

# Deals Characteristics and Short-Term Stock Price Performance of Malaysian Acquirers

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### ABSTRACT

This paper aims to examine the effect of deals characteristics (types of target and method of payment) on the short-term common stock returns of acquirers in acquisitions. The sample composes of acquisitions during the period from 2000 to 2013. The study finds that cash-financed acquisitions create positively significant returns to the wealth of shareholders' of bidders. Meanwhile, types of target neither create nor destroy short-term value to the bidding firms. The indifferent result for types of targets shows that shareholders of acquiring companies do not react regardless if the target are from public or private companies.

**Keywords:** Acquisition, method of payment, short-term price performance, types of target

### 1. INTRODUCTION

Acquisition refers to the process of taking over a target firm by a bidding firm through buying some or majority of the target company's shares from its current shareholders in order to gain control of the businesses. There are three types of acquisitions namely vertical, horizontal and conglomerate. In horizontal acquisition, both buying and selling firms operate in the same industry. Vertical acquisition is where buying firms attempt to diversify their business by venturing pstream or downstream. Conglomerate acquisition refers to acquisition between firms from unrelated industries. This paper focuses on acquisitions because acquisitions are major investments and the effects from acquisitions on a firm value will be significant

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## **1.1 Problem Statement**

The deals characteristics could be one of the most significant mechanisms in acquiring firms in Malaysia. As an example, in 2008, Martynova and Renneboog showed in their review studies how status, private or publicly listed, influences returns to the bidder. Meanwhile, Gonenc, Hermes, and Van Sinderenn (2013) find the method of payment in an acquisition is important for a number of reasons. One of the reasons is the method of payment becomes an alternative approach for attracting target firms. Thus, based on previous studies from developing countries, this study examines the effects of deals characteristics on short-term price return of Malaysian bidders. There are two deals characteristics identified in this study that could be significant to the short-term stock price performance of acquiring firms.

The first characteristic is the type of target firms. In Malaysia, most acquisitions involve unlisted firms (target firms) that are acquired by listed firms. The market prices of listed firms that are being acquired could be observed. In this case, an acquiring firm or bidding firm has to pay at least the market price of the target firms. Thus, the final price for a listed target firm could be greater than its market price. If this is the case, the acquiring firm would earn lower return. On the other hand, for the acquisition of an unlisted firm, investors may not even know the real value of the firm. Furthermore, unlisted firms are exposed to other risks such as liquidity. Therefore, it is possible for an acquiring firm to pay a lower price. This is consistent with Officer's findings in 2007 that shows acquiring firms could get discounts of 15% to 30% for unlisted firms compared to those of listed firms.

The second characteristic is the mode of payment for target firms. There are two modes of payment, which are cash and stock. The bidding firms that engage in cash acquisition usually realize that its stock price is undervalued. Correspondingly, firms that engage in the stock acquisition are overvalued. Therefore, investors will react more positively to cash acquisitions compared to stock acquisitions. In fact, cash-financing could elude the regulations by the security commission (SC) that require acquirers to get the shareholder's approval if the acquisitions are financed by stocks. Hence, investors prefer cash-financing in order to avoid difficulties along the acquisition process.

### 2. OVERVIEW OF RELATED THEORY

Asymmetric information is a theory highlighted by past literature that could explain the effects of types of target and method of payment in an acquisition. This theory posits that bidders may signal valuable information to the market. Depending on the type of target, bidders may experience problems due to asymmetric information. For instance, a bidder may face asymmetric information as some vital information are not relayed and disclosed especially from private firms. Peng and Isa (2012) argue that the bidding firms are facing difficulties in getting full accurate information about private target firms and less liquid in takeover (Gonenc, Hermes & Van Sinderen, 2013). Since market price of public target firms could be observed, the price of the target must be similar or more than the market price. Thus, the final price paid to a public target firm could be greater than the market price. In this case, the acquiring firm would earn a lower return.

In the case of the method of payment, if managers possess information about the intrinsic value of their firm, they will be able to finance the acquisition in the most profitable way for the existing stockholders (Travlos, 1987). In this case, Myers and Majluf (1984) as well as Croci and Petmezas (2010) argue that the bidding firms would prefer to engage in cash acquisition when their stock price is undervalued. Otherwise, they prefer to use stock to finance target firms when the bidding firm believes that their stock price is overvalued.

### 2.1 Literature Review Related to Empirical Evidence

This section gives an overview of the existing literature on deals characteristics (types of target and method of payment) on short-term stock price performance in various countries. There are several studies that reviewed the types of target. As an example, Martynova and Renneboog (2008) showed in their review studies how status, private or publicly listed, influences returns to the bidder. They find that private targets generate substantially higher Cumulative Average Abnormal Returns (CAAR) to the bidders. Facio, McConnell and Stolin (2006), Masulis, Wang and Xei (2007), Bae, Chang and Kim (2013), Capron and Shen (2007) find that bidders in Europe and the US earn significant positive returns of 1.48%, 1.75%, 4.70% and 0.760% over a short-period window when they acquire privately held targets On the other hand, firms that acquire public target firms all experience significant negative returns of -0.38%, -1.41%, -2.56% and -1.484% respectively. The authors argue that the results are consistent with prior studies indicating that acquiring private target firms is a value-destroying investment.

With regards to the method of payment, empirical evidence from developed countries show mixed findings. Two studies about the method of payment on M&As have been conducted using meta-analysis (King, Dalton, Daily & Covin, 2004; Martynova & Renneboog, 2008). King et al. (2004) find that the method of payment in their meta-analysis in the US does not have an impact on the bidders. However, Martynova and Renneboog (2008) find that the mean of the payment influences returns to bidders. They find that stock-financed acquisitions lead to significant negative returns to the bidders than those of all-cash bids in the US. On the contrary, in the European studies, they find that stock-financed acquisitions lead to significant positive returns to the bidders. Alexandridis,

Petmezas, and Travlos (2010) find that returns to bidders in cash acquisitions outperform those of stock-financed in US and Canada. This is shown in an abnormal return of 0.44% in cash acquisitions compared to -2.29% in stock acquisitions. The results are supported by Alexandridis, Fuller, Terhaar and Travlos (2013) who find that stock payment leads to a lower return of -1.7% to bidders for a three-day (-1,1) event window during 1990 to 1999 in the US.

Meanwhile, the empirical evidence from Malaysia shows inconclusive results related to the method of payment. Using a sample of 376 companies from 2001 to 2009 in Malaysia, Mat-Rahim and Pok (2013) find that cash acquisitions lead to significant positive returns in a 61-day (-30,30) event window. The wealth creation is attributed to the domination of cash bidders that accounts for 80% of the bidding. Md-Nor and Ismail (2006) find that only stock payment has a significant positive return over 17-day (-1,15) but significant negative return for cash payment over 61-day (0,60) event window. Their sample consists of 220 public listed Malaysian firms from 1995 to 2000. Authors attribute the significant positive return as good news to takeover target firms for significantly negative return, investor over-reacted to the news by using cash-financing.

# 3. SAMPLE SELECTION AND METHODOLOGY

The sample in this study composes of completed acquisitions between 2000 and 2013. This study focuses on domestic firms in Malaysia. The deals characteristics are manually collected from annual reports from the year 2001 to 2014. To measure the short-term stock price, this study uses an event study methodology as recommended by Brown and Warner (1985), Bradley, Desai and Kim (1983) and MacKinlay (1997). This study uses univariate analyses to tests differences in means and Mann-Whitney U to investigate the existence of differences between the two groups.

# 3.1 Short-term Stock Price Performance Measurement

In order to measure the Cumulative Abnormal Return (CAR), the normal return is first calculated using market model approach as suggested by MacKinlay (1997). To examine the abnormal returns to bidding firms, this study uses a 121day event window that is comprised of 60 pre-event days, the event day, and 60 post-event days. The estimation period is from day -200 to -61 days before the announcement date. A larger event window is used rather than a specific period of interest, this enables the researchers to capture market reaction prior to the official date of announcement (MacKinlay, 1997). The FTSE Bursa Malaysia EMAS Index (FBMEMAS) was used as the market portfolio. FBMEMAS is chosen because it because it is a broader index as compared to the more popular FTSE Bursa Malaysia Kuala Lumpur Composite Index (FBMKLCI).

#### 3.1.1 Short-run Measurement

The first step is to calculate the daily raw return for each company and the market index from day -200 to day +60. Daily raw return of company i on day t is computed as follows:

$$R_{i,t} = L_n(P_{i,t}/P_{i,t-1})$$
[3.1]

	where,
$R_{i,t}$	= Return on company <i>i</i> during day <i>t</i>
$\mathbf{P}_{i,t}$	= Price of company <i>i</i> shares at the end of day <i>t</i>
<b>P</b> <sub><i>i</i></sub> , <i>t</i> -1	= Price of company <i>i</i> shares at the end of day $t-1$

The daily raw return of FBMEMAS market index on day t is,

$$R_{m,t} = L_n (EMAS_t / EMAS_{t-1})$$
[3.2]

where,

 $R_{m,t}$  = Return on market index during day tEMAS<sub>t</sub> = Market index level at the end of day tEMAS<sub>t-1</sub> = Market index level at the end of day t-1

Next, the return date from day -200 to day -61 are used to estimate intercept and slope of market model in the following form:

$$\mathbf{R}_{i,t} = \alpha_i + \beta_i \mathbf{R}_{m,t} + \varepsilon_{i,t}$$
[3.3]

where,

$\mathbf{R}_{i,t}$	= The return of company <i>i</i> during on day <i>t</i>				
$\alpha_i$ and $\beta_i$	= The parameters of market model				
$\mathbf{R}_{m,t}$	= Market return on day $t$				
$\varepsilon_{i,t}$	= The zero mean disturbance term				

Then, the abnormal returns for company *i* from day -60 to 60 can be estimated as follows:

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i R_{m,t}) + \varepsilon_{i,t}$$
[3.4]

where,

$$AR_{i,t} = The abnormal return of company i on day t and the rest of parameters are explain previously.$$

The next step is to take the daily average abnormal returns **AAR**, of all companies as follows:

$$AARt = \sum_{i=1}^{n} AR_{i,t} / n_t$$
[3.5]

where  $n_t$  is the number of companies traded on day *t*. The variance of AR<sub>*it*</sub> using market model is:

$$VAR (AAR_t) = 1/n^2 \sum \sigma_{\varepsilon i}^2$$
[3.6]

where  $\sigma_{\varepsilon i}^2$  is the variance of the residuals of company *i* that is estimated from model 3.3.

To test for daily significance of AR<sub>t</sub>, Z-test is used where:

$$Z = AAR_t / VAR (AAR_{tl, t2})^2$$
[3.7]

Next, the cumulative average abnormal return  $CAAR_{t1,t2}$  would be calculated for the window period between  $t_1$  and  $t_2$  as follows:

$$CAAR_{tl,t2} = \sum_{t=t1}^{t2} AAR_t$$
[3.8]

To test for significance of CAAR t1,t2, Z-test is used where:

$$Z = CAAR_{(t1, t2)} / Var (CAAR_{t1, t2})^{1/2}$$
[3.9]

The cumulative abnormal returns of firms i (CAR<sub>i</sub> (t<sub>1</sub>, t2)) over a specified period t<sub>1</sub> to t<sub>2</sub> is calculated by summing the daily abnormal returns of firm i across the period as follow:

CAR (t<sub>1</sub>, t2) = 
$$\sum_{t=t_1}^{t_2} AR_{it}$$
 [3.10]

]	Panel A: Public vs Private				Panel B: Cash vs. mixed		
Event windows	Public (N=15) Mean (%) (P-value)	Private (N=188) Mean (%) (P-value)	-p-value of Indpt t- test (p-value of Mann Whitney U)	Cash (N=179) Mean (%) (P-value)	Mixed (N=24) Mean (%) (P-value)	-p-value of Indpt t- test (p-value of Mann Whitney	
CAAR	5 297%	6 166%**	0 910	5 322%	11 918%	0.552	
(-60,60)	(0.466)	(0.025)	(0.604)	(0.040)**	(0.273)	(0.100)	
CAAR	4.321%	1.927%***	0.370	1.884%***	3.743%**	0.267	
(-5,1)	(0.109)	(0.001)	(0.408)	(0.001)	(0.023)	(0.365)	
CAAR	3.627%	1.061%**	0.310	0.915%*	3.752%***	0.060*	
(-3,1)	(0.152)	(0.022)	(0.350)	(0.062)	(0.011)	(0.089)	
CAAR	3.057%	0.770%**	0.299	0.698%*	2.738%**	0.079 *	
(-1,1)	(0.167)	(0.025)	(0.595)	(0.062)	(0.016)	(0.085)	

Table 1: The Effect of Deal Characteristics on Acquisition Announcements

\*\*\*, \*\*, and \* denotes significance level at 1%, 5% and 10% level respectively.

### 4. ANALYSIS AND DISCUSSION

Table 1 summarizes the results using CAAR and univariate analyses to the bidding firms. Panel A shows results for types of target and Panel B shows the results for the method of payments.

### 4.1 Types of Target

Referring to Table 1, Panel A shows abnormal returns when bidders acquire shares in either 15 public listed firms or 188 private non-listed firms. As for the 188 non-listed firms, significant positive returns at 5% level in all event windows are observed. The CAARs of the event windows over 121-day (-60, 60), seven-day (-5, 1), five-day (-3, 1) and three-day (-1,1) are 6.166%, 1.927%, 1.061% and 0.770% respectively. Since the targets are not listed, bidders may have trouble in evaluating the targets. In this case, the bidders would pay a lower price as they do not want to overpay for the target.

Nevertheless, when parametric and non-parametric tests are applied, there is no significant difference in returns between the two groups. The figures indicate that most of the target firms in Malaysia are privately held. The returns are insignificant for acquisitions of public listed firms. These insignificant results might be due to the small sample of public firms.

# 4.2 Method of Payment

Panel B in Table 1 shows that 179 acquisitions are cash-financed while the other 24 acquisitions are financed by either stocks or mixed (mixture of stock and cash). The results show that acquisitions financed by cash earn significant returns ranging from 0.689% to 5.322% in all event window. Meanwhile, bidders in mixed-funded acquisition earned positive returns in the short-term event windows and the returns range from 2.738% for three-day event window (-1,1) to 3.752% for five-day event window (-3,1). Mixed-financed earned higher returns than cash acquisitions for the five-day and three-day event windows and the differences are significant at 10% level for both parametric and non-parametric tests. To conclude, the fact that most of the acquisitions are financed by cash show that acquirers try to circumvent the regulations are financed by stock. This study shows almost all of the acquiring firms are owned by substantial shareholder, thus the use of cash is more likely to secure their position.

# 5. CONCLUSION

This paper examines the deals characteristics for short-term stock price performance of acquirer companies. Using the sample of 203 Malaysian acquisitions during 2000 to 2013, the study finds that acquisitions financed by cash are categorized as cash-rich bidders and experience value-increasing acquisition. This study supports the results from previous studies (see for example Harford, 1999; Md-Nor & Ismail, 2006). Meanwhile, for types of the target, there is no difference between public and private targets. This means that the price paid for a public or private target is similar and/or the synergy from acquiring a public target is similar to the synergy from acquiring a private target. A possible reason for the indifferent result between public and private targets is that the sample for public targets constitutes only 15 firms. The findings of this research could be beneficial to regulator and investors in determining the method of payment. In terms of law and regulation, the regulator could reassess the procedure of acquisition by using the stock financing to avoid difficulties through the acquisition transaction. Besides that, investors could get an indicator that bidders' stock is undervalued if bidder uses cash to finance target firm. Thus, investors perceive that using cash-financed in acquisition signals a good news and stock-financed as a bad news. Future researches should also examine the relationship of long-run stock price performance with method of payment and types of target.

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