AGENCY COSTS AND POST CROSS BORDER ACQUISITION PERFORMANCE OF MALAYSIAN ACQUIRERS

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ABSTRACT

The purpose of this paper is to investigate whether the variation in the performance of Malaysian acquirers following cross-border acquisition (CBA) activities is explained by agency costs factors. This study uses one, two and three years buy-and-hold abnormal return (BHAR) to measure acquisition performance and weighted least square regression to evaluate the impact of agency costs factors on acquisition performance. The findings suggest that the CBA performance is influenced by agency costs of the acquirers where those with lower agency costs, characterized by higher institutional ownership, higher board gender diversity, and higher board ethnic diversity perform better. The sample was restricted to CBAs in Malaysia, which limits the generalization of the findings to other countries.The results are reasonable to serve as guide to policy makers to make appropriate policy concerning the representation of female and various races on board of directors. The results could also guide in making appropriate investment policy decision that will result in long-term performance of acquiring firms.The novel contribution of this study is in terms of revealing the applicability of corporate finance theories in explaining CBA performance in emerging markets where CBAs are aggressively undertaken and high failure rates of CBAs are reported using long term datasets and robust performance measures and analyses.

Keywords: Cross-border acquisition; Shareholders' wealth effect; Buy-and-hold abnormal returns; Agency costs and Bursa Malaysia.

1. INTRODUCTION

Cross-border acquisition (CBA) has long been used as an important investment strategy for firms' international strategic expansion. CBA enables firms to access new markets faster, acquire

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resources and strategic assets, improve efficiency, diversify into related market and create synergies. CBA has become a major mode-of-entry for developing-country firms into other countries (Aulakh, 2007). From the broader economic perspective, CBA allows capital to be reallocated more freely and more efficiently to its highest use in economic terms.

Malaysia as an advanced emerging market in Asian has involved aggressively in CBA deals as early 1990s (UNCTAD, 2014). In aggregate statistical terms, the rise of CBA by Malaysian corporations has been phenomenal. The average value of CBA for the period from 2000 to 2009 was almost 4.33 times of the period from 1990 to 1999. Moreover, on an average, Malaysia has recorded a substantial number of CBA activities during the recent years. Based on the data from 2014 World Development Report by UNCTAD, Malaysia is in the third position among south-east Asia countries, in the 10th position among Asian countries and 19th position globally in terms of CBA value (see Table 1).

Table 1: Ranking based on value and deal of CBA

Region	Malaysia's rank based on value of CBA	Malaysia's rank based on deal of CBA
World	19th	17th
Asia	10th	5th
South-East Asia	3rd	2nd

Source: UNCTAD (2014) & Thomson Reuters Eikon (2015)

Despite the popularity of growth strategies based on CBA, the challenges of execution are substantial where the failure rates reported by several sources are high ranging from 40% to 80% (Dunbar, 2014; Rahim, Ahmad, Ahmad, & Rahim, 2013). It was also reported that globally companies spent more than $2 trillion on all types of acquisition every year but experienced failure rates as high as 70% to 90% (Bunce, 2013; Christensen, Alton, Rising, & Waldeck, 2011). More specifically for Malaysian market, PwC's surveys show that 70% of the M&As fail in general (The Edge Malaysia, July 9, 2012).

The high failure rate of the CBA has motivated studies on the wealth effect of CBA. However, the results are mixed. For example, positive returns were shown by Francis et. al (2014) in United State, Banerjee, Banerjee, De, Jindra, and Mukhopadhyay (2014) in India, Khin, Lee, and Yee (2012) in Malaysia whereas negative returns were shown by Wang, Shih, and Lin (2014) in Asia and Bertrand and Betschinger (2012) in Russia. Basuil and Datta (2015) in US and Chakrabarti (2007) in India show the insignificant or neutral return for acquiring firms.

While the variation in shareholders' returns are shown to be explained by cultural similarities and distance (Chakrabarti, Gupta-Mukherjee, and Jayaraman, 2009), predecessors' acquisition activity (Francis et al., 2014), bidders' prior experiences (Basuil and Datta, 2015) and the level of R&D involved (Francoeur, 2006), agency costs at the time CBA decisions were concluded could be another potential explanation. Jensen and Meckling (1976) posit an argument that separation of ownership and control result in agency problems due to inconsistent interests of the management and the shareholders where managers may pursue objectives other than shareholders' wealth maximization and have the tendency to over invest excess cash under their control. This conflict gives rise to agency costs, which reduce the value of the firm. In the context of CBA, managers

may have the tendency to pursue international expansion, referred to by Jensen as 'empire building', with less consideration to shareholders' wealth creation. Hence, acquirers with higher agency costs arguably would have lower shareholders' returns.

Little is known about Malaysian acquirers' performance following CBA as most studies on this topic were conducted in the context of developed countries. In addition, the performance measure used in the few available studies on Malaysia's CBA is either short run Cumulative Abnormal Return (CAR) (e.g., Amin Noordin, Kamarudin, & Mohamad Anwar, 2015; Bhagat, Malhotra, & Zhu, 2011) or long run CAR (e.g., Khin et al., 2012). Short run CAR can be criticized for not accurately measuring and capturing the full effect of an event in a short-run stock market reaction. This is because its assumption that the market possesses information about the event in an efficient and unbiased manner most likely does not hold in many emerging markets, including Malaysia, where the capital markets are not fully efficient (Minai, Ibrahim & Uddin, 2017). Moreover, the complexity and ambiguity involved in CBA activities amplify the magnitude of informational efficiency of the CBA decisions in these markets. Long run CAR has been used to overcome the pitfall of short run CAR but it too has been criticized as an inappropriate measurement for long run wealth effect due to measurement bias, new listing bias, and rebalancing bias (Barber & Lyon, 1997). In addition, the study of Khin et al. has a weakness in terms of a short dataset from 2004 to 2008.

This study attempts to examine whether Malaysian acquirers' performance following CBA is explained by agency costs by investigating the relationship between long run shareholders effect using Buy and Hold Abnormal Return (BHAR) and several agency costs proxies. A sample of 178 CBA deals involving public listed acquirers during the period 2004 to 2015 was utilized.

The novel contribution of this study is in terms of revealing the applicability of corporate finance theories in explaining CBA performance in an emerging market where CBA are aggressively undertaken and high failure rates of CBA are reported using long term datasets and robust performance measures and analyses. Many influencing factors driving CBA in Malaysia are substantially different from those in other emerging markets, such as cultural background and international exposure (Bhagat et al., 2011), and possible different CBA strategies are pursued (Bhagat et al., 2011; Buckley, 2004) which justify undertaking a study on Malaysian CBA.

The remainder of the paper is organized as follows. In the next section, we review the related empirical literature so as to guide the research framework. Section 3 describes the methodology adopted. Section 4 presents the determinants of the acquirers' long run performance and Section 5 concludes.

2. LITERATURE REVIEW AND HYPOTHESES

Based on past-related theoretical and empirical literature, the research framework and hypotheses of this study were developed.

2.1. Dependent Variable

One-, two-, and three-year shareholder buy and hold abnormal returns (BHAR) are used as alternative dependent variables in this study to represent acquirers' performance. This measure has been widely used in previous long run performance studies (e.g., Chan, Ikenberry, & Lee, 2004; Datta, Iskandar-Datta, & Raman, 2000; Ibrahim, Uddin, Mohd, & Minai, 2013; Lyon, Barber, & Tsai, 1999; Minai et al. 2017; Ritter, 1991) and able to capture the wealth effect of an event when market is not fully efficient.

2.2. Independent Variables

The following variables and their hypothesized impact on acquirers' long run performance are derived:

a) Free Cash Flow (FCF)

FCF is commonly used as a proxy for agency costs based on Jensen's (1986) free cash flow hypothesis. According to the theory, firm generating cash in excess of that required to fund positive net present value projects have higher tendency to waste corporate resources, take value decreasing investment and inefficient resource allocation, and therefore face greater agency problems (Ibrahim & Minai, 2009; Minai et al, 2017; Wang, 2010). It is thus expected that companies with high FCF have a high tendency to embark on CBA to fulfil the top management's desire for empire building without detail consideration of the project financial viability.

Harford (1999) argues that with large cash holdings, managers may tend to favor their self-interests by engaging in acquisitions with decreasing value. More so, Boateng and Bi (2014) and Du, Boateng and Newton (2015) assert that such excess free cash holdings may lead managers to incorrectly evaluate targets and overvalue acquisitions paid for, thereby resulting in poor long-run performance. Therefore, the following alternative hypothesis is specified:

> H1a: Acquirers with higher FCF have lower long run performance following CBA

b) Board ethnic diversity

Diversity can enhance a board's independence of thought so that the board can better perform its monitoring function (Erhardt, Werbel, & Shrader, 2003; Adams & Ferreira, 2009). Several studies, including those on Malaysia market, found support for this argument when the level of ethnic diversity is associated with firm performance. Carter, D'Souza, Simkins, and Simpson (2010) have used an "ethnic directors only" in their study of U.S. firms. They found that the level of ethnic minority directors and firm performance is related. A study by Abdullah and Ku Ismail (2013) on Malaysian firms which examines the effects of board diversity (in terms of gender, ethnicity and age) of the top 100 non-financial firms on firm performance found that ethnic diversity has positive relationship with firm performance (measured by return on asset). It can thus be argued that ethnic diversity in Malaysia reduce agency costs which results in better CBA decisions. Hence, the following alternative hypothesis is thus specified:

H1b: Acquirers with high board ethnic diversity have better long run performance following CBA

c)   *Board gender diversity*

Drawing on argument from Adams & Ferreira (2009) on board diversity's role in enhancing board-monitoring function, board gender diversity arguably is another proxy for agency costs. Empirical studies that have examined the role of board gender diversity on firm performance are in support of this. Huse and Solberg (2006) show that the presence of women on board meetings improves the quality of board deliberations of complex issues, and thereby reduces the occurrence of major decision missteps. In particular, Adams and Ferreira (2009) find that female directors have better attendance records and that male directors in gender-diverse boards are less likely to have attendance problems.

However, studies on Malaysian market show mixed results. Abdullah and Ku Ismail (2013) show that gender diversity has negative impact on firm performance (measured by Tobin's q and return on asset), while Abdullah, Ku Ismail and Nachum (2016) find that the presence of female directors on boards of Malaysian companies generates value for some firms while it decreases it for others. Thus, it is hypothesized as follows:

H1c: Firms with high board gender diversity have better long run performance following CBA

d)   *Board Independence*

Independent directors, also referred to as non-executive directors, are defined as those that do not have any association with the organization they work with except for their directorship or perhaps holding a small proportion of organization's ownership (Bliss, 2011). It is generally assumed that independent directors act as an affective internal governance mechanism in companies and therefore higher level of board independence results in less agency costs. In a recent study, Badru and Raji (2016) find that the proportion of independent directors has significant positive influence on company performance.

On the contrary, stewardship theory argues that boards dominated by insider members made better strategic decisions since the insiders are better informed about the firms' operation. Agarwal and Knoeber (1996) finds support for this theory. As the focus of this study is on agency cost theory, the following hypothesis is specified:

H1d: Firms with high level of board independence have better long run performance following CBA

e)   *Managerial Ownership*

According to Jensen and Meckling (1976), high managerial ownership should reduce the agency cost of equity because managers' interests would be more aligned with those of the shareholders. This is consistent with the Jensen's (1993) 'convergence of interest' hypothesis. Rashid (2016) argues that when a firm manager possesses a large ownership stake in a firm, this allows the

manager to refrain from self-opportunistic behaviour and thus reduces the firm agency costs. As a result, managerial ownership enhances better utilisation of firm resources, as managers will be the best stewards of their firms. Hence, firms with high managerial ownership are associated with lower agency costs, resulting in greater alignment of CBA decisions with shareholders' wealth. It is therefore hypothesised that:

> H1e: Firms with high level of managerial ownership have better long run performance following CBA

f)   Institutional ownership

Firms with large institutional ownership mostly buy large percentage of outstanding shares of company and by so doing can largely influence its management. Due to large amount of investment that institutions engage in, they are more knowledgeable and skillful compared with other average investors particularly when it comes to companies and industries they have invested. Given the managerial skills, talent and substantial resources possessed by institutional investors, they tend to monitor and actively supervise investee companies and by so doing lessen the agency problem and maximize shareholders' wealth (Lin & Fu, 2017). Since institutional ownership enhances corporate governance structure of a firm and reduces agency costs, the study proposes the following hypothesis:

> H1e: Firms with high level of institutional ownership have better long run performance following CBA

2.3.   Control Variables

Previous literature has shown that the following variables influence the post CBA performance of acquirers hence these variables are modeled as the control variables.

a)   Firm Size

Roll (1986) hubris hypothesis states that larger firms have higher tendency to face negative performance since their managers may be more prone to hubris, given their past success in growing the company. Hence, size is used as one of the control variables (Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010).

b)   Mode of payment

Based on the signaling role of equity in corporate acquisitions, Myers and Majluf (1984) argue that if bad news is about to come, the manager will endeavor to 'beat the market' by dispensing overvalued equity. Hence, a firm offering stock as payment for CBA gives signal to the investors that the stock is overvalued. Therefore, mode of the payment is used as another control variable due to its potential influence on CBA performance.

c)   Level of control in target firm

Chari, Ouimet, and Tesar (2010) show that acquirers of emerging market targets realize a statistically significant abnormal returns when acquirers gains majority control of target. Hence, in this study the level of control is included as one of the control variables.

3.   METHODOLOGY

3.1.   *Data Analysis Methodology*

The results of long run event study are sensitive to both the methodology used and the benchmark employed (Agrawal, Jaffe, & Mandelker, 1992; Pontiff & Woodgate, 2008; Rau & Vermaelen, 1998; Uddin, 2012). This is why using appropriate method to calculate abnormal returns and comparing them to an appropriate benchmark are the two most important aspects of determining long run wealth effect. In this study, we used BHAR approach of post-event performance with characteristics-based benchmark.

3.1.1.   *Buy-and-hold abnormal return (BHAR)*

The first step of calculating BHAR is to calculate the holding period returns of firm *i* for the analysis period in months *(T),*

$$BHR_{i,T} = \prod (1 + r_{it}) - 1 \qquad (1)$$

Where, r_{it} is the monthly raw return of firm *i* in month *t*. By using the same calculation, the holding period return for the benchmark *b* is

$$BHR_{b,T} = \prod (1 + r_{bt}) - 1 \qquad (2)$$

The buy-and-hold abnormal returns for each firm *i* in month *t* after benchmark adjustment is the difference between the buy-and-hold returns of the firm and the benchmark:

$$BHAR_{it} = BHR_{it} - BHR_{bt} \qquad (3)$$

Equation (3) was used for calculating the value weighted *(w_i)* mean of the buy-and-hold abnormal return (BHAR) for month *t* as follows:

$$\overline{BHAR_t} = \sum w_i\, BHAR_{it} \qquad (4)$$

Identification of the benchmark firms based on size and book-to-market ratio is very common in long run event study literature following Barber & Lyon (1997) (Ibrahim et al., 2013; Minai et al, 2017). Several conditions are satisfied before considering any firms as a benchmark candidate firm. The study follows numerous empirical studies such as Berry, Guillén, & Zhou (2010), Van Heerde, Gijsbrechts, & Pauwels (2008) that use Euclidean Distance (ED) as a matching estimator. We

calculate the ED between each of the acquirer in the sample and the benchmark candidates based on the size measured by market capitalization of the firm, and market-to-book ratio.

$$ED_{ibt} = \sqrt{(mv_{i(t-1)} - mv_{b(t-1)})^2 + (mb_{i(t-1)} - mb_{b(t-1)})^2} \tag{5}$$

Where,

ED_{ibt} = Euclidean distance between sample firm *i* and benchmark candidate *b* for the CBA event in month *t*.

t = CBA event month of acquiring firm or sample firm. So (t-1) mean previous month of the event month.

$mv_{i(t-1)}$ = standardized[1] market value of sample firm in month *t -1*

$mv_{b(t-l)}$ = standardized market value of benchmark candidate, in month *t-1*

$mb_{i(t-1)}$ = standardized market-to-book value of sample firm in month *t-1*

$mb_{b(t-1)}$ = standardized market-to-book value of benchmark candidate, in month *t-1*.

The weighted market value is given as: $mv_{j(t-1)} = \frac{MV_{j(t-1)}}{\sum MV_{(t-1)}}$ and the weighted market-to-book value ratio is given as: $mb_{j(t-1)} = \frac{MB_{j(t-1)}}{\sum MB_{(t-1)}}$, where, $MV_{j(t-1)}$ is the market capitalization of firm j in month *t-1*, $MB_{j(t-1)}$ is the market-to-book value of firm *j*, in month *t – 1* and *j = i, b* for individual and benchmark firm, respectively.

For each of the acquiring firm in month t, this calculation provides the distance of each of the benchmark candidates based on size and market-to-book ratio from equation 5. We then sorted the entire benchmark candidates based on this distance, for each of the firms in the sample. This sorting permits figuring out the nearest and subsequent matches of a particular firm in a particular month. For the estimation of long run abnormal return measured by BHAR, the average return of the two nearest available matching firms is considered as benchmark return.

3.1.2. Regression Model

To analyze the effect of agency costs proxies on post cross border acquisition performance of acquirers, the study uses the following regression model.

$$BHAR_{it} = \alpha + \beta_1 MGO + \beta_2 INSO + \beta_3 FCF + \beta_4 BED + \beta_5 BGD + \beta_6 PBIP + \beta_7 FSIZ + \beta_8 LC + \beta_9 MP + \varepsilon \tag{6}$$

Where

$BHAR_{it}$ = the long run post cross border acquisition performance of acquirers, which represents 12 months return, 24 months return and 36 months return. α = intercept term, MGO = Managerial ownership, INSO = Institutional ownership, FCF = Free Cash Flow, BED = Board ethnic diversity, BGD =Board gender diversity, PBIP= Board independence, FSIZ = Firm size, LC= Level of control in target firm, MP = Mode of payment.

Ordinary Least Square (OLS) regressions were first fitted, but due to heteroscedasticity problem Weight Least Square (WLS) were utilized. T tests were then run to conclude about the significance of the coefficient for the agency cost variables, namely MGO, INSO, FCF, BED, BGD and PBIP.

3.1.3. Measurement of explanatory variables

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[1] Standardized value of a firm is value of a firm over total market value for a particular period.

The measurements used are as in Table 2
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Table 2: Measurement of the Explanatory Variables

Name of the variable	Measurement of the variable	Support for the measurement
Managerial Ownership	The percentage of total outstanding shares held by the executive or managing directors.	Minai, Uddin and Ibrahim (2017)
Institutional Ownership	Percentage of firm's common stock owned by institutional investors.	Lin and Fu (2017)
Free Cash Flow	Free cash flow[a] by total assets	Minai, Uddin and Ibrahim (2017), Ibrahim and Minai (2009)
Board ethnic diversity	The level of ethnic diversity is measured using the Herfindahl Hirshman Index (HHI)[b].	Cheong & Sinnakkannu (2014)
Board gender diversity	1 if the firm's board of directors has at least one female member; 0 otherwise.	Terjesen, Couto, and Francisco (2016), Abdullah, Ku Ismail and Nachum (2016)
Board Independence	The proportion of independent directors by board size.	Badru and Raji (2016)
Firm Size	Natural log of firm's total asset.	Ibrahim and Minai (2009), Ibrahim and Hwei (2010)
Level of control in target firm	The percentage of control in target firms.	Aybar and Ficici (2009), Narayan and Thenmozhi, (2014)
Mode of payment	1 if the mode of payment is cash; 0 otherwise.	Khin, Lee, and Yee (2012)

Note: [a]Free cash flow is the operating activities represent the net cash receipts and disbursements resulting from the operations of the company.

[b]The Herfindahl Index is estimated by one minus the sum of the squared proportion of each ethnic.

3.2.   *Data and Sample selection*

The data of the acquiring firm's ethnic diversity and gender diversity were collected from the Bursa Malaysia website, respective company's prospectus and annual report. CBA characteristics including mode of payment and level of control in target firm were collected from Thomson Reuter's database. In addition, monthly stock return index, market capitalization, market-to-book value, and annual cash flow statements were collected from the Datastream database.

Initial list of all CBA deals of acquiring firms from 1, January 2004 to 31, December 2015 period were extracted from Thomson Reuters Eikon and Datastream databases. This list contains the information on the announcement date, effective date, acquirer name, CBA deal characteristics and percentage of acquisitions in target firm etc. for Malaysian acquiring companies. Since the long run value of acquirer (post-acquisition performance) would be examined for 3-year post-acquisition period, announcements after January 2015 were excluded respectively for the samples. The list of number of CBA deals has a total of 178 for 3, 2, 1-year performance sample.

Pending and withdrawn deals, unknown status, intended rumors, dismissed rumors, and intent withdrawn type of deals were considered uncompleted deals and thus excluded from the sample. Multiple deals within the post period were also omitted. In total, the size for one-, two-, and three-year performance analyses are 178 along with their respective companies.

4. ANALYSES AND FINDINGS

4.1. *Descriptive Analysis*

Table 4 shows the descriptive statistics of variables used in the study. In terms of value-weighted buy-and-hold abnormal, BH3 exhibits the highest maximum value compared to BH1 and BH2, while BH2 has the lowest maximum value.

The average institutional ownership (INSO) is 12.89%, while the average managerial ownership (MGO) is 14%. The mean value of the cash flow (FCF) appears to be high, even though some firms recorded negative FCF while engaging in cross-border acquisitions activity.

Concerning gender and ethnic diversity, the table shows that acquiring firms' board members are diverse by ethnicity and gender. Malaysia composes of three main ethnic groups, namely Malays, Chinese, and Indians. Major board members are either Chinese or Malays. On the average, about 15.4% of these races are represented on board of directors while the proportion of female representation is about 46.6%. The increased proportion of female on board of director is in line with the Malaysian government target to promote female representation on the board of directors of listed companies to at least 30% by the year 2020.

With respect to the level of control in target firms and mode of payment, Malaysian acquirers have higher level of control in target firms abroad with the proportion of about 70%. Moreover, most of mode of payment is cash, representing about 68% of deals.

Table 4. Descriptive Statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
BH1	178	0.00004	0.00237	-0.01742	0.01893
BH2	178	0.00002	0.00248	-0.01999	0.01525
BH3	178	0.00028	0.00418	-0.02569	0.02703
MGO	178	0.01438	0.03278	0.00000	0.35209
INSO	178	0.12881	0.11567	0.00980	0.78820
FCF	178	0.35741	2.02440	-1.64435	22.74037
BED	178	0.15433	0.09602	0.00000	0.44444
BGD	178	0.46629	0.50027	0	1
PBIP	178	0.43478	0.14205	0	1
FSIZ	178	5.51289	0.72049	3.41447	7.59834
LC	178	0.70268	0.31807	0.05	1
MP	178	0.67978	0.46788	0	1

Notes: BH1, BH2 and BH3 represent BHAR, which is a 12-, 24-and 36-month return, respectively. MGO= Managerial ownership, INSO= Institutional ownership, FCF= Free cash flow. BED = Board ethnic diversity. PBIP= Ratio of

independent directors on the board to board size. FSIZ = Firm size. LC= Percentage of acquisition in target firm, BGD = is a dummy variable representing the presence of female board member, MP = is a dummy variable representing the mode of payment.

A correlation analysis among all the variables used was executed to observe whether there are significant correlations among variables. Table 5 presents the results of the correlations and it can be seen that none of the correlations is above 0.7 which according to Hair, Black, Babin, Anderson (2010) do not indicate the presence of multicollinearity problem.

Table 5: Correlation Results (BHAR Models)

	BH1	BH2	BH3	MGO	INSO	FCF	BED	BGD	PBIP	FSIZ	LC	MP
BH1	1.00											
BH2	0.60[a]	1.00										
	(0.00)											
BH3	0.68 [a]	0.78 [a]	1.00									
	(0.00)	(0.00)										
MGO	-0.03	0.00	-0.04	1.00								
	(0.66)	(0.98)	(0.63)									
INSO	-0.08	-0.03	-0.01	0.23[a]	1.00							
	(0.27)	(0.71)	(0.91)	(0.00)								
FCF	-0.01	0.00	-0.01	0.01	0.26[a]	1.00						
	(0.95)	(0.96)	(0.89)	(0.89)	(0.00)							
BED	0.06	0.05	0.12	-0.04	-0.12 [c]	-0.09	1.00					
	(0.39)	(0.53)	(0.11)	(0.59)	(0.10)	(0.24)						
BGD	-0.02	-0.07	-0.11	0.05	0.00	0.15 [b]	-0.13[c]	1.00				
	(0.78)	(0.37)	(0.13)	(0.47)	(0.96)	(0.04)	(0.08)					
PBIP	0.00	-0.02	-0.04	-0.06	0.16 [b]	-0.07	0.56 [a]	-0.13[c]	1.00			
	(0.95)	(0.82)	(0.63)	(0.39)	(0.03)	(0.36)	(0.00)	(0.08)				
FSIZ	-0.07	-0.20 [a]	-0.04	-0.08	0.20 [a]	-0.28 [a]	0.08	-0.06	0.13[c]	1.00		
	(0.32)	(0.01)	(0.62)	(0.28)	(0.01)	(0.00)	(0.29)	(0.42)	(0.09)			
LC	-0.05	0.07	0.01	-0.04	-0.06	0.00	0.07	0.06	0.02	-0.01	1.00	
	(0.51)	(0.35)	(0.93)	(0.60)	(0.40)	(0.98)	(0.35)	(0.41)	(0.79)	(0.88)		
MP	0.11	0.06	0.04	-0.02	0.00	0.07	-0.04	0.11	-0.17 [b]	-0.09	0.11	1.00
	(0.13)	(0.46)	(0.58)	(0.78)	(0.97)	(0.35)	(0.60)	(0.14)	(0.02)	(0.26)	(0.14)	

Note: BH1, BH2 and BH3 represent BHAR, which is a 12-, 24-and 36-month return. Other variables are as defined earlier. The figure in parenthesis represents P-value. a, b & c represent 1%, 5% and 10% level of significance, respectively.

4.2.   *Regression Analysis*

Initial regression analysis shows the presence of homoscedasticity problems so the study applies weighted least squares (WLS) regression following the procedures suggested by Agung (2011). Table 7 presents the results of applying WLS regression using MGO as a weighted variable.

Table 7: Results of weighted least square regression

Model	BHAR1	BHAR2	BHAR3
Constant	0.0030	-0.0010	-0.0206***
	(0.0024)	(0.0022)	(0.0078)
MGO	-0.5425	-0.6336*	-2.7682**
	(0.3575)	(0.3305)	(1.1558)
INSO	0.0123***	0.0151***	0.0497***
	(0.0020)	(0.0019)	(0.0066)
FCF	-0.0004	-0.0002	0.0002
	(0.0005)	(0.0005)	(0.0018)
BED	0.0109***	0.0122***	0.0394***
	(0.0015)	(0.0014)	(0.0049)
BGD	0.0016***	0.0007**	0.0001
	(0.0004)	(0.0004)	(0.0012)
PBIP	-0.0111***	-0.0167***	-0.0680***
	(0.0011)	(0.0011)	(0.0037)
FSIZ	-0.0006	0.0008**	0.0069***
	(0.0004)	(0.0004)	(0.0012)
LC	0.0027***	0.0011**	0.0043***
	(0.0005)	(0.0005)	(0.0017)
MP	0.0006**	0.0002	0.0009
	(0.0003)	(0.0002)	(0.0009)
R^2	0.8742	0.9525	0.9699
Adj. R^2	0.8662	0.9495	0.9680

Notes: ***, ** and * represent 1%, 5% and 10% level of significance, respectively. The figure in parenthesis represents standard error.

BH1, BH2 and BH3 represent BHAR, which is a 12-, 24-and 36-month return, respectively.   MGO= Managerial ownership, INSO= Institutional ownership, FCF= Free cash flow. BED = Board ethnic diversity. PBIP= Ratio of independent directors on the board to board size. FSIZ = Firm size. LC= Percentage of acquisition in target firm, BGD = is a dummy variable representing the presence of female board member, MP = is a dummy variable representing the mode of payment.

The results suggest that both managerial ownership (MGO) and institutional ownership (INSO) play important role in influencing the long run performance of Malaysian acquirers. In particular, INSO has significant positive influence on the one-, two-and three-year long run performance at the 1% level, supporting the proposition made earlier. This implies that higher institutional ownership leads to active monitoring and supervision of investee companies. Consequently, the results suggest that institutional ownership enhances corporate governance structure of a firm, reduces agency costs and improves long-run performance of CBA decisions. However, MGO has significant (though at 5% level) negative impact on the three-year long-term returns of Malaysian firms. It is argued that firms with high managerial ownership are associated with lower agency costs, resulting in greater alignment of CBA decisions with shareholders' wealth (Jensen and Meckling, 1976). Surprisingly, we do not find evidence in support of this argument.

The results also indicate that FCF has a significant negative impact on the post cross-border acquisition long run performance of Malaysian acquirers. This evidence shows that Jensen's (1986) free cash flow theory is applicable in explaining post-merger and acquisition performance of Malaysian companies' acquirer.

With respect to board ethnic diversity (BED) and board gender diversity (BGD), our study indicates that both of them are among the important factors that determine shareholder's wealth. Specifically, the results show that BED has positive significant influence on the three different measures of long-term returns of Malaysian acquirers. It implies that the more the representative of various races on board, the better the post CBA long run performance. Our result is consistent with those found by Erhardt et al. (2003), and Adams and Ferreira (2009) in which they argue that the level of ethnic diversity is associated with firm performance. Similarly, BGD also exerts positive significant influence on the one-and two-year measures of long run performance of Malaysian acquirers. The result supports the findings of Huse and Solberg (2006), and Adams and Ferreira (2009) that show that the presence of women on board meetings improves the quality of board deliberations of complex issues as well as firm performance.

However, we find significant negative impact of board independence (PBIP) on all measures of long run performance at the 1% level. Similar evidence of a negative relationship between board independence and shareholders' wealth has been reported by Bhagat and Black (2001). The negative relationship between board independence and post CBA performance indicates that having a higher number of non-executive directors on board may be detrimental to the company. This is because such directors may lack the business knowledge to initiate strategic decisions or engage in investment opportunities that can improve the company performance. This finding supports the argument of Haniffa and Hudaib (2006) that appointment of independent directors on board of Malaysian companies may likely not be based on directors' expertise or experience, rather more often for political reasons, to legitimize business activities and for contacts and contracts.

5.   CONCLUSION AND POLICY IMPLICATIONS

This study examines the influence of various agency cost proxies namely managerial ownership (MGO), institutional ownership (INSO), free cash flow (FCF), female board member (BGD) and board ethnic diversity (BED) on the long-term returns of Malaysian acquirers to verify the agency problems influence on CBA performance.

The long run performance of CBA is measured by one-, two- and three-year buy and hold returns (BHAR). Using Weighted Least Square regression, our findings suggest that CBA performance is influenced by agency costs of the acquirers at the time the strategic decisions were made, whereby those with lower agency costs, characterized by higher INSO, higher BGD, and higher BED are shown to record higher performance.

The results obtained in this study have implications for the corporate governance literature in the sense that they show how different governance variables improve decision-making related to CBA, and that shareholder returns can be increased with effective corporate governance in place by lessening conflicts between the shareholders and agents (managers).

These findings are consistent with Abdullah et. al (2016), also on Malaysian stock market, which indicates the effectiveness of gender diversity, ethnic diversity and executive directorship in increasing firm performance. The negative effect of non-executive directorship in this study shows the dominance of stewardship theory on the effectiveness of insiders in making strategic decisions, particularly CBA decisions, over the monitoring role of independent directors in reducing agency costs associated with these decisions. The claim by Haniffa and Hudaib (2006) that "in most developing countries, including Malaysia, independent directors are not appointed based on their experience and expertise, but merely to serve a political agenda in order to legitimize and facilitate business activities" (Hassan, Karbhari, Mohd Isa and Razak (2017; p. 77)).

The findings also have some implications for concerned firms and regulators. For example, our results suggest that institutional investors are important factor for sourcing value creation for CBA in Malaysia, an emerging country. Since institutional ownership enhances corporate governance structure of a firm and reduces agency cost, there is a need for regulators to ensure that institutional shareholders are attracted to have large shareholding in firm engaging in cross-border mergers and acquisitions.

The results also indicate the important role of board ethnic and gender diversity in acquirers' long run performance following cross-border mergers and acquisitions. Since Malaysians in recent times have been promulgating the lessening of racial restrictions, and encouraging an equitable share of economic well-being, the obligation of firms to ethnic diversity is likely to reflect the societal standards that in turn improve the legitimacy of firms. Therefore, policy makers and regulators ought to focus more on the Malaysian boards of directors' racial structure.

Concerning the role of female directors in firm performance, our findings indicate that the presence of female directors on boards enhances the acquirers' returns of Malaysian post cross-border mergers and acquisitions. The significant positive effect of board gender diversity on post cross-border mergers and acquisitions performance of Malaysian firm suggests that the presence of female directors on boards is an essential issue of corporate governance that deserves more attention.

Finally, the negative impact of the proportion of independent nonexecutive directors on the post cross-border mergers and acquisitions performance of Malaysian firm suggests that there is lack of effective monitoring role. This might imply that majority of these independent nonexecutive directors are somehow related to each other or have similar ethnicity to the board's majority race.

Therefore, there is a need for the concerned authorities to ensure greater enforcement of the independence of Malaysian independent directors.

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