the context of these eight East and Southeast Asian countries, establishing whether such associations exist has important implications for managers of acquiring firms, target firms, and investing communities. The findings suggest that the country-level attributes analysis, as well as the nature of the difference in institutional environment between target and bidder countries are a potential source of acquisition benefits and, therefore, are related to both bidder decision-making and return outcomes for target shareholders. These are likely to help managers of both bidders and target firms choose their business locations more accurately, and manage the acquisition integration process more efficiently.

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