THE EFFECTS OF FAMILY CONTROL, BLOCKHOLDER ACTIVISM, BOARD STRUCTURES AND DEAL CHARACTERISTICS ON ACQUISITION PERFORMANCE

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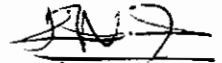|			
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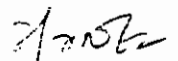
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ABSTRACT

This study examines the announcement effects and long-run stock performance for acquirers from years 2000 to 2013. Since acquisitions create agency problem and companies in Malaysia exhibit concentrated ownership structures, this study aims to investigate four major objectives which consist of the effects of family control, blockholder activism, board structures and deal characteristics on stock performance of acquirers. In addressing these objectives, abnormal returns from three-day before through one-day after the announcements as well as abnormal returns over a 36-months period are adopted as the proxy for the announcement effects and long-run stock performance respectively. Ordinary least squares regression methods are used to examine the effects of the 16 factors on abnormal returns. The results show that acquisitions in Malaysia are value-enhancing, which is consistent with synergistic theory. Furthermore, family ownership and active institutional blockholders are able to create value which implies that family-controlled firms do not engage in opportunistic behaviour. However, passive institutional blockholders and fairness opinion lead to lower value which indicates that these factors are unable to mitigate conflict of interest between majority and minority shareholders. As for the long run performance, Malaysia market can be considered as efficient, as most of the analyses show that the performance of acquirers do not differ from those of the matching firms. The findings imply that managers of family-controlled firms do not have to worry about investors penalizing them, as long as they engage in value-creating acquisitions. Moreover, institutional blockholders should play an active role if they want to protect their investments. Finally, investors have to realize that over the long run, there is no trading strategy that could be adopted to earn abnormal profit.

Keywords: acquisition, announcement effects, long-run stock performance, family control, fairness opinion

ABSTRAK

Kajian ini mengkaji kesan pengumuman dan prestasi saham jangka masa panjang bagi syarikat pengambilalihan dari tahun 2000 hingga 2013. Oleh sebab pengambilalihan mewujudkan permasalahan agensi dan syarikat-syarikat di Malaysia menunjukkan struktur pemilikan tertumpu, kajian ini bertujuan menyiasat empat objektif utama yang mengandungi kesan syarikat pemilikan keluarga, aktivisme pemegang blok, struktur lembaga pengarah dan ciri-ciri penjanjian ke atas prestasi saham syarikat pengambilalihan. Bagi mencapai objektif-objektif ini, pulangan luar biasa daripada tiga hari sebelum sehingga satu hari selepas pengumuman, serta pulangan luar biasa dalam tempoh 36 bulan digunakan sebagai proksi untuk kesan pengumuman dan prestasi jangka panjang saham. Tambahan lagi, kaedah regresi kuasa dua terkecil biasa digunakan untuk menganalisa kesan 16 faktor terhadap pulangan luar biasa. Keputusan menunjukkan pengambilalihan di Malaysia adalah menguntungkan serta konsisten dengan teori sinergi. Selain itu, pemilikan keluarga dan pemegang blok institusi yang aktif berupaya untuk menambah nilai, serta ianya menunjukkan bahawa syarikat yang dikawal oleh keluarga tidak terlibat dalam tingkah laku oportunistik. Walaubagaimanapun, pemegang blok institusi yang pasif dan pendapat munasabah (FO) yang menjurus kepada nilai yang lebih rendah menunjukkan bahawa faktor-faktor ini tidak dapat mengurangkan konflik kepentingan di antara pemegang saham majoriti dan minoriti. Bagi prestasi jangka masa panjang, pasaran Malaysia boleh dianggap sebagai cekap kerana hampir kesemua analisis menunjukkan bahawa prestasi syarikat pembida tidak berbeza daripada prestasi syarikat kawalan. Keputusan kajian ini mencadangkan bahawa pengurus bagi syarikat di bawah kawalan keluarga tidak perlu risau mengenai tindakan negatif pelabur, selagi mereka terlibat dengan pengambilalihan yang berupaya mencipta nilai. Selain itu, pemegang blok institusi perlu memainkan peranan yang aktif untuk melindungi pelaburan mereka. Akhir sekali, pelabur perlu sedar bahawa dalam tempoh jangka masa panjang, tidak ada sebarang strategi perdagangan yang boleh dipraktik untuk memperoleh keuntungan yang luar biasa.

Kata kunci: pengambilalihan, kesan pengumuman, pretasi saham jangka masa panjang, kawalan keluarga, pendapat munasabah

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LIST OF ABBREVIATIONS

M&As   = Mergers and acquisitions
SC   = Secutiries Commission
BM   = Bursa Malaysia
ND   = Notices day
GDP   = Gross domestic product
ASEAN   = South East Asia countries
GLICs   = Government linked investment companies
NM   = Percentage of ownership are not mentioned
MCCG   = Malaysian code of corporate governance
OLS   = Ordinary-Least Square
RoW   = Rest of the world
SOEs   = State-Owned Enterprises
EW   = Equal-Weighted
VW   = Value-Weighted
MV   = Market Value
FBMEMAS = Bursa Malaysia EMAS Index
FBMKLCI = Kuala Lumpur Composite Index
ED   = Euclidean distance
MM   = Market model
MAR   = Market adjusted returns model
VIF   = Variance inflation factor
DW   = Durbin-Watson
JB   = Jarque-Bera
P   = Prices
RI   = Total return index
MV   = Firm size
MTBV   = Market-to-book value

CHAPTER ONE
BACKGROUND OF STUDY

1.1   Introduction

This chapter focuses on overview of background of the study and a discussion of the problem statement. This is followed by research questions, research objectives and the scope of study respectively. Finally, this chapter provides the significance of this study, organization of the study and conclusion the chapter.

1.2   Background

Mergers and acquisitions (M&As) are among the largest and most readily observable forms of corporate investments (Masulis, Wang & Xei, 2007). The term mergers and acquisitions are used interchangeably by most researchers, however, they are different in terms of implementation. Mergers refer to the process of consolidation where the two combined firms would become a new entity while acquisitions refer to the process of taking over target firms by the acquiring firms where the target firms become a part of the acquiring firms. There are three major types of M&As, which are horizontal, vertical, and conglomerate. In horizontal M&As, the acquirers and targets operate in the same industry. Vertical M&As refers to M&As where the acquirers try to diversify their businesses by acquiring targets in upstream or downstream activities. Finally, conglomerate M&As refers to M&As between two firms in unrelated industries.

The involvement of Malaysian companies in M&A activities increases year-over-year in both domestic and foreign markets. Values of M&As in Malaysia amounted to over RM128.5 billion in 2014, or 8.87% of GDP, which represents an 88% increase as

compared to deal values of RM 68.5 billion in 2010, or 6.27% of GDP (Malaysian Mergers & Acquisition Association, 2014). Meanwhile the deal value is RM65.4 billion in 2015, and the deal values increase to RM84.8 billion in 2016, an increase of 30% from the previous year (Theedgemarkets.com, 2017). Table 1.1 reports the total completed deal values associated with M&As in selected South East Asia countries (ASEAN) from 2000 to 2016.

Table 1.1
M&A Deals (in Million USD) in Selected South East Asia Countries (2000-2016)

Year	MALAYSIA	INDONESIA	THAILAND	SINGAPORE	PHILIPPINES	TOTAL
2000	3,776	60	754	2,709	557	7,856
2001	1,494	803	547	3,787	198	6,829
2002	1,955	773	251	2,292	198	5,469
2003	3,079	131	391	1,584	365	5,550
2004	1,744	421	488	2,272	86	5,011
2005	3,169	2,832	1,175	6,067	852	14,095
2006	2,143	692	796	8,706	366	12,703
2007	8,966	145	278	20,936	2,610	32,935
2008	9,621	6,860	612	25,168	868	43,129
2009	2,323	1,826	1,377	3,167	4,173	12,866
2010	2,232	1,619	2,436	6,334	3,325	15,946
2011	2,874	1,825	1,607	4,244	1,615	12,165
2012	1,517	713	4,289	5,435	1,895	13,849
2013	1,569	1,171	2,471	5,818	2,747	13,776
2014	5,374	2,299	753	15,960	535	24,921
2015	885	276	350	17,213	621	19,345
2016	1,909	1,760	3,649	23,182	526	31,026
TOTAL	54,630	24,206	22,224	154,874	21,537	277,471

Source: SDC Thomson Database, M&A deals value in South ASEAN 5 countries

During this period (2000-2016), the total M&A values based on domestic and foreign acquisitions, are US$D277, 471 million. The highest number of deal values, as reported in the final column, is observed to be in 2007 and 2008 before the financial crisis that affected global economies in 2009. In terms of country, Singapore, as a developed country, dominated the M&A activities with US$D154, 874 million worth of transaction value. This is followed by Malaysia, Indonesia, Thailand and the Philippines with total deal

values of USD$54,630 million, USD$24,206 million, USD$22,224 million and USD$21,537 million respectively. M&A deal values in percentage (%) are depicted in Figure 1.1. Singapore takes up the largest percentage (56%) followed by Malaysia with 19%. Indonesia, Thailand and Philippines have about similar percentages, between 8% to 9%.
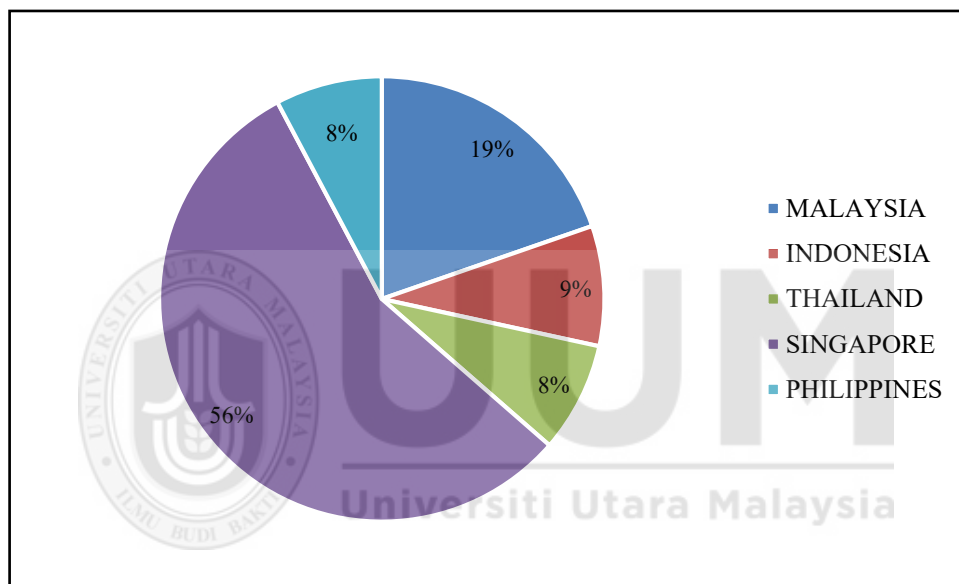
Figure 1.1
M&A Deals Value in 5 South East ASEAN Countries (2000-2016)
Source: SDC Thomson Database, M&A deals value in South ASEAN 5 countries

In Malaysia, there are various stages of procedure before application of M&As deals are approved by the Securities Commission. Table 1.2 summarizes the number of events associated with M&As in Malaysia from 2001 to 2013. Consistent with the previous table, the highest number of events is observed in 2007 and 2008 before financial crisis affected global economies in 2009. The ringgit values of M&A are only available for offer documents, starting from 2008. To facilitate M&A in 2011, the Securities Commission (SC) abolish the requirement that appointment of independent adviser has to get its

approval. As M&A affects the value of a firm, the impact of acquisition on shareholders wealth warrants an investigation.

Table 1.2
Data on Mergers and Acquisitions (M&As) From 2001 To 2013

Year	Clearance of offer document (1)	Offer Value based on clearance of offer document (RM billion) (2)	Exemption from mandatory obligation (3)	Request for rulings and other ancilliary applications (4)	Others (5)	Clearance of independent advice circulars (6)
2001	13	-	44	23	-	10
2002	10	-	69	35	-	21
2003	14	-	67	33	-	32
2004	16	-	61	30	-	22
2005	25	-	60	32	-	29
2006	20	-	62	79	-	24
2007	52	-	95	121	-	65
2008	41	8.3	81	44	-	57
2009	13	3.26	57	20	-	37
2010	27	25.03	37	30	-	38
2011	20	3.88	26	-	40	36
2012	35	14.54	25	-	49	46
2013	33	18.33	28	-	35	47

Source: Annual Reports of Securities Commission

Key of the code:

(1) Offer document explains about the details of the proposed acquisition.

(3) Mandatory obligation refers to the fact that acquirers have to make a mandatory offer if they have manage to acquire certain percentage of the target firms' share.

(6) Independent advice circular refers to advice provided by an independent financial adviser on the attractiveness of the proposed acquisition. It is required if there is any conflict of interest in the proposed acquisition or if the acquisition is a reverse takeover.

Large acquisitions demand more time and effort from CEOs and their impacts on a firm's value are easily observed by outsiders by looking at the stock prices (Dutta, MacAulay & Saadi, 2011; Zhao, 2013). Moreover, large acquisitions have long-term consequences for well-being of shareholders and other stakeholders as they are risky in nature. Since Asian markets, including Malaysia, are generally controlled by large shareholders (Claessens, Djankov & Lang, 2000), acquisitions could exacerbate the agency problems as acquisitions could be used by the large shareholders to enrich their private benefits at the expense of minority shareholders. Shleifer and Vishny (1997) argue that acquisitions provide a clear evidence of agency problems as many studies show that the acquirers experience losses in these activities (see for example Roll (1986) who reviews the evidence).

In Malaysia, large shareholders are composed of families and government linked investment companies (GLICs). Amran (2011), Rachagan and Satkunasingam (2009), Abdullah (2006) and Claessens, Djankov and Lang (2000) state that a common feature of East Asian business scenario is that majority of firms are controlled by substantial shareholders, either families or institutions. Claessens *et al*. (2000) find that 67.2% of firms in Malaysia are controlled by families while another 13.4% are controlled by government. They also find that 85% of Malaysian firms have managers (CEOs or chairpersons) who belong to controlling families. Families could use M&A as a step to diversify their portfolios, to expand their firms' size as their compensation is closely tied to firm size, to ensure that their firms survive and to pass on the firms to future generations. Thus, the question of the effects of family ownership in M&As on firm value is an empirical issue.

Another feature in Malaysian market is the significant investments made by institutions, either government linked investment companies (GLICs) or non-GLIC's. Wahab, How and Verhoeven (2008) state that GLICs' holdings represent 70% of total institutional shareholdings in firms listed on Bursa Malaysia. Apparently, the existence of these institutions might contribute to the success or failure of M&As as they could monitor managerial actions and reduce the agency problems between minority and majority shareholders.

In mitigating agency problem, LaPorta, DeSilanes, Shleifer and Vishny (2002) claimed that corporate governance is one of the mechanisms that could protect outside investors from being expropriated by insiders, including managers and controlling shareholders. One of the mechanisms of internal corporate governance is the role of board of directors who are responsible for overseeing the firm's operation. A board of directors consists of individuals who are nominated by the company's shareholder, thus it serves as an effective internal monitoring and controlling mechanism to reduce agency problem (Masulis, Wang & Xei, 2007; Hilscher & Ciamarra, 2013). Due to this fact, it is the aim of this study to examine the influence of the selected board characteristics, namely board size, independent director, executive director and founder-director, with stock price performance of M&As.

Another notable aspect of acquisitions in Malaysia is the requirement for the acquiring firm to appoint a financial adviser in advising the minority shareholders if the acquisitions meets the criteria as set by the Securities Commission (SC). The advice is necessary to ensure the appropriateness of the acquisition. Hence, this study intends to

investigate the effectiveness of this ruling. Figure 1.2 illustrates an example of an advice letter to minority shareholders of the acquiring firm.
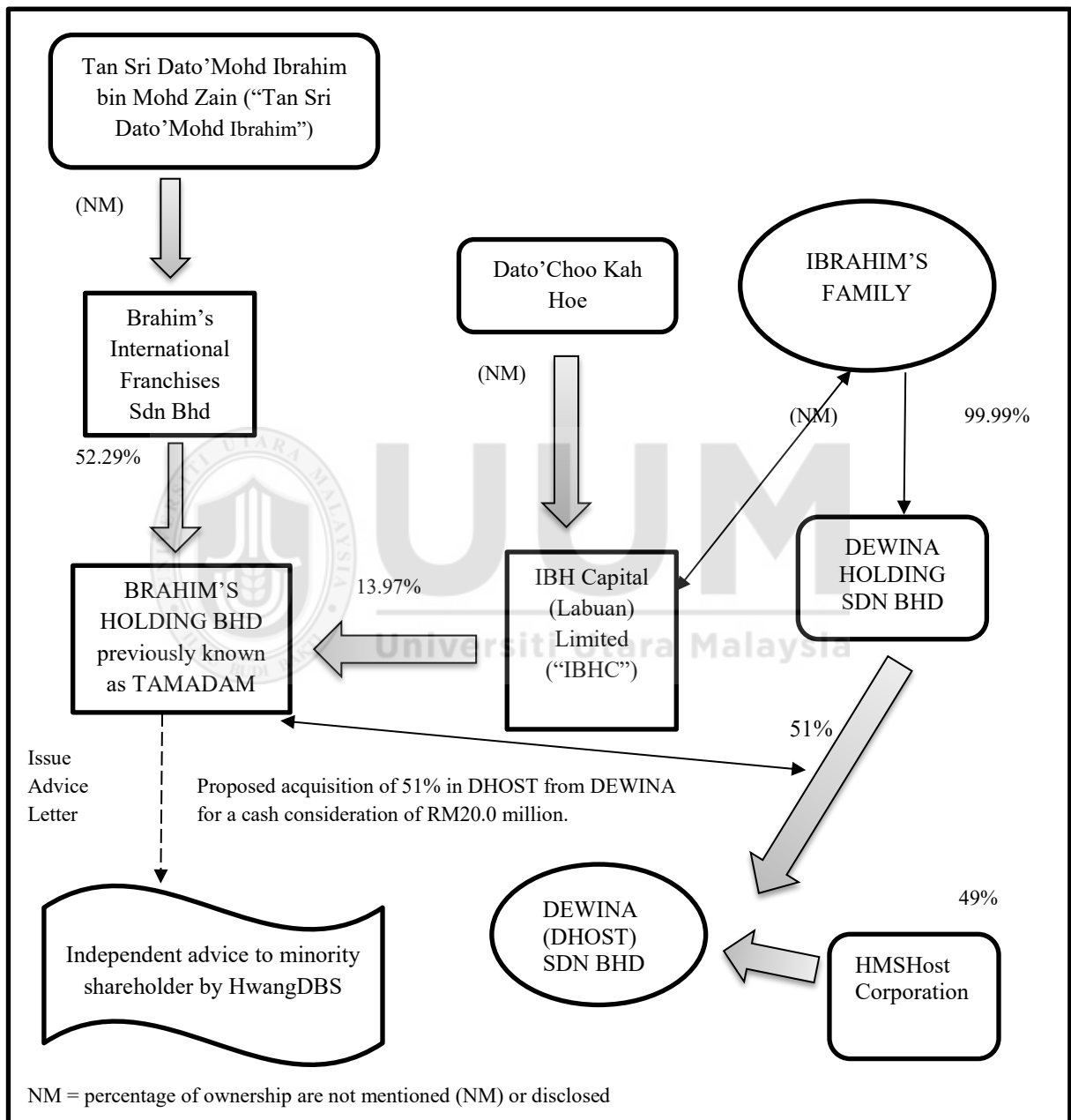
Figure 1.2
Example of an Advice Letter to Minority Shareholder of the Acquiring Firm
Source: BRAHIM'S HOLDING BHD-IndependentAdviceCircular.pdf/Bursa Malaysia (circular/notice to shareholder, 2011)

The independent advice letter, or circular, should contain information that the interested parties in an acquisition would reasonably require (Malaysian Code on Take-overs and Mergers 2010). Usually, the circular contains information such as rationale of proposed acquisition, assessment and valuation of the proposed acquisition, financial effect of the acquisition, background of the acquirer and the target and the risk factors affected by the acquisition transaction.

In summary, the arguments presented above are relevant as factors to be examined in explaining stock price performance following acquisitions in Malaysia.

1.3   Problem Statement

An acquisition enables the acquirer to diversify business activity, expand operation strategies and gain technical knowledge. Thus, its effect on the acquiring firm's value could be significant. The acquiring firms in Malaysia are generally listed companies while target firms are privately held companies. Since share prices of a privately held company are not available, this study focuses on share price performance of the acquiring firms. Furthermore, the firm's performance might be influenced by its ownership pattern. Given that ownership in Malaysia is concentrated (Claessens *et al*., 1999), an acquisition could increase agency problem. This study therefore attempts to analyze the impact of concentrated ownership on stock price performance.

The existing studies provide substantial evidence on the effect of acquisitions on share prices of the acquiring firms (see for example Jensen & Ruback, 1983; Jarrell, Brickley & Netter, 1988; Martynova & Reenboog, 2008 for an extensive literature review). Most of the evidence of acquisitions in the context of developed and developing

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countries document that the effects of acquisition on share prices of the acquiring firms are mixed. For example in the US and UK markets, Gleason, Pennathur and Wiggenhorn (2014), Field and Mkrtchyan (2017) and Andriosopoulos and Yang (2015) find the acquirers earn positive returns. Meanwhile, Duggal and Miller (1999) and Andrade, Mitchell and Stafford (2001) find the acquirer experience loss of wealth. In contrast, Malaysian studies consistently document that acquisitions create wealth to acquire shareholders (Md. Isa, 1994; Mat-Nor & Ismail, 2006; Ma, Pagan & Chu, 2009; Mat-Rahim & Pok, 2013). However, these studies do not associate stock price performance with any governance, ownership patterns and deal characteristics. Thus, this study intends to fill that gap.

In Malaysia, majority of firms are controlled by substantial shareholders who might gain private benefits at the expense of other shareholders through acquisitions. The pursuance of their own benefits leads to a conflict of interest between them and minority shareholders. The higher is the agency problem faced by the firm, the greater is the incentives of substantial shareholders to engage in activities that could lead them to undertake activities that increase their private benefits. One type of substantial shareholders is families. Amran (2011), Rachagan and Satkunasingam (2009) and Abdullah (2006) show that most of the firms in Malaysia are controlled by families.

Family firms face a different type of agency problem as compared to non-family firms. When family firms list their shares in a stock exchange, there is more likely that they will sell off a portion of their shares to outside shareholders and retained a large portion with them. In family firms, agency problem between managers and large shareholders can be reduced or even eliminated because family members are often present on the

board or serve as a part of the management team (Bouzgarrou & Navatte, 2013). However, a different type of agency problem emerges where the family, who own a significant amount of shares, would use their controlling power to take actions that benefit them to the detriment of minority shareholders, who own a small stake in the firm.

Family firms might undertake acquisitions as they have their own objectives such as empire-building, higher compensation, risk reduction or survival. Empire building would enlarge firm size and this would affect managerial compensation and firm survival. Managerial compensation is tied to firm size. By undertaking acquisitions, family-owned firms could pay a higher amount of remuneration to family members, who usually serve as directors and managers. Anderson and Reed (2003) argue that family firms will focus on survival compared to enhancing shareholder value. Furthermore, family firms might choose to diversify their investments to lower the probability of financial distress or bankruptcy even though this action might lower firm value (Bouzgarrou & Navatte, 2013). Thus, acquisitions could be used as a way to reduce financial distress or increase the survival of the family firm.

Even though family ownership could lead to agency problems, the problems might be minimized as family's wealth is tied up to the performance of the family's controlled firm. If the family behaves opportunistically, investors might shun away from the firm, which could reduce the stock price and/or increase the bid-asked spread and thus reducing the firm's liquidity. Therefore, families have more incentive to get into value creating acquisitions. Bouzgarrou and Navatte (2013) support this argument where they find that family firms outperform non-family firms in acquisitions. Furthermore,

family firm are less likely to overpay in acquisitions. This argument is supported by Gonenc, Hermes and VanSinderen (2013) whose finding shows that family-owned firms do not lose from acquiring targets, which are owned by other families.

The agency problem emerged from M&As activities could be alleviated by the other factors such as corporate governance (see, for example, Masulis, Wang & Xei, 2007; Park, Selvili & Song, 2008; Ahn, Jiraporn & Kim, 2010). These studies, nevertheless, find inconclusive results. A primary reason for incorporating corporate governance in M&As studies is that it can increase effectiveness of monitoring and improve decision making. Thus, this study intends to examine the effect of corporate governance on stock prices of the acquiring firms. An effective board of directors could protect minority shareholders. A good corporate governance could ensure that firms do not get into default or bankruptcy (Zhou, Li & Svejnar, 2011). Effective governance in acquiring firm could make sure that the acquisitions will lead to value creation. As such, five important governance-related characteristics are examined, which are the participation of blockholder, board size, independent directors, executive directors and founder-director. The first examined corporate governance characteristics is blockholder.

Blockholder could monitor managerial actions in acquisition by reducing agency problem between managers and outside shareholders. Bouzgarrou and Navatte (2013), Harris, Madura and Glegg (2010) and Bauguess, Moeller, Schlingemann and Zutter (2009) argue that blockholders could influence decision making and is able to prevent any non-value enhancing proposals made by managers through close monitoring. Furthermore, a large blockholder has its own interest in ensuring the successful

completion of M&A (André, Khalil & Magnan, 2007). There are two types of blockholder examined in this study: passive and active. A passive blockholder does not have its representation on board while active blockholder has a representative on board. Thus, it is expected that active shareholders will play a more vital role in monitoring managerial performance.

Board size could influence actions of management. Large board could add value to the firm by adding expertise and experience, which would lead to effective decision making. On the other hand, large board creates communication and coordination problem (Ben-Amar & André, 2006). In addition large board might lead to agency problems among the members as some members might not carry out their duties effectively as they depend on the other members. This leads to loafing or free riding problem (Jensen, 1993; Nogata, Uchida & Goto, 2011). Thus, large board might lead to worse firm performance. Jensen (1993) finds small board results in efficient management whereas Yermack (1996) argues small board leads to lower performance.

Conflict of interest between majority and minority shareholders may be alleviated by existence of independent directors, who could monitor managerial actions. Malaysian Code of Corporate Governance 2012 (MCCG) classifies an independent director as a director with less than nine years of attachment to a firm. As documented by previous studies, high levels of outside director's acquisition expertise will have the greatest positive effects on acquisition performance. This is because outside directors are capable to exercise relatively high levels of influence over acquisition decisions (McDonald, Westphal & Graebner, 2008; Alexandridis, Petmezas & Travlos, 2010).

In spite of the importance of director independence in minimizing agency problem, executive director, founder director and CEO-duality could influence agency problem. Executive directors are involved in day-to-day operations. They also have expertise and experience that could lead to a better decision-making in firm's investment strategy due to their private knowledge. Normally, founders of firm have specialized knowledge, significant ownership and possess non-pecuniary factors that are tied up with their firms. Xie (2015) states that founders also have ability to pick more diligent directors for their companies in order to manage and sustain the firms' wealth. In addition, he argues that founders' personal characteristics could affect firm value. This is supported by Bouzgarrou and Navatte (2013), Li and Srinivasan (2011) and Caprio, Croci, and DelGiudice (2011) who find that founder director generates positive returns to acquirers. Thus, the role of founders is associated with value creation to acquirers.

Two deal characteristics, which are independent advice letter to minority shareholder (Chen, 2006; Kisgen, Qian & Song, 2009) and toehold (Cai & Sevilir, 2012; Hamberg, Overland & Lantz, 2013) are explored in this study. Despite mixed evidences documented about the two characteristics, they are still important to be studied as they could ensure good qualities of M&A transaction. Furthermore, there is a lack of evidence regarding the effect of those characteristics on share price performance in Malaysia. The independent advice letter, henceforth known as fairness opinion (FO), is required in a reverse takeover or in a situation where the acquirer directors are faced with conflict of interest. It could lower the information asymmetric problem between majority and minority shareholders. This in turn would reduce the problem of majority shareholders overpay for the targets. Besides fairness opinion, toehold is argued to reduce information asymmetry problem between the two parties (Povel & Sertsios,

2014; Cosset & Meknassi, 2013). Toehold refers to the situation where the acquiring firms have existing shares in the target firm. Toehold allows the acquirer to be involved with the target, either as managers, directors or shareholders. This involvement allows acquirer to observe, monitor and obtain private information about the target. Therefore, premium paid by the acquirer to the target might be related to current ownership of the acquiring firm in the target. This would lead to acquirers not to overpay for the target and acquisitions is done only when acquirer could add value to the acquisition process.

Acquisition not only limited to short term stock price performance but it is also important to see whether the return or loss persist in the long-run. The long-term share price performance is crucial to be examined in order to test the market efficiency. Based on the past empirical reviews (see for example, Jensen & Ruback, 1983; Andrade, Mitchell & Stafford, 2001; Martynova & Renneboog, 2008) over the long-term, there been no consistent result found that can determine whether the acquirer creates or destroys value. The most common long-term share price performance measures are cumulative average abnormal return (CAAR) and buy and hold return (BHAR). Therefore, this study will attempt to investigate the effects of the aforementioned factors on the long-term share price performance of the acquiring firm.

1.4 Research Questions

There are four main questions in this study:

(1) What are the effects of announcement of acquisitions on acquiring firms' immediate values?

(2) What are the factors that affect the firm's performance following acquisition's announcement? For this question, 12 factors are tested:

(a) What are the effects of family ownership on abnormal returns following acquisition's announcements?

(b) What are the effects of family directors on abnormal returns following acquisition's announcements?

(c) What are the effects of blockholding (active individual or passive individual, active institution and passive institution) on abnormal returns following acquisition's announcements?

(d) What are the effects of selected board structures (board size, independent director, executive director and founder-director) on abnormal returns following acquisition's announcements?

(e) What are the effects of fairness opinion on abnormal returns following acquisition's announcements?

(f) What are the effects of toehold on abnormal returns following acquisition's announcements?

(3) What are the effects of acquisitions on firm's performance in the long-run?

(4) What are the factors that affect firm's performance in the long-run?

1.5 Research Objectives

Four main research objectives are examined in this study:

(1) To determine if acquisitions create immediate value to acquiring firms.

(2) To explore the factors that affect firm's performance following acquisition's announcements. For the second objective, 12 factors are tested:

(a) To investigate the effects of family ownership on abnormal returns following acquisition's announcements.

(b) To investigate the effects of family directors on abnormal returns following acquisition's announcements.

(c) To investigate the effects of blockholding (active individual or passive individual, active institution and passive institution) on abnormal returns following acquisition's announcements.

(d) To investigate the effects of selected board structures (board size, independent director, executive director and founder-director) on abnormal returns following acquisition's announcements.

(e) To investigate the effects of fairness opinion on abnormal returns following acquisition's announcements.

(f) To investigate the effect of toehold on abnormal returns following acquisition's announcements.

(3) To examine the long-run effect of acquisitions on firm's performance.

(4) To explore the factors that affect firm's performance in the long-run performance.

1.6   Scope of the Study

This study focuses only on acquisitions. In particular, it examines the immediate impact of acquisition's announcements and the long-run performance following acquisitions in Malaysia from 2000 to 2013. In addition, it investigates the factors affecting wealth surrounding the announcements of acquisitions in Malaysia. There are 16 factors including control variables investigated, which have been identified based on the established theories and previous studies. The 16 factors are listed as ownership patterns family ownership, family directorship, blockholder activism (active individual blockholder, passive individual blockholder, active institutional

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blockholder and passive institutional blockholder), board structures (board size, director independence, executive director and founder-director), deal characteristics (fairness opinion (FO) and toehold) and control variables (cash, mixed, public and consideration).

1.7   Significance of the Study

This study contributes primarily in five main areas. First, to the author's knowledge, this is among the initial studies conducted to examine the effects of family firms and shareholders' return on acquisition performance in Malaysia. This research investigates in depth whether family ownership and family directorship can affect wealth in acquisition. The prevalence of family-controlled firms in Malaysia coupled with lack of studies on the effects of these firms on acquisition performance further indicate that this area needs to be further explored. By observing the stock price performance of family firms in Malaysia, this study aims to present a different perspective from a developing country that in return could be a comparing point to the performance of family-controlled firms from developed countries such as in the US (Basu, Dimitrova & Paeglis, 2009), Europe (DeCesari, Gonenc & Ozkan, 2016), France (Bougarrou & Navatte, 2013) and Canada (André, Ben-Amar & Saadi, 2014).

Second, this study sheds light on the role of corporate governance mechanisms in affecting shareholders' wealth in acquisition performance. Given that majority of firms in Malaysia are controlled by families, conflict of interest between majority and minority shareholder might be severe. To alleviate this problem, effective corporate governance mechanisms are required, which might be in the form of blockholder participation, director independence, executive director and founder director.

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Furthermore, since Malaysia has a distinct characteristic in which institutions, namely government linked investment companies (GLICs) and non-GLICs, play a major role in monitoring firms, the effect of their ownership could be significant on acquisition performance. This study is also important because it examines the effectiveness of the monitoring role of independent director as suggested and revised in MCCG 2001, 2007 and 2012. Moreover, an executive director and founder director also enhance quality of firm's decision making. Thus, these factors might affect share prices of the acquiring firms.

Third, a different regulation requirement from other markets with regards to independent party further necessitates this study to be conducted. While fairness opinion in the US is provided by a party that might have business relationship with the acquirers, that is not the case in Malaysia. SC requires the party to be independent and the contents of independent advice circular must get its approval (Malaysia Code on Take-Overs and Mergers, 2010). Thus, this highlights the importance of examining the effect of advice letter to minority shareholders on the returns of the acquiring firms.

Fourth, the situation in Malaysia is that acquiring firms takeover privately held target firms. This creates a higher degree of information asymmetry about the value of a privately held target as information about the target is not publicly available. For instance, information about private firms could not be observed by investors, thus the intrinsic values of the firms are considerably more ambiguous. Thus, the role of toehold is important as it could reduce information asymmetry between targets and acquires.

Finally, studies on long-run performance are not extensively explored as compared to the studies on the announcement's effects. It is well documented in literatures that over the long period of time, the acquirers takeover privately held targets might create or destroy value especially since the needed information regarding the targets cannot be publicly observed and thus there are uncertainties concerning the target's valuations (Bhabra & Huang, 2013; Dutta & Jog, 2009). Although Peng and Isa (2012) investigate the long-run stock price performance in Malaysian market, their study is only limited to the method of payment, types of target and relative size of the acquirers. This thesis nevertheless attempts to use more variables that also include ownership, corporate governance and deal characteristics.

1.8   Organization of the Study

The remainder of this thesis is organized as follows. Chapter One is the introductory chapter of the study. It covers background of the study, problem statement, research questions, research objectives, the scope of the study, significant of the study and finally structure of the study. Chapter Two describes the critical review of literature of evidence of M&As and briefly the specific procedure and framework of takeover. In specific, the theories on synergistic benefits, agency problems and efficiency are used to explain share price performance on M&As. Finally, this chapter will present empirical evidence on return to acquiring firms, overview of empirical evidence about related variables and empirical evidence over the long run performance of the acquiring firms of M&As. Chapter Three begins with description of data, sample selection procedures, theoretical framework, hypotheses development, measurement of the variables and model specification.

Chapter Four discusses findings for announcement's effect, testing the assumption of Ordinary-Least Square (OLS), descriptive analyses, univariate analysis, correlation matrix analysis and multivariate regression analysis. Chapter Five presents and discusses the results of long run stock price performance, univariate analysis and multivariate regression analysis for long run stock price performance. Finally, Chapter Six wraps up the study by summarizing the findings, discussing the contribution and implication of findings, as well as presenting the limitations of the study and suggestions for the future research.

1.9   Conclusion

This chapter provides an overview of the study conducted. In particular, this study focuses on the issues surrounding acquisition announcement among Malaysian acquiring companies.The arguments in problem statements leads to identification four major research questions and research objectives. This chapter also highlights significants the study.

CHAPTER TWO
LITERATURE REVIEW

2.0   Introduction

The purpose of this chapter is to review the literature which is relevant to the issue of the present study. This chapter begins with an overview of the specific procedure and framework of acquisition in Malaysian listed companies. This is followed by a discussion of theories that explain return to shareholders due to acquisitions. The subsequent section discusses the roles of corporate governance as mechanisms to reduce agency problem. Next, the present study continues to reviews empirical evidence and factors that are related to announcement effects. Similarly, the reviews are made for empirical evidence that are related to long run stock performance. Finally, this chapter provides the summary of the literature gap and a conclusion section is presented.

2.1   Procedures and Framework of Takeover

Table 2.1 shows the regulators and laws related to mergers and acquisitions (M&As) in Malaysia. There are two relevant regulators and two relevant laws related to M&As in Malaysia namely the Securities Commission (SC) and Bursa Malaysia. SC is the main regulator of M&As in Malaysia while Bursa Malaysia supplements the work of SC for listed firms. Meanwhile, the two laws are Capital Markets and Services Act 2007 and Malaysia Code on Take-Overs and Merger 2010 and Rules on Take-Overs, Mergers and Compulsory Acquisitions (2016).

Table 2.1

Part A :Relevant Regulator and Laws

Regulators	Function
Securities Commission (SC)	SC has regulatory powers to regulate M&A activities and to ensure compliance with the provisions of securities laws.
Bursa Malaysia Securities Berhad (BM)	BM has a responsibility to oversee compliance to M&A laws and regulations if a acquirer or target company is a listed entity. For example, disclosure of information about the M&A process to the public.

Part B: Laws

Laws	Explanation
Capital Markets and Services Act 2007 (CMSA 2007)	This law contains provisions to govern the M&As of companies under Part IV Division 1 & 2 of CMSA 2007.
Malaysia Code on Take-Overs and Merger 2010	Describes in detail the process involved in M&As in Malaysia.

Source: Mergers and Acquisitions Law Guide 2013/14

Figure 2.1 shows the procedures of a takeover process for the acquiring firm. The acquirer who makes a takeover offer or proposes a possible takeover offer should immediately announce the takeover offer to the public. The announcement will be made by way of a press notice and a written notice to the board of directors of the target company if the target is not listed and to the board of directors of the target company, the Securities Commission (SC) and Bursa Malaysia (BM) if the target company is listed on the stock exchange. The written notice shall disclose information such as the identity of the acquiring firm and all related parties and persons acting in concert, the basis of the offer price, the basis of consideration if the offer is by way of other than cash, and the type and total number of voting shares or voting rights of the target. The target's board of directors should make an announcement upon receiving a written notice to the public if the target is not listed and to BM if the target is listed within 24 hours. The announcement should be dispatched to the target's shareholders within seven days.

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Press notice

Immediately announce to public announcement

Written Notice

To board of director of target firm or to SC and BM if target listed

Offer document

Submit an offer document to the SC for its consent within four days

Dispatch the offer document

After get approval from the SC, acquirer should dispatch document to target's board within 21-days

If an acquisition is identified as reverse takeover or acquiring firm and target listed firm encounter with conflict of interest situation

Exemption from mandatory offer obligation

The acquirer is able to requires exemption from mandatory offer if meet several situations

Target firm should make announcement upon receiving within 24 hours.

The acquiring firm must ensure that all necessary approval are obtained in time, if not, the acquirer should request for extension time to the SC

If the target fails to identify or reject the offer, they should make a final announcement by seven days from the date of dispatch offer document

Appoint independent adviser to provide independent advice letter

Figure 2.1
Framework of Acquisitions in Malaysia
Source: Capital Markets and Services Act 2007, Part IV (Divisions 1 & 2) and Arrangement of Code of Malaysian Code on Take-Overs and Mergers, 2010 and Rules on Take-Overs, Mergers and Compulsory Acquisitions, 2016

The acquirer must submit an offer document within four notice days (ND) to the SC for its consent from the date of sending the written notice. All information submitted must be disclosed to the target shareholders and their advisers to assist them in assessing the attractiveness of the offer. The offer document includes, among others, the identity of the ultimate acquirer, the acquirer's intentions with regard to the continuation of the target's business, the offer price, the confirmation that the acquirer has sufficient financial resources where the takeover is by cash, and the acquirer's intention of being exempted from making a mandatory general offer. After the offer document has been approved by the SC, the acquiring firm is required to dispatch the offer document to the target's board of directors within 21 days from ND. Nevertheless, the acquirer could request for an exemption from dispatching an offer document for several reasons such as the target firm is not listed and the offer price of the remaining voting shares is less than RM10 Million (for more explanations refer to Practice Notes of Malaysian Code on Take-Overs and Mergers 2010 and Rules on Take-Overs, Mergers and Compulsory Acquisitions 2016). The target's board of directors should consider and finalize the result of the takeover's offer which must not be later than 74 days.

If the takeover offer is a reverse takeover or if directors of the acquiring firm face a conflict of interest situation, the acquiring firm shall appoint an independent adviser (Arrangement of Code 15.1, Malaysian Code on Takeovers and Mergers 2010). The independence of the financial adviser must meet several criteria such as the independent adviser must not have a business relationship with the acquiring firm or target, the adviser must not be on the board of directors of the acquiring firm or target, a representative from either the acquirer or target must not be on the board of directors of the advisory firm, and the adviser must

not have a financial interest in the outcome of the takeover offer (for full criteria see Practice Note 15, Malaysian Code on Takeover and Merger 2010 and Rules on Take-Overs, Mergers and Compulsory Acquisitions 2016). An appointment of the independent adviser should be made within 10 days from the date the offer document is dispatched to the target's board of directors. The independent adviser shall provide comments, opinions, information, and recommendation on the takeover offer in an independent advice circular to the acquiring firm. Starting from 1st November 2012, the independent adviser should not only give short and comprehensive comments, opinions, information, and recommendation but they should also include comments and advice on the reasonableness, adequacy of information and the significance of the relevant offer or proposal. The purpose of including this material in the independent advice letter is to assist the acquirer's shareholders in making a decision as to the value of the takeover or proposal.

The acquiring firm may request for an exemption from making a mandatory takeover offer under the provisions of Division 2 of Part VI (Capital Markets and Services Act 2007). An application for an exemption will only be considered by the SC after the application is submitted by the independent adviser on behalf of the applicant. There are several situations where the acquiring firm could request for exemption and the examples are when the acquiring firm and persons acting in concert own more than 50% of voting shares or voting rights of the target firm, the acquiring firm intends to financially rescue the target firm, or the acquisition is undertaken to safeguard national interest (for more details see Practice Notes, Malaysian Code on Takeovers and Mergers 2010 and Rules on Take-Overs, Mergers and Compulsory Acquisitions 2016).

2.2 Overview of Related Theories

There are abundant of studies attempt to cultivate the theories that can explain M&As in greater details. Nonetheless, as of now, the motives for M&As remain unclear and they represent the most puzzling fact in corporate restructuring wave as stated by Faria (2008). However, this study narrows its focus on two broad theories to explain the motives for M&As, which are synergistic effects and agency problems. Section 2.2.1 and section 2.2.2 discuss the synergy and agency problem respectively.

2.2.1 Synergy

Bradley, Desai and Kim (1983) argue that synergy can be described in tender offer as acquirers may attempt to exploit the changes caused by technological, innovation, supply and/or demand or purposeful investment by acquirers. Generally, the value created may come from the:-

"more efficient management, economic scale, improved production techniques, the combination of complementary resources, the redeployment of assets to more profitable uses, the exploitation of market power, or any number of value-creating mechanisms that fall under the generic rubric of corporate synergy" (Bradley, Desai & Kim, 1983, p. 184).

To put it briefly, synergy can be realized in various forms. As such, technical efficiency is also recognized as one form of synergy. In technical efficiencies, the acquiring firm can generate value through the economies of scale and scope by reducing marginal costs and increases the production output after combining its production with that of the target. This can be comprehended as a condition by which two merged firms can get rid of the double fixed costs, such as administrative and customer service costs. The comprehension of synergy can also be described through the economies of vertical integration, in which the

acquiring firm generates efficiency gains by lowering the costs of the two stages of production. As an example, when the two firms combined, the distribution costs are reduced. Synergy can also be understood by apprehending the process of learning and the transfer of know-how or sharing of R&D between the merging firms.

Furthermore, synergy is also realized through enhancing or strengthening of market power and financial cost savings. In this context, market power refers to the ability of the merged firms to raise prices above the level that would prevail under competitive conditions. The scope of enhancement of market power is influenced by concentration of industry, product differentiation, entry barriers and cost advantages.

2.2.1.1   Empirical Evidence from Synergies

Harris and Ravenscraft (1991) investigates gains and losses on 6000 acquisitions in the US from the years 1950 to 1977. The acquisitions involve the business of manufacturing. Based on his research, it is discovered that targets gain and acquirers lose. The target firms' gains are influenced by a complex combination of factors. He argues that 30% of acquisition enhance efficiency, 30% result in transfers of wealth from acquirer shareholders, bondholders, workers and government to target shareholders and another 30% come from the information by superior acquirer.

In another study conducted by Mulherin and Boone (2000), they unveil that acquisitions which create wealth effect are found to be consistent with synergy theory. They argue that firms from 59 industries, which include 281 sample acquirers and targets, between 1990

to 1999 lead to 3.56% significant positive return. The result is believed to be motivated by the combined returns of target and acquirer surrounding two-day announcement which are influenced by the changes in economic condition and industry shock.

Similarly, Andrade, Mitchell and Stafford (2001) in their finding claim that the combinations between targets and acquirers create the significant values of 1.8% and 1.9% surrounding the three-day and 20-day announcement periods respectively. The evidence comes from 3688 firms from various industries such as telecommunication, utilities and broadcasting. The results are shown to be consistent with previous studies, such as Mitchell and Mulherin (1996), Mulherin and Boone (2000), Mitchell and Stafford (2000) and Harford (2005). All the findings from these studies support synergistic theory, which are driven by industrial and deregulations shock.

Wang and Xei (2008) also state that corporate governance mechanism can create synergistic benefit by combining returns of the acquirers and targets. They find that 396 publicly US firms between year 1990 to 2004 create 0.97% synergistic benefit surrounding the 11-day announcement. The wealth creation is attributed to the transfer of good governance by well-governed acquirers to poorly governed target.

Bauguess, Moeller, Schlingemann and Zutter (2009) study the deal synergy between acquirer and target firms in the US. They claim that synergy is independent to either targets or acquirers capturing gains or losses. They measure synergy by calculating the cumulative abnormal return over a three-day event window for a value-weighted portfolio

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of target and acquirer returns. Afterwards, it is discovered that active-outside owners do lead to significant positive deal synergy. The result indicates that active-outside owners of target firms are willing to accept lower returns and share potential gains with acquiring management, thus they are contributing to social welfare to shareholders by facilitating value-enhancing transactions.

2.2.2 Agency Problem

The second explanation for M&As is based on agency theory. There are two types of agency's problem: Type I, which is between owners and managers and Type II, takes place between the majority and minority shareholders (Villalonga & Amit, 2006). Agency's problem arises because of the differences that exist in goals and risk preferences (Eisenhard, 1989). This problem can motivate the managers to pursue their own objectives at the expense of shareholders' interests (Jensen & Meckling, 1976). Gompers, Ishii and Metrick (2003) report that firms with higher agency's problems and stronger managerial rights are more likely to pursue M&As.

In Type I agency's problems, the managers who claim to work in maximizing the shareholders' wealth are prone to abuse their powers. In other words, committing moral hazards is sometimes inevitable. For example, they might shirk their duties to enjoy more leisure (Jensen & Meckling, 1976). Moreover, Masulis, Wang and Xei (2007), based on their research that managers who have greater divergence between the control rights and the cash flow right are more inclined to extract private benefits at the shareholders'

expense. Most managers are tempted to pursue this because they do not directly own the company's resources.

Next, Type II agency's problem usually occurs within the family firms. Family firms usually extend out private benefits to family members such as granting job promotions to their family members instead of the deserved employees, declaring special dividends, and giving out excessive compensation (Shleifer & Vishny, 1997). However, Type II agency's problem may actually be lessened by positioning the non-family members in top management's positions or by monitoring the family managers. These actions can then allow the necessary attention to be focused on strategies and plans in maximizing wealth for the survival of the company and attract more shareholders and investors. In addition, Yen and André (2007) also find that the highly concentrated ownership is consistent with the decrease of agency's costs and subsequently lead to the positive post-acquisition performance and increase in wealth of the acquiring firms.

Weston, Chung and Hoag (1990) put forward the argument that M&A may lead to three forms of agency's problems which are managerial entrenchment, empire building and hubris hypothesis.

2.2.2.1 Managerial Entrechment

Shleifer and Vishny (1989) state that managerial entrenchment exists when managers make themselves a valuable asset to their firms and costly to be replaced. In the case of acquisition, managers can decrease their chances of replacement by diversifying through

acquisitions and they are willing to overpay for their targets in order to achieve this objective. Similarly, Berger, Ofek and Yermack (1997) defines entrenchment as the failures of corporate governance and control mechanisms, which include factors such as board monitoring, dismissal or takeover threat, pay-performance compensation and managerial discipline and discipline managers. Meanwhile managerial entrenchment may also be positively influenced by leverage.

In a study conducted by Bauguess and Stegemoller (2008), it is found that managerial entrenchment may lead to the increase of cost to minority shareholder since it can direct the firm's resources to the managers who have less concern on how their actions affect other shareholders' wealth. For instance, there are managers who demand excessive compensation package such as private jets and corporate retreats. They argue that family-controlled firms with more insider directors can lead to either value destruction, which is consistent with the agency theory or value creation, which supports the argument that families would work hard to increase their wealth in their controlled firms.

2.2.2.2 Empire building

The second form of agency's problem is empire building. Trautwein (1990) argue that managers often times prefer to maximize their utility instead of the shareholders' value. This is possible to be done by increasing their compensation, which can be achieved by increasing the firm's size. Thus, this agrees with the statement that the maximization of managerial utilities leads to acquisition. Since managerial compensation is frequently tied to the amount of assets under their control, managers are more likely to seek higher rates

of growth in assets than those of profits (Seth, Song & Petit, 2002). However, Ruiz and Requejo (2010) also discover that managers will have greater opportunities in pursuing their objectives through M&As in the firms of dispersed ownership, as compared to the firms of concentrated ownership. They are more likely to undertake an opportunistic acquisition decision, in order to expand their business group, rather than maximizing value. Therefore, we would expect managers of firms with dispersed ownership structure to acquire more firms, which then offer them possibilities of obtaining private benefits. However, in firms with widely dispersed ownership, Mitchell and Lehn (1990) argue that acquisitions can also backfire as firms who generate bad acquisitions would eventually become targets later.

2.2.2.3 Risk reduction

Moving on, one condition that is closely related to empire building is risk reduction, which is the third form of agency's problem. Amihud and Lev (1981) conclude in their model that managers engage in conglomerate mergers in the year of 1961 to 1970 as they want to maximize their utilities and reduce risk-employment, such as the risk of losing job and their professional reputation. Even though risk reduction does not give any benefit to shareholders, it is advantageous to managers due to reduction of bankruptcy-risk and financial distress. This theory predicts that as the shareholders' wealth of the acquiring firm's falls, the shareholders' wealth of the target firm rises. Subsequently, firms' values are significantly reduced upon acquisition since there is a transfer of value from the combined firm to the managers of acquiring firms (Seth, Song & Pettit, 2000; Seth, Song & Pettit, 2002).

2.2.2.4 Hubris hypothesis

Closely associated to agency problem is hubris hypothesis that is proposed by Roll (1986). In the scope of agency's problems, the issue highlighted is the conflict of interest between agents and principals. Meanwhile, the hubris hypothesis proposes the situation by which agents are overconfident and optimistic in evaluating the attractiveness of the mergers. Thus, hubris hypothesis states that managers acquire other firms in order to pursue their interest at shareholders' expense.

There is another hypothesis that is similar to hubris, which is extrapolation. Extrapolation hypothesis, as defined by Rau and Vermaelen (1998) "assumes that the market only gradually reassesses the quality of the acquirers as the results of the acquisition become clear." This hypothesis is tested through empirical evidence over the long-run performance. They find that 'glamour' acquirers[1] earn lower returns over the long-run performance and this result evidently emphasised that investor and management often overestimate the acquirers' past performance and supports the extrapolation hypothesis. Additionally, Lakonishok, Shleifer and Vishny (1994) argue that the difference between "value" stocks (underpriced) and glamour stocks (overpriced) returns is influenced by "naïve" strategies by which the investors make mistakes in estimating the firm's future performance by assuming a trend in past stock prices and overacting to good or bad news.

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[1] Glamour firms are firms with high past stock returns and high past growth in cash flow and earnings.

2.2.3   Market Efficiency

A market is efficient if the security prices fully reflect the available information (Fama, 1970). On an announcement of a proposed acquisition by the acquirer, the acquirer's share prices would vary considerably to reflect the investors' beliefs on the attractiveness of the proposed acquisition. If investors are convinced that the acquisition is value enhancing, the share prices would then go up. If happens otherwise, the acquisition is only to lessen the value, hence reduce the share prices. Thus, in the short-run, the prices would fluctuate depending on the promising potential of the acquisition. However, over the long-run, such as a duration of a three-year period, there should not be any overreaction or underreaction if the market is efficient since information regarding the acquisition is accessible to investors. Therefore, in the context of an efficient market, investors cannot make abnormal profits[2] once the announcement is made. The failure of share prices to incorporate the information regarding the acquisition would be inconsistent with the efficient market hypothesis. Andrade, Mitchell and Stafford (2001) also support the efficient market hypothesis based on the findings that stock prices can quickly adjust to merger announcements on announcement dates while over a period of 24-month after the completion of acquisitions, they find zero abnormal returns. The same findings are reported by Dutta and Jog (2009), who observe insignificant three-year abnormal returns following the completion of acquisitions.

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[2] Abnormal profits are realized if the actual returns are greater than the expected returns if there were no announcement about the acquisition.

2.3   Role of Corporate Governance in M&A

An effective corporate governance mechanism could reduce agency problems (Masulis, Wang & Xei, 2007). Hilscher and Ciamarra (2013) state that governance could prevent wealth transfers and preserve shareholders' values as boards of directors of acquirers who would monitor the actions of managers. Masulis, Wang and Xei (2007) claim that a number of corporate control mechanisms exist simultaneously to help mitigate the agency problems and subsequently affect the profitability of firm acquisitions. They find that acquirers that separate the positions of CEO and chairman of the board experience higher abnormal announcement returns.

McDonald, Westphal and Graebner (2008) claim that board composition has positive performance effects on firm performance because they are "independent" from management. Fama and Jensen (1983) as well as Bhagat and Black (2001) state that outside directors could influence strategic decision-making and ultimately influence firm-level performance outcomes. Bhagat and Black (2001) find a positive significant effect on M&As return when the independent directors have more prior experience with their duties.

Park, Selvili and Song (2008) state that a takeover could lead to the formation of blockholders, who will monitor managerial action and firm performance. They find that the creation of active blockholders leads to positive returns to the acquiring firms. Harris, Madura and Glegg (2010) find that acquiring firms prefer to use the method of payment that diminishes monitoring role by outsiders. The acquiring firms would use stock-financing if they have aggressive blockholder ownership of less than 20%. On the other

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hand, if the aggressive blockholders hold between 20% and 60% of the shares, firms tend to use cash-financing to avoid excessive monitoring by the blockholders.

2.4   Empirical Evidence on Returns to Acquiring Firms

The evidence on returns to acquiring firms is inconclusive. Jensen and Ruback (1983) review five studies and they find mixed results. They focus on studies during the 1960s and 1970s. They find that investors make an average return of 1.37% and -0.05% for both one-month and two-day announcement effects respectively. In the late-1980s, several literature find that acquirers have wealth loss driven by increasing competition among acquirers (Duggal & Miller, 1999; Eckbo & Thorburn, 2000) and the rise of the auction-style contest (Jarrell, Brickley & Netter, 1988). Duggal and Miller (1999) find that acquiring firms experience a significant loss of wealth of -1.20% (p=0.10) in a 22-day window period (-20, 1) during the years 1985 to 1990. Jarrell, Brickley and Netter (1988) find that returns to acquirers are statistically significant at 5% in the 1960s and 2.2% in the 1970s but the return is an insignificant -0.04% during the 1980s. Eckbo and Thorburn (2000) study two groups of acquirers in the years 1964 to 1983: one group is listed on the Toronto Stock Exchange (TSE) and the other group is listed on the New York Stock Exchange (NYSE). The acquirers in Canada gain a significant return of 3.64% over a 25-day period (-12, 12) while acquisitions of Canadian firms by the Americans firms do not create value to the acquirers.

Deal characteristics used by the acquirers and changes in legislation could influence returns to acquiring firms in acquisitions. Andrade, Mitchell and Stafford (2001) find that

returns to acquirers are -0.7% (p=0.05) in a three-day (-1,1) and -3.8% for a 21-day (0,20) window periods for 3688 acquisitions during the period from 1973 to 1998. They argue that the negative return to acquirers is caused by stock financing of the acquisitions. Higgins and Beckman (2006) look at the returns to acquiring firms in Japan from 1990 to 2000. As a result of the prolonged economic slowdown in the 1990s, the Japanese government has been making many legislations such as M&As legislation to boost the economy by attracting capital transfusion from overseas and by reallocating capital within the country. Subsequently, M&As in Japan have become quite active. They divide their Japanese firms into two groups: domestic acquirers and global acquirers. They find that domestic acquirers earn a return of 19.58% over a 40-day event window (-20, 20) during 1999 to 2000 while foreign acquirers earn a return of -6.51%, which is significant at 10%. However, during the period from 1990 to 1998, both groups earned insignificant returns. They attribute the significant returns from 1999 to 2000 to legislative changes made by the Japanese government. They argue that the global acquirers do not benefit from M&A legislation as much as the domestic acquirers.

In recent years, there are many studies on acquisitions that focus on international markets and governance factors. Andriosopoulos and Yang (2015) find that acquirers in the UK gain a significant return of 0.75% over a three-day period (-1, 1). They argue that positive returns of 3697 during the year 2000 to 2010 are driven by the presence of foreign institutional investors and institutional ownership. Foreign investors have an informational advantage over domestic investors while institutional ownership can help to reduce external borrowing costs and therefore help firms to get easier access to external financing further to support large transactions of M&As.

Alexandridis, Petmezas and Travlos (2010) review studies on acquirers in 39 countries around the world. They find that acquirers experience a significant return of -9.1% for the entire sample in a five-day window (-2,2) during the year 1990 to 2007. Meanwhile, return to acquirers following in Japan, South America, and all European countries excluding the UK are significant with values of 2.45%, 2.32% and 1.65% respectively. The acquirers in the US, UK and Canada experience a significant return of -1.38%. Meanwhile, acquisitions do not create value for the rest of Asian countries. They argue that acquisitions generate returns but the distribution of returns depends on the degree of competition in the market for corporate control.

Bougarrou and Navatte (2013) find that acquirers in France earn a return of 1%, which is significant at 5% level. They argue that French firms are widely held and controlled by a single family. Thus, returns are more influenced by family firm's performance than non-family firms. In the same vein, Gleason, Pennathur and Wiggenhorn (2014) find that acquirers in the US generate wealth when acquiring family-owned targets. The acquirers could earn 0.98% surrounding a three-day window (-1,1) for the entire sample of 307 acquirers. They divide the targets into three ranges of family ownership: low (20-50%), medium (51-75%) and high (76-100%) and find that acquirers get the highest returns of 2.25% on acquiring medium family-owned targets. They argue that medium family-owned targets have the best performance, and most likely, the most competent monitor.

Li and Tong (2018) document about target's level of information uncertainty and target valuation. They argue that a target's share prices would be heavily discounted by the market when the target suffers serious information uncertainty problem. They find that

acquiring firm in the US from the year 1986 to 2015 positively earn higher returns correlated with target's level information uncertainty[3] and negatively correlated to the valuation multiple, OV/EBITDA[4], and premiums. These results indicate that acquirers benefit from acquisitions of targets with high information uncertainty as the targets would receive a lower valuation multiple from the acquirers.

Several empirical studies have been conducted on takeover activities of the public listed companies in Malaysia. Md. Isa (1994) find that acquisitions in Malaysia generate a significant positive return to acquirers for 51-day (-50,-1) prior announcement of 6.31% but insignificant for a two-day (-1, 0) event window for the periods 1984 to1989. He claims that the insignificant return could be due to information leakage prior to companies' official announcement. Furthermore, Mat Nor and Ismail (2006) find that acquirers earn a significant positive abnormal return by using stock payment for 61-day (-30, 30) of 8.26% in the period of 1995 to 2000. They argue that investor in Malaysia react favourably to the acquirer that used stock-payment because stock-payment is a signal of low valuation on targets and simultaneously could mitigate the adverse selection of overpayment.

Nevertheless, investor reacts differently for cash-payment because they indicate that cash-payment cause agency problem which is associated with hubris hypothesis. Meanwhile, Mat-Rahim and Pok (2013) find that acquiring firms earn a significant positive abnormal

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[3] Proxies by DISPERSION "The standard deviation of analysts' earnings forecasts made in the event window [−126, −64] on the target's one-year-ahead earnings, scaled by the target's stock price on trading day −64, where day 0 is the takeover announcement day"

[4] "The ratio of the offer value to the product of the percentage of target outstanding shares acquired in the transaction and the target's earnings before interest, taxes, and depreciation and amortization of intangibles (EBITDA) at the end of the year immediately before the bid announcement".

return for a two-day (-1, 0) and a five-day (-2, 2) event window of 0.24% and 0.34% in the period of 2001 to 2009. The results are consistent with the previous study which finds that targets earn higher returns and acquirers do not lose wealth in acquisitions.

Ma, Pagan and Chu (2009) examine 10 emerging Asian markets: China, India, Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, South Korea, Taiwan and Thailand. They report that the acquiring firms in Malaysia and Indonesia earned significant positive returns over a two-day (-1,0) announcement period while other regions experience significantly negative returns over the two-day (-1,0) announcement period. The positive returns indicate that acquiring firms in Malaysia and Indonesia have a more concentrated corporate ownership structure where many firms are controlled by families or central government. Thus, agency problem may be less severe in those countries. Secondly, returns to acquirers are affected by the liquidity of target firms. Since most targets are private firms, they cannot be liquidated easily and the illiquidity of target firms could be exploited by the acquirers by offering lower prices.

In summary, empirical evidence shows that returns to acquiring firms are mixed. Table 2.2 summarises the empirical evidence on returns to acquiring firms of selected countries.

Table 2.2
Summary of Studies on the Effect of Returns to Acquiring Firms

Study(s)	Country	Sample (period)	Method	Key findings
Duggal and Miller (1999)	US	120 (1985-1990)	Market model	The acquirers earn significant negative return of -1.20% for (-20,1) event window.
Eckbo and Thorburn (2000)	Canada	1261 domestic and 390 foreign (US) (1964-1983)	Market model	Domestic acquirers earn significant positive returns of 3.64% for (-12,12) and 0.81% for (-1,0). Foreign acquirers earn insignificant return.
Andrade, Mitchell and Stafford (2001)	US	3688 (1973-1998)	Market model	The acquirers earn significant negative returns of -0.7%, -3.8% for (-1,1) and (0,20) event window.
Higgins and Beckman (2006)	Japan	152 (1990-2000)	Market model	Domestic acquirers earn significant positive returns of 19.58% while foreign acquirers earn returns of -6.51% following legislative changes.
Andriosopoulos and Yang (2015)	UK	3697 (2000-2010)	Market model	The acquirers earn significant positive return of 0.75% (p=0.01) for three-day (-1, 1) event window.
Alexandridis, Petmezas and Travlos (2010)	Around the world	4577 (1990-2007)	Market model	The acquirer experiences loss of wealth of -9.1% for -2 to 2 or (-2,2).
Bougarrou and Navatte (2013)	France	239 (1997-2006)	Market model	The acquirers earn significant positive returns of 1% for (-1, 1).
Gleason, Pennathur and Wiggenhorn (2014)	US	307 (1984-2000)	Market model	The acquirers earn significant positive returns of 0.98% (p=0.01) for three-day event window (-1,1).
Li and Tong (2018)	US	2375 (1985-2015)	Market model	Acquiring firm earn significant positively of 0.02 for target's level of uncertainty and negatively of -0.013 for target valuation for three-day event window (-1,1).
Md. Isa (1994)	Malaysia	119 (1984-1989)	Market model	The acquirers earn significant positive return for -51-day (-50,-1) and insignificant return for two-day (-1,0) event window.
Mat-Nor and Ismail (2006)	Malaysia	220 (1995-2000)	Market model	The acquirers earn significant positive returns of 8.26% for 61-day.
Mat-Rahim and Pok (2013)	Malaysia	376 (2001-2009)	Market model	The acquirers earn significant positive return of 0.24% and

				0.34% for two-day (-1,0) and five-day (-2,2) event window.
Ma, Pagan and Chu (2009)	Ten Emerging Asian market (include Malaysia)	1477 (2000-2005)	Market model	The acquirers earn significant positive return 0.80% for three-day (-1, 1) and 0.53% for two-day (-1,0) event window.

2.5 Overview of Empirical Evidence on Related Variables

This section examines prior M&A studies that employ governance characteristics, deal characteristics and control variables. Section 2.5.1 to Section 2.5.4 discusses governance characteristics. Section 2.5.5 and Section 2.5.6 discuss deal characteristics while Section 2.6 discusses control variables. Section 2.7 discusses the empirical evidence on the long-run performance followed by Section 2.8 which provides the summary of literature gap and finally, Section 2.9 presents the conclusion section.

2.5.1 Family Ownership

Family ownership is the most prevalent form of ownership in Malaysia. Thus, the effect of family firms in M&As could be significant. It is believed that family firms could reduce agency problems between majority shareholders and minority shareholders. Bougarrou and Navatte (2013) look at family firms in France, where a family firm is identified if one or more family members have more than 51% voting right. They find that family firm could lead to positive and significant returns for a three-day event window or (-1,1). They argue that family ownership creates value as they engage in less acquisition, thus they could be choosy in identifying a target firm. Furthermore, as the family's wealth is tied up to the performance of the firm, they would only engage in a value-creating acquisition.

Using univariate analysis, André, Ben-Amar and Saadi (2014) find that family ownership leads to a significant positive return of 2.65% for -1 to 1 respectively. In multivariate analyses, they find that the relationship between family ownership and returns is non-linear. Returns increase with increases in family ownership up to a certain level and then decreases. They argue that, at higher levels ownership, the amount of wealth invested in the firm by the family is higher, thus investors perceive that the family is undertaking an acquisition with less value creation. By using 215 samples of high tech industries, they define family ownership as a founder or a member of a family, either by blood or marriage, is the largest shareholder of the firm either individually or as a group.

Crannickx and Huyghebaert (2015) identify family firms as firms in which individuals or multiple members of the same family own at least 20% of outstanding shares. They find that family firms have the abnormal return of 2.58% for a three-day period (-1,1) and 4.75% for a 37-day period (-35,1). They argue that family firms are more risk-averse, thus they tend to be more cautious in making an investment decision. In this case, family firms could avoid bad performance by shunning away from unrelated firms in order to generate wealth in acquisitions.

Caprio, Croci and DelGiudice (2011) find that a significant positive relationship exists between family firms in Europe and abnormal returns in both a five-day (-2,2) and a 61-day (-30, 30) periods of 0.97% and 1.22% respectively. They find that family firms in 1998 to 2008 have the best performance, consistent with the hypothesis that the alignment of incentives of the family and the other shareholders improves as the stake held by the family increases.

Ben-Amar and André (2006) find that family ownership leads to a significant positive return of 2.2% over a three-day period (-1,1). Similarly, Ruiz and Requejo (2010) find that family ownership leads to a significant positive return of 2.17% for a five-day window (-2,2). They identify family firm in which a major shareholder is a family group or an individual. They argue that family firm leads to efficient decision-making in M&As in order to achieve long-term objectives such as to sustain long-term reputation with their stakeholders. Thus, it could expand family's wealth over future generations.

DeCesari, Gonenc and Ozkan (2016) study price reactions to acquisition announcements in 15 European countries. On average, 39% of the 3219 sample firms are controlled by families from Portugal (83%) and France (50%) have the largest percentage of family firms. They claim that family firms earn significant positive returns of 1.88% and 1.24% over a three-day (-1, 1) and a five-day (-2, 2) announcement periods. They argue that firms controlled by family provide effective monitoring and good decision-making. Hence, they engage in acquisitions to create shareholders' wealth rather than to achieve their personal objectives such as gaining greater job security or expanding their compensation packages. Defrancq, Huyghebaert and Luypaert (2016) find that family firms in the European market have the significant return of 1.16%. Similar to the argument by DeCesari *et al.* (2016), Defrancq *et al.* (2016) claim that family firms engaged in M&As to maximise shareholder wealth rather than to achieve their own objectives such as to entrench their control. Thus, it can be argued that family firms have strong incentives to pursue deals that could add value to shareholders.

In Malaysia, Lynn, Evans, Shaikh and Sadique (2014) find family ownership in Malaysia earn significant positive returns to shareholder wealth for a three-day period (-1,1). They argue that family ownership which maximises the value of family-controlled firms is close to 50% or more of the equity shareholdings in family firms. They sum up in their study that family-controlled Malaysian firms need to own larger stakes in the firms for maintaining an effective decision-making process.

Basu, Dimitrova and Paeglis (2009) look at newly publicly listed acquirers affiliated to families. They define a family firm as a firm in which the founder or his descendants either hold at least 5% of the firm's outstanding shares or are actively involved in the management (or governance) of the firm. The further divide family firms to either low or high levels based on a cut-off point of 50%. In univariate analyses, they find that returns to acquirers for all three groups (non-family, low-family and high-family) are not different from zero. Furthermore, in the multivariate analysis, they find that the relationship between family ownership and returns is non-linear with a U-shaped function. This shows that at a lower level of family ownership, entrenchment effects are greater than the alignment of interests between families and minority shareholders. In line with this study, Bauguess and Stegemoller (2008) find the significant negative return of -0.74% for a three-day period (-1,1). In their study, family firms comprise of single entrepreneurs or founders. They argue that acquiring firms controlled by insiders could lead to managerial entrenchment among family firms. Thus, it would lead to a reduction in shareholders' wealth. In summary, there is inconclusive evidence of family ownership and announcement effects. Table 2.3 summarises the effect of family ownership to acquisition performance.

2.5.2 Family Directors

A number of family directors on board that influence acquisition returns are comparable to the effect of family ownership on acquisition returns through acquisitions. Family directors could lead to a higher risk of expropriation as they try to protect their family interest. However, they also have a greater incentive to better manage their firms as their wealth is linked to the firm performance. Claessens *et al.* (2000) find that 85% of the sampled Malaysian firms have CEOs or chairpersons who belong to the members of controlling families or nominees.

Ben-Amar and André (2006) find that 54.2% of CEOs in family firms are members of the families. They report that family CEOs lead to a positive and significant return of 3.2% for a three-day (-1,1) event window. They argue that family CEOs lead to positive returns as their wealth is connected to the firm performance. Furthermore, by behaving opportunistically, they would have difficulty to establish a long-term relationship with the investment community, raise additional capital to grow the firm and would increase the cost of capital. Furthermore, they also argue that Canada has a good investor protection which can reduce the agency problem between majority and minority shareholders.

Table 2.3
Summary of Studies on the Effects of Family Ownership to Acquisition Performance

Author(s)	Country	Sample(period)	Methodology	Definition	Key findings
Bougarrou and Navatte (2013)	France	239 (1997-2006)	Market model	Family firm is identified if one or more family members have more than 51 % voting right.	Family ownership leads to a significant positive return for the event window of -1 to 1 or (-1,1).
André, Ben-Amar and Saadi (2014)	Canada	215 (1997-2006)	Market model	Family ownership is identified as the founder or a family member by either blood or marriage is the largest shareholder of firm either individually or as a group.	Family ownership leads to significant positive returns of 2.65% for -1 to 1.
Craninckx and Huyghebaert (2015)	European	303 (1997-2007)	Market model	Family firms as firm in which individuals or multiple members of the same family own at least 20% of outstanding shares	Family ownership lead to significant positive returns of 4.75% for (-35,1) and 2.58% for (-1,1).
Caprio, Croci and DelGiudice (2011)	Continental European	777 (1998-2008)	Market-adjusted approach	Family firm is a family members.	Family ownership leads to significant positive returns for the event windows of 0.97% for -2 to 2 and 1.22% for -30 to 30.
Ben-Amar and André (2006)	Canada	232 (1998-2002)	Market model	Family ownership is defined as individual or family holds the ultimate largest controlling block in a company.	Family ownership leads to significant positive return of 2.2% for -1 to 1.
Ruiz and Requejo (2010)	European	124 (2002-2004)	Market model	Family firm is a firm in which the major shareholder is a family group or an individual.	Family ownership lead to significant positive return of 2.17% for (-2, 2).
DeCesari, Gonenc and Ozkan (2016)	European Country	3219 (2001-2008)	Market-Adjusted model	Family is defined as individual or a group of family members with at least 25% of voting right.	Family ownership shows a significant positive and statistically significant at three-day (-1, 1) is 1.88% and 1.24% (-2, 2) event window.
Defrancq, Huyghebaert	Continental Europe	3485 (2005-2013)	Market model	Family firm is defined as at least two owners, two directors, or two managers have the same surname to	Family controlled firms are positive of 1.16% over three-

				separate true family firms from lone-founder firms.	day (-1,1) and statistically significant at 1% level.
and Luypaert (2016)					
Lynn, Evans, Shaikh and Sadique (2014)	Malaysia	267 (2001-2011)	Market Model	Family firm is defined as one of the family members holds shares and the total equity ownership held by all related family members.	Family controlled firms are positive over three-day (-1,1) and statistically significant at 5% level.
Basu, Dimitrova and Paeglis (2009)	US	722 (1993-2000)	Market model OLS	Family firm is a firm which founder or his/her descendants either hold at least five percent of the firm's outstanding shares or actively involved in the management (or governance) of the firm	Family ownership (IPO) shows a significant negative return on 1% level of significant on CAR (-1,0).
Bauguess and Stegemoller (2008)	US	498 (1994-2005)	Market model	Family firms comprise of single entrepreneurs or founders.	Family ownership shows a significant negative to acquirer returns on announcement with -0.74% for -1 to 1 or (-1,1).

Outside the US market, there are studies on the relationship of shareholders and family directors on board in the European market. Caprio, Croci and DelGiudice (2011) find that a family director leads to significantly positive returns of 1.38% and 1.12% for 61-day (-30,30) and five-day (-2,2) respectively to family firms. They argue that the positive returns show that the interest of family directors is aligned with the interest of other shareholders.

Li and Srinivasan (2011) find the family director of the US market does not give any significant effect on shareholder wealth. They argue that CEO from family-heirs could lead to value-destroying to M&As performance. In summary, available results on the relationship between family director and cumulative abnormal returns (CAR) are inconsistent across countries. Table 2.4 summarises the effects of family director to acquisition performance.

Table 2.4
Summary of Studies on the Effects of Family Director to Acquisition Performance

Author(s)	Country	Sample(period)	Methodology	Key findings
Ben-Amar and André (2006)	Canada	232 (1998-2002)	Market model	Family CEO leads to significant positive return of 3.2% for -1to1 or (-1, 1).
Caprio, Croci and DelGiudice (2011)	Continental European	777 (1998-2008)	Market-adjusted model	Family director leads to significant positive return for -2 to 2 and -30 to 30.
Li and Srinivasan (2011)	US	1,734 (1996-2004)	Market Model	Family director has no effect on return over a three-day (-1,1) event window.

2.5.3 Blockholder Ownership

Blockholder ownership is one of the mechanisms that could reduce agency problem. An effective role of a blockholder leads to value creation through monitoring managerial actions in M&A activity. Thus, a blockholder could influence any decision-making in

order to prevent any non-value investment and to ensure M&A is successfully completed (Bauguess & Stegemoller, 2008; Bauguess, Moeller, Schlingemann & Zutter, 2009; Carline, Linn and Yadav, 2009; Nogata, Uchida, & Goto, 2011; Walters, Kroll & Wright, 2007; Craninckx & Huyghebaert, 2015; Masulis, Wang & Xei, 2007; Bouzgarrou & Navatte, 2013).

Bauguess and Stegemoller (2008) investigate the impact of blockholder ownership on acquirer returns. They define outside blockholder ownership as the percentage ownership of all beneficial 5% owners unaffiliated with the firm's inside owners. In univariate analysis, they find that the returns to the largest one-third blockholders of 0.09% are statistically different from the returns to the smallest one-third blockholders of -0.61%. They argue that larger outside blockholders in acquiring firms could increase the benefit of monitoring. Hence, leading to better returns. However, in multivariate analysis, outside blockholder ownership does not influence returns.

Bauguess *et al.* (2009) divide blockholder ownership into two groups: Passive and active blockholders. Passive blockholders, who do not serve on board of director, play less role in firms and thus could not affect returns of the acquiring firms. Meanwhile, active blockholders are defined as insiders, corporation and institutions who have representation on boards or ongoing business relations (including direct employment) with target firms. The result shows positive significant returns to acquiring firms that have active-corporate ownership or active-institutional ownership for a three-day (-1,1) event window. They argue that if the outside owners facilitate more efficient management of the assets, the overall value creation should be positive. They find evidence consistent with outside

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owners facilitating more efficient management. However, for passive blockholder, they find a negative return statistically significant at 10% level. They argue that passive blockholder serve to entrench management and reduce firm value consistent with finding by Barclay, Holderness and Sheehan (2007). In addition, Bauguess *et al.* (2009) argue that less enhancement when acquired is driven by the strong positive coefficient on active blockholders.

Carline, Linn and Yadav (2009) find that outside blockholders in their study have a positive and significant effect on shareholders' wealth. They claim that outsider blockholders in the year 1985 to 1994 are consistent with the general hypothesis that blockholders bring important influence to bear on operating decisions performance in the acquirers firm.

Nogata, Uchida, and Goto (2011) state that outside blockholder in all sample of their study comprise institutional investors in regulated non-financial firms and personnel from a regulation authority on the board. They find that outside blockholder give positive and significant impact on shareholder wealth. They report that firms that appoint more outsiders to their board create shareholder wealth via M&As. Meanwhile, different result reporting for a separate sample such as a sample of regulated non-financial acquirers' firm which outside blockholder give negative significant effects. They argue that outside blockholders are not only focused on maximising shareholder value but they are more likely to monitor management in public interest to ensure that any economic benefits from M&As are passed to non-shareholder stakeholder like customers.

Walters, Kroll and Wright (2007) find outside blockholders, who hold at least 5% stake in the acquiring firms, lead to positive and significant returns to acquirers for a seven-day (-3,3) event window. They argue that outside blockholders could reduce CEO entrenchment and subsequently generate value-enhancing acquisition performance.

Craninckx and Huyghebaert (2015) observe the smallest gains on M&As when the firm's largest blockholder is an institutional investor. The return is negative and significant of -1.78% for a 37-day or (-35,1) event window. They argue that acquirers tend to pay aggressive takeover premiums to target shareholders. Thus, institutional investor influence decision-making by CEOs through monitoring effects.

Masulis, Wang and Xei (2007) look at two measures of blockholders: institutions holding at least 5% of shares and aggregate shareholdings by 18 identified pension funds. They find an insignificant relationship between these two groups of blockholders and acquirers' returns for a five-day (-2, 2) event window. Thus, they argue that blockholder ownership does not increase a shareholder's value. Finally, in France, Bouzgarrou and Navatte (2013) find that a non-family blockholder has no significant effect on shareholders' wealth surrounding the three-day (-1,1) event window regardless whether they have a representation on board or not. The empirical evidence shows inconclusive evidence on the relationship between blockholder ownership and cumulative abnormal returns (CAR). This can be seen from Table 2.5 which summarises the effects of blockholder ownership to acquisition performance.

2.5.4 Board Size

Jensen (1993) argues that a small board could perform better than a large board in terms of communication and effective decision-making. Hence, a small board could reduce agency problem.

Ben-Amar and André (2006), using 232 acquisitions in Canada from 1998 to 2002, find that the relationship between board size and abnormal returns is negative, which supports Jensen's contention. They claim that even though the larger board could add expertise and balance the managers' dominance of the board, large boards create communication and coordination problem. Thus, large boards lead to negative impacts on shareholders' wealth. The evidence against the large board is also find by Nogata, Uchida and Goto (2011), who report that board size for Japan's regulated non-financial acquirer's leads to a significantly negative effect on shareholders' wealth. Carline, Linn and Yadav (2009) also find that board size leads to negative impact on acquisitions. They claim that larger boards tend to excessively supervise the acquiring firms and this can be an impediment to efficient operating strategy. Chikh and Filbien (2011) find that board size in French's firm leads to a negative effect on shareholder's wealth. This leads to less effective monitoring and more freedom to the CEO in making a decision. Nevertheless, Cosh, Guess and Hughes (2006) and Li and Srinivasan (2011) find that board size does not influence shareholders' wealth. Li and Srinivasan (2011) find that board size is insignificant when founder-CEO served in the firms.

Table 2.5
Summary of Studies on the Effect of Blockholder Ownership to Acquisition Performance

Author(s)	Country	Sample (period)	Methodology	Key findings
Bauguess and Stegemoller (2008)	US	4266 (1994-2005)	Market model	Blockholder experiences significant positive return for (-1, 1).
Bauguess, Moeller, Schlingemann and Zutter (2009)	US	1668 (1996-2005)	Market-adjusted return	Blockholder (active) leads to significant positive return for 1 to 1 or (-1, 1).
Carline, Linn and Yadav (2009)	UK	81 (1985-1994)	Market adjusted return	Blockholder leads to significant positive return for (-2, 2).
Nogata, Uchida, & Goto (2011)	Japanese	383 (1998-2007)	Market model	Blockholder leads to significant positive return for (-2, 2) for all sample but negative significant for regulated non-financial acquirers sample firms.
Walters, Kroll and Wright (2007)	US	313 (1997-2001)	Market model	Blockholder leads to significant positive return for(-3, 3).
Craninckx and Huyghebaert (2015)	European	303 (1997-2007)	Market model	Blockholder from institutional investor leads to significant negative return for (-35,-1).
Masulis, Wang and Xei (2007)	US	1646 (1990-2003)	Market model	Blockholder has no effect on return over a five-day event window (-2, 2).
Bouzgarrou and Navatte (2013)	French	239 (1997-2006)	Market model	Blockholder has no effect on return over a three-day event window (-1, 1).

The empirical evidence shows inconclusive evidence on the relationship between board size and cumulative abnormal returns (CAR). This can be seen from Table 2.6 which summarises the effect of board size to acquisition performance.

Table 2.6
Summary Studies on the Effect of Board Size to Acquisition Performance

Author(s)	Country	Sample(period)	Methodology	Key findings
Ben-Amar and André (2006)	Canada	232 (1998-2002)	Market model	Board size leads to significant negative return for a three-day event window (-1, 1).
Nogata, Uchida and Goto (2011)	Japanese	383 (1998-2007)	Market model	Board size leads to significant negative return for five-days (-2, 2).
Carline, Linn and Yadav (2009)	UK	81 (1985-1994)	Market adjusted model	Board size leads to significant negative return for five-day event window (-2, 2).
Chikh and Filbien (2011)	French	200 (2000-2005)	Market model	Board size leads to significant negative return for a three-day (-1, 1) event window.
Cosh, Guess and Hughes (2006)	UK	363 (1985-1996)	Market model	Board size has no effect on return over a three-day event window (-1, 1).
Li and Srinivasan (2011)	US	1,734 (1996-2004)	Market Model	Board size has no effect on return over a three-day event window (-1, 1).

2.5.5   Director Independence

Director independence is another governance variable that could potentially reduce agency problem in firms. McDonald, Westphal and Graebner (2008) state that an independent board would increase directors' capacities to influence a firm's strategic decision in M&A. The effectiveness of the role could lead to value creation to the firms. Thus, the effect of director independence on M&As could lead to a positive significant abnormal return to the firms.

Empirical evidence in the US shows that independent directors play their role in firms that are involved in M&A. Thus, the acquiring firms generate a positive abnormal return to their shareholders. This can be found in the study of Walters, Kroll and Wright (2007). They find a statistically significant positive relationship between director independence

and returns in M&As in a seven-day (-3,3) event window. Results from Ben-Amar and André (2006) show that director independence leads to a significant positive return over a three-day (-1,1) event window. They argue that director independence is a good governance mechanism since it can represent shareholders interest as well as bring added expertise and valuable business relationship that should benefit the firm. Field and Mkrtchyan (2017) find independent directors with experience such as financial expertise or have experience in the targets industry generate higher returns. Additionally, they would monitor the CEO closely to ensure the CEO could make a good decision. The positive effects of board independence are also observed in Vietnam (Pham, Oh & Pech, 2015).

Alexandridis, Petmezas and Travlos (2010) investigate M&As around the world. They find that independent directors lead to a significant negative return. However, when they divide the sample into two subsamples of the US, UK and Canada (UUC) and the rest of the world (RoW), they find that the effects of board independence are positive and statistically significant at 1% level for UUC while for RoW, the effects are not significant. This shows that board independence is more valuable in the competitive market. In the same vein, Lynn, Evans, Shaikh and Sadique (2014) find that an independent director in Malaysian family firm experiences significant negative returns for shareholder's wealth. They argue that it is due to the decision-making in the hand of family-controlled firms.

There is evidence that shows independent directors do not have a relationship with an abnormal return in M&As (see for example Masulis *et al*. 2007; Cosh, Guest & Hughes, 2006; McDonald *et al*., 2008; Cai & Sevilir, 2012). Masulis, *et al.* (2007) find that director

independence has influenced insignificant returns to acquirers despite using two measures of director independence in their study. They define director independence as outside directors over 70 years old who may be less active in monitoring and those outside directors sitting on three or more corporate boards who may be overly busy. Cosh *et al.* (2006) argue that an outside director does not create value for the acquirer. Similarly, McDonald *et al*. (2008) argue that director independence experience significant loss to acquirers because the independent board will make better acquisition decision when their boards are independent of management. Cai and Sevilir (2012) argue that independent director neither generate nor create a return to bidding firms and these supported by Li and Srinivasan (2011).

In summary, empirical evidence shows mixed results in studies examining the relationship between independent director and cumulative abnormal returns (CAR). Table 2.7 summarises the effect of independent director to acquisition performance.

2.5.6   Executive Directors

A recent study by Field and Mkrtchyan (2017) find that executive directors play effective roles in improving acquisition performance. They argue that executives with prior acquisition experience generate positive returns. However, the result for the executive directors without experience is either negative or insignificant. André, Ben-Amar and Saadi (2014) find that professional managers who serve in family firms lead to a significant negative effect for a three-day (-1, 1) announcement period. They argue that professional managers in family firms create type I agency problem.

Table 2.7

Summary of Studies on the Effect of Independent Director to Acquisition Performance

Author(s)	Country	Sample (period)	Methodology	Key findings
Walters, Kroll and Wright (2007)	US	313 (1997-2001)	Market model	Director independence leads to significant positive return over a seven-day announcement period (3,3).
Ben-Amar and André (2006)	Canada	232 (1998-2002)	Market model	Director independence leads to significant positive return for a three-day announcement period (-1,1).
Field and Mkrtchyan (2017)	US	1766 (1998-2014)	Market-adjusted model	Director independence lead to significant positive for a three-day announcement period (-1, 1).
Pham, Oh and Pech, (2015)	Vietnam	188 (2004-2013)	Market model	Director Independence lead to significant positive return for a three-day announcement period (-1, 1).
Alexandridis, Petmezas and Travlos (2010)	Around the world	4577 (1990-2007)	Market-adjusted return	Director independence leads to significant negative return mainly driven by US and UK over five-day announcement period (-2, 2).
Lynn, Evans, Shaikh and Sadique (2014)	Malaysia	267 (2001-2011)	Market Model	Director independence leads to significant negative return over a three (-1,1), five (-2,2) and seven-days (-3,3).
Masulis, Wang and Xei (2007)	US	1646 (1990-2003)	Market model	Director independence has no effect on return over a five-day event window (-2, 2).
Cosh, Guest and Hughes (2006)	UK	321 (1985-1996)	Market model	Director independence has no effect on return over a three-day event window (-1, 1).
McDonald, Westphal and Graebner (2008)	US	1916 (1989-1998)	Market model	Director independence has no effect on return over a two-day event window (-1, 0).
Cai and Sevilir (2012)	US	1664 (1996-2008)	Market model	Director independence has no effect on return over five-day event window (-2, 2).
Li and Srinivasan (2011)	US	1,734 (1996-2004)	Market Model	Director independence has no effect on return over a three-day event window (-1, 1).

In summary, available results on the relationship between executive directors and cumulative abnormal returns (CAR) are inconsistent across countries. Table 2.8 summarises the effect of executive director to acquisition performance.

Table 2.8
Summary of Studies on the Effect of Executive Director to Acquisition Performance

Author(s)	Country	Sample(period)	Methodology	Key findings
Field and Mkrtchyan (2017)	US	1766 (1998-2014)	Market-adjusted model	Executive director leads to positive return for a three-day (-1, 1) event window.
André, Ben-Amar and Saadi (2014)	Canada	43-215(1997-2006)	Market model	Professional CEO leads to negative and significant return for a three-day event window (-1, 1).

2.5.7 Founder

André, Ben-Amar and Saadi (2014) examine the effect of founder CEO on firm value following announcements of acquisition. They find that founder CEO create a value of 3.4% for a three-day (-1, 1) announcement period. They find that a founder CEO is associated with better performance compared to that of hired professional CEOs. Additionally, founder CEO plays a valuable role in the family firm because of long-term experience and more expertise in decision-making which resulted in value-creating strategies. Correspondingly, Bouzgarrou and Navatte (2013) find that 34% of founder-director from 239 France's family firms create value to shareholders' wealth. They find the result is a positive return for a three-day (-1, 1) announcement period. They claim that founder-director creates value in the family firm while CEO descendant destroys value. Li and Srinivasan (2011) find the presence of founder-director in firm implies effective monitoring role of the acquisition activity and the result is a positive return of 1.29% for a three-day (-1, 1) announcement period. They argue that founder-director leads to effective decision-making and fewer agency problems; therefore, founder-director generates higher announcement returns. Caprio, Croci and DelGiudice (2011) examine the effects of founder CEO on shareholder wealth. They find that founder-CEO in Continental European lead to positive returns (1.01%) for a five-day (-2, 2) announcement

period. They argue that founder CEO in the family firm would not engage in acquisitions as to extract private benefits.

However, several studies show that founder-directors create negative returns to firms. Ning, Kuo, Strange and Wang (2014) study cross-border acquisitions for China-listed firms in Hong Kong. They find China firms which are controlled by founder-directors earn negative returns of 4.15% for a three-day (-1, 1) announcement period. They claim that international investor in Hong Kong reacts inversely to a firm controlled by founder-director. They argue founder-directors have their own objective rather than maximising shareholders' wealth. Meanwhile, Bauguess and Stegemoller (2008) find that the effect on shareholders' wealth is significantly negative when a founder-director serve as CEO in family firm for a three-day (-1,1) announcement period. They claim that founder-directors who serve as CEOs in family firms have greater propensity to reduce wealth and to entrench their position in the firm.

In summary, available results on the relationship between founder-director and cumulative abnormal returns (CAR) are inconsistent across countries. Table 2.9 summarises the effect of founder-director to acquisition performance.

Table 2.9
Summary of Studies on the Effect of Founder Director to Acquisition Performance

Author(s)	Country	Sample (period)	Methodology	Key findings
André, Ben-Amar and Saadi (2014)	Canada	43-215 (1997-2006)	Market model	Founder CEO leads to significant positive retuns of 3.2% for a three-day (-1,1).
Bouzgarrou and Navatte (2013)	France	239 (1997-2006)	Market model	Founder CEO leads to significant positive returns of 2.2% for a three-day (-1, 1) event window.
Li and Srinivasan (2011)	US	1,734 (1996-2004)	Market Model	Founder CEO leads to positive returns of 1.99% for a three-day event window (-1, 1).
Caprio, Croci and DelGiudice (2011)	Continental European	777 (1998-2008)	Market model	Founder CEO leads to positive returns of 1.01% over a five-day event windows (-2,2).
Ning, Kuo, Strange and Wang (2014)	Chinese	335 (1991-2010)	Market model	Founder CEO leads to significant negative return of -4.15% for a three-day event window (-1, 1).
Bauguess and Stegemoller (2008)	US	4266 (1994-2005)	Market model, OLS	Founder CEO leads to significant negative return over a three-day event window (-1, 1).

2.5.8 Advice Letter to Minority Shareholder

Advice letter to a minority shareholder, or fairness opinion (FO), is a mechanism that alleviates information asymmetric between majority and minority shareholders that could subsequently reduce agency problem in firms. Fairness opinions are studied in the US. Kisgen, Qian and Song (2009) find a significant negative return of -4.79% surrounding the three-day (-1,1) window to acquiring firms that use FOs. They argue that the market reacts negatively toward transactions in which acquirers use FOs as they could pay higher premiums for the targets. Frye and Wang (2010) argue that FOs are used by directors who are not sure about the attractiveness of the target firms. The result shows that acquiring firms experience a significant return of -0.19% for a two-day (-1,0) announcement period. They argue that investors react more negatively towards acquisition announcement with

an FO. Hence, this result is consistent with their assertion that FOs is used by firms that unsure about the deals.

Chen (2006), on the other hand, finds that FOs lead to a significant positive return of 5.1% to acquirers for a three-day (-1,1) event window. They argue that fairness opinions (FO) can protect investors' interests as they reduce information asymmetry about the deals. They also argue that FOs signal to market participants that the deals are attractive and fair.

In a nutshell, there is a limited empirical study that examines independence advice letter to minority shareholder (Fairness opinion). The results from prior studies nevertheless show mixed evidence. Table 2.10 summarises the effect of independence advice letter to Minority Shareholder (Fairness Opinion) to acquisition performance.

Table 2.10
Summary Studies on the Effect of Independent Advice to Minority Shareholder (Fairness Opinion) to Acquisition Performance

Author(s)	Country	Sample(period)	Methodology	Key findings
Kisgen, Qian and Song (2009)	US	1509 (1994-2003)	Market model	The acquirers with (FO) leads to significant negative return over a three-day event window (-1, 1).
Frye and Wang (2010)	US	1102 (1996-2003)	Market model	The acquirers that use independent FO leads to significant negative return over a three-day event window (-1, 1).
Chen (2006)	US	215 (1997-2003)	Market model	FOs leads to significant positive return over a three-day event window (-1, 1).

2.5.9 Toehold

Toehold allows the acquirer to be involved with a target, either as managers, directors or shareholders. The role of a toehold from acquirers' perspective allows acquirers to observe, monitor, obtain special information about target firms and reduce information asymmetry between acquirers and targets. Thus, this study identifies a toehold as a deal mechanism based on its role. Furthermore, the effect of toehold could give a positive abnormal return in acquirer firms.

Kisgen, Qian and Song (2009) find the acquiring firms that have toeholds of more than 50% of target firms generate positive and significant returns to shareholders in a three-day (-1,1) event window. They argue acquirers that have more than 50% stake in targets pay lower premiums, leading to higher returns. In Sweden, Hamberg, Overland and Lantz (2013) find that toeholds by both domestic and foreign acquirers in target firms generate positive and significant returns to acquiring firms for a three-day (-1,1) event window. They argue that toeholds create value to acquiring firms as they reduce information asymmetric between acquirers and targets. Information asymmetric in this case includes valuations of the acquiring firms, synergistic gains and uncertainty of the outcomes of acquisitions. Study by Li and Tong (2018) point out that investor react negatively significant of toehold for 2375 acquiring firm in the US. The results support that hypothesis, acquirer should offers a lower bid price instead of premium paid if they own more shares of the target prior to the takeover.

Several studies show that toeholds neither generate nor destroy value to acquiring firms (Bates, Lemmon & Linck, 2006; Cai & Sevilir, 2012; Gregory & O'Donohoe, 2014). Even

though acquirers have a stake in the target, they cannot pay a lower price as the other shareholders of target firms expect fair prices. In short, empirical evidence ambiguously shows the relationship between toehold and cumulative abnormal returns (CAR). Table 2.11 summarises the effect of toehold to acquisition performance.

Table 2.11
Summary Studies on the Effect of Toehold to Acquisition Performance

Author(s)	Country	Sample(period)	Methodology	Key findings
Kisgen, Qian and Song (2009)	US	1509 (1994-2003)	Market model	Toehold leads to significant positive return over a three-day event window (-1,1).
Hamberg, Overland and Lantz (2013)	Sweden	240 (1985-2007)	Market model and Market adjusted model	Toehold leads to significant positive return over a three-day event window (-1,1).
Li and Tong (2018)	US	2375 (1986-2015)	Market model	Toehold leads to significant negative return over a three-day event window (-1,1).
Cai and Sevilir (2012)	US	1664 (1996-2008)	Market model	Toehold experiences an insignificant return for five-day event window (-2,2).
Gregory and O'Donohoe (2014)	UK, US and multinational	288 (1990-2005)	Market-adjusted return	Toehold has no effect for five-day event window (-2,2).
Bates, Lemmon and Linck (2006)	US	4079 (1988-2002)	Market-adjusted return	Toehold has no effect over a three-day event window (-1,1).

2.6   Control Variables

This study uses four control variables for firm-specific characteristics that have a potential influence on abnormal return. The variables are used by many studies (for example Alexandridis, Petmezas, & Travlos, 2010; Bae, Chang & Kim, 2013; Banerjee, Banerjee, De, Jindra & Mukhopadhyay, 2014; Caprio, Croci & DelGiudice, 2011; Faccio, McConnell & Stolin, 2006 Gonenc, Hermes & VanSinderen, 2013; Mat-Rahim & Pok,

2013; Walter, Yawson & Yeung, 2008) as they find the variables are important in explaining acquirers' gain from acquisition. The four control variables are cash, mixed, public and consideration.

2.6.1   Method of Payment (Cash and Mixed)

Numerous studies state that the method of payment in the acquisition is important for a number of reasons. For example Gonenc, Hermes and VanSinderen (2013) state that the method of payment becomes an alternative approach to attracting target firms. There are two modes of payment: cash and stock. Bidding firms would prefer to engage in cash acquisition when their stock price is undervalued (Croci & Petmezas, 2010). Alternatively, firms that engage in the stock acquisition are overvalued. Therefore, investors react more positively to cash acquisitions compared to stock acquisitions. This is because acquiring firms tend to share the risk of a target's overvaluation with the target's owners when the acquisition is financed by stock. On the other hand, when the acquirer pays with cash, acquirer bears all of the risks of overvaluation (Officer, Poulsen & Stegemoller, 2008).

The evidence from Asian countries shows inconclusive results. 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 acquirers that account for 80% of the acquiring firms as classified by the method of payment. A study by Banerjee, Banerjee, De, Jindra and Mukhopadhyay (2014) divide their sample of acquisitions in India into three important time periods: 1995 to 2003 (period when global financial crisis affects performance of Indian acquirers), 2004 to 2007 (period when corporate growth is

dominant) and 2008 to 2011 (period when acquirers earn highest equity value). They find that cash deals lead to the significant positive return of 3.12% and 3.18% for the first two periods respectively for a five-day (-2,2) event window. Meanwhile, for the third period, cash deals lead to significant negative returns to acquirers. The losses are attributed to the ownership structure of the acquiring firms and competition among potential acquirers. Furthermore, 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 Malaysia publicly listed firms from 1995 to 2000. The reason stock payment has significantly positive return because is investors react to stock-financing as a good news while cash-financing due to investor over-reacted to the news.

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 method of payment in their meta-analysis in the US does not have an impact on the acquirers. However, Martynova and Renneboog (2008) find that the mean of payment influences returns to acquirers. They find that stock-financed acquisitions lead to a significant negative return to the acquirers than those of all-cash bids in the US. On the contrary, in the European studies, they find that stock-financed acquisitions lead to a significant positive return to the acquirers.

Alexandridis, Petmezas and Travlos (2010) find that returns to the acquirer in cash-financing outperform those of stock-financed in the 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 acquirers for a three-day (-1,1) announcement period during 1990 to 1999 in the US. The losses in wealth for stock-financing are due to information asymmetry as shareholders perceive stock-financed acquisitions signal overvalue equities. Chen (2006) find that acquirers who use cash payment earn a significant positive return of 8.7% for a three-day (-1,1) announcement period by using 955 firms in the periods of 1997 to 2003. Masulis, Wang and Xei (2007) find that stock payment shows the significant negative result of -1% while cash payment shows the significant positive return of 0.798% to acquirers by using 1646 firms between the periods 1990 to 2003. They argue that acquirers have inside information about the firm value, thus they tend to pay with cash when their stock is undervalued. Eckbo, Makaew and Thorburn (2018) find that acquiring firm earn a significantly negative return when they used stock to finance acquisitions of public, or listed, firms. They claim that the negative reaction towards stock-financing is consistent with the hypothesis of acquirer opportunism, where targets tend to accept payment in the overvalued acquirer shares.

Field and Mkrtchyan (2017) find that cash-financed acquisition deals generate positive announcement return of 1.461% and statistically significant at 1% level. By using 1766 sample firms from 1998 to 2014, they argue that acquirers in US firms have higher leverage with the disciplining role of debt earn higher acquisition return. They also claim that acquirers with higher cash flows and higher quality managers who tend to make better acquisition decisions are positively associated with announcement returns.

A study by McCabe and Yook (1997) find cash leads to significant positive return for their sample of 234 firms in the US. They argue that acquiring firms that use cash transaction could generate significant positive returns of 0.909% in two-day (-1, 0) event window but the return is insignificant for stock transactions. The positive return to the acquirer is consistent with Jensen's theory which claims that managers would not waste excess cash if they use cash payment for acquisitions. Chang (1998) uses 536 firm-year observations between 1981 and 1992 and he finds that acquiring private target firms by using stock-financing leads to a wealth gain of 2.64%. The significant positive return is consistent with information hypothesis. However, the acquiring firm takeover public target firms by using stock-financing experience wealth losses of -2.46%. Insignificant results are observed when acquirers use cash to finance their acquisitions of either public or private targets.

The evidence in the UK is similar to that of the US. Croci, Petmezas and Nanos (2010), Cosh, Guess and Hughes (2006), as well as Petmezas (2009), find that stock-financed acquisitions in the UK lead to significant negative returns to acquirers of -2.1%, -1.0% and -5.97% respectively for short-period event windows. Bouzgarrou and Navatte (2013) find that acquisitions financed by cash for 239 acquiring firms in France from 1997 to 2006 lead to significant negative returns to acquirers. They argue that acquiring firms hold more cash in their firm, thus engage in value decreasing acquisitions. Bauguess and Stegemoller (2008) and Gonenc, Hermes and VanSinderen (2013) examine the method of payment used by family and non-family firms to finance their acquisitions in the US and the UK respectively. They find that family firms use more cash-financing compared to that of non-family firms to avoid dilution in their concentrated ownership.

Chikh and Filbien (2011), Duta, MacAulay and Saadi (2011), as well as Lin, Michayluk, Oppenheimer and Reid (2008) find that the methods of payment do not influence returns to acquiring firms. Chikh and Filbien (2011) find that French firms that use cash payments as deal acquisition have no effect on abnormal return. Meanwhile, Duta, MacAulay and Saadi (2011) find that the method of payment in acquisitions in Canada leads to insignificant abnormal returns. Finally, Lin, Michayluk, Oppenheimer and Reid (2008) record insignificant return to acquiring firms in stock-financed acquisitions.

In short, empirical evidence ambiguously shows the relationship between method of payment and cumulative abnormal returns (CAR). Table 2.12 summarises the effect of method of payment to acquisition performance.

Table 2.12
Summary Studies on the Effect of Method of Payment to Acquisition Performance

Author(s)	Country	Sample(period)	Methodology	Key findings
Mat-Rahim and Pok (2013)	Malaysia	376 (2001-2009)	Market model	Cash leads to significant positive return for 61-day (-30,30) event window.
Banerjee, Banerjee, De, Jindra and Mukhopadhyay (2014)	India	538 (1991-2011)	Market Model	Cash leads to significant positive return for five-day (-2,2) event window.
Md-Nor and Ismail (2006)	Malaysia	220 (1995-2000)	Market Model	Stock payment leads to significant positive return for 17-day (-1,15). Meanwhile, cash leads to significant negative return for 61-day (0,60) event window.
Alexandridis, Petmezas, and Travlos (2010)	Around the world	4577 (1990-2007)	Market Model	Cash and stock lead to singificant positive and negative returns for three-day (-1,1) event window.
Alexandridis, Fuller, Terhaar and Travlos (2013)	US	3691 (1990-2007)	Market Model	Stock leads to significant negative return for three-day (-1,1) event window.

Table 2.12 (Continued)

Chen (2006)	US	955 (1997-2003)	Market Model	Cash leads to significant positive return for three-day (-1,1) event window.
Masulis, Wang and Xei (2007)	US	1646 (1990-2003)	Market Model	Stock and cash lead to significant neagtive and positive for five-day event window (-2, 2).
Eckbo, Makaew and Thorburn	US	6200 (1980-2014)	Market Model	Stock leads to significant negative return for three-day event window (-1,1).
Field and Mkrtchyan (2017)	US	1766 (1998-2014)	Market Model	Cash leads to significant positive return for three-day event window (-1,1).
McCabe and Yook (1997)	US	234 (1976-1986)	Market Model	Cash leads to significant positive return for two-day (-1,0).
Chang (1998)	US	536 (1981-1992)	Market Model	Stock leads to significant positive return when acquiring private target for a two-day event window (-1, 0).
Croci, Petmezas and Nanos (2010)	UK	2471 (1989-2005)	Market model	Stock leads to significant negative return over a five-day event window (-2, 2).
Cosh, Guess and Hughes (2006)	UK	363 (1985-1996)	Market model	Stock leads to significant negative return over a three-day event window (-1, 1).
Petmezas (2009)	UK	2973 (1984-2003)	Market model	Stock leads to significant negative return for a five-day event window (-2, 2).
Bouzgarrou and Navatte (2013)	France	239 (1997-2006)	Market model	Cash leads to significant negative return for a three-day event window (-1, 1).
Bauguess and Stegemoller (2008)	US	498 (1994-2005)	Market model	Cash leads to significant negative returns over a three-day event window (-1, 1).
Gonenc, Hermes and VanSinderen (2013)	UK	391 (1997-2008)	Market Model	Cash has no effect over a three-day (-1, 1) and five-day (-2, 2) event window.
Chikh and Filbien (2011)	French	200 (2000-2005)	Market model	Cash has no effect over a three-day event window (-1, 1).
Dutta, MacAulay and Saadi (2011)	Canada	1109 (1997-2005)	Market Model	Cash and stock have no effect over a three-day (1,

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				-1) and five-day (-2, 2) event window.
Lin, Michayluk, Oppenheimer and Reid (2008)	Japan	4582 1962-2005	Market Model	Stock has no effect over a three-day event window (-1, 1).

2.6.2 Types of Target

In Malaysia, most of the acquisition events involve listed firms being acquirers and unlisted firms being targets. Since the market price of target listed firms could be observed, the price to the target must be similar to or more than the market price. Thus, the final price paid to a listed target firm could be greater than the market price. In this case, the acquiring firm would earn a lower return. For the acquisition of an unlisted firm, a bidding firm may not even know the real value of the unlisted target. Furthermore, unlisted firms are exposed to other risks such as liquidity. Therefore, in this case, an acquiring firm could pay a lower price. Officer (2007) shows that acquiring firms could get discounts of 15% to 30% for unlisted firms compared to those of listed firms. Martynova and Renneboog's (2008) review studies about how status (private or publicly listed) influences returns to the acquirers. They find that private target generates substantially higher CAR to the acquirers.

Faccio, McConnell and Stolin (2006), Masulis, Wang and Xei (2007), Bae, Chang and Kim (2013), Capron and Shen (2007) find that acquirers in Europe and the US respectively earn significant positive returns of 1.48%, 1.75%, 4.70% and 0.760% over short-period window when they acquire privately held targets. Furthermore, if firms acquire public target firms, they 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 that indicate that acquiring private-target firms could lead to value-enhancing activity while acquiring public-target firms is a value-destroying investment. However, Caprio, Croci and DelGiudice (2011) find positive abnormal returns for 777 European acquirers who acquired private and public firms of 0.76% and 0.94% respectively in five-day (-2,2) event window between 1998 and 2008. These results show that types of target influence return to acquirers.

Gonenc, Hermes and VanSinderen (2013) show that negative abnormal return of 0.8% and 1.1% for a three-day (-1,1) and a five-day (-2,2) event windows are earned by the acquirers who acquire family-owned private target firm. By using a sample of 391 firms between 1997 and 2008, they argue that family-private target firms require being paid a higher price as compared to when there are no family members controlling the firms.

Gleason, Pennathur and Wiggenhorn (2014) find that acquirer experience negative and insignificant returns during a takeover of a public target. However, acquirers earn positive of 1.20% at one percent level when takeover family-private target firm. By using 306 sample firms between 1984 and 2000, they argue that a family-private target firm is less liquid takeover market with incomplete information. Field and Mkrtchyan (2017) find acquirer takeover public target lead to the value-decreasing acquisition of shareholder wealth. By using the market-adjusted model of 1766 sample firms, public target negatively of 2.299% and statistically significant at 1% level. In summary, available results on the relationship between types of target and cumulative abnormal returns (CAR) are inconsistent across countries due to different years of observations. Table 2.13 summarises the effect of types of target to acquisition performance.

Table 2.13
Summary Studies on the Effect of Types of Target to Acquisition Performance

Author(s)	Country	Sample(period)	Methodology	Key findings
Faccio, McConnell and Stolin (2006)	17 Western European	4,429 (1996-2001)	Market model	Acquiring private (public) target firm leads to significant positive (negative) return over a five-day event window (-2, 2).
Masulis, Wang and Xei (2007)	US	1646 (1990-2003)	Market model	Acquiring private (public) target firm leads to significant positive (negative) return over a five-day event window (-2, 2).
Bae, Chang and Kim (2013)	US	672 (1996-2002)	Market Model	Acquiring private (public) target firm leads to significant positive (negative) return over a three-day window period (-1, 1)
Capron and Shen (2007)	US	984 (1988-1992)	Market Model	Acquiring private (public) target firm leads to significant positive (negative) return for 22-days event window (-20,1).
Caprio, Croci and DelGiudice (2011)	European	777 (1998-2008)	Market Model	Acquiring private target firm leads to significant positive return over a five-day event window (-2,2).
Gonenc, Hermes and VanSinderen (2013)	UK	391 (1997-2008)	Market Model	Acquiring private target firm leads to significant negative return over a three-day (-1,1) and five-day event window (-2,2).
Gleason, Pennathur and Wiggenhorn (2014)	US	306 (1984-2000)	Market Model	Acquiring private target firm leads to significant positive return over a three-day event window (-1,1)
Field and Mkrtchyan (2017)	US	1766 (1998-2014)	Market Model	Acquiring public target firm leads to significant negative return over a three-day event window (-1, 1).

2.6.3 Consideration

Results on the effects of consideration on returns to acquiring firms are inconclusive. Walters, Kroll and Wright, (2007) find that consideration could lead to significant positive returns to acquirers for a seven-day (-3,3) announcement period. Meanwhile,

Alexandridis, Petmezas and Travlos (2010) find that consideration leads to significant negative return if acquirers takeover public target firms. Li and Srinivasan (2011) also find that consideration paid by the acquirer to a target leads to lower returns to acquirers.

Masulis, Wang and Xei (2007) find that consideration does not influence acquirers' returns for a five-day (-2, 2) announcement period except for the subsample of high-technology firms, where the relationship is negative. They argue that it is more difficult to integrate target operations with acquirer operations for larger size technology firms as technology firms depend more on human capital who will find other jobs rather than facing uncertainties associated with the acquisitions. Field and Mkrtchyan (2017) also find that consideration does not influence acquirers' returns.

In summary, there is inconclusive evidence between consideration and announcement effects. Table 2.14 summarises the relationship between considerations to acquisition performance.

Table 2.14
Summary studies on the Effect of Consideration to Acquisition Performance

Author(s)	Country	Sample (period)	Methodology	Key findings
Walters, Kroll and Wright, (2007)	US	313 (1997-2001)	Market model	Consideration leads to significant positive returns over a seven-day event window (-3,3).
Alexandridis, Petmezas and Travlos (2010)	Around the world	4153 (1990-2007)	Market-adjusted return	Consideration has negative impact on acquirers' over a five-day event window (-2, 2).
Li and Srinivasan (2011)	US	1,734 (1996-2004)	Market Model	Consideration has negative impact on acquirers' over a

				three-day event window (-1, 1).
Masulis, Wang and Xei (2007)	US	3333 (1990-2003)	Market model	Consideration does not effect returns over a five-day event window (-2, 2).
Field and Mkrtchyan (2017)	US	1766 (1998-2014)	Market-adjusted model	Consideration does not effect returns over a three-day event window (-1, 1).

2.7 Empirical Evidence on the Long-Run Performance of the Acquiring Firms

Jensen and Ruback (1983) in their reviewed papers find that acquirers earn a significant negative return of -7.55% in the 12-month period after the takeover. Similarly, King, Dalton, Daily and Covin (2004) carry out a meta-analysis of 103 studies and find that long-run returns range from six months to three years to acquiring firms are negative and statistically significant at 1%. They argue that the results imply that acquisitions do not lead to synergistic benefits to acquirers.

Bhabra and Huang (2013) examine the long-run performance of M&As by 136 Chinese firms. They find that acquiring firms could create values of 49.88% in the 26-month period and 72.14% in the 36-month period under market index benchmark and value-weighted (VW) approach. They argue that the vast majority of the acquiring firms create value to their shareholders by acquiring unlisted target firms. Meanwhile, Chi, Sun and Young (2011) state that majority of their sample consist state-owned enterprises (SOEs) which Chinese government controlled completely for these type of firms. They find that return by using BHAR rather than CAR has positive and significant returns by EW approaches in 13 months after completion. The returns are 5.3% at one percent level. They argue that higher state ownership and stronger government connection have a significant positive impact on long-run acquiring firm's performance.

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A study in India by Banerjee, Banerjee, De, Jindra and Mukhopadhyay (2014) also find that acquiring firm's positively long-run returns index for first to three years of 14.29% to 22.88% at one percent level for the whole sample. They also examine separately time periods of three groups such as 1995 to 2003; group I, the returns are 12.80% and 56.39 % (p-value: 0.05), group II (2004 to 2007) the returns are 11.65% (p-value: 0.10) and 1.2% and group III (2008 to 2011) the returns are 19.10% (p-value: 0.01) and 26.34% (p-value: 0.05). They argue that the largest long-runs in between 1995 to 2003 are related to the bullish market of the late 1990s. They added that a long-run performance is positive and significant for only two of the three times periods following separately time period. They identify for only two of the three time periods that are significant such as declined trend reflects the overpayment for targets and low expected synergies.

Higson and Elliott (1998) find that the acquiring firms in the UK from 1975 to 1990 experience insignificant abnormal returns in the one-year, two-year and three-year periods using equal-weighted approach. However, when the value-weighted approach is used, the returns by matching control firms based on size and market capitalisation for two and three year periods are positive of 6.88% and 12% respectively and both returns are significant at 5%. The value-weighted results are in large part driven by a few very large takeover deals and they argue that these results show that acquisitions do not destroy value as many studies claim.

Underperformance returns observed by Ma, Whidbee and Zhang (2011) study in the US merger firms between years of 1978 to 2002. They find that 1077 acquirer firms experience underperformance in long-run performances. By using the buy and hold

method, acquirers gain negative returns of -7.6% based on matching control firms from three months to three years post acquisitions. They argue that post-acquisition for the whole sample underperformance is not driven by the reversal of overvaluation. The underperformance actually reflects the negative economic impact of mergers on estimated intrinsic value. A study by Lin, Chou and Cheng (2011) also find underperformance returns for 597 sample firms that used stock-for-stock acquisition in between 1984 to 2006. The results are negatively significant at one and five percent level for 12-month to 36-month. The returns under value-weighted (VW) and matching control firms benchmark are -5.10%, -20.25% and -28.36%. They strongly argue that underperformance long-run acquirer firms are concentrated among highly overvalued firms.

Another study by Moeller, Schlingemann and Stulz (2005) find that 4136 acquiring firms' that make large deal losses in between 1980 to 2001 suffer from underperformance returns of -14% by equally-weighted (EW) and matching control firms are statistically significant at one percent level. They argue that acquirers' loss of wealth is driven by merger wave that is costly for acquiring-firm shareholders. Meanwhile, Andrade, Mitchell and Stafford (2001) find that acquisitions do not lead to wealth destruction to acquirers except when equal-weighted return approach is used. They find a negative return of -5.0% and significant at five level under EW approach. Meanwhile, return under value-weighted (VW) is a negative of -1.4% but not significant. Their results are based on matching control firms. Therefore, large firms carry more weight than small firms. This shows that the long-run poor performance is driven by small acquiring firms.

Another study in the US is by Rau and Vermaelen (1998). They study 2823 acquirers between the years of 1980 to 1991 in the market. They find a significant (p-value: 0.01) negative -4%. By using CAR in calculating long-run CAR return, they argue that underperformance return is driven by the lower price-to-book value of firms or "glamour" acquirer in their samples. They claim that their results are also driven by the fact that investors and management overestimate the acquirer's past performance. In line with the result, a study by Agrawal, Jaffe and Mandelker (1992) finds that acquirers experience underperformance long-run returns by using cumulative average abnormal return (CAAR). They report the return under market index benchmark in three years by value-weighted (VW) approach is -7.38% meanwhile the returns for five years by EW and VW are -11.2% and 10.3% respectively. All returns are significant at 5% level. Meanwhile, returns under matching control firms are positive of 7% at 1% level. They argue that underperformance returns are caused by a slow adjustment of the market to the merger event.

Martynova and Renneboog (2008) find that acquirers generate negative and significant returns in the three-year post-acquisition period. Additionally, they find that returns to acquirers are statistically significant when M&A transactions are partitioned into subsamples by means of payment, bid status and type of target firms. Meanwhile, Cosh, Guess and Hughes (2006) find that 363 UK firms in between 1985 to 1996 experience a negative and significant return of -16.26% by matching control firms based on industry and profitability in the 36-month post-acquisition period. They argue that their study is in line with several studies in the UK which is underperformance long-run return for acquiring firms.

In a different study by Dutta and Jog (2009), they find that acquiring firms in Canada do not show any significant long-run performance in the 36-month by matching control firms benchmark following post-acquisition period. Meanwhile, by using the market index, acquirers experience long-run underperformance of 54% by the equal-weighted and value-weighted approach. They argue that M&As in Canada do not destroy the value of acquiring firms in the long-run performance as compared to that of the US. In US studies, most of the researchers use overlapping US data and suffer from data mining biases. Moreover, in the US market, they find frequently adopted anti-takeover strategies such as shareholder's rights plan, poison pills and shark repellent. Differently in Canada markets for such anti-takeover legislation are typically rendered ineffective by securities commission(s) at the request of the acquirers. Thus, these factors could affect the long-run performance of acquirers.

Peng and Isa (2012) find acquirers in Malaysian market experience negative long-run performance for CAAR and BHAR by market index and matching control firm. The results show that CAARs are 2.88% and -15.13% for 24 months and 36 months. Both are statistically significant at 10% and 5% levels. Meanwhile for BHARs are negatives of -13.92% and -11.93% for 36 months and statistically significant at 5% and 10% levels. They argue that acquirer might be through difficulties in the bid/ask process and thus, a market investor perceives that the bid/ask integrations costs are higher than the synergistic gains. Finally, Bougarrou and Navatte (2013) find that returns of family's acquirer in France region are underperformance long-runs. They find that positive but not significant at all for matching control firms benchmark. Thus, family' acquirers do not create value

for shareholders wealth in 36-month post-acquisition. They argue that family acquirer is strongly efficient in the extraction of private benefits in family firms.

In summary, empirical evidence show the effect of the market performance on long run performance are mixed. Table 2.15 summarizes empirical evidence for long-run returns to acquiring firms for selected countries. Sections 2.7.1 to 2.7.7 will investigate the influence of independent variable on long-run performance. Studies that focus on factors influencing long run performance are fewer compared to those of the short run performance.

2.7.1 Family Ownership

By using matching firm and market index as benchmarks, Adhikari and Sutton (2016) find that acquirers controlled by families earned higher returns in acquisitions. Based on their findings, they argue that family firms engage in acquisitions by undertaking unrelated firms in order to reduce the risk of investment through lowering cost of capital. Thus, the diversifying activities taken by family firms create value in acquisitions. Meanwhile, Bougarrou and Navatte (2013) find that family-controlled firms in France do not generate returns over 36 months using either CAR or BHAR.

Table 2.15

Summary of Studies on the Effect of Long-Run Stock Performance to the Acquiring Firms

Study(s)	Country	Sample (period)	Benchmark	Key findings	
				CAAR	BHAR
Bhabra and Huang (2013)	China	136 (1997-2007)	Index	Not Applicable	The acquirer experience significant positive value-weighted and significant returns for 24-month (49.88%) and 36-month (72.14%).
Chi, Sun and Young (2011)	China	736 (1998-2003)	Index	The acquirer does not influence return within 13-month	The acquirer experience positive and significant return by EW approach of 5.3% for 13-month.
Banerjee, Banerjee, De, Jindra and Mukhopadhyay, (2014)	India	538 (1991-2011)	Index	Not Available	The acquirer experience positive and significant long-run performance of 14.29% for 12-month to 22.88% for the 36-month.
Higson and Elliott (1998)	UK	830 (1975-1990)	Matching firms (based size and market capitalization).	Not Applicable	The acquirer leads to positive value-weighted of 6.88 % and 12% for 24-month and 36- months.
Ma, Whidbee and Zhang (2011)	US	1077 (1978-2002)	Matching firms (based on size and book-to-market).	Not applicable	The acquirer leads to significant negative returns of 7.6% for 3 to 36 month.
Lin, Chou and Cheng (2011)	US	597 (1984-2006)	Matching firms (based on MV and book-to market).	Not available	The acquirer experience negative returns of -5.10%, -20.27% and -28.36% by VW approach and for first, second and third year.
Moeller, Schlingemann and Stulz (2005)	US	4136 (1980-2001)	Matching firms (based on industry and size-matched portfolio).	Not available	The acquirer leads to significant negative returns of 14% by using equally-weighted approach.
Andrade, Mitchell and Stafford (2001)	US	2068 (1961-1993)	Matching firms (based on market value and book-to-market value).	Not available	The acquirer does influence returns leads to significant negative of -5.0% by EW approach for three years.

Table 2.15 (Continued)

Study(s)	Country	Sample (period)	Benchmark	Key findings	
				CAAR	**BHAR**
Rau and Vermaelen (1998)	US	2823 (1980-1991)	Matching firms (based on market size and book-to-market).	The acquirer leads to significant negative returns of -4% by EW approach.	Not available
Agrawal, Jaffe and Mandelker (1992)	US	937 (1955-1987)	Index and matching firms (based on size).	The acquirer leads significant negative of -7.38% by VW approach in three years. Meanwhile the acquirer leads to significant positive of 10.3% by VW and -11.2% by EW approach for five-years.	Not available
Cosh, Guess and Hughes (2006)	UK	363 (1985-1996)	Matching firms (based on industry and profitability)	Not available	The acquirer leads to negative and significant return of -16.26% for 36-months.
Dutta and Jog (2009)	Canada	1018 (1993-2002)	Index and matching firms (based on size and book-to-market value).	Not Available	The acquirer leads to significant negative of -54% by EW and VW approach. Meanwhile, acquirer does not influence returns in matching firms control for 36-months.
Peng and Isa (2012)	Malaysia	115 (2000-2004)	Index and matching firm.	The acquirer leads to significant negative of -2.88% and -15.13% for 24 and 36-month.	The acquirer leads to significant negative of -13.92% (market index) and -11.93% (matching control) for three-year.
Bougarrou and Navatte (2013)	France	239 (1997-2006)	Matching firms (based on size and book-to-market).	The acquirer does not influence for CAAR (36-month).	The acquirer does not influence return for BHAR (36-month).

In summary, the results indicate that family ownership in the long-run stock returns neither create nor destroy value. Table 2.16 summarises empirical evidence for family ownership on long-run stock performance.

Table 2.16
Summary of Studies on the Effect of Family Ownership to Long-Run Stock Performance

Study(s)	Country	Sample (period)	Benchmark	Key findings	
				CAR	BHAR
Adhikari and Sutton (2016)	US	213 (1993-2006)	Index and Matching firms (based on size and book-to-market).	Not applicable	Family firms earn higher returns of 15%-17% using either matching firms or market index over a one-year period. Meanwhile, family firms earn 36% (matching control firm) and 35% (market index) for three-year long-run returns.
Bougarrou and Navatte (2013)	France	239 (1997-2006)	Matching firms (based on size and book-to-market).	Family ownership does not influence CAR (36-month).	Family firms do not influence returns for BHAR (36-month).

2.7.2 Blockholder Ownership

There is a limited empirical study that examines blockholder ownership on long-run returns. Boubakri, Dionne and Triki (2008) investigate the long-run performance of acquirers in the US property-liability insurance sector. They find that the presence of blockholders for 177 sample firms leads to significant negative returns over a three-year performance. They argue the result is consistent with entrenchment hypothesis. Meanwhile, Adhikari and Sutton (2016) find that blockholders do not give significant impact on shareholders' wealth. Table 2.17 summarises the effect of blockholder ownership to long-run stock performance.

Table 2.17
Summary of Studies on the Effect of Blockholder to Long-Run Stock Performance

Study(s)	Country	Sample (period)	Benchmark	Key findings	
				CAR	BHAR
Boubakri, Dionne and Triki (2008)	US	1995-2000 (177)	Index	Not Applicable	Blockholders lead to significant negative returns to bidding firms over a three-year period.
Adhikari and Sutton (2016)	US	213 (1993-2006)	Index Matching firms (based on size and book-to-market).	Not applicable	Blockholder does not influence returns for acquirers.

2.7.3 Director Independence

Boubakri, Dionne and Triki (2008) find the presence of independent directors in the US property-liability insurance sector leads to significant negative BHAR over a three-year period. They argue that independent directors do not play a role in reducing agency problem and the presence of independent director do not necessarily lead to profitable M&As for acquirers. Meanwhile, Dutta and Jog (2009) find that director independence does not influence returns to acquirers. Table 2.18 summarises the effect of director independence to long-run stock performance.

Table 2.18
Summary of Studies on the Effect of Director Independence to Long-Run Stock Performance

Study(s)	Country	Sample (period)	Benchmark	Key findings	
				CAR	BHAR
Boubakri, Dionne and Triki (2008)	US	1995-2000 (177)	Index	Not Applicable	Independent directors leads to significant negative returns to acquirers over a three-year period.
Dutta and Jog (2009)	Canada	1018 (1993-2002)	Index and matching (firms based on size and book-to-market value).	Not Applicable	Independent director does not influence returns.

2.7.4 Executive Ownership

Boubakri, Dionne and Triki (2008) find that CEO-ownership leads to a significant negative BHAR over a three-year period. They claim that the result on CEO-ownership is consistent with entrenchment hypothesis, where CEO might abuse his power to achieve his objectives.

 Meanwhile, Dutta and Jog (2009) find that CEO-ownership within 5% to 25% level earns significant negative returns. Table 2.19 summarises the effect of executive ownership to long-run stock performance.

Table 2.19
Summary of Studies on the Effect of Executive Ownership to Long-Run Stock performance

Study(s)	Country	Sample (period)	Benchmark	Key findings	
				CAR	BHAR
Boubakri, Dionne and Triki (2008)	US	1995-2000 (177)	Index	Not Applicable	CEO ownership leads to significant negative returns to acquirers for a three-year long-run returns.
Dutta and Jog (2009)	Canada	1018 (1993-2002)	Index and matching firms (based on size and book-to-market value).	Not Available	CEO-ownership of 5% to 25% in the acquiring firms lead to significant negative returns for a three-year long-run returns.

2.7.5 Method of Payment (Cash and Stock)

Bhabra and Huang (2013) find that 33 cash-acquirers in China earn positive BHARs of 74.03% over a three-year period. Meanwhile, stock-acquirers experience significant negative returns of -13.72% over 24 months. Since most of the acquirers are state-owned enterprises (SOE), they will use cash as a payment in order to maintain a controlling interest in the SOE from share dilution to target firm. Duchin and Schmidt (2013) study

merger wave in the US from 1980 to 2009. By using matching firms as a benchmark, they find that cash acquisitions lead to significant positive returns. They claim that cash-financing is used by the acquirers when their stocks are undervalued.

Studies in Canada and the US by Dutta and Jog (2009) and Ma, Whidbee and Zhang (2011) respectively find that acquirers earn negative returns in the long-run if they use stock-financing. They argue that stock-financing is chosen by the acquirers if the stock prices are overvalued. As for acquisitions financed by cash, the returns are not significant. Peng and Isa (2012), as well as Adhikari and Sutton (2016), find that the method of payment does not influence long-run returns for acquirers in Malaysian and the US respectively.

There is mixed empirical evidence that examines the method of payments on long-run returns. Table 2.20 summarises the effect of method of payments to long-run stock performance.

Table 2.20
Summary of Studies on the Effect of Method of Payment to Long-Run Stock Performance

Study(s)	Country	Sample (period)	Benchmark	Key findings	
				CAR	**BHAR**
Bhabra and Huang (2013)	China	136 (1997-2007)	Index	Not Applicable	The acquirers lead to positive of 74.03% over 3-year for cash and significantly negative over 24-month of 13.72% under equal-weighted (EW) approached.
Duchin and Schmidt (2013)	US	9103 (1980-2009)	Matching firms.	Not applicable	The acquirer leads to significant positive retuns for cash-financed acquisition.
Dutta and Jog (2009)	Canada	1018 (1993-2002)	Index and matching firms (based on size and book-to-market value).	Not Available	The acquirer leads to significant negative returns of -0.10% by using stock-financed. As for cash-financed acquisition does not influence returns.
Ma, Whidbee and Zhang (2011)	US	1077 (1978-2002)	Matching firms (based on size and book-to-market).	Not applicable	The acquirer leads to significant negative of 0.152% by using stock-financed and cash-financed does not influence returns.
Peng and Isa (2012)	Malaysia	115 (2000-2004)	Index and matching firms.	Both types of payment do not influence returns over a three-year returns.	Both types of payment do not influence returns over a three-year returns.
Adhikari and Sutton (2016)	US	213 (1993-2006)	Index and matching firms (based on size and book-to-market).	Not applicable	Cash-financing does not influence returns for acquirers.

2.7.6   Types of Target

Bhabra and Huang (2013) find that acquirers in China gain significant positive returns of 98.72% over a three-year period if they acquired public listed targets. They claim that public targets in China are mostly state-owned enterprises (SOEs). By this fact, acquirers in China generate synergistic benefit by acquiring related target firms, in term of ownership.

Peng and Isa (2012) find in a univariate analysis that there is no effect on shareholders' wealth of the acquirers who acquired public-listed target firms. However, by acquiring private target firms, acquirers earn significant negative CARs of -9.77% and -18.68% over a two-year and three-year periods respectively. While for BHAR, acquirer earns a significant negative return of -14.85% over three years. They argue that in the Malaysian market, acquirers face difficulties in getting accurate and full information about private targets. Meanwhile, Adhikari and Sutton (2016) find that acquirers in the US get a lower return by acquiring public-listed target firms over a three-year period. However, Bougarrou and Navatte (2013), Duchin and Schmidt (2013), and Dutta and Jog (2009) find that acquisitions of public-listed targets in France, Canada and the US, respectively, do not influence returns to acquirers by using either BHAR or CAR.

In summary, empirical evidence shows the effects of the types of the target on long-run performance are mixed. Table 2.21 summarises the effect of the type of targets to long-run stock performance.

Table 2.21

Summary of Studies on the Effect of Types of Target to Long-Run Stock Performance

Study(s)	Country	Sample (period)	Benchmark	Key findings	
				CAR	BHAR
Bhabra and Huang (2013)	China	136 (1997-2007)	Index	Not Applicable	The acquirer leads to significant positive of 98.72% and 42.43% over a 3-year period for public and private target respectively by using equal-weighted (EW) approach.
Bougarrou and Navatte (2013)	France	239 (1997-2006)	Matching firms (based on size and book-to-market).	Family firms do not influence return for 36-month.	Not applicable
Peng and Isa (2012)	Malaysia	115 (2000-2004)	Index and matching firms.	Public listed target firms do not influence return for a three-year long-run returns. As for private target firms significant negative over two (-9.77%) and three-year (-18.68%)	Public listed target firms do not influence return for a three-year long-run returns. Meanwhile, for private target firms, acquirer leads to negative return of -14.85%.
Dutta and Jog (2009)	Canada	1018 (1993-2002)	Index and matching firms (based on size and book-to-market value).	Not Available	Types of targets do not influence returns on acquirers.
Duchin and Schmidt (2013)	US	9103 (1980-2009)	Matching firms.	Not applicable	Public target firms do not influence return to acquirer.
Adhikari and Sutton (2016)	US	213 (1993-2006)	Index and matching firms (based on size and book-to-market).	Not applicable	The acquirer leads to significant negative return over a three-year returns.

2.7.7   Consideration

Dutta and Jog (2009) study the effect of consideration paid on shareholder's wealth. They find that consideration paid by the acquirers more than 25% of public target firm has significant negative returns. They claim that consideration paid more than 25% of public target firm is expensive and greater bargaining power. In the same vein, results by Peng and Isa (2012) find the consideration paid to public target firm has a significant negative impact on acquirer returns for both CAR and BHAR. They argue a public-listed target firm may be harder to handle but having a greater bargaining power compared to a private target firm which is easier to handle. Nevertheless, Duchin and Schmidt (2013) find that consideration paid at least at 5% give significant negative impact on acquirers' return over a two-year long-run performance. They argue that small consideration paid to target firm during merger waves leads to poor long-run returns.

Several studies find that consideration paid to target do not give any impact on acquirer returns for both CAR and BHAR (Adhikari & Sutton, 2016; Bougarrou &Navatte, 2013; Ma, Whidbee & Zhang, 2011). In summary, the effect of consideration paid to target firms either create or destroy value to acquirer returns. Table 2.22 summarises the effect of consideration paid to target firms to long-run stock performance.

Table 2.22
Summary of Studies on the Effect of Consideration to Long-Run Stock Performance

Study(s)	Country	Sample (period)	Benchmark	Key findings	
				CAR	BHAR
Dutta and Jog (2009)	Canada	1018 (1993-2002)	Index and matching firms (based on size and book-to-market value).	Not Available	Consideration of more than 25% for public target firms significant negative returns.
Peng and Isa (2012)	Malaysia	115 (2000-2004)	Index and matching firms	Consideration paid to target firm give significant negative impact on acquirer returns	Consideration has negative impact on acquirer' returns.
Duchin and Schmidt (2013)	US	9103 (1980-2009)	Matching firms.	Not applicable	Consideration has a significant negative impact on acquirers' return over a two-year period.
Adhikari and Sutton (2016)	US	213 (1993-2006)	Index and matching firms (based on size and book-to-market).	Not applicable	Consideration does not influence returns to acquirers.
Bougarrou and Navatte (2013)	France	239 (1997-2006)	Matching firms (based on size and book-to-market).	Consideration paid to target do not influence returns for 36-month.	Not applicable
Ma, Whidbee and Zhang (2011)	US	1077 (1978-2002)	Matching firms (based on size and book-to-market).	Not applicable	Consideration does not influence returns to acquirers.

2.8   Summary of Literature Gap

Family firms are prevalent in Malaysia (Claessens, Djankov & Lang, 2000; Abdullah, 2006; Rachagan & Satkunasingam, 2009). In the case of acquisitions, it is interesting to investigate the impact of family-controlled firms on firm values. Two aspects of family firms are examined in this study: family ownership and family directors.

Blockholders, independent directors, executive director and founder director are expected to play a significant role in monitoring managerial actions and providing advice as they have the capabilities, knowledge and experiences. Thus, it is expected that blockholders and independent directors could influence acquisition performance.

A major shareholder in the acquiring firm might also own some stakes in a target firm which might lead to a conflict of interest to protect minority shareholders. SC requires that the acquiring firm hire an independent adviser to advise minority shareholders of the acquiring firm. To the best knowledge of the author, the effectiveness of the adviser is not explored in Malaysia. This study intends to investigate the effectiveness of an independent adviser, also known as fairness opinion. Information asymmetries between acquirers and targets could be reduced by the stake that acquirers have in targets, also known as toehold. The greater the toehold amount of the acquirer in a target firm, the better the price that the acquirer will get from the acquisition as the acquirer already has private information about the target such as synergies that could be realised.

Finally, this study investigates factors that could explain long run stock performance. Studies on governance factors that affect long run performance are limited (Adhikari &

Sutton, 2016; Boubakri, Dionne & Triki, 2008 and Dutta & Jog 2009). This study would become the first study in examine the empirical evidence of family director, founder-director, FO and toehold in the long-run performance. Thus this study fills in that gap.

2.9   Conclusion

This chapter describes the structure of rule and procedures of M&A, discusses the theories, overview the empirical evidence related to returns and factors that affect those returns to acquirers in M&As. This chapter describes the rules and procedures related to Malaysian M&As and discusses two related broad theories which are synergy and agency problems. Meanwhile, for empirical evidence, there are four sections that discusses previous studies related to acquisition stock performance in short and long run. The chapter ends with an overview of gaps in the literature.
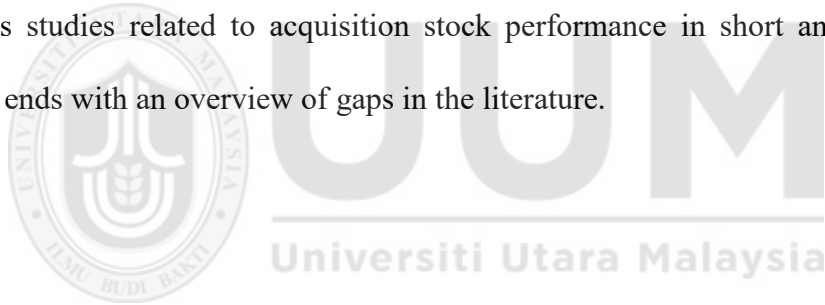
CHAPTER THREE
DATA AND RESEARCH METHODOLOGY

3.0 Introduction

This chapter explains the methodologies employed in this study. The explainations starts with data collection, followed by explaination of sources of the data, sample selection and the theoretical framework. The methodologies applied to test announcement effect and long run stock performance are discussed. This is followed by the identification of dependent variable (DV), independent variables (IVs) and control variables (CVs) that leads to hypotheses development. In order to accomplish the research objectives as stipulated in Chapter one, the study employs multiple regression in examining the announcement effects. Finally, the summary of the measurement of variables and model specification, are presented before a conclusion is made.

3.1 Data Collection

The data is obtained from the general announcement section in Bursa Malaysia's website, circulars to shareholders, the company's annual report, Securities Commission's website, Thompson DataStream and Bloomberg Merger and Acquisition (M&As) database. The study only includes companies that are listed on Main Market because companies listed on ACE Market are usually more speculative in nature. Data on ownership characteristics, governance characteristics and deal characteristic are manually collected from annual reports and company's proposal from the year 2001 to 2014. The initial data comprises of 4702 announcements. Sample observations are all deals between year 2000 and 2013.

3.2   Sample Selection

The initial sample of the study consists of companies with proposed domestic acquisitions from 1st January 2000 to 31st December 2013. The initial data on announcements comprise of 4702 M&As from the year 2000 to 2013. M&A is defined as "the acquirer has obtained control of a company when the vendor sells parts of voting shares or voting right to the acquirer" (Practice Notes, Malaysian Code on Takeovers and Mergers 2010, p. 8). Several criteria are constructed to finalize the sample size which is summarized in Table 3.1.

Table 3.1
Sample Selection Process for Acquisition Announcement firms

Panel A: Determination of the final sample		Total
All M&As announcements for companies 1st January 2000 and 31st December 2013.		4702
Less:		
Financial assets	987	
Joint acquisitions	699	
Private takeover private	680	
Takeover by finance and banking sectors	104	
Cross-border takeover	532	
Incompleted transactions	1191	
Annual report and share price not available	4	
Purchase consideration less than 5%	227	
Equals: Sample of this study		278
Panel B: Types of financings		
5% cash purchases consideration on based market value (MV)	234	
5% stock purchases consideration on outstanding share	44	
Panel C: Clean and contaminated samples		
Clean transaction		203
Unclean transaction		75
Total Final Firms Announce Acquisitions		278

Source: Bloomberg Merger and Acquisition (M&As) database

The final sample comprises of 278 announcements after excluding takeover of financial assets (987), joint acquisitions (699), acquisitions by private companies (680), and

acquisitions by banking and financial institutions (104). Since this study only focuses on domestic acquisitions, 532 cross-border acquisitions, 1191 incomplete transactions and acquirers with no share prices or annual reports (4) are also excluded. To ensure that acquisition activities provide measurable impacts on acquiring firms' stock prices, this study only considers acquisitions where the purchase consideration are at least 5% of acquirers' market values. Thus, we have a total final sample of 278 acquisitions in this study. Out of the 278 acquisitions, 234 are financed by mostly cash while 44 are financed by stock, as shown in Panel B. Panel C classifies an acquisition as either clean (203) or "unclean" (75). Clean data are classified as clean announcement of acquisitions with no other announcements made up by the acquirers. Meanwhile, unclean announcements consist of other announcements made up by the acquirer that affect share prices.
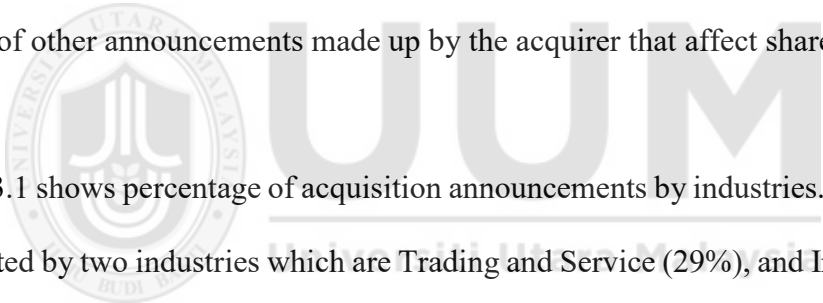
Figure 3.1 shows percentage of acquisition announcements by industries. Acquisitions are dominated by two industries which are Trading and Service (29%), and Industrial Product (28%). Meanwhile, Hotel and IPC industries have the lowest number of acquisitions. Table 3.2 shows the total of acquisition announcement by year, percentage of total acquisition and total average per acquisitions. Based on percentage, the higher value of transactions are 12% to 17% from year 2001 to 2003. Meanwhile, the total average per acquisition for these year are RM276, 823,689 to RM131,969,941 per acquisition activity. On the other hand, the lowest value of transactions are shown to be during the year 2000 (0%), 2008 (4%) and 2009 (3%) with less than RM50,000,000 total average per acquisition.
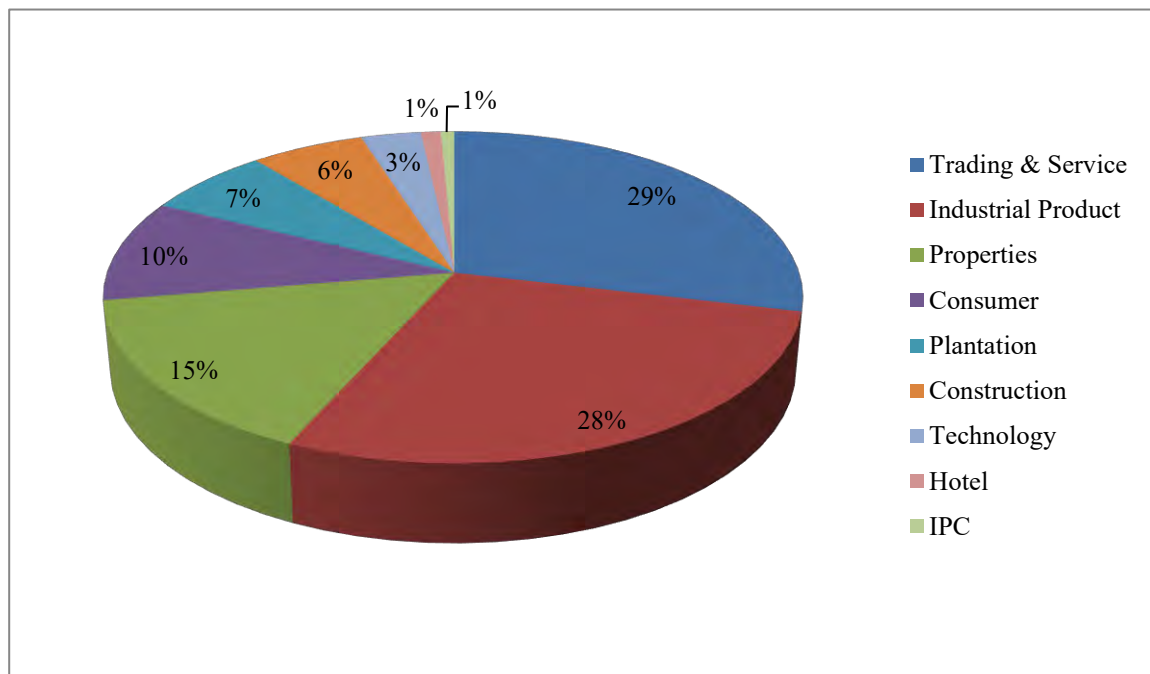
Figure 3.1

Acquisition Announcements by Industries

Source: Bloomberg Merger and Acquisition (M&A) database

Table 3.2

Acquisition Announcements by Year

Year	Number of Acquisition Announcement	Value of Acquisition RM(Million)	Percentage of Total Acquisition	Total Average Per Acquisition RM (Million)
2000	1	8,400,000	0%	8,400,000
2001	13	3,598,707,959	12%	276,823,689
2002	20	4,457,547,437	15%	222,877,372
2003	38	5,014,857,754	17%	131,969,941
2004	22	1,375,293,737	5%	62,513,352
2005	21	1,618,924,779	5%	77,091,656
2006	32	1,818,471,856	6%	56,827,246
2007	27	2,493,804,010	8%	92,363,111
2008	25	1,152,652,403	4%	46,106,096
2009	23	851,828,781	3%	37,036,034
2010	21	1,923,251,024	6%	91,583,382
2011	14	1,247,264,284	4%	89,090,306
2012	10	1,687,609,102	6%	168,760,910
2013	11	2,969,677,273	10%	269,970,661
Total	**278**	**30,218,290,399**	**100%**	**108,698,886**

Source: Circular's to shareholders in Bursa Malaysia (BM)

3.3   Theoretical Framework

There are four main objectives of this study. The first objective is to examine market reactions following acquisition announcements. This objective is met by measuring cumulative average abnormal returns (CAAR) from the longer to short event windows. The announcement dates during a five-day event window (-3,1) is selected as dependent variable because the returns are greater and significant at either 1% or 5% level. The CAR (-3,1) will then be used in the regression model to test the effects of independent variables, in the second objective. In objective two, there are 16 independent variables are family ownership (FAMOWN), family directorship (FAMBRD), presence of active individual blockholder (D4BLIDACT), presence of passive individual blockholder (D4BLIDPSV), presence of active institutional blockholder (D4BLISACT), presence of passive institutional blockholder (D4BLISPSV), board size (BOARDSIZE), fraction of independent director (INEDBRD), fraction of executive director (EXECDIRBRD), present of founder-director (D4FOUNDER), fairness opinion (D4FAIRNESS), toehold (D4TOEHOLD), cash (D4CASH) or mixed (D4MIXED), public (D4PUBLIC) and consideration (CONSIDERATION) will be regressed by using ordinary least square (OLS). The third objective is to examine long run stock performance, thus two methods applied are BHAR and CAAR from 12-month to 36-month. As in objective four, BHAR and CAR for 36-month is used as the dependent variable to regress with aforementioned factors. These relationship is summarized in Figure 3.2.

Independent   **Dependent**

┌─────────────────────────────────┐
│ **Family control**   │
│   • Family Ownership   │
│   • Family Directors   │
└─────────────────────────────────┘

┌─────────────────────────────────┐
│ **Blockholders Activisms**   │
│   • Presence of Active Individual │
│   Blockholder   │
│   • Presence of Passive Individual │
│   Blockholder   │
│   • Presence of Active Institutional │
│   Blockholder   │
└─────────────────────────────────┘

┌─────────────────────────────────┐
│ **Board Structures**   │
│   • Board Size   │
│   • Fraction of Independent Director │
│   • Fraction of Executive Director │
│   • Present of Founder-Director │
└─────────────────────────────────┘

┌─────────────────────────────────┐
│ **Deal Characteristics**   │
│   • Fairness Opinion   │
│   • Toehold   │
└─────────────────────────────────┘

┌─────────────────────────────────┐
│ **Control Variables**   │
│   • Cash   │
│   • Mixed   │
│   • Public target firm   │
│   • Consideration   │
└─────────────────────────────────┘

┌─────────────────────────────────┐
│ **Performance:**   │
│   1. **Short Run:**   │
│   **CAR (-3,1)**   │
│   2. **Long Run:**   │
│   **BHAR**   │
│   **(36-month)**   │
│   **CAR (36-month)**   │
└─────────────────────────────────┘

Figure 3.2

Relationship between Independent Variables and Dependent Variables

3.4   Methodology and Hypotheses Development

Three methodologies are applied in this study. First, to measure announcement performance, event study methodology is used to estimate CAAR. Second, to measure the effects of independent variables on CAR, regression models are used. Finally, long-run performance is measured by using long-run study methods followed by regression model of long run performance.

3.4.1   Short-Term Stock Price Effect on Announcement Performance

This study uses event study methodologies as suggested by previous researches (Brown & Warner, 1985; Bradley, Desai & Kim, 1983; MacKinlay, 1997). Market model is used to measure abnormal market reactions on M&A announcements returns. In order to capture the impact of market reactions on M&A announcements, this study uses a 121-day 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. As suggested by MacKinlay (1997), a larger event window is used rather than a specific period of interest to enable a researcher to capture market reactions prior to the official date of announcement.

In order to measure the cumulative abnormal return (CAR), the normal return is first calculated using market model approach as suggested by MacKinlay (1997). Normal return refers to the expected return if the event did not happen. The FTSE Bursa Malaysia EMAS Index (FBMEMAS) is used as the market portfolio. The choice of FBMEMAS is made because it is a broader index as compared to the more popular FTSE Bursa Malaysia Kuala Lumpur Composite Index (FBMKLCI).

The first step is to calculate 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:

$$R_{i,t} = L_n(\frac{p_{i,t}}{p_{i,t-1}})$$

where,

$R_{i,t}$ = Return on company i during on day t

$P_{i,t}$ = Price of company i shares at the end of day t

$P_{i,t-1}$ = Price of company i shares at the end of day $t-1$

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

$$R_{m,t} = Ln(\frac{EMAS_t}{EMAS_{t-1}})$$

where,

(3.2)

$R_{m,t}$ = Return on market index during on day t

$EMAS_t$ = Market index level at the end of day t

$EMAS_{t-1}$ = Market index level at the end of day $t-1$

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

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_{i,t}$$

(3.3)

$R_{i,t}$ = The return of company i during on day t

α_i and β_i = The parameters of market model

$R_{m,t}$ = Market return on day t

$\varepsilon_{i,t}$ = The zero mean disturbance term

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

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

(3.4)

$AR_{i,t}$ = The abnormal return of company i on day t

and the rest of the parameters are explained previously.

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

$$AAR_t = \frac{\sum_{i=1}^{n} AR_{i,t}}{n_t}$$

(3.5)

where n_t is the number of companies traded on day t. The variance of AR_t using market model is:

$$\mathrm{var}_{(AAR_t)} = \frac{1}{n^2}\sum_{i=1}^{n} \sigma_{\varepsilon i}^{2}$$

(3.6)

where $\sigma_{\varepsilon i}^{2}$ is the variance of the residuals of company i that is estimated from model 3.3.
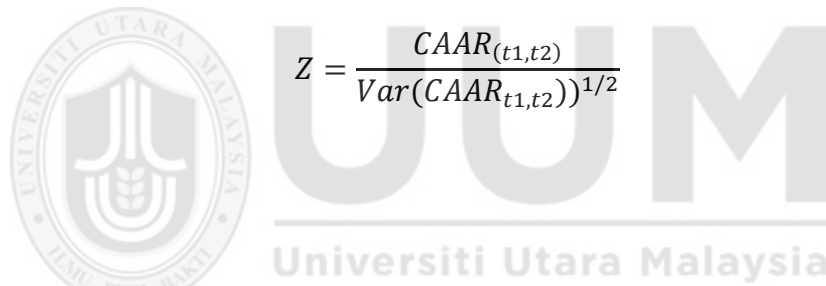
To test for the daily significance of AR_t, Z-test is used where:

$$z = \frac{AAR_t}{\sqrt{\mathrm{var}_{(AAR_{t1,t2})}}}$$

(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:

$$CAAR_{t1,t2} = \sum_{t=t1}^{t2} AAR_t$$

(3.8)

To test for significance of CAAR $_{t1,t2}$, Z-test is used where:

$$Z = \frac{CAAR_{(t1,t2)}}{Var(CAAR_{t1,t2}))^{1/2}}$$

(3.9)

The cumulative abnormal returns of firms i (CAR$_i$ (t_1, t2) over a specified period t_1 to t_2 is calculated by summing the daily abnormal returns of firm i across the period as follows:

$$CAR\ (t_1,\ t2) \quad = \sum_{t=t1}^{t2} AR_{i,t}$$

(3.10)

3.4.2 Examination of Long-Run Performance.

There are two critical issues that should be considered in employing long-term event studies: (a) methodology used to estimate returns and (b) the benchmarks employed to

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measure normal returns (Fama, 1998; Barber & Lyon, 1997; Bessler & Thies, 2007; Pontiff & Woodgate, 2008). There are two popular approaches in estimating long-run performance: buy-and-hold returns (BHAR) and cumulative average abnormal returns (CAAR). Almost all studies apply BHAR in detecting long-run abnormal returns (Cosh *et al.*, 2006; Savor & Lu, 2009; Bougarrou & Navatte, 2013; Bhabra & Huang, 2013). Barber and Lyon (1997) argue that CAAR is a biased predictor of long-run buy-and-hold abnormal returns. Besides, CAAR also ignores the effects of monthly compounding. Additionally, by using BHAR, short-term returns are compounded to obtain long-run buy-and-hold returns, which are similar to the returns that investors will realize if they hold the investments over a long period of time. Therefore, Barber and Lyon (1997) suggest the use of BHAR to detect long-run performance.

This study uses EMAS Index Bursa Malaysia (FTSEEMAS) as a benchmark. However, EMAS Index is a weighted index and focuses more on large firms so it would carry more weight for larger firms. Thus, it might not be a suitable benchmark alone. Therefore, another benchmark is also used which is a control firm or a portfolio of control firms with similar characteristics to the acquiring firm. To identify matching control firms, this study matches each acquiring firm to controlling firms based on firm size and book-to-market. To be considered as control firms, firms must be listed for the whole length of the long run performance. Empirically, firm size and book-to-market have been proven to play important roles in explaining the cross-section of average stock return (Fama & French, 1992; 1993) and have been commonly used by researchers to select the matching firms in estimating the abnormal returns (Fama, 1998). Based on these two firm characteristics, Euclidean distance is estimated to identify the matching companies (Datta, Iskandar-Datta

& Raman, 2000). Firms with the lowest Euclidean distance are chosen as the matching firms. Three groups of matching firms are used, which are one-matching firm, two-matching firms and four-matching firms. Matching[5] is done one month prior to the completion of the acquisition.

Euclidean distance of firm i, $ED_{i,t}$ is calculated as follows:

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

(3.11)

where,

ED_{it} = Euclidean distance between a sample firm i and a benchmark firm b in month t-1, one month before of the completion acquisition of firm i

$mv_{i(t-1)}$ = Standardized market value of sample firm i, in month t-1

$mv_{b\,(t-1)}$ = Standardized market value of benchmark firm b in month t-1

$mb_{i(t-1)}$ = Standardized market-to-book ratio of sample firm i, in month t-1

$mb_{b(t-1)}$ = Standardized market-to-book value of in benchmark firm b in month t-1

The standardized market value is estimated as follows:

$$MV_{j(t-1)} = \frac{MV_{j(t-1)}}{\sum MV_{(t-1)}}$$

(3.12)

---

[5] Acquiring firms is matched to a control firm with the closest firm's size and MTBV to the acquisition firms.

where $MV_{j(t-1)}$ is the market capitalization of firm j in month t-1 and the standardized

market-to-book value is estimated as :

$$MB_{j(t-1)} = \frac{MB_{j(t-1)}}{\sum MB_{(t-1)}}$$

<div align="right">(3.13)</div>

where $MB_{j(t-1)}$ is the market-to-book value of firm j, in the month t-1.

3.4.2.1 Calculation of Long-Run Abnormal Return

Long-run performance might also be influenced by the way adjusted returns are weighted.

Both equal weighted (EW)[6] and value weighted (VW)[7] measures are used to investigate

the effects of size on long-run performance. In measuring the long-run performance using

market index or matching firms as the benchmarks, CAR and BHAR for a three-year

period are calculated. To calculate CAR over a three-year period, the abnormal returns for

each month for the 36-month period are added up.

The calculation of abnormal return (AR) is as follows:

$$AR_{it} = R_{it} - R_{bt}$$

<div align="right">(3.14)</div>

where:

---

[6] In EW approach, each firm is weighted equally in calculation of returns.
[7] In VW approach the abnormal return for each firm is weighted by its size. Therefore, large firms carry more weight than small firms.

AR_{it} = The abnormal return of acquirer i during month t

R_{it} = The return of acquiring firm i during month t

R_{bt} = The return for benchmark b during month t

Next, the average abnormal return for the whole sample during month t is estimated as follows:

$$AAR_t = \sum_{i=1}^{n_t} \omega_i * AR_{it}$$

(3.15)

where:

AAR_t = The average abnormal return during month t

n_t = The number of firms observed during month t

ω_i = The weight for firm i

Variance of AAR_t is estimated as:

$$EW - Var(AAR_t) = \frac{1}{n(n-1)} \sum_{i=1}^{n} (AR_{it} - AAR_t)^2$$

(3.16)

Then, the statistical significance of AAR_t is:

$$t - stat = \frac{AAR_t}{\sqrt{var\ (R_t)}}$$

(3.17)

Under EW, ω_i is equivalent to $1/n_t$ while under VW, ω_i is equal to $\frac{MV_i}{\sum_{i=1}^{n_t} MV_i}$ where MV_i is

the market value of equity for firm i. To calculate the cumulative average abnormal return

(CAAR), the three-year CAAR$_{1,36}$ are estimated as:

$$CAAR_{t1,t2} = \sum_{t=t1}^{t2} AAR_t$$

(3.18)

where:

$CAAR_{t1,t2}$ = Cumulative average abnormal return from period t₁ to t₂

and

$$CAAR_{1,36} = \sum_{t=1}^{36} AAR_t$$

(3.19)

where:

$CAAR_{1,36}$ = The cumulative average abnormal return (CAAR) from month-one to

month-36 or three-year CAAR

AAR_t = The average abnormal return from month t

Variance of EW-CAAR $_{t1,t2}$ and variance of VW CAAR $_{t1,t2}$ are estimated as follows:

$$Var(EWCAAR_{t1,t2}) = \frac{1}{n(n-1)} \sum_{i=1}^{n} (CAAR_{i,t1,t2} - \overline{EWCAAR_{t1,t2}})^2$$

(3.20)

where;

$EWCAAR_{t1,t2}$ = The equal-weighted cumulative average abnormal return

$\overline{EWCAAR_{t1,t2}}$ = The average of equal-weighted cumulative average abnormal return

Then the statistical significance is estimated as:

$$t - stat = \frac{EWCAAR_{t1,t2}}{\sqrt{Var(CAAR_{t1,t2})}}$$

(3.21)

and

$$Var(VWCAAR_{t1,t2}) = \frac{1}{n-1}\sum_{i=1}^{n}\omega_i * (CAAR_{i,t1,t2} - \overline{VWCAAR_{t1,t2}})^2$$

(3.22)

where:

$\overline{VWCAAR_{t1,t2}}$ = The value-weighted cumulative average abnormal return from period t1 to t2

Buy-and-hold abnormal return (BHAR) refers to the abnormal return that an investor gains from holding on to the investment over a period of time. If an investor holds on to the

share for three years, then BHAR refers to the total adjusted return that investor earns during this three-year period. BHAR is estimated as follows (Barber & Lyon, 1997:

$$BHAR_{it} = \prod_{\tau=1}^{\tau}(1 + R_{it}) - \prod_{\tau=1}^{\tau}(1 + R_{bt})$$

(3.23)

where:

R_{it} = The return for firm i in the event month t

R_{bt} = The return on benchmark during the event month t

τ = Number of months

Then, the average of BHAR in event month t is calculated as follows:

$$\overline{BHAR_t} = \sum_{i=1}^{n_t} \omega_i * BHAR_{it}$$

(3.24)

where ω_i is as explained previously.

Cumulative average BHAR during the period t1 to t2 is calculated as follows:

$$\overline{BHAR_{t1,12}} = \sum_{t=t_1}^{t_2} \overline{BHAR_t}$$

(3.25)

Then, the following steps are performed to calculate the variance of EW-BHAR$_{t1,t2}$ and VW-BHAR$_{t1,t2}$.

$$Var(EWBHAR_{t1,t2}) = \frac{1}{n(n-1)} \sum_{i=1}^{n} (BHAR_{i,t1,t2} - \overline{EWBHAR_{t1,t2}})^2$$

<div align="right">(3.26)</div>

where:

$\overline{EWBHAR_{t1,t2}}$ = The equal-weighted BHAR from period t1 to t2

Then the statistical significance of EWBHAR$_{t1,\,t2}$ is calculated as follows:

$$t - stat = \frac{EWBHAR_{t1,t2}}{\sqrt{Var(EWBHAR_{t1,t2})}}$$

<div align="right">(3.27)</div>

Second the variance of VW BHAR from period t1 to t2 is calculated as follows:

$$Var(BHAR_{t1,t2}) = \frac{1}{n-1} \sum_{i=1}^{n} \omega_i * (BHAR_{i,t1,t2} - \overline{VWBHAR_{t1,t2}})^2$$

<div align="right">(3.28)</div>

where:

$VWBHAR_{t1,t2}$ = The value-weighted buy and hold return

3.4.3 Determinants of Short-Run and Long Run Price Performance

This study uses cumulative average abnormal returns (CAAR) over a five-day event window (-3,1) surrounding the acquisition announcement dates as the dependent variable to capture the short-run price effects (Brown & Warner, 1985; Bradley, Desai & Kim, 1983; MacKinlay, 1997). For the long run price effect, either BHAR or CAAR over a 36-

month period is used as the dependent variable. The following subsection discusses the hypotheses development for the independent variables.

3.4.3.1.   Hypotheses Development

This section provides arguments and supports for the hypotheses. There are six hypotheses developed in the study.

(a)   Family Ownership and Family Director

As discussed in Chapter Two, mergers and acquisitions could lead to agency problem between controlling shareholder and minority shareholder. For example, in term of compensation, family firms might pay a higher amount of remuneration to family members. Furthermore, family companies might also undertake M&A to expand their empire or to ensure control continuity from one generation to the next. Even though there are temptations to engage in value destroying actions, family companies might not engage in those actions as they are costly to the family wealth.

Firms with high family ownership show significant abnormal returns according to several studies. Significant positive returns to shareholders are found when families acquire other companies (Ruiz & Requejo, 2010; Caprio *et al.*, 2011; Bougarrou & Navatte, 2013; André *et al.*, 2014; Craninckx & Huyghebaert, 2015). The significant positive relationship shows that acquirers could reduce agency problem through synergistic benefit. Evidences in Japan show that families are not likely to engage in acquisitions (Shim & Okamoru, 2011). This shows that families are choosy and they are more likely to acquire other

companies when the acquisitions create value. However, Bauguess and Stegemoller (2008) and Basu *et al.*, (2009) find significant negative returns to shareholder wealth. These results indicate that families face agency problem in M&As, subsequently lowering the wealth to shareholders.

Long run price performance families' show mixed results. Adhikari and Sutton (2016) shows that family firm generate higher returns over 12 and 36-month. However, Bougarrou and Navatte (2013) shows that family has insignificant effect on a 36-month performance. Therefore, the following hypothesis is developed:

H1: There is an effect of family ownership on abnormal returns either in the short run or long run following acquisition announcements.

Studies which examine family director participation find that family directors play their role in the acquiring firms constructively since significant positive return is found in family controlled companies (Ben-Amar & André, 2006; Caprio *et al*. 2011). Studies regarding long-run stock price performances related to family director are scarce and none are available or accessible. Hence, this study assumes family director to have a similar effect with short-run performance. Thus, the following hypothesis is developed:

H2: There is an effect of family directors' participation on abnormal returns either in the short run or long run performance following acquisition announcements.

(b)   Blockholder Ownership

Blockholders could monitor performance of mergers (Shleifer & Vishny, 1986). If they are powerful, they could even replace underperforming managers. Walters *et al.*, (2007), Bauguess *et al.*, (2009) show that active blockholders could play their role in companies and lead to significant positive returns. However, if the blockholder does not play an active role, it could lead to an insignificant return which shows the existence of agency problem and non-synergistic benefits (Masulis *et al.*, 2007; Bouzgarrou & Navatte, 2013). Over the long-run price performance, a blockholder shows lower effective role and insignificant effect to acquirers. Boubakri, Dionne and Triki (2008) find that a blockholder has negative effect while Adhikari and Sutton (2016) find the effect insignificant to acquirers. Therefore, the following hypothesis is developed:

H3(a): There is an effect of either active or passive individual blockholding on abnormal returns either in the short run or long run following acquisition announcements.

H3(b): There is an effect of either active or passive institution blockholding on abnormal returns either in the short run or long run following acquisition announcements..

(c)   Board Size

Varying number of directors on board could influence decision making in the firms. Ben-Amar and André (2006); André, Ben-Amar and Saadi (2014); Carline, Linn and Yadav (2009); Chikh and Filbien (2011) and Nogata, Uchida and Goto (2011) find that large board give negative impact on returns whereas Cosh, Guess and Hughes (2006) and Li and Srinivasan (2011) find it to have insignificant return to acquirers. Over the long-run

price performance, there is no study related to board size. This study assumes board size to have similar effect with shor-run performance. Therefore, the following hypothesis is developed:

H4: There is an effect of board size on abnormal returns either in the short run or long run performance following acquisition announcements.

(d) Director Independence

Walters *et al.*, (2007), Ben-Amar and André (2006), Kisgen *et al.*, (2009) find that independent directors play a significant role and lead to positive and significant returns to acquiring firms. However, study by Alexandridis *et al.* (2010) find significant negative relationship between director independence and return. Several studies find it to have insignificant return to acquiring firms (Masulis *et al.*, 2007; Cosh *et al.*, 2006; McDonald *et al.*, 2008; Cai & Sevilir, 2012). Over the long-run price performance, there is no study related to independent directors. This study assumes independent director to have similar effect with short-run performance. Therefore, the following hypothesis is developed:

H5: There is an effect of director independence on abnormal returns either in the short run or long run performance following acquisition announcements.

(e) Executive Director

Field and Mkrtchyan (2017) find that an executive director influences return to acquirer. They claim that an executive has more experience in acquisitions and play a significant

role in the acquiring firm. Meanwhile, André *et al.* (2014) find that an executive director has negative and significant effect to acquirer returns due to existence of agency problem type I between manager and shareholders. Nevertheless, Duta *et al.* (2011) find that executive directors to have insignificant effect on shareholders wealth. For the long-run price performance, there is no study related to executive director. This sudy assumes executive director to generate similar result with short-run performance. Therefore, the following hypothesis is developed:

H6: There is an effect of executive director on abnormal returns either in the short run or long run performance following acquisition announcements.

(f)   Founder-director

Several studies find that the presence of a founder director associates with better performance and create value to the acquiring firms. André *et al.*, (2014), Bouzgarrou and Navatte (2013), Li and Srinivasan (2011) and Caprio *et al.*, (2011) find that a founder director leads to a positive significant return to acquirer. Meanwhile, Ning *et al.*, (2014) and Bauguess and Stegemoller (2008) find that a founder director of the acquiring firm experience negative significant returns due to agency problem. With regard to the long-run price performance, there is no study related to founder directors. Thus, this study assumes a founder director could give similar impact with short-run performance. Therefore, the following hypothesis is developed:

H7: There is an effect of founder-director on abnormal returns either in the short run or long run following acquisition announcements.

(g)   Fairness Opinion

 Chen (2006) finds that acquirers who use fairness opinion could earn significant positive returns. The result indicates that expropriation between controlling shareholder and minority shareholder in the firm could be reduced by using fairness opinion. However, Kisgen *et al.*, (2009) and Frye and Wang (2010) find it to have significant negative returns to shareholders of acquiring firms. Over the long-run price performance, there is no study related to the fairness opinion. This study assumes acquirers who provide fairness opinion to have similar impact with short-run performance. Therefore, the following hypothesis is developed:

H8: There is an effect of fairness opinion on abnormal returns either short run or long run performance following acquisition announcements.

(h)   Toehold

A firm that has a higher proportion of toehold experiences higher returns (Kisgen, *et al.*, 2009; Hamberg, *et al.* 2013). The result shows that information asymmetry is reduced in deals where acquirers have ownership in targets and synergistic benefits are expected after the completion of the acquisitions. Several studies find insignificant relationship between toeholds and return (Gregory & O'Donohoe, 2014; Bates *et al.*, 2006; Cai & Sevilir, 2012). Over the long-run performance, there is no study related to toeholds. Thus, this study assumes a toehold could generate positive effect on shareholder wealth. Therefore, the following hypothesis is developed:

H9: There is an effect of toehold on abnormal returns either in the short run or long run performance following acquisition announcements.

3.5   Measurement of Variables

This section provides the operational definitions of each variable examined in this thesis. The independent variables are composed of ownership characteristics, governance characteristics, deal characteristic and control variables. Table 3.3 provides a summary of the measurement used in this thesis.

Table 3.3
Summary of the Measurements of the Variables of Main Results

Variables	Corresponding Abbreviations	Proxy for Measurement	References
Governance Characteristic			
Family	**FAMOWN**	Relates to the percentage (%) of voting rights an individual or a family holds, directly or indirectly (at least 10%), while the aggregate shareholdings of other major shareholders are not greater than 10%.	Basu *et al.*, (2009); Caprio *et al.* (2011).
Family director	**FAMBRD**	Refers to a fraction member of a family.	Ben-Amar and André (2006); Caprio *et al.* (2011).
Blockholder	**BLOCK**	Institutions, corporations, and non-family companies holding at least 5% of voting rights. Passive: blockholders that are not represented on board. Active: blockholders represented on board.	
Presence of Active Individual Blockholder	**D4BLIDACT**	Defined as a dummy of individual blockholder and non-family owned companies having at least 5% of voting rights, and represented on the boards.	Bouzgarrou and Navatte (2013); Bauguess *el at*., (2009); Walters *et al.* (2007).
Presence of Passive Individual Blockholder	**D4BLIDPSV**	Reflects a dummy of individual blockholder and non-family owned companies holding at least 5% of voting rights and not represented on the boards.	
Presence of Active Institutional Blockholder	**D4BLISACT**	Reflects a dummy of institutions, corporations, and non-family owned companies holding at least 5% of voting rights and represented on the boards.	
Presence of Passive Institutional Blockholder	**D4BLISPSV**	Dummy of institutions, corporations, and non-family companies holding at least 5% of voting rights and not represented on board.	
Board size	**BOARDSIZE**	Constitutes the number of board members.	Ben-Amar and André (2006); Carline, Linn and Yadav (2009).
Fraction of Independent Director	**INEDBRD**	Represents the fraction of independent directors to total directors.	Cosh *et al.*, (2006); Walters *et al.* (2007).
Fraction of Executive Director	**EXECDIRBRD**	Denotes the fraction of professional CEOs involved in the board's day to day operations.	André *et al.* (2014); Chikh and Filbien (2011); Duta *et al.*, (2011); Field and Mkrtchyan (2017).
Founder-Director	**D4FOUNDER**	Dummy variable is coded as 1 if a firm has a founder on its board; 0 otherwise.	Bouzgarrou and Navatte (2013); Caprio *et al.* (2011); Li and Srinivasan (2011).
Deal Characteristics			

Fairness Opinion (FO)	**D4FAIRNESS**	Dummy variable is coded as 1 if an acquiring firm uses FO; 0 otherwise.	Frye and Wang (2010); Kisgen *et al.* (2009).
Toehold	**D4TOEHOLD**	Dummy variable is coded as 1 if shares held by an acquirer in a target firm prior to the acquisition announcement; 0 otherwise.	Hamberg *et al.* (2013).
Control Variables			
Mode of payment	**MODEPAY (D4CASH and D4MIXED)**	Two dummy variables are used. The first one is coded as 1 for cash-acquisition; 0 otherwise. The second one is coded as 1 for mixed-acquisition; 0 otherwise.	Chikh and Filbien (2011)
Types of target (Public or Private)	**D4PUBLIC**	Dummy variable is coded as 1 if a target is a listed company; 0 otherwise.	Bae *et al.,* (2013); Capron and Shen (2007); Faccio *et al.* (2006).
Consideration	**CONSIDERATION**	Defined by dividing the dollar amount of the deal value by the market value of the acquiring firm.	Masulis *et al.,* (2007); Walters *et al.* (2007).

Table 3.4
Summary of the Measurements of the Variables of Additional Results

Variables	Corresponding Abbreviations	Proxy for Measurement	References
Governance Characteristic			
Family director	**FAMNUM**	Refers to a number of members of a family who sit on company boards.	
Blockholder	**BLOCK**	Institutions, corporations, and non-family companies holding at least 5% of voting rights. Passive: blockholders that are not represented on board. Active: blockholders represented on board.	
Presence of Active Individual Blockholder	**BLIDACTNUM**	Defined as a number of blockholders of an individual and non-family owned holding at least 5% of voting rights represented on boards	Bouzgarrou and Navatte (2013); Bauguess *el at*., (2009); Walters *et al.* (2007).
	BLIDACT	Defined as a percentage (%) of number of blockholders of an individual and non-family company holding at least 5% of voting rights, and represented on boards.	
Presence of Passive Individual Blockholder	**BLIDPSVNUM**	Defined as a number of blockholders of an individual and non-family companies holding at least 5% of voting rights, but not represented on boards.	
	BLIDPSV	Percentage (%) of number of blockholders of an individual and non-family companies holding at least 5% of voting rights, and not represented on boards.	
Presence of Active Institutional Blockholder	**BLISACT**	Percentage (%) of an institutions, corporations, and non-family companies holding at least 5% of voting rights and represented on boards.	
	BLISACTNUM	Reflects a number as institutions, corporations, and non-family owned companies holding at least 5% of voting rights, and represented on boards.	
Presence of Passive Institutional Blockholder	**BLISPSVNUM**	Number of an institutions, corporations, and non-family companies holding at least 5% of voting rights and not represented on boards.	
	BLISPSV	Percentage (%) of an institutions, corporations, and non-family companies holding at least 5% of voting rights and not represented on boards.	
Board size	**BOARDOWN**	Defined as a percentage (%) of shareholding by all members of board of directors.	Ben-Amar and André (2006); Carline, Linn and Yadav (2009).
Independent Director	**INEDNUM**	Represents the number of independent directors to total directors.	Cosh *et al.*, (2006); Walters *et al.* (2007).
	INEDOWN	Percentage (%) of independent directors to total directors.	
	EXECDIRNUM	Number of professional CEOs involved in the board's day to day operations.	André *et al.* (2014); Chikh and

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Fraction of Executive Director	**EXECDIROWN**	Percentage (%) of professional CEOs involved in the board's day to day operations.	Filbien (2011); Duta *et al.*, (2011); Field and
Founder-Director	**D4FOUNDER**	Dummy variable is coded as 1 if a firm has a ``ounder on its board; 0 otherwise.	Bouzgarrou and Navatte (2013); Caprio *et al.* (2011); Li and Srinivasan (2011).
Deal Characteristics			
Fairness Opinion (FO)	**D4FAIRNESS**	Dummy variable is coded as 1 if an acquiring firm uses FO; 0 otherwise.	Frye and Wang (2010); Kisgen *et al.* (2009).
Toehold	**TOEHOLDOWN**	Percentage of shares held by an acquirer in a target firm prior to the acquisition announcement.	Hamberg *et al.* (2013).
Mode of payment	**MODEPAY (D4CASH and D4MIXED)**	Two dummy variables are used. The first one is coded as 1 for cash-acquisition; 0 otherwise. The second one is coded as 1 for mixed-acquisition; 0 otherwise.	Chikh and Filbien (2011)
Types of target (Public or Private)	**D4PUBLIC**	Dummy variable is coded as 1 if a target is a listed company; 0 otherwise.	Bae *et al.*, (2013); Capron and Shen (2007); Faccio *et al.* (2006).
Consideration	**CONSIDERATION**	Defined by dividing the dollar amount of the deal value by the market value of the acquiring firm.	Masulis *et al.*, (2007); Walters *et al.* (2007).

3.6   Model Specification

The purpose of this study is to investigate how ownership patterns (family ownership, family director), blockholder activism (presence of active individual blockholder, presence of passive individual blockholder, presence of active institutional blockholder and presence of passive institutional blockholder), board structures (board size, director independence, executive director, founder-director), deal characteristics (fairness opinion and toehold) and control variables (cash, mixed, public and consideration) affect CAR of firms announcing acquisitions in Malaysia. The ordinary least squares (OLS) method is used to test for the relationships between the dependent variable for short-run and long run price performance and the independent variables.

The model is expressed in the following way:

$$PERFORMANCE_i = \beta_0 + \beta_1 \text{ FAMOWN}_i + \beta_2 \text{ FAMBRD}_i + \beta_3 \text{ D4BLIDACT}_i + \beta_4$$

$$D4BLIDPSV_i + \beta_5 \text{ D4BLISACT}_i + \beta_6 \text{ D4BLISPSV}_i + \beta_7 \text{ BOARDSIZE}i + \beta_8 \text{ INEDBRD}_i +$$

$$\beta_9 \text{ EXECDIRBRD}_i + \beta_{10} \text{ D4FOUNDERDIR}_i + \beta_{11} \text{ D4FAIRNESS}_i + \beta_{12} \text{ D4TOEHOLD}_i +$$

$$\beta_{13} \text{ D4CASH}_i + \beta_{14} \text{ D4MIXED}_i + \beta_{15} \text{ D4PUBLIC}_i + \beta_{16} \text{ CONSIDERATION}_i + \varepsilon_i$$

Where for each firm i:

CAR	= Cumulative Abnormal Return over a Five-Day Period (-3,1).
	= Cumulative Abnormal Return over 36-Month Period.
BHAR	= Buy and Hold over 36-Month Period.
FAMOWN	= Family Ownership.
FAMBRD	= Family Director.
D4BLIDACT	= Presence of Active Individual Blockholder.
D4BLIDPSV	= Presence of Passive Individual Blockholder.
D4BLISACT	= Presence of Active Institutional Blockholder.
D4BLISPSV	= Presence of Passive Institutional Blockholder.
BOARDSIZE	= Board Size.
INEDBRD	= Fraction of Independent Director.
EXECDIRBRD	= Fraction of Executive Director.
D4FOUNDER	= Presence of Founder-Director.
D4FAIRNESS	= Fairness Opinion.
D4TOEHOLD	= Toehold.

D4CASH	= Cash.
D4MIXED	= Mixed.
D4PUBLIC	= Public Listed Target Firm.
CONSIDERATION	= Consideration.

3.7 Conclusion

This chapter explains the research methodologies employed in this study. In particular, this study uses event-study methodology to measure the announcement effect and long run stock performance (CAAR and BHAR). It is expected that the announcement effect to be positive while for long run stock performance, it shows that the market is efficient. Ordinary least squares (OLS) method as illustrated by model specification shown in Section 3.5 is run to identify various factors including ownerships, governance, board of directors and deal characteristics.
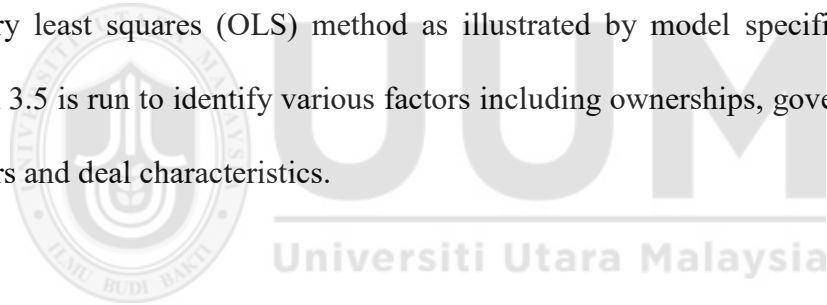
CHAPTER FOUR
DATA ANALYSIS AND DISCUSSION OF RESULT

4.0   Introduction

This chapter presents the findings concerning the effects of acquisition announcements and multiple regression analyses. It is divided into six sections. The first section, sets out the results of short-term market reaction by using event study methodologies. This is followed by illustrating the descriptive statistics for independent variables used in the regression analyses. Univariate analysis of returns based on dummy variables is discussed in the following section followed by a discussion of the assumptions of OLS, which covers multicollinearity, heteroscedasticity, autocorrelation, normality and outlier test for the independent variables. Next, the findings of the multivariate regression analysis are discussed followed by a discussion of additional regression analyses. Finally, a conclusion section is presented.

4.1   Share Price Reactions on Acquisition Announcements

Both market model (MM) and market adjusted returns model (MAR) are employed to measure price reactions of acquiring firms on the announcement dates. In MM, estimation periods are taken from the period -250 to -61. MAR is used to verify the results of MM.

The sample is divided into three main groups: all, clean, and unclean. Clean announcements refer to announcements without other contemporaneous announcements, while unclean announcements refer to announcements which also include other contemporaneous announcements. The 'All' sample group refers to both types of

announcement. The clean sample group is made up of 203 announcements while the unclean sample group is made up of 75 announcements.

Table 4.1 shows the average abnormal returns (AARs) observed for "All" and "Clean" for the period -3 to 3 days around the acquisition announcement. The results show that returns to acquiring firms in the "All" sample group are significant for days -1, 0, and +3. The AARs are 0.343% (p-value = 0.074) for pre-announcement day of -1, 0.835% (p-value = 0.002) for the announcement day and -0.337% (p-value = 0.079) for the post-announcement day of +3. As argued by Mat-Rahim and Pok (2013) and Ma, Pagán and Chu (2009), these results show that investors assess the acquisitions as value-enhancing investments.

Table 4.1
Average Abnormal Returns (AARs) Using Market Model (MM) Over the Seven-Day Period for "All" and "Clean" Groups

Event Day (t)	All (n=278)		Clean (n=203)	
	AAR (%)	p-value	AAR (%)	p-value
-3	0.064%	0.712	0.192%	0.309
-2	0.148%	0.458	0.119%	0.638
-1	0.343%	0.074*	0.113%	0.577
0	0.835%	0.002**	0.509%	0.016**
1	0.276%	0.285	0.317%	0.249
2	-0.155%	0.442	-0.190%	0.386
3	-0.337%	0.079*	-0.387%	0.067*

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

Meanwhile, the findings for the "Clean" sample group show that acquiring firms earn a positive AAR of 0.509% (p-value = 0.016) on the announcement day only, while for the post-announcement day of +3, the AAR is negative at -0.387% (p-value=0.067). As suggested by Mat Nor and Ismail (2006), the negative returns for both sample groups on

day +3 can be attributed to investors' overreaction towards the acquisition announcements. Similar analysis is conducted by using the alternative model MAR, and the results are set out in Table 4.2. The "All" sample group records returns of 0.322% (p=0.096) on the pre-announcement day t= -1, returns of 0.791% (p=0.004) on the announcement day t=0, and -0.411% (p=0.029) on the post-announcement day t=+3. Meanwhile, for the "Clean" sample group, the returns are 0.452% (p=0.032) and -0.437% (p=0.033) on the announcement day t=0 and the post-announcement day t=+3 respectively.

Table 4.2
Average Abnormal Returns (AARs) Using Market Adjusted Returns Model (MAR) for "All" and "Clean" Groups

Day (t)	All (n=278)		Clean (n=203)	
	AAR (%)	p-value	AAR (%)	p-value
-3	0.048%	0.783	0.165%	0.377
-2	0.168%	0.400	0.138%	0.585
-1	0.322%	0.096*	0.094%	0.645
0	0.791%	0.004***	0.452%	0.032**
1	0.226%	0.380	0.292%	0.293
2	-0.222%	0.269	-0.242%	0.272
3	-0.411%	0.029**	-0.437%	0.033**

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

Although the results of AARs when applying both MAR and MM are quite similar for a short window period of -3 to +3, the findings of cumulative average abnormal returns (CAAR) differ between the two models over longer event window periods, such as (-60, +60) and (-60, +10). Table 4.3 and Table 4.4 record the CAAR for acquiring firms using

Table 4.3
Results of CAAR for "All" and "Clean" Sample Groups Using Market Model (MM)

Event window	All (n=278)		Clean (n=203)	
	CAAR (%)	p-value	CAAR (%)	p-value
CAAR (-60,60)	6.443%	0.001***	6.102%	0.019**
CAAR -60,10)	4.781%	0.000***	4.540%	0.008***
CAAR (-20,1)	2.790%	0.000***	2.475%	0.002***
CAAR (-5,1)	2.525%	0.000***	2.104%	0.000***
CAAR (-3,1)	1.665%	0.000***	1.250%	0.007***
CAAR (-1,1)	1.454%	0.000***	0.939%	0.008***
CAAR (0,1)	1.111%	0.001***	0.826%	0.014***
CAAR (2,60)	1.428%	0.269	1.281%	0.427

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

Table 4.4
Results of CAAR for "All", and "Clean" Sample Groups Using Market Adjusted Returns Model (MAR)

Event window	All (n=278)		Clean (n=203)	
	CAAR (%)	p-value	CAAR (%)	p-value
CAAR (-60,60)	1.386%	0.396	-0.708%	0.705
CAAR -60,10)	1.457%	0.244	0.095%	0.947
CAAR (-20,1)	1.866%	0.008***	1.194%	0.126
CAAR (-5,1)	2.324%	0.000***	1.877%	0.001***
CAAR (-3,1)	1.555%	0.001***	1.141%	0.018**
CAAR (-1,1)	1.339%	0.000***	0.838%	0.021**
CAAR (0,1)	1.017%	0.002***	0.744%	0.028**
CAAR (2,60)	-0.892%	0.402	-1.700%	0.164

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

both MM and MAR. The returns for the "All" sample group range from 1.111%, for a two-day event window of (0, 1), to 6.443%, for a 121-day event window of (-60, 60). All returns are significant at 1% level.

Similarly, for the "Clean" sample group, CAAR for acquiring firms for the two-day event window (0, 1) and 121-day event window (-60, 60) are 0.826% (p=0.014) and 6.102% (p=0.019) respectively. For both sample groups, the CAAR values are significant for all event windows except for the 59-day event window of (2, 60). Similarly, as seen in Table

4.4, the values for 121-day event window (-60, 60) and 71-day event window (-60, 10) are also insignificant.

As shown in Tables 4.3 and 4.4, the returns for all event windows of the "All" sample group are greater than those of the "Clean" group for both MM and MAR models. This is due to the fact that the results of the "All" sample group are influenced by other contemporaneous or "unclean" announcements.

Table 4.5 presents the summary of returns of AAR and CAAR for the "Not Clean" sample group. The "Not Clean" sample group experiences significant positive returns on pre-announcement day $t=-1$ and on the announcement day $t = 0$, with the AARs being 0.965% (p-value = 0.033) and 1.719% (p-value = 0.033) respectively. Both results are significant

Table 4.5
Result of AAR and CAAR in "Not Clean" Sample Group for Both Models

AAR (Not clean n = 75)		
Event window	**AAR MM (%)**	**AAR MAR (%)**
-3	-0.285%	-0.286%
	(0.457)	(0.472)
-2	0.227%	0.245%
	(0.417)	(0.385)
-1	0.965%**	0.946%**
	(0.033)	(0.038)
0	1.719%**	1.749%**
	(0.033)	(0.039)
1	0.165%	0.043%
	(0.785)	(0.943)
2	-0.060%	-0.170%
	(0.896)	(0.707)
3	-0.200%	-0.302%
	(0.638)	(0.478)

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

Table 4.5 (continued)

Event window	CAAR MM (%)	CAAR MAR (%)
	CAAR	
CAAR (-60,60)	7.365%***	7.278%**
	(0.004)	(0.026)
CAAR (-60,10)	5.435%***	5.189%**
	(0.012)	(0.039)
CAAR (-20,1)	3.640%***	3.705%**
	(0.008)	(0.017)
CAAR (-5,1)	3.663%***	3.537%***
	(0.001)	(0.003)
CAAR (-3,1)	2.789%***	2.697%***
	(0.004)	(0.008)
CAAR (-1,1)	2.848%***	2.738%***
	(0.002)	(0.003)
CAAR (0,1))	1.883%**	1.792%**
	(0.021)	(0.031)

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

at the 5% level. As for CAARs, the results are significant and positive for all event window periods. Since the results of the "All" sample are influenced by other announcements, only the "Clean" sample group announcements are taken into consideration in subsequent analyses.

The findings of this study are consistent with that of other studies in Malaysia such as Mat-Nor and Ismail (2006), Ma, Pagán and Chu (2009) and Mat-Rahim and Pok (2013). Mat-Nor and Ismail (2006) finds that the returns of 8.26% is significant over a longer 61-day window period (-30, 30). Mat-Rahim and Pok (2013) records that acquirers earn significant positive returns of 0.24% for a two-day event window (-1, 0) and 0.34% for five-day (-2, 2) event window, while Ma, Pagán and Chu (2009) finds positive significant returns of 0.80% for a three-day event window (-1, 1). However, the findings of this study contradict that of Md. Isa (1994) which see acquirers experiencing insignificant returns of 1.162% for a two-day event window (-1, 0). The acquirer returns from developed markets

are mixed. Andrade *et al.* (2001) and Duggal and Miller (1999) find that the returns from short-term event windows of (-1, 1) and (-20, 1) in the US are -0.7% and 1.20% respectively and both values are significant at 5% and 10% levels. Meanwhile, Gleason *et al.* (2014) finds that the returns in the US for event window (-1, 1) is positively significant at 0.98% (p=0.10). Andriosopoulos and Yang (2015) and Bougarrou and Navatte (2013) find that returns for the short-term event window of (-1, 1) are positive at 0.75% and 1% and are significant to the acquirers in the UK and France respectively.

In short, in the case of MM, both sample groups are find to give similar results in terms of significance. For the "All" sample in Table 4.4, the results in MAR differ for certain event windows, specifically for event windows (-60, 60) and (-60, 10). The results for MAR show that for both event windows (-60, 60) and (-60, 10), the CAARs are no longer statistically significant. However, CAARs for shorter event windows are positive and significant for MAR, which reflect the results of MM. For example, for the two-day event window (0, 1) and seven-day event window (-5, 1), CAARs are 1.017% and 2.324% respectively and they are significant at the 1% level. The results of the "Clean" sample reflect that of the "All" sample, except for the window period of (-20, 1) where the CAAR is not significant anymore. The results of all other shorter window periods are significant at either 1% or 5% level. Under both models, the returns of post-announcement event window of (2, 60) for both samples are not statistically significant. This supports the efficient market hypothesis as espoused by Fama (1970).

CAARs for a 121-day period (-60 to 60) surrounding the announcement of acquisition dates for both models are plotted in Figure 4.1. It can be seen that CAARs for the "All"

sample using MM record the highest values. This is followed by CAARs for the "Clean" sample using MM. The line chart shows increasing returns using MM for pre-announcement, on announcement and post-announcement of acquisitions. There is a positive sharp spike in returns surrounding the announcements of CAAR for the 121-Day

Period for both estimation models for the "All" and the "Clean" sample, which suggests that investors reacted favorably to the announcements. The poor performance of acquisition announcements is observed when MAR is adopted, as MAR gives the two lowest returns. However, for a short period leading up to the announcements, MAR for both samples show an increasing trend. These results show that investors react favorably to the announcements a few days before they are made. For both models, CAARs are positive for a few days prior to the announcements. A comparison of the models reveals that returns are different over longer window periods and these models can be to the influence of which plays an important role in measuring abnormal return performance especially when performance is measured over a longer period. Since risk plays a significant role, subsequent analyses will be based on the market model (MM).

Overall, the positive returns to shareholders show that acquisitions in Malaysia are value-enhancing and this can be attributed to the synergistic effects of such acquisitions. Bradley, Desai and Kim (1983) argue that synergistic benefits occur when the acquirers seek to increase profitability after the acquisitions. The increase in profitability can be achieved through efficient management and increased production capacity through a combination of resources and assets. On a similar vein, Duggal and Miller (1999) puts forward two theories of efficiency that allow investors to gain from mergers. First,

investors invest funds in companies that can manage the funds efficiently in order to ensure returns. Second, efficiency can be achieved through a monitoring system that will ensure that quality decisions are made. This monitoring system includes monitoring discussions with management on corporate plans and performance, supporting (opposing) the management's wealth-enhancing (wealth-reducing) policies and decisions, and active participation in board elections.
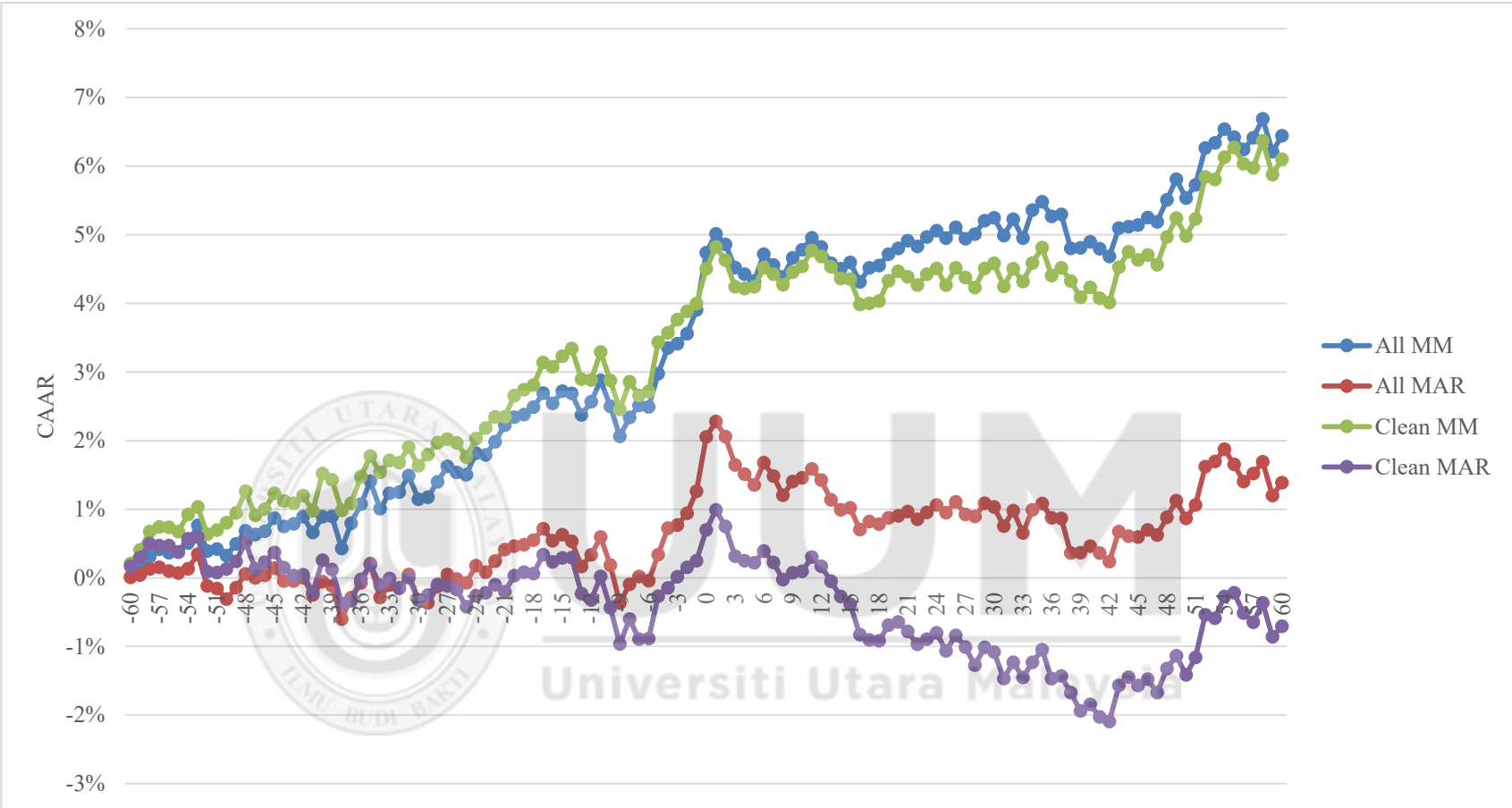
Figure 4.1

CAAR for the 121-Day Period for Both Estimation Models for "All", and "Clean" Sample Firm

4.2   Descriptive Analyses

Table 4.6 presents a summary of descriptive statistics for all variables of the 203 sample firms. 158 of the announcing companies can be classified as family companies if ownership by members of the same family reach a 10% cut-off point. Family ownership (FAMOWN) stands at 32.11% on average. The highest family ownership is recorded by KrisAsset Holding Bhd with 76.41% of its shares being held by IGB Corporation Bhd[8]. The percentage of family ownership recorded in this study is also consistent with those of previous studies such as Song and Rath (2010) and Song, Ali and Pillay (2009) who find the average of family ownership are 32.7% and 32% respectively. The descriptive statistics also show that there are two family members who serve on company boards (FAMNUM) or on average, 25.17% of the directors come from the same family (FAMBRD). Thus, it can be concluded that in Malaysia, members of the same family have high ownership stakes and play an active role in managing their firms' resources.

Moreover, active individual blockholders (D4BLIDACT) are present in 26.60% of the sample, which is equivalent to 54 companies. The maximum number of active individual blockholders (BLIDACTNUM) is four. Meanwhile, 27.09% of the samples or 55 companies have individual passive blockholders (D4BLIDPSV) with a maximum number of three individual passive blockholders (BLIDPSVNUM). The average ownerships of individual active blockholders (BLIDACT) and individual passive blockholders (BLIDPSV) are 3.65% and 3.31% respectively. Meanwhile, the maximum percentage for BLIDACT and BLIDPSV are 26.88% and 26.03%

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[8]A substantial shareholder of IGB Corporation Bhd is Goldis Bhd which is in the hands of family members such as Tan Lei Cheng, Tan Boon Lee, Tan Boon Seng, Pauline Tan Suat Ming, Robert Tan Chuang Meng and Tony Tan @ Choon Keat.

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respectively. 21.18% of the 203 sampled firms, or 43 companies, have active institutional blockholders (D4BLISACT) with a maximum number of active institutional blockholders of seven (BLISACTNUM).The maximum ownership of active institutional blockholders is 82.33% recorded by Cycle and Carriage Bintang Bhd with the majority of shares being held by Cycle and Carriage Limited (48.07%), Employees Provident Fund Board (EPF) (21.59%) and J.I. Motor Holding B.V. (12.67%).

Meanwhile, the presence of passive institutional blockholders (D4BLISPSV) is observed in 29.06% of the sampled firms or 59 companies. The maximum number of passive institutional blockholders (BLISPSVNUM) is three. The maximum percentage ownership of passive institutional blockholder (BLISPSV) is 40.53%, which is recorded by MMC Corporation Bhd. and the shares are held by Permodalan Nasional Berhad (PNB) (33.69%) and EPF (6.84%).
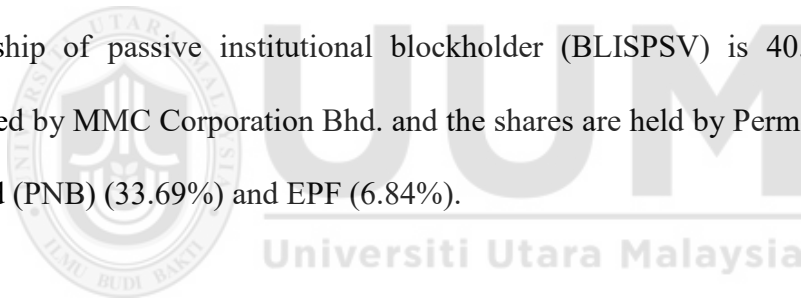
Table 4.6
Independent Variables Descriptive Statistics

VARIABLE	MEAN	MAXIMUM	MINIMUM	MEDIAN	STD DEVIATION
FAMOWN	0.3211	0.7641	0	0.3257	0.2157
FAMNUM	1.8571	7	0	2	1.5039
FAMBRD	0.2517	0.71	0	0.25	0.1980
D4BLIDACT	0.2660	1	0	0	0.4430
BLIDACTNUM	0.3842	4	0	0	0.7513
BLIDACT	0.0365	0.2688	0	0	0.0672
D4BLIDPSV	0.2709	1	0	0	0.4455
BLIDPSVNUM	0.3793	3	0	0	0.6517
BLIDPSV	0.0331	0.2603	0	0	0.0598
D4BLISACT	0.2118	1	0	0	0.4096
BLISACTNUM	0.4581	7	0	0	1.1949
BLISACT	0.0836	0.8233	0	0	0.1937
D4BLISPSV	0.2906	1	0	0	0.4552
BLISPSVNUM	0.3695	3	0	0	0.6498
BLISPSV	0.0316	0.4053	0	0	0.0599
BOARDSIZE	7.2759	15	3	7	1.8623
BOARDOWN	0.3049	0.7493	0	0.3203	0.2211
INEDNUM	3.2611	8	1	3	1.1840
INEDBRD	0.4548	1	0.14	0.43	0.1388
INEDOWN	0.0051	0.0799	0	0.000	0.0129
EXECDIRNUM	2.5911	8	0	2	1.5781
EXECDIRBRD	0.3602	0.83	0	0.38	0.1939
EXECDIROWN	0.2507	0.7492	0	0.2078	0.2224
D4FOUNDER	0.1034	1	0	0	0.3053
D4FAIRNESS	0.2069	1	0	0	0.4061
D4TOEHOLD	0.2266	1	0	0	0.4197
TOEHOLDOWN	0.1195	0.85	0	0	0.2344
D4CASH	0.8818	1	0	1	0.3237
D4MIXED	0.0394	1	0	0	0.1950
D4PUBLIC	0.0739	1	0	0	0.2622
CONSIDERATION	0.2260	2.15	0.0500	0.1300	0.2624

FAMOWN relates to the percentage of voting rights an individual or a family holds, either directly or indirectly (at least 10%), while the aggregate shareholdings of other major shareholders are not greater than 10%. **FAMNUM** refers to a number of members of a family who sit on company boards. **FAMBRD** refers to a fraction of members of a family. **BLIDACTNUM** is defined as a number of blockholders of an individual and non-family owned holding at least 5% of voting rights represented on board. **BLIDACT** is defined as a percentage of number of blockholders of an individual and non-family company holding at least 5% of voting rights, and represented on boards. **BLIDPSVNUM** is defined as a number of blockholders of an individual and non-family companies holding at least 5% of voting rights, but not represented on boards. **BLIDPSV** is a percentage of number of blockholders of an individual and non-family companies holding at least 5% of voting rights, and not represented on boards. **BLISACTNUM** reflects a number as institutions, corporations, and non-family owned companies holding at least 5% of voting rights, and represented on boards. **BLISACT** is a percentage of an institutions, corporations, and non-family companies holding at least 5% of voting rights and represented on boards. **BLISPSVNUM** is a number of an institutions, corporations, and non-family companies holding at least 5% of voting rights and not represented on boards. **BLISPSV** is a percentage of an institutions, corporations, and non-family companies holding at least 5% of voting rights and not represented on boards. **BOARDSIZE** constitutes the number of board members. **BOARDOWN** is defined as a percentage of shareholding by all members of board of directors. **INEDNUM** represents the number of independent directors to total directors. **INEDBRD** represents the fraction of independent directors to total directors. **INEDOWN** is a percentage of independent directors to total directors. **EXECDIRNUM** is a number of professional CEOs involved in the board's day to day operations. **EXECDIRBRD** denotes the fraction of professional CEOs involved in the board's day to day operations. **EXECDIROWN** is defined as a percentage (%) of professional CEOs involved in the board's day to day operations. **D4FOUNDER** is defined as 1 if a firm has a founder on its board; 0 otherwise. **D4FAIRNESS** is defined as 1 if an acquiring firm uses FO; 0 otherwise. **D4TOEHOLD** is defined as 1 if shares are held by an acquirer in a target firm prior to the acquisition announcement. **TOEHOLDOWN** is defined as a percentage of shares held by an acquirer in a target firm prior to the acquisition announcement. **D4CASH** is defined as 1 if a company is fully acquired by cash; 0 otherwise. **D4MIXED** is defined as 1 if a company is acquired by a mixture of cash and other instruments; 0 otherwise. **D4PUBLIC** is defined as 1 if a target is a listed company; 0 otherwise. **CONSIDERATION** is defined by dividing the dollar amount of the deal value by the market value of the acquiring firm.

The average board size (BOARDSIZE) of the 203 sampled firms is 7 and the number ranges from three to 15. The average director ownership (BOARDOWN) is 30.49% and the range of director ownership is between 0 and 74.93%. On average, the proportion of independent directors on the board of directors (INEDBRD) is 45.48% with at most eight independent directors (INEDNUM) on the board. Meanwhile, the average of independent non-executive director ownership (INEDOWN) is 0.51% with a range between 0 and 7.99%.

Furthermore, the average number of executive directors (EXECDIRNUM) on company boards is three with the average of 36.02% of the directors are executive directors (EXECDIRBRD). The average ownership percentage by executive directors (EXECDIROWN) is 25.07%. The highest ownership by executive directors is observed in Brahim's Holding Bhd., where executive directors hold 74.92%. The presence of founder-directors (D4FOUNDER) is observed in 10.34% of the sample, or 21 companies. 42 bidding firms, or 20.69% of the sampled firms, seek the service of financial advisors in providing letters to minority shareholders (FO). The possible explanations for the fairness opinion are reverse takeover by acquirers and conflict of interest faced by acquirers' directors. CEO duality is observed only in 10 companies out of 203 sampled companies. Since the number of observations is very small, it is not included in further analyses. As for toehold, 22.66% or 46 of the acquiring firms have toehold (D4TOEHOLD) prior to the acquisitions. The maximum percentage of toehold (TOEHOLDOWN) is detected for Paramount Corporation Bhd., which holds 85% in KDU University College Sdn. Bhd.

Four control variables are included in this study, namely method of payment, types of target and consideration. As for the method of payment, 88.18% of the acquiring firms used cash (D4CASH). Generally, stock-financing in mergers and acquisitions (M&As) has complicated procedures[9] compared to cash financing. Thus, most acquirers prefer to use cash. Another plausible explanation for the widespread use of cash financing is to avoid share dilution and consequently control of the substantial shareholders of acquiring firms. This result is consistent with Mat-Rahim and Pok (2013), who show that 80% of acquirers tend to use cash. As for the rest of the acquisitions, 7.88% used stock financing while 3.94% used a mixture of cash and stock (D4MIXED).

Moreover, for the type of target firms, on average, 7.39% or 15 target firms are public firms. The highest director ownership of 74.93% is recorded by Brahim's Holding Bhd. Finally, it can be seen that the average consideration (CONSIDERATION) paid by the acquirer to a target is 22.60%. The minimum and maximum values of consideration are 5% and 215% respectively. The maximum value is observed for GUH Holding Bhd., which proposed to issue 215% of its outstanding stock to acquiring Teknoserv Engineering Sdn Bhd.

4.3   Univariate Analyses

This section discusses the results of univariate analyses for relevant dummy independent variables. Tests of difference in means, assuming normal distribution, and Mann-Whitney U, assuming non-normal distribution, are used to investigate the existence of differences between the two groups. The dummy independent variables

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[9] Malaysia Code on Take-Overs and Mergers 2010 (p. 31) requires that acquires obtain approval from Securities Commission in case of stock financing.

used are for family ownership, blockholder, fairness opinion, toehold, cash, mixed and public target firms.

4.3.1   The Effects of Family Ownership on Acquisition Announcements

Table 4.7 shows the results of family ownership types (family and non-family firms) on acquisition announcements, where the cut-off point for ownership to be considered as a family firm is 10%. There are 158 family firms while the other 45 are non-family firms. The returns in the long window period of 121 days (-60,60) show that non-family firms earn a significant return of 12.522% while for family firms, the return earned is 4.273% but not significant. However, the difference in CAAR between these two groups for the event window (-60,60) is not significantly different from zero.

Meanwhile, for short window periods in (-5,1), (-3,1) and (-1,1), the returns to family firms are 2.477%, 1.764% and 1.172% respectively and are all significantly different from zero at the one-percent level while the returns to non-family firms are not different from zero. When the differences between the two groups are tested, it is found that only the difference for the window (-3,1) is significantly different at the 5% level. This result is supported by those of Craninckx, Huyghebaert (2015), Andrè *et al.*, (2014) and Bouzgarrou and Navatte (2013), who find that family-controlled firms generate returns of 2.58%, 1.53%, 2.816% respectively in a short window period of (-1,1) and these returns are significantly different from those of non-family firms.

The significant returns over short window periods show that family-controlled firms would engage in value-creating acquisitions. The positive returns showed that family ownership could lead to higher efficiency through the family's focus on long-term

objectives, such as building long-term reputation with their stakeholders and continuity of family business over future generations (Ruiz & Requejo, 2010). In addition, firms controlled by families could provide effective monitoring of managerial actions and thus, managers would make better decisions and cannot use acquisitions as a way of gaining greater job security and expanding their compensation packages, to the detriment of minority shareholders' interests (DeCesari *et al.* 2016). In Panel B, a firm is considered as family controlled if a family owns at least 33% of shares outstanding. The results in Panel B are similar to those of Panel A. Family firms outperform non-family firms in short event windows.

4.3.2 The Effects of Blockholders on Acquisition Announcements

The results of the presence of blockholders on acquisitions are summarized in Panel C of Table 4.7. Blockholders, either active, passive or a combination of both, are present in 152 acquiring firms. If the role of the blockholder affects management action through monitoring, they can also influence the performance of the operation in bidding firms. In addition, blockholders will also ensure that the bidding company does not overpay for the target company. The results show that for firms with blockholders, CAARs are positive and significant for all window periods except for a for a three-day event window (-1,1). The CAARs are 6.993% (p=0.028), 1.863% (p=0.003) and 0.986% (p=0.077) for the 121-day event window (-60,60), seven-day event window (-5,1) and five-day event window (-3,1) respectively. As for the 51 sample firms that do not have blockholding, CAARs are positive and significant for short term window periods of (-5,1), (-3,1) and (-1,1).

Table 4.7
The Effect of Governance Characteristics on Acquisition Announcements

	Panel A: Family≥10% and Non-Family≤ 10%			Panel B: Family≥33% and Non-Family≤ 33%			Panel C:Presence of Blockholder and Non-Presence of Blockholder		
Event windows	Family (158)	Non-family (45)	-p-value of Indpt t-test (Mann Whitney U test)	Family≥33 % (99)	Family≤33 % (104)	-p-value of Indpt t-test (-p- value of Mann Whitney U)	Presence of Blockholder (152)	Non-Presence of Blockholder (51)	-p-value of Indpt t-test (Mann Whitney U)
CAAR (-60,60)	4.273% (0.148)	12.522%** (0.023)	0.179 (0.473)	4.109% (0.265)	7.999%** (0.030)	0.452 (0.948)	6.993%** (0.028)	3.447% (0.409)	0.497 (0.875)
CAAR (-5,1)	2.477%*** (0.000)	0.794% (0.545)	0.243 (0.120)	2.990%*** (0.000)	1.260% (0.111)	0.108 (0.030)**	1.863%*** (0.003)	2.822%*** (0.010)	0.438 (0.712)
CAAR (-3,1)	1.764%*** (0.000)	-0.555% (0.570)	0.039** (0.007)***	1.980%*** (0.005)	0.556% (0.369)	0.125 (0.032)**	0.986%* (0.077)	2.038%** (0.015)	0.285 (0.198)
CAAR (-1,1)	1.172%*** (0.007)	0.122% (0.809)	0.114 (0.225)	1.700%*** (0.004)	0.214% (0.594)	0.037** (0.023)**	0.618% (0.145)	1.897%*** (0.003)	0.088* (0.076)*

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

The positive results of both groups show that managers, irrespective of the presence of blockholders, try to increase their firm values by engaging in acquisitions that would lead to value creation. Finally, none of the CAARs between these two groups is significantly different from each other except for the event window of (-1,1) where the CAAR of firms with no blockholding is greater than that of firms with blockholding. However, the difference is only significant at the 10% level.

4.3.3 The Effects of Active Blockholders on Acquisition Announcements

This section separates the firms based on presence of active blockholders. If monitoring of managerial actions lead to value creation, it is expected that acquiring firms with the presence of active blockholders would do better than that of firms with no active blockholders. Table 4.8 summarizes the results of the presence of active blockholders. Panel A in Table 4.8 shows that 91 firms have active blockholders while other 112 firms do not have active blockholders. For the event window (-60,60), firms with active blockholders earn a greater return (8.251%) than firms with no blockholders, which earn a return of 4.356%. However, this difference is not statistically significant. However, for shorter event windows, CAARs of firms with no blockholders are greater than those of firms with active blockholders. Again, none of the differences are significantly different except for the event window (-3,1), where the return of firms with no blockholders is greater than that of firms with active blockholders. However, the difference is significant only at 10% level. The overall evidence seems to indicate that active blockholdings do not lead to greater returns. In this case, it could be surmised that managers of acquiring firms work to increase shareholders' wealth, irrespective of the presence of active blockholders.

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Table 4.8 shows the results if an active blockholder is further segregated into an active institutional blockholder (see Panel B) or an active individual blockholder (see Panel C). The results of Panel B are similar to those of Panel A except that now none of the differences is significant even at the 10% level. This indicates that the presence of active institutional blockholders does not lead the acquiring firms to perform better than that of acquiring firms with no presence of active institutional blockholders.

However, for active individual blockholders, the results as summarized in Panel C are different from those of either Panel A or Panel B. The CAARs of the 54 firms with active individual blockholders are not significantly different from zero for all event windows while for the other group with no active individual blockholders, all CAARs are positive and significantly different from zero. The difference in CAAR between the two groups is significant for the event window of (-3,1) at a 5% level. These results indicate that active individual blockholders do not play an effective role in monitoring managerial actions.

4.3.4 The Effects of Passive Blockholders on Acquisition Announcements

Table 4.9 compares the results of acquiring firms with presence of passive blockholders and those without the presence of passive blockholders. If monitoring of managerial actions leads to value creation, it is expected that acquiring firms with the presence of active blockholders would do better than those of firms with no active blockholders. Passive blockholders in this study are expected to have an impact on the acquiring firm because they have a shareholding of more than 5%.

Table 4.8

The Effect of Governance Characteristics on Acquisition Announcements

	Panel A: Presence of Active Blockholder and Non-Presence of Active Blockholder			Panel B: Presence of Active Institutional Blockholder and Non- Presence of Active Institutional Blockholder			Panel C: Presence of Active individual Blockholder and Non-Presence of Active Individual Blockholder		
Event windows	Presence of Active Blockholder (91)	Non-Presence of Active Blockholder (112)	-p-value of Indpt t-test (Mann Whitney U)	Presence of Active Institutional Blockholder (43)	Non-Presence of Active Institutional Blockholder (160)	-p-value of Indpt t-test (Mann Whitney U)	Presence of Active Individual Blockholder (54)	Non-Presence of Active Individual Blockholder (149)	-p-value of Indpt t-test (Mann Whitney U)
CAAR (-60,60)	8.251%** (0.023)	4.356% (0.238)	0.448 (0.717)	12.540%*** (0.011)	4.372% (0.148)	0.150 (0.216)	5.599% (0.275)	6.284%** (0.038)	0.908 (0.476)
CAAR (-5,1)	1.431%* (0.093)	2.651%*** (0.000)	0.266 (0.589)	2.900%*** (0.013)	1.890%*** (0.002)	0.430 (0.493)	0.542% (0.652)	2.670%*** (0.000)	0.114 (0.206)
CAAR (-3,1)	0.402% (0.569)	1.940%*** (0.002)	0.100 (0.079)*	1.664%* (0.096)	1.139%** (0.032)	0.637 (0.616)	-0.709% (0.423)	1.960%*** (0.000)	0.011*** (0.006) ***
CAAR (-1,1)	0.566% (0.250)	1.242%** (0.015)	0.336 (0.527)	0.819% (0.165)	0.971%** (0.022)	0.832 (0.915)	0.419% (0.549)	1.127%*** (0.010)	0.382 (0.477)

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

Even though they do not have representation in the board of directors of the acquiring firms, they will make sure that investments taken by the acquiring firms do not lead to losses as losses would reduce their wealth. Table 4.9 summarizes the results of the presence of passive blockholders. Panel A shows that the presence of passive blockholders has no effect on acquiring firms' returns for all event windows. However, the returns to acquiring firms without the presence of passive blockholders are all positive and significantly different from zero. The returns to event windows of 121-days (-60,60), seven-days (-5,1), five-days (-3,1) and three-days (-1,1) are 7.808%, 3.371%, 2.095% and 1.447% respectively. The CAARs to five-day and seven-day event windows are statistically different between the two groups, based on both parametric and non-parametric tests. Thus, it can be concluded that passive blockholders play a lesser role in creating value through acquisitions.

Panel B and Panel C of Table 4.9 summarize the results of the presence of passive institutional blockholders and passive individual blockholders respectively. Panel B shows that the presence of passive institutional blockholders leads to better performance as the returns to event windows (-5,1) and (-1,1) are 2.245% and 1.367% respectively with both values being significant. However, the differences in returns between the two groups, i.e. firms with the presence of passive institutional blockholders and firms without the presence of passive institutional blockholders, are not statistically significant. The results in Panel C are a reflection of the results in Panel A. The results show that the presence of passive individual blockholders are associated with insignificant returns to acquiring firms for all event windows while the returns are positive and significant for firms without the presence of passive individual

blockholders. Thus, it can be concluded that passive institutional blockholders could monitor managerial actions better than passive individual investors.

4.3.5   The Effects of Founder-Director on Acquisition Announcements

Table 4.10 shows CAARs when firms are classified based on founders who serve as directors. The 21 firms with founder-directors experience positive and statistically significant CAARs for 121-day event window (-60,60) and seven-day event window (-5,1), where the CAARs are 13.312% and 1.498% respectively. CAARs over shorter window periods of (-3,1) and (-1,1) are not significant. As for the other 182 firms with no founder-directors, CAARs are positive and significant over all four window periods. The CAARs are 5.270%, 2.174%, 1.412% and 0.962% for event windows (-60,60), (-5,1), (-3,1) and (-1,1) respectively. However, CAARs between the two groups are not significantly different as the p-values of both parametric and non-parametric tests are greater than 10%. These results show that the existence of founder directors does not lead to value destruction or creation.

Table 4.10
The Effect of Founder Director on Acquisition Announcements

Event windows	Founder (21)	Non-founder (182)	Independent t-test -p-value	Mann Whitney U test -p-value
CAAR(-60,60)	13.312%* (0.077)	5.270%* (0.057)	0.303	0.483
CAAR(-5,1)	1.498%** (0.021)	2.174%*** (0.000)	0.613	0.875
CAAR(-3,1)	-0.148% (0.881)	1.412%*** (0.006)	0.165	0.413
CAAR(-1,1)	0.737% (0.254)	0.962%** (0.014)	0.761	0.899

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

Table 4.9
The Effect of Governance Characteristics on Acquisition Announcements

	Panel A : Presence of Passive Blockholder and Non-presence of Passive Blockholder			Panel B: Presence of Passive Institutional Blockholder and Non-Presence of Passive Institutional Blockholder			Panel C: Presence of Passive Individual Blockholder and Non-Presence of Passive Individual Blockholder		
Event windows	Presence of Passive Blockholder (103)	Non-Presence of Passive Blockholder (100)	-p-value of Indpt t-test (Mann Whitney U)	Presence of Passive Institutional Blockholder (59)	Non-Presence of Passive Institutional (144)	-p-value of Indpt t-test (Mann Whitney U)	Presence of Passive Individual Blockholder (55)	Non-Presence of Passive Individual Blockholder (148)	-p-value of Indpt t-test (Mann Whitney U)
CAAR (-60,60)	4.445% (0.241)	7.808%** (0.030)	0.515 (0.545)	6.767% (0.227)	5.867%** (0.043)	0.896 (0.510)	1.999% (0.661)	7.627%** (0.015)	0.308 (0.185)
CAAR (-5,1)	0.873% (0.246)	3.371%*** (0.000)	0.020** (0.021)**	2.245%*** (0.000)	1.761% (0.140)	0.714 (0.954)	-0.168% (0.850)	2.948%*** (0.000)	0.005*** (0.014)***
CAAR (-3,1)	0.430% (0.523)	2.095%*** (0.001)	0.071* (0.026)**	1.521% (0.112)	1.139%** (0.032)	0.724 (0.971)	-0.732% (0.361)	1.987%*** (0.000)	0.006*** (0.005)***
CAAR (-1,1)	0.445% (0.400)	1.447%*** (0.003)	0.155 (0.063)*	1.367%* (0.055)	0.764%* (0.063)	0.457 (0.733)	-0.227% (0.731)	1.372%*** (0.001)	0.042** (0.053)*

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

4.3.6 The Effects of Fairness Opinion on Acquisition Announcements

Table 4.11 shows that the CAARs for the 42 firms that provide fairness opinion are not significant except for the longest widow period of (-60,60), where the CAAR is a statistically significant 11.86%. This result shows that FO could reduce agency problems between substantial and minority shareholders over a longer period. As for the shorter term windows, none of the CAAR is significant. These results indicate that over shorter periods, FO neither increases nor mitigates the agency problems. As for the 161 non-FO firms, CAARs are significant for short window periods of (-5,1), (-3,1) and (-1,1). It seems that for short term windows, investors reacted more favorably to acquisitions by firms that do not have to provide FO. However, none of the differences in CAAR between the two groups is significantly different as the p-values of both parametric and non-parametric tests are less than 10%. The result of this study differs from that of Frye and Wang (2010) who find that firms with FO earned lower negative returns compared to those firms without FO and the difference is significant at 1% level.

Table 4.11
The Effect of Fairness Opinion on Acquisition Announcements

Event windows	FO (N=42) Mean (%) (p-value)	NON-FO (N=161) Mean (%) (p-value)	Independent t-test -p-value	Mann Whitney U test – p-value
CAAR(-60,60)	11.860%** (0.033)	4.600% (0.118)	0.241	0.451
CAAR(-5,1)	1.442% (0.134)	2.276%*** (0.000)	0.465	0.586
CAAR(-3,1)	0.802% (0.354)	1.367%*** (0.012)	0.578	0.966
CAAR(-1,1)	0.183% (0.800)	1.136%*** (0.005)	0.250	0.628

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

4.3.7 The Effects of Toehold on Acquisition Announcements

46 acquirers have a toehold in their targets prior to acquisition announcements while for the other 157 acquirers, they do not have any ownership, or toehold, in their target firms. Panel A of Table 4.12 shows that toehold gives a positive impact in a short term window period (-5,1) of 1.534% and it is significant at the 5% level. This result is similar to the result of Caroll and Griffith (2010) who find that acquiring firms with toehold earn a return of 4.98% for a seven-day event window (-3,3). However, for the other window periods, the abnormal returns are not statistically different from zero.

This finding is consistent to those of Cai and Sevilir (2012) and Bates, Lemmon and Linck (2006), who argue that even though acquirers have a stake in the targets, they cannot pay lower prices as the other shareholders of target firms expect fair prices. Meanwhile, acquiring firms without toehold earn positive and significant returns in all event windows of (-60,60), (-5,1), (-3,1) and (-1,1). The CAARs are 8.561%, 2.271%, 1.463% and 0.949% respectively. The differences in returns between these two groups are not significant except for the event window of (-60,60) where the difference is only significant at 10%. Thus, it can be concluded that acquirers without toeholds earn at least similar returns to acquirers with toeholds.

4.3.8 The Effects of Cash on Acquisition Announcements

Panel B of Table 4.12 shows that 179 acquisitions are cash funded while the other 24 acquisitions are either financed by stock or a mixture of stock and cash. The fact that most of the acquisitions are financed by cash show that acquirers try to circumvent the regulations of the Securities Commission that require acquirers to get shareholders' approval if the acquisitions are financed by stock. This study shows that almost all the

acquiring firms are owned by substantial shareholders, thus they might use cash for their personal interest. Moreover, by using cash funding it could prevent dilution of control by the majority shareholders and the formation of new blockholders. The results show that acquisitions financed by cash earned significant returns ranging from 0.698% to 5.322% in all event windows. Meanwhile, acquirers in mixed acquisitions 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 acquisitions 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. The results differed from those of Banerjee *et al.*, (2014) Chikh and Filbien (2011), and King *et al.*, (2004) who find insignificant returns for acquirers using stock payment in the event window of (-2,2). Meanwhile, Martynova & Renneboog (2008) find that stock-financed acquisitions lead to significant negative return to the acquirers than those of all-cash bids in the US.

To conclude, the choice of payment method depends on the acquirer's stock price, whether it is overvalued or undervalued. For example, acquiring firms tend to use the stock-payment method if the stock of the target company is overvalued.

4.3.9   The Effects of Acquisitions of Either Public Listed Companies or Private Non-Listed Companies on Acquisition Announcements

Panel C of Table 4.12 shows the abnormal returns when acquirers acquired shares in either the 15 public listed firms or 188 private non-listed firms. The figures indicate that most of the target firms in Malaysia are privately held.

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Table 4.12
The Effect of Deal Characteristics on Acquisition Announcements

Event windows	Panel A : Toehold and Non-Toehold			Panel B: Cash and Stock and Cash (Mixed)			Panel C: Public and Private		
	Toehold (N=46) Mean (%) (P-value)	Non-Toehold (N=157) Mean (%) (P-value)	-p-value of Indpt t-test (Mann Whitney U)	Cash (N=179) Mean (%) (P-value)	Mixed (N=24) Mean (%) (P-value)	-p-value of Indpt t-test (Mann Whitney U)	Public (N=15) Mean (%) (P-value)	Private (N=188) Mean (%) (P-value)	-p-value of Indpt t-test (Mann Whitney U)
CAAR (-60,60)	-2.292% (0.689)	8.561%*** (0.003)	0.093* (0.061)*	5.322% (0.040)**	11.918% (0.273)	0.552 (0.100)	5.297% (0.466)	6.166%** (0.025)	0.910 (0.604)
CAAR (-5,1)	1.534%** (0.049)	2.271%*** (0.000)	0.465 (0.695)	1.884% (0.001)***	3.743% (0.023)**	0.267 (0.365)	4.321% (0.109)	1.927%*** (0.001)	0.370 (0.408)
CAAR (-3,1)	0.524% (0.500)	1.463%*** (0.010)	0.325 (0.517)	0.915% (0.062)*	3.752% (0.011)***	0.060* (0.089)*	3.627% (0.152)	1.061%** (0.022)	0.310 (0.350)
CAAR (-1,1)	0.905% (0.190)	0.949%** (0.022)	0.956 (0.841)	0.698% (0.062)*	2.738% (0.016)**	0.079 * (0.085)*	3.057% (0.167)	0.770%** (0.025)	0.299 (0.595)

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

The returns are insignificant for acquisitions of public listed firms. These insignificant results might be due to the small sample of public firms.As for the 188 non-listed firms, a significant positive return 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 on the stock exchange, acquirers may have trouble in assess the market value of the targets. In this case, the acquirers would pay a lower price as they do not want to overpay for the target. Furthermore, Peng and Isa (2012) argue that in the Malaysian market, acquirers face difficulties in getting accurate and comprehensive information about target companies which are not listed on Bursa Malaysia. The information about private targets are also more costly and difficult to obtain compared to public companies. Therefore in this case, an acquiring firm could pay a lower price. Furthermore, private targets face other risks such as liquidity risks. Thus, the acquirers could pay a lower price as they could reduce this liquidity risk. In addition, Mat Nor and Ismail (2006) argue that private targets are more popular in Malaysia because of lower competition in acquiring them as compared to the public targets. The positive finding of this study is also consistent to that of Officer (2007), who shows that acquiring firms could get discounts of 15% to 30% for unlisted firms compared to those of listed firms. Nevertheless, when parametric and non-parametric tests are applied, no significant difference in returns are observed between the two groups.

4.4 Testing the Assumption of Ordinary-Least Square (OLS)

This study conducts several regression diagnostic tests in order to confirm that the assumptions of OLS are met and subsequently the validity of the results. The OLS diagnostic tests in this study include tests of multicollinearity, heteroscedasticity, autocorrelation, normality and outlier.

4.4.1 Multicollinearity Test

Multicollinearity exists when there is a high correlation between two variables. Gujarati and Porter (2009) state that multicollinearity might exist if the correlation coefficient is greater than 0.80. To overcome the problem of multicollinearity, one of the highly correlated variables should be dropped or additional data should be obtained (Gujarati & Porter, 2009). The results of the correlational analyses are summarized in Table 4.13. The correlation coefficient between variables is tested using pair-wise correlation.

The correlation between family directorship (FAMBRD) and family ownership (FAMOWN) is 0.4931 and significant at 1% level. Meanwhile, there are significant negative relationships between active institutional blockholders (D4BLISACT) and family ownership (FAMOWN) as well as family directorship (FAMBRD). The correlations are -0.5320 and -0.3861 respectively. Both are significant at the 1% level. The relationship between executive director (EXECDIRBRD) and family director (FAMBRD) is positive (0.3670) and significant at 1% level. Meanwhile, the correlation between family directorship (FAMBRD) and number of independent directors on boards (INEDBRD) is 0.3427. Meanwhile negative relationships are observed between executive director (EXECDIRBRD) and independent non-executive director (INEDBRD) as well as

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active institutional blockholders (D4BLISACT). The correlations are -0.4930 and -0.4099. Both correlations are significant at 1% level. Meanwhile, the relationship between cash (D4CASH) and mixed (D4MIXED) is negative at -0.5532 and statistically significant at 1% level. The rest of the correlations are less than 0.30.

Another method to test for multicollinearity in a regression model is by estimating variance inflation factor (VIF). In general, as the degree of collinearity increases, the VIF increases. If two variables are not correlated at all, the VIF will be 1. As a rule of thumb, a variable is said to be highly correlated with other variables if the VIF of the variable exceeds 10 (Gujarati & Porter, 2009). Table 4.14 shows the values of the VIFs for the model developed in Chapter Three.

Table 4.14
Variance Inflation Factor

Variable	VIF
FAMOWN	2.07
FAMBRD	1.65
D4BLIDACT	1.23
D4BLIDPSV	1.11
D4BLISACT	1.95
D4BLISPSV	1.15
BOARDSIZE	1.16
INEDBRD	1.60
EXECDIRBRD	1.72
D4FOUNDERDIR	1.13
D4FAIRNESS	1.14
D4TOEHOLD	1.09
D4CASH	1.79
D4MIXED	1.64
D4PUBLIC	1.13
CONSIDERATION	1.21
Mean VIF	1.42

Table 4.13
Correlation Coefficient for Independent Variables

	FAMOWN	FAMBRD	D4BLIDACT	D4BLIDPSV	D4BLISACT	D4BLISPSV	BOARDSIZE	INEDBRD
FAMOWN	1							
FAMBRD	0.4931***	1						
D4BLIDACT	-0.1294*	0.1392**	1					
D4BLIDPSV	-0.1267*	-0.048	0.0344	1				
D4BLISACT	-0.532***	-0.3861***	-0.1484**	-0.0448	1			
D4BLISPSV	-0.0535	0.0188	-0.0416	-0.1217*	-0.0398	1		
BOARDSIZE	0.0392	0.0107	-0.1134	-0.0846	0.1372**	0.2086***	1	
INEDBRD	-0.1937***	-0.3427***	0.0238	-0.0131	0.176***	-0.0874	-0.1751***	1
EXECDIRBRD	0.1683**	0.3670***	0.1399**	0.0016	-0.4099***	0.0275	-0.071	-0.493***
D4FOUNDER	0.0628	0.0347	0.1982***	0.0477	-0.1365**	0.0319	-0.1114	0.1227*
D4CASH	0.0767	-0.0269	-0.0213	-0.0514	-0.0716	-0.068	-0.0195	0.01
D4MIXED	0.0659	0.1264*	0.05	-0.0095	0.0189	0.0934	-0.0028	0.0383
D4PUBLIC	-0.0422	-0.0759	-0.1700**	-0.0027	0.1762***	-0.0149	0.0391	0.0415
D4TOEHOLD	-0.0894	-0.087	-0.1128	-0.0123	0.065	0.12	0.059	-0.0583
D4FAIRNESS	0.0002	-0.1314	-0.1148	-0.0104	0.0924	-0.0323	0.0747	-0.0602
CONSIDERATION	0.0879	0.0995	0.0002	0.0392	-0.1204*	0.0669	-0.0707	0.0904

	EXECDIRBRD	D4FOUNDER	D4CASH	D4MIXED	D4PUBLIC	D4TOEHOLD	D4FAIRNESS	CONSIDERATION
EXECDIRBRD	1							
D4FOUNDER	0.0977	1						
D4CASH	-0.0082	-0.0259	1					
D4MIXED	-0.0532	0.0975	-0.5532***	1				
D4PUBLIC	-0.1430**	-0.0959	-0.0715	0.1364*	1			
D4TOEHOLD	-0.0783	-0.0293	0.0524	-0.0492	0.1620**	1		
D4FAIRNESS	-0.0607	-0.0936	-0.2273***	0.0216	0.0882	-0.015	1	
CONSIDERATION	-0.0305	-0.0434	-0.2876***	0.0646	0.0846	-0.0898	0.0634	1

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

The average VIF for the regression model is 1.42 while the score for each variable is less than 3. In summary, both correlations and VIFs indicate that the multicollinearity problem does not exist in this model.

4.4.2 Heteroscedasticity

Heteroscedasticity is conducted in this study because the problem of heteroscedasticity is likely to be more common in cross-sectional data due to different sizes of data. Heteroscedasticity is present when the conditional variance of Y_i varies with X_i, which indicates that the variances of Y_i is not constant. The Breusch-Pagan/Cook-Weisberg test is used to detect the presence of heteroscedasticity. The Breusch-Pagan/Cook-Weisberg value is 17.07 and it is statistically significant at the 1% level. Therefore, to overcome the heteroscedasticity problem, the robust standard errors procedure is applied.

4.4.3 Autocorrelation

Autocorrelation is observed when the residual of one observation is related to the residual of any other observation. Autocorrelation is usually a problem of time series data. Even though the data of this study is cross-sectional in nature, the existence of autocorrelation, or more correctly spatial autocorrelation, is still tested since acquisitions might be clustered in a certain period. Thus, autocorrelation might be present. If such situations occur, the OLS estimators no longer have the best linear unbiased properties as its variance is not the least minimum. To detect autocorrelation, the Durbin-Watson (DW) test is employed. The estimated DW value for this sample is 1.8848 which lies above the upper limit of DW table (dU = 1.8477). Since the DW value of 1.8848 is greater than the critical value of 1.8477, the null hypothesis of no autocorrelation is not rejected. Thus, this study

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will use robust standard errors that are adjusted for heteroscedasticity but not autocorrelation.

4.4.4 Normality Test

Normality assumption deals with the probability distribution of OLS estimators. The OLS estimators are linear functions of error terms. Therefore if error terms are normally distributed, hypothesis testing of the estimators are very straightforward as we could use t, F and χ^2 distributions for statistical tests of the regression models.

To detect the presence of normality, the Jarque-Bera (JB) test is used. The JB value is 38.6731 with a p-value 0.0000 as shown in Figure 4.2. This value indicates that the residuals are not normally distributed, thus rejecting the null hypothesis. However, Gujarati and Porter (2009) and Greene (2012) argue that if the sample is large, the normality assumption could be relaxed.
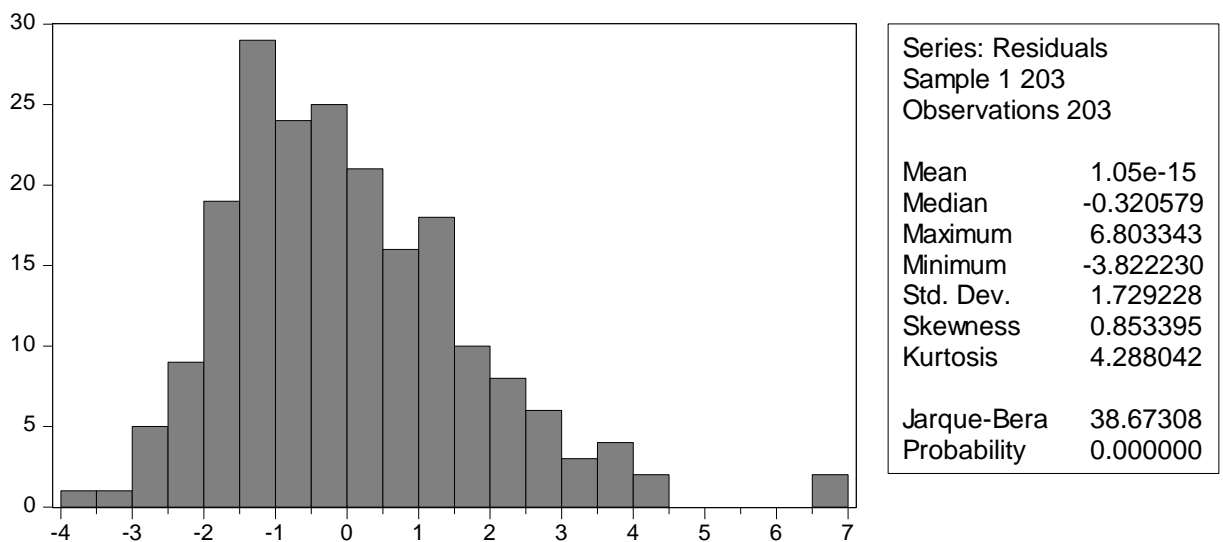
Figure 4.2
The Test of Normality Distribution

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4.4.5 Outlier Test

An outlier is defined as an observation with a "large residual". It is identified by the difference, either positive or negative, between the actual value of the regression and the value estimated from the regression model (Gujarati & Porter, 2009). This study analyzes outliers by looking at the standardized residuals, which compare residuals to the entire set excluding itself. The residuals will be divided by their estimated standard errors to get the standardized residuals. An outlier problem is present if the standardized residuals' values are greater than 3.3 (Tabachnick and Fidell, 2007, p. 128).

4.5   Multivariate Regression Results

This section presents the results of the models utilised in this study. The outcomes are analysed by incorporating the ordinary least squares (OLS). The model and its variants are estimated as follows:

Model:

$\text{CAR}_i = \beta_0 + \beta_1 \text{ FAMOWN}_i + \beta_2 \text{ FAMBRD}_i + \beta_3 \text{ D4BLIDACT}_i + \beta_4 \text{ D4BLIDPSV}_i + \beta_5 \text{ D4BLISACT}_i + \beta_6 \text{ D4BLISPSV}_i + \beta_7 \text{ BOARDSIZE}_i + \beta_8 \text{ INEDBRD}_i + \beta_9 \text{ EXECDIRBRD}_i + \beta_{10} \text{ D4FOUNDER}_i + \beta_{11} \text{ D4FAIRNESS}_i + \beta_{12} \text{ D4TOEHOLD}_i + \beta_{13} \text{ D4CASH}_i + \beta_{14} \text{ D4MIXED}_i + \beta_{15} \text{ D4PUBLIC}_i + \beta_{16} \text{ CONSIDERATION}_i + \varepsilon_i$

The dependent variable, CAR, refers to cumulative abnormal return of a firm during the five-day event window (-3,1). Since the Breusch-Pagan/Cook-Weisberg value is a statistically significant 17.07 while the Durbin-Watson d value is not significant, the Robust Standard Error procedure correcting for heteroscedasticity is used. Table 4.15

displays the regression results a variation of Model 1 which comprises of Model A to Model C. In Table 4.15, the dummy variables are used as the proxy for the presence of individual and institutional blockholders, while fraction of independent or executive directors are used as a proxy for type of investors. Model A includes all the involved variables, Model B omits insignificant control variables while Model C excludes all insignificant variables.

The F-statistics for Model A is 2.41 and it is statistically significant at 1%. The F-statistics indicates that jointly, the coefficients of the independent variables are not equal to zero. The regression equation is able to explain 18.40% of the variations in the dependent variable in Model A. The adjusted R-square is 11.38% and it is consistent with those in previous studies. Craninckx and Huyghebaert (2015) find that the adjusted R-squared should be between 18.7% and 19.6% for event window (-35,1) while Bauguess *et al.* (2009), Benson *et al.* (2015) and Field and Mkrtchyan (2017) argue that the adjusted R-squared for a three-day event window of (-1,1) to be between 9.2% and 29.1%. Finally, Ruiz and Requejo (2010) observe that the adjusted R-squared are between 14.26% and 15.53% for a five-day event window of (-2,2).

The first two variables in Model A measure the effects of family control on abnormal returns. The family ownership (FAMOWN) indicates a positive coefficient of 0.068 and it is statistically significant (p-value = 0.02). The result indicates that a one standard-deviation increase in family ownership leads to a 1.47%[10] increase in abnormal returns.

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[10] Coefficient of FAMOWN multiplying with standard deviation.

As for the proportion of family members on the board of directors (FAMBRD), its coefficient is 0.0457 and is statistically significant at 10% level. The outcome shows that an increase in one standard deviation of family directorship leads to a 0.90%[11] increase in abnormal returns. Thus, the finding supports the argument that family ownership or family directorship can add value to acquiring firms' shareholders. This is similar to that of other studies (see for examples, Bougarrou & Navatte, 2013; André *et al.*, 2014; Crannickx & Huyghebaert, 2015; Ben-Amar & André, 2006).

As the family's wealth is tied up to the performance of the firm, family firms are more risk averse, thus they tend to be more cautious in making investment decisions. For example, they could be choosy in identifying a target firm and they would not overpay for the target firm. Furthermore, they have more incentive to monitor target firms. The results of family ownership and family directorship show the non-existence of managerial entrenchment or agency problem between majority and minority shareholders.

Thus, the higher the family ownership or directorship stake, the higher are the abnormal returns. These findings support the hypothesis that there is a significant effect of family ownership and family directorship on acquisition announcements. Next, it is believed that blockholders can monitor performance of acquisitions (Shleifer & Vishny, 1986). If they are powerful, they could replace the underperforming managers. Studies done by Walters *et al.,* (2007) and Bauguess *et al.* (2009) show that active blockholders could play their

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[11] Coefficient of FAMBRD multiplying with standard deviation.

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Table 4.15

Multiple Regressions for Variables on Returns to Acquirers (Model 1)

Variable	Model 1A	Model 1B	Model 1C
FAMOWN	0.0680**	0.0683***	0.0762***
	(0.0222)	(0.0147)	(0.0009)
FAMBRD	0.0457*	0.0444	
	(0.0967)	(0.1046)	
D4BLIDACT	-0.0229**	-0.0242**	-0.0218**
	(0.0233)	(0.0160)	(0.0233)
D4BLIDPSV	-0.0208**	-0.0203**	-0.0220**
	(0.0293)	(0.0269)	(0.0217)
D4BLISACT	0.0211	0.0233	0.0219*
	(0.1609)	(0.1075)	(0.0741)
D4BLISPSV	0.0059	0.0051	
	(0.6182)	(0.6377)	
BOARDSIZE	-0.0010	-0.0009	
	(0.6573)	(0.6702)	
INEDBRD	0.0938*	0.0927**	
	(0.0552)	(0.0487)	
EXECDIRBRD	0.0093	0.0095	
	(0.7447)	(0.7371)	
D4FOUNDER	-0.0158	-0.0165	
	(0.2236)	(0.1917)	
D4FAIRNESS	-0.0134	-0.0126	-0.0169*
	(0.1850)	(0.2050)	(0.0852)
D4TOEHOLD	-0.0082	-0.0060	
	(0.4376)	(0.5088)	
D4CASH	-0.0382**	-0.0346**	-0.0371**
	(0.0257)	(0.0258)	(0.0223)
D4MIXED	-0.0089		
	(0.8313)		
D4PUBLIC	0.0192		
	(0.5238)		
CONSIDERATION	-0.0069		
	(0.7349)		
CONSTANT	-0.0134	-0.0176	0.0314
	0.7269	0.6521	0.1078
No. of Observations	203	203	203
F-stat	2.41	2.82	5.63
Sign F-stat	0.0026	0.0010	0.0000
R^2	0.1840	0.1776	0.1379
Adj. R^2	0.1138	0.1210	0.1115

FAMOWN relates to the percentage of voting rights an individual or a family holds, directly or indirectly (at least 10%), while the aggregate shareholdings of other major shareholders are not greater than 10%. **FAMBRD** refers to a fraction member of a family. **D4BLIDACT** is defined as a dummy of individual block holder and non-family owned companies having at least 5% of voting rights, and represented on the board. **D4BLIDPS** reflects a dummy of individual block holder and non-family owned companies holding at least 5% of voting rights and not represented on the board. **D4BLISACT** reflects a dummy of institutions, corporations, and non-family owned companies holding at least 5% of voting rights and represented on the board. **D4BLISPSV** is a dummy of institutions, corporations, and non-family companies holding at least 5% of voting rights and not represented on board. **BOARDSIZE** constitutes the number of board members. **INEDBRD** represents the fraction of independent directors to total directors. **EXECDIRBRD** denotes the fraction of professional CEOs involve the board's day to day operations. **D4FOUNDER** = is defined as 1 if a firm has a founder on its board; 0 otherwise. **D4CASH** = is defined as 1 if cash-acquisition; 0 otherwise. **D4MIXED** = is defined as 1 if mixed-acquisition; 0 otherwise. **D4PUBLIC** = is defined as1 if a target is a listed company; 0 otherwise. **D4TOEHOLD** = is defined as 1 if shares held by an acquirer in a target firm prior to the acquisition announcement. **D4FAIRNESS** is defined as 1 if an acquiring firm uses FO; 0 otherwise. **CONSIDERATION** is defined by dividing the dollar amount of the deal value by the market value of the acquiring firm. The number in the bracket is the p-value.

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role in companies and generate significant positive returns for (-3,3) and (-1,1) window periods. As for passive blockholders, Bauguess *et al.* (2009) find that they do not play a role in explaining returns to acquirers, as evident from the insignificant effect for a three-day event window (-1,1). However, in this study, active individual blockholders (D4BLIDACT) and passive individual blockholders (D4BLIDPSV) bring about value-decreasing returns to acquirers. The existence of either active or passive individual blockholders on board leads to a 2.29% or 2.08% reduction in abnormal returns, respectively. Both coefficients are statistically significant at the 5% level. There are two reasons for the significant negative returns. First, despite having 5% shareholding, active individual blockholders do not play an active role in monitoring, which subsequently reduces their involvement in decision-making. Second, the passive individual blockholder would only aim to diversify their investment in order to reduce the overall risk without any involvement in firm's management.

This study finds that the active institutional blockholders (D4BLISACT) and passive institutional blockholders (D4BLISPSV) have an insignificant effect on acquirers' returns, which highlights the existence of non-synergistic benefits (Masulis *et al.*, 2007; Bouzgarrou & Navatte, 2013). As one of the mechanisms to reduce agency's problem, the active institutional blockholders plays a role in monitoring the managerial actions to ensure acquirers generate returns in the acquiring firms. Nevertheless, the insignificant result provides insufficient evidence to support the blockholder's influence on returns. This finding is however supported previous studies by Masulis *et al.* (2007) and Bouzgarrou and Navatte (2013) who recognize that outsider blockholders have no significant effect on shareholders' wealth regardless of whether they have representation

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on the board or not for a five-day event window (-2,2) and a three-day event window (-1,1).

Another governance characteristic included in this study is the board's size (BOARDSIZE). Studies by Ben-Amar and André (2006), Carline *et al*. (2009), Chikh and Filbien (2011), and André *et al*. (2014) find that board's size can lead to the value-decreasing returns to acquirers for short window periods of (-1,1) and (-2,2). They claim that boards of larger size that overseeing the acquiring firms usually serve as impediments to the efficient operating strategies. In addition, a large board is less effective in monitoring and grants more freedom to the CEO particularly in decision making. However, in this study, board size does not have a significant effect on shareholders' wealth. The coefficient of BOARDSIZE is an insignificant 0.0010.

Following that, this study finds that the fraction of independent directors (INEDBRD) on the board does play a rather significant role and eventually lead to positive and significant returns to acquiring firms. The coefficient of 0.0938 indicates that a one standard deviation increase in proportion of independent directors gives rise to a 1.30% increase in abnormal returns. In reviewing the literature, INEDBRD is often find to be a good governance mechanism since it represents the shareholders' interest. The independent directors bring about additional expertise and valuable business relationship that should benefit the firm and serve as the drivers of growth performance of M&As (Walters *et al*., 2007; Pham *et al*. 2015). It is believed that an independent board would then increase the directors' capacity in influencing the firm's strategic decisions in M&As (McDonald *et al*., 2008). This is in line with findings from previous studies conducted by Ben-Amar and André

(2006), Pham *et al*. (2015) and Walters *et al*. (2007) whose findings also support the claim that independent directors have a statistically significant positive effect on acquirers for short window periods.

Furthermore, the proportion of executive directors on the board (EXECDIRBRD) indicates that executive directors have no significant effect on shareholders' wealth. The result shows an insignificant coefficient of 0.0093 which is consistent with Duta *et al*., (2011) but differs with the outcomes concluded by Field and Mkrtchyan (2017) and André *et al*. (2014). Field and Mkrtchyan (2017) note that there are positive returns for a three-day event window (-1,1) while André *et al*. (2014) finds negative returns for a three-day event window (-1,1). In conclusion, this signifies that the proportion of executive directors on the board neither generate nor destroy value to acquiring firms.

The dummy for founder (D4FOUNDER) shows an insignificant coefficient of -0.0158 for a five-day (-3, 1) event window. Thus, this study is unable to show the effectiveness of founder-director on acquirer returns. This result differs from that of earlier studies by André *et al*. (2014), Bouzgarrou and Navatte (2013), and Li and Srinivasan (2011) who all agree that the presence of founder on the board resulted in positive and statistically significant returns for a three-day event window (-1,1). They argue that founders possess more expertise in the selection of target firms and provide effective monitoring of the M&A process, thus, leading to efficient decision making in M&As.

Presumably, if the board of directors of the acquiring firm has a conflict of interest with the minority shareholders, they would appoint an independent financial adviser to issue a

letter to the minority shareholders, also known a fairness opinion (D4FAIRNESS). The purpose of this letter is to convince the minority shareholders on the acquisition without affecting their shareholdings. The contents of this letter will usually include the revision of procedures, such as the value of transaction on the target firm, the profit outlook and the impact of an acquisition. Fairness opinion is one of the mechanisms that may lower the information asymmetry and reduce the disagreements between the majority and minority shareholders associated with overpayment for the target firm. Several studies find that fairness opinion may also affect the shareholders' wealth. Chen (2006) observed that FO results to positive returns of 5.1%, while Kisgen *et al.*, (2009) and Frye and Wang (2010) note that FO leads to negative returns of -4.79% and -1.9%, respectively for a three-day event window (-1,1). However, Model A turns out to be a negative result, which is not statistically significant (p-value= 0.185). Thus, it can be concluded that fairness opinion does not influence the returns to shareholders' wealth.

Next, Toehold (D4TOEHOLD) is used by the acquirer to observe, monitor and obtain private information about the target. Consequently, it would reduce information asymmetry problem between the two parties (Povel & Sertsios, 2014; Cosset & Meknassi, 2013). Thus, the acquirer would not overpay for the target and it would experience higher returns driven by synergistic benefits that are expected from the acquisition (Kisgen *et al.*, 2009; Hamberg *et al.*, 2013). Interestingly, this study discovers that toehold exhibits an insignificant effect. In this case, toehold neither generates nor destroys the value of the acquiring firms. Although acquirers have a stake in the target, they cannot pay a lower price as the other shareholders of target firms expect fair prices. This finding corroborates that of previous studies, for example by Bates *et al.*, (2006), Cai and Sevilir (2012) and

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Gregory and O'Donohoe (2014) who find an insignificant relationship between toeholds and return for short event windows.

With regard to deal characteristics, the result expresses that cash (D4CASH) leads to a 3.82% reduction in abnormal returns and it is statistically significant (p-value = 0.05). This is in line with the findings in earlier studies (see for examples, Banerjee *et al*., 2014; Bae *et al*., 2013; Alexandridis *et al*., 2010; Martynova & Renneboog, 2008; Chen, 2006; Md-Nor & Ismail, 2006). A plausible explanation is that managers of acquiring firms that own more cash tend to overpay for the target firms. Since most of the acquiring firms are controlled by the majority shareholders who usually serve as managers, they are willing to overpay if they get other benefits such as higher compensation and lower risk. Harford (1999) note that cash-rich acquirers experienced a return of -0.6%, which is statistically significant at 5% level, for a seven-day event window (-5,1). This indicates that cash-rich acquirers tend to engage in value-deceasing acquisitions as cash-rich acquirers destroy seven cents of firm value for every dollar of excess cash held. He added that cash provides freedom from external due diligence that could simply allow managers to make more mistakes than other better-monitored firms. Furthermore, cash financing may elude the regulations set by SC which require acquirers to get shareholder's approval if the acquisitions are financed by stocks. In addition, cash funding can also prevent dilution of control by the majority shareholders and from the formation of new blockholders. Thus, dealing with cash most likely to have a negative impact on acquirers' returns. Meanwhile, the dummy for mixed (D4MIXED) illustrates an insignificant coefficient of -0.0089 for a five-day (-3,1) event window. This differs from the findings by Gleason *et al*., (2014),

Mateev and Andonov (2016) and Alexandridis *et al*. (2010) which reveals significant returns of 2.31%, 2.98% and -1.05% respectively.

As for the acquirers acquiring public listed firms (D4PUBLIC), the coefficient is insignificant. Thus, there is no difference between the 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 study differ from those by Faccio *et al*. (2006), Masulis *et al*. (2007), Bae *et al*. (2013) and Capron and Shen (2007) whom note that acquirers earn returns of -0.38%, -1.41%, -2.56% and -1.484%, respectively if they acquire public listed firms while as for the acquisitions of non-listed firms, the acquirers earned positive returns of 1.48%, 1.75%, 4.70% and 0.760%, respectively over short-period window.

Finally, the price paid in an acquisition, CONSIDERATION, does not influence abnormal returns. The insignificant finding shows that regardless of the relative size of the acquisitions, acquirers neither overpay nor underpay for the target firms. Since both acquirers and targets act rationally, acquirers do not want to overpay while targets do not want to sell their stakes at prices lower than their true value. This finding verifies the results of previous studies by Masulis *et al*. (2007) and Field and Mkrtchyan (2017). Meanwhile, Walters *et al*. (2007) explains that abnormal returns are positively related to the size of the acquisitions while Alexandridis *et al*. (2010) and Li and Srinivasan (2011) find that abnormal returns are negatively related to the size of the acquisitions.

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To ensure the robustness of the results, another regression is estimated by excluding the insignificant variables in Model B and Model C. The adjusted R-squares in Model B and Model C are 12.10% and 11.15%, respectively. The F-statistics for both models are statistically significant at 1% level. This denotes that at least one of the independent variables helps to explain the variations in the dependent variable.

Next, Model B demonstrates the results of multiple regressions by excluding insignificant control variables, i.e., D4MIXED, D4PUBLIC, and CONSIDERATION. F-test is carried out to test the appropriateness of dropping the three variables. The value of the F-statistic[12] is 0.42 with a p-value of 0.737. Thus, the null hypothesis that all three omitted variables is equal to zero cannot be rejected. After omitting the three control variables, five variables remain significant, which are FAMOWN, D4BLIDACT, D4BLIDPSV, INEDBRD, and D4CASH. FAMOWN variable shows a positive and significant coefficient of 0.0683 while the other four variables are significant at 5% level. The coefficient of D4BLIDACT is -0.0242, D4BLIDPSV is -0.0203, INEDBRD is 0.0927 and finally D4CASH is -0.0346. At this stage, FAMBRD which is significant in Model A is no longer significant. The rest of the variables continue to have an insignificant effect on abnormal returns.

In Model C is a final models that omits all insignificant variables: the three control variables stated above and FAMBRD, BOARDSIZE, INEDBRD, EXECDIRRBRD, D4FOUNDER and D4TOEHOLD. F-test is carried out to test the reasonability of dropping the ten variables. The value of the F-statistic[13] is 0.74 with a p-value of 0.6861.

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[12] F-statistic of dropping variables from stepwise approaches is not reported in the Table 4.15
[13] F-statistic of dropping variable from stepwise approaches is not reported in the Table 4.15

Hence, the null hypothesis that all ten omitted variables is equal to zero cannot be rejected. After excluding the ten variables, the other six variables remain significant, which are FAMOWN, D4BLIDACT, D4BLIDPSV, D4BLISACT D4FAIRNESS and D4CASH. FAMOWN shows a positive coefficient of 0.0762 at 1% level, while the other three variables all are significant at 5% level. The coefficient of D4BLIDACT is -0.0218, D4BLIDPSV is -0.0220 and D4CASH is -0.0371.

Surprisingly, the active institutional blockholders (D4BLISACT) and D4FAIRNESS which previously does not display any significant results in Model A and B, illustrates significant outcomes in Model C. D4BLISACT has a coefficient of 0.0219 while D4FAIRNESS shows negative coefficient of 0.0169. However, both are statistically significant at 10% level. The active institutional blockholder (D4BLISACT) who serves on the board adds more value to the acquirer. The empirical evidence reveals that active institutional blockholders in firms reduce CEO's entrenchment and increase the benefit of monitoring (Bauguess and Stegemoller, 2008; Bauguess *et al.* 2009; Walters *et al*., 2007). They detect that active institutional blockholder bring about significant positive returns for short window periods. A plausible explanation for such condition is that the active institutional blockholders in Malaysia are able to provide the monitoring role and thus, influence the board of directors to acquire targets that can lead to value creation.

Furthermore, fairness opinion (D4FAIRNESS) is shown to leave a significant negative effect on returns. This corroborates the findings by Kisgen *et al*. (2009) and Frye and Wang (2010) who note that acquirers who make use of FO leads to significant negative coefficient for a three-day event window (-1,1). This signifies that investors expect

acquirer to overpay for the target and that the majority shareholder of the acquiring firm would take advantage of its minority shareholders.

4.6   Additional Regression Analysis

Table 4.16 displays the regression results when different measures of directors or blockholders are appointed. Model 2 uses dummy for the presence of blockholders and the ownership for director participation and the results obtained from Model 2 are similar to those of Model 1C. Next, Model 3 uses dummy for the presence of blockholders and the number of directors for director participation. Again, the results are similar to Model 1C with the exception that D4BLISACT is not significant anymore at this stage. The adjusted R-squares are 11.08% and 10.80% for Models 2 and 3 respectively and the F-statistic indicates that jointly, the coefficients of the independent variables are not equal to zero for both models.

Model 4 uses blockholder ownership with a proportion of different types of directors. The results obtained indicate that FAMBRD and INEDBRD have significant positive effects on abnormal returns. The coefficient for FAMBRD is 0.0413 and it is statistically significant at 10% level while for INEDBRD, the coefficient is 0.0807 and is significant at 5% level. However, BLISACT is proven to not be significant. The number of blockholders with fraction of directors is used in Model 5. The results reflect those of Model 4, with the exception of BLISACTNUM, which has a coefficient of 0.0074 and it is significant at 5% level while the coefficients of BLIDACT and INEDBRD are demonstrated to not be significant at all.

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Table 4.16

Multiple Regressions for Variables on Returns to Acquirers (Model 2 to Model 5)

VARIABLE	Model 2	Model 3	Model 4	Model 5
FAMOWN	0.0760***	0.0526**	0.0413*	0.0798***
	(0.0007)	(0.0155)	(0.0746)	(0.0012)
FAMBRD			0.0474*	
			(0.0629)	
D4BLIDACT	-0.0205**	-0.0247**		
	(0.0314)	(0.0133)		
BLIDACTNUM				
BLIDACT			-0.1820***	
			(0.0057)	
D4BLIDPSV	-0.0247***	-0.0269***		
	(0.0076)	(0.0030)		
BLIDPSVNUM				-0.0130**
				(0.0490)
BLIDPSV			-0.1762**	
			(0.0207)	
D4BLISACT	0.0214*			
	(0.0737)			
BLISACTNUM				0.0074**
				(0.0249)
BLISACT				
D4BLISPSV				
BLISPSVNUM				
BLISPSV				
BOARDSIZE				
BOARDOWN				
INEDNUM				
INEDBRD			0.0976**	
			(0.0339)	
INEDOWN				
EXECDIRNUM				
EXECDIRBRD				
EXECDIROWN				
D4FOUNDER				
D4FAIRNESS	-0.0173*	-0.0160*		
	(0.0774)	(0.0980)		
D4TOEHOLD				
TOEHOLDOWN				
D4CASH	-0.0376**	-0.0382**	-0.0348**	-0.0348**
	(0.0208)	(0.0148)	(0.0157)	(0.0214)
D4MIXED				
D4PUBLIC				
CONSIDERATION				
CONSTANT	0.0323	0.0464	-0.0139	0.0190
	0.0933	0.0082	0.5637	0.2746
No.Observation	203	203	203	203
F-stat	5.77	5.96	6.33	5.83
Sign F-stat	0.000	0.000	0.000	0.0002
R^2	0.1416	0.1301	0.1487	0.098
Adj R^2	0.1108	0.1080	0.1227	0.0797

***Significant at 1% level, **significant at 5% level, *significant at 10% level. **Model 2** shows blockholder as measured by dummy and director as measured by ownership, **Model 3** shows blockholder as measured by dummy and number of directors, **Model 4** shows blockholder as measured by ownership and proportion of directors and **Model 5** shows blockholder as measured by number and proportion of directors.

Family ownership and acquisition financed by cash are confirmed to always be significant in explaining returns regardless of the models used. Positive returns to acquirers indicate that family-controlled firms in Malaysia engage in M&As in order to maximize the shareholder's wealth and not to achieve private benefits for family members. Furthermore, the findings establish that families align their interests with those of minority shareholders. Moreover, the result shows that if families want to diversify their risk through acquisitions, they would only do so by acquiring firms that could lead to value-creating synergies. Finally, the findings indicate that the agency's problem between minority and majority shareholders in acquisitions are lessened. This finding is consistent with that from previous studies (see examples André *et al*., 2014; Ben-Amar & André, 2006; Bougarrou & Navatte, 2013; Caprio *et al*., 2011; Craninckx & Huyghebaert, 2015; DeCesari *et al*., 2016; Defrancq *et al*., 2016; Ruiz & Requejo, 2010).

As for acquisitions financed by cash, the result shows that acquirers in Malaysia are categorized as cash-rich acquirers and experience value-decreasing acquisition. This outcome is also in parallel with the results from previous studies (see for example Bouzgarrou & Navatte; 2013; Banerjee *et al*. 2014; Harford, 1999; Md-Nor & Ismail, 2006). Moreover, Jensen (1986) also states in his study stating that since free cash flow functions as the fund to all the firms' projects, they are usually reluctant or refuse to pay out to shareholders. Nevertheless, the firms still manage to generate substantial free cash flows and the managers from the firms with unused borrowing power are prone to engage in low benefit, unprofitable projects or even create value-destroying acquisitions. Consequently, firms with high free cash flows have higher probability of facing conflicts of interest between the shareholders and managers.

In this study only one variable, which is consideration (CONSIDERATION), is considered as the effect of outliers as the standardized values for some of the observations of this variable are greater than 3.3. To remedy the problem of outliers, winsorization approach is adopted by which the outliers are transformed by limiting their values (Ismail & Krause, 2010; Sudarsanam & Mahate, 2003). For example, values for data above the 95th percentile is set to the value of the data for the 95th percentile. The effects of winsorizing the data would then lead to the more robust results as the findings are not influenced by the outliers.

Table 4.17 shows the results after winsorizing the data. The adjusted R-squares for all models (Model 6A to Model 6B) are 11.35% to 12.90% respectively. Moreover, the F-statistic indicates that jointly, the coefficients of the independent variables are not equal to zero for all models. The final results in Model 6C show that there are six significant variables, at least at 10% level. The results for family ownership (FAMOWN), active individual blockholder (D4BLIDACT), passive individual blockholder (D4BLIDPSV) and cash (D4CASH) are consistent to the previous results. However, two variables which are the family director (FAMBRD) and the independent director (INEDBRD) are significant at the 5% level after winsorization. The coefficients are 0.0488 and 0.0920 respectively. Overall, the results in Model 6 prove that outliers may have an influence on the outcome of this study.

Table 4.17
Multiple Regressions by Using Winsorization Approach (Model 6)

Variable	Model 6A	Model 6B	Model 6C
FAMOWN	0.0674**	0.0636**	0.0398*
	(0.0237)	(0.0184)	(0.0696)
FAMBRD	0.0452	0.0460*	0.0488**
	(0.1015)	(0.0744)	(0.0496)
D4BLIDACT	-0.0230**	-0.0230**	-0.0289***
	(0.0238)	(0.0218)	(0.0035)
D4BLIDPSV	-0.0210**	-0.0210**	-0.0242***
	(0.0267)	(0.0225)	(0.0069)
D4BLISACT	0.0211	0.0183	
	(0.1584)	(0.1586)	
D4BLISPSV	0.0058	0.0045	
	(0.6242)	(0.6770)	
BOARDSIZE	-0.0010		
	(0.6758)		
INEDBRD	0.0923*	0.0877*	0.0920**
	(0.0595)	(0.0604)	(0.0441)
EXECDIRBRD	0.0093		
	(0.7461)		
D4FOUNDER	-0.0157	-0.0150	
	(0.2157)	(0.2077)	
D4FAIRNESS	-0.0135	-0.0134	
	(0.1900)	(0.1989)	
D4TOEHOLD	-0.0095	-0.0098	
	(0.3584)	(0.3483)	
D4CASH	-0.0375**	-0.0346**	-0.0325**
	(0.0246)	(0.0245)	(0.0222)
D4MIXED	-0.0084		
	(0.8365)		
D4PUBLIC	0.0194	0.0183	
	(0.5131)	(0.5241)	
Winsor CONSIDERATION	-0.0062	-0.0045	
	(0.8621)	(0.8941)	
_cons	-0.0133	-0.0160	-0.0115
	0.7295	0.5462	0.6380
No. of Observation	203	203	203
F-stat	2.51	3.09	6.24
Sign F-stat	0.0017	0.0003	0.0000
R^2	0.1837	0.1821	0.1549
Adj. R^2	0.1135	0.1258	0.1290

***Significant at 1% level, **significant at 5% level, *significant at 10% level.

4.7 Conclusion

This chapter provides the findings concerning the effects of acquisition performance which is related to objective one and two. The results show CAAR for longer event window and short event window are positive and significant at least at 5% level. Hence, this results indicate that investors are able to earn abnormal returns surrounding the announcement and Malaysia are value-enchancing consistent with synergistic theory. Regarding to objective two, there are two analyses conducted which are univariate analyses and multivariate analyses. The results from Table 4.15 (1C) are used as a final model in explaining the overall results. In general, six variables namely family firm, active individual blockholders, passive individual blockholders, active institutional blockholders, fairness opinion and cash are found to be significant at least at 10% level.
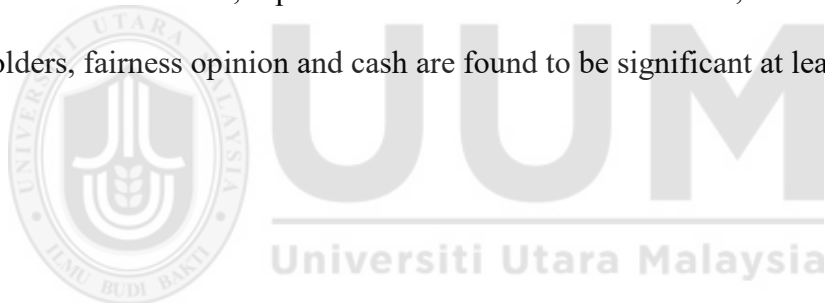
CHAPTER FIVE
EMPIRICAL FINDINGS AND DISCUSSIONS OF LONG RUN
PERFORMANCE

5.0   Introduction

This chapter discusses the results of long-run stock performance. It begins with a sample

selection, and followed by a discussion on long-run performance using buy and hold

returns (BHARs) and cumulative average abnormal returns (CAARs) based on stock

prices. Next, this chapters summarizes the findings for additional analyses of BHARs and

CAARs based on total return index (RI). Finally, a discussion of multivariate regression

analysis for long-run stock performance and a conclusion section is presented.

5.1   Sample selection for Long-Run Performance

Sample selection for long-run performance includes all clean and unclean sample firms

for the period from 2000 to 2013. The initial sample is composed of 278 firms. However,

11 firms have to be omitted from the sample due to non-availability of data on their stock

prices. The study uses monthly data for prices (P) and total return index (RI) from three

months prior to acquisition to 36 months after the acquisition completion date. Data on

firm size (MV), market-to-book value (MTBV), and stock prices are obtained from

Thompson DataStream. This study employs two methods of estimating abnormal returns

(as discussed in Chapter Three), namely: a) CAARs; and b) BHARs. Two benchmarks for

price performance are applied, which are: (a) the market benchmark approach using FTSE

Emas Index; and (b) the matching firm approach (Barber & Lyon, 1997).

5.2   Finding: Long Run Performance of Acquisition Announcements

The quality of the matching firms which are used as the benchmark have to be scrutinized. To ensure the quality of the matches, the characteristics of the matching firms are compared to those of the sample firms. If both groups have similar characteristics, it can be concluded that the matching firms are comparable to the sample firms and therefore serve as good benchmark.

Table 5.1 presents the results of goodness of fit between the sample firms and matching firms. The average market value and the average MTBV of the sample firms are RM 626.569 million and 1.121 respectively. If matching is done by choosing one matching firm, then the average market value and the MTBV of the matching firms are RM 638.261 million and 1.059 respectively.

Table 5.1
Goodness of Fit between Acquisition Firms and Matching Firms

Variables	Number of matches	Acquisition firms	Matching firms	P-value of difference
MV (RM Million)	1- match	626.569	638.261	0.342
	2-match	626.569	602.105	0.124
	4-match	626.569	586.810	0.218
MTBV	1- match	1.121	1.059	0.290
	2-match	1.121	1.055	0.300
	4-match	1.121	1.030	0.188

The average market value and MTBV for matching firms are slightly lower when matching is done by using either two or four matching firms. The average market value

of two matching firms is RM 602.105 million, with their MTBV being 1.055. For four matches, the average market value is RM 586.810 million and the average MTBV is 1.030. The results show that for all matches, the differences in size and MTBV are statistically insignificant. For one matching firm, the p-value of the differences in average market value and average MTBV are only 0.342 and 0.290 respectively. Similar conclusions are observed for two and four matches. The p-values of two matches for market value and MTBV are 0.124 and 0.300 respectively. For four matches, the p-values are 0.218 and 0.188 for market value and MTBV respectively. Since the null hypothesis (that the characteristics of matching firms are similar to the sample firms) cannot be rejected, it can be concluded that the matching firms are comparable to the sample firms and hence, the matching firms serve as good benchmarks.

5.3   Buy and Hold Abnormal Returns (BHARs) Based on Stock Prices

The advantage of using BHARs is that the returns realized over the holding period for the investment is equal to the actual returns earned by the investor. Figure 5.1 summarizes the results of EW-BHAR respectively in graphical form. Figure 5.1 shows that the value of raw BHARs increases over a period of three years after the completion of acquisitions. However, when the returns are adjusted by using either the returns of matching firms or market index, there are decreases in the returns. The most significant decrease is seen when market index is used as the benchmark.
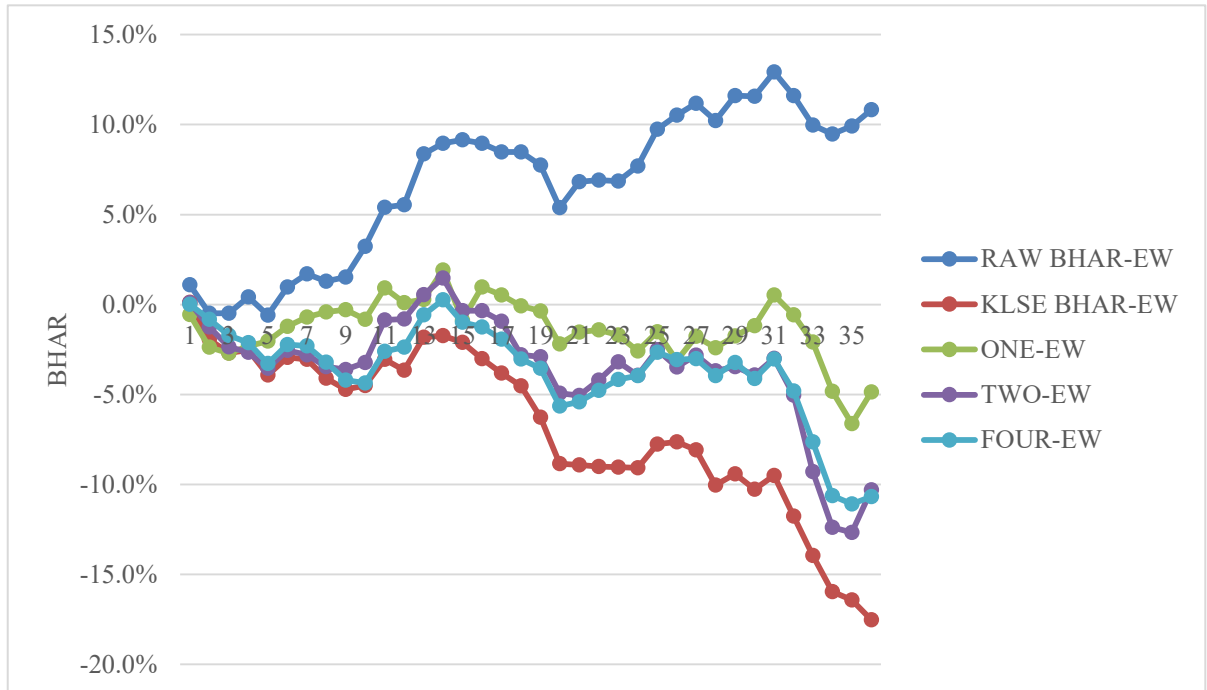
Figure 5.1
Buy-and-Hold Returns over a Three-Year Period by Using Equal-Weighted (EW) Approach

Table 5.2 presents the results of buy-and-hold returns using equal-weighted (EW) as depicted in Panel A and value-weighted (VW) approaches as highlighted in Panel B. Column 1(a) of Table 5.2 shows the results of EW buy-and-hold raw returns without adjusting for the benchmarks. In the first year following acquisitions, acquiring firms earn an average return of 5.538%, increasing to 10.827% over a three-year period. All results are statistically significant at 5% and 10% levels. Meanwhile, when the VW approach is used, the results are also significant at 5% and 1% for 30-month and 36-month window periods respectively. When the EW raw returns are compared to those of the benchmarks, this study finds that the BHARs over the three-year event period are negatively significant if EMAS Index (-17.528%), two-firm portfolio (-10.309%), or four-firm portfolio (-10.667%) are used as the benchmarks. This finding is similar to those of other studies (see

examples, Andrade *et al*., 2001; Ma *et al*., 2011; Moeller *et al*. 2005). These results show evidence of underperformance or overreaction by investors when EW measure is applied and this is especially true if performance is measured over a three-year period. Figure 5.2 summarizes the results of value-weighted buy-and-hold returns in graphical form. Figure 5.2 shows that VW returns for unadjusted, raw, and adjusted methods, using either market index or matching firms, are more volatile compared to the EW approach over the three-year period.

Panel B of Table 5.2 shows that when VW approach is used, none of the BHAR is significant except when EMAS Index is used as the benchmark, in which case the BHAR of -6.898% is statistically significant at 10%. The insignificance of BHAR when VW approach is used shows that the underperformance of EW-BHAR is driven by the small size of the acquiring firms.
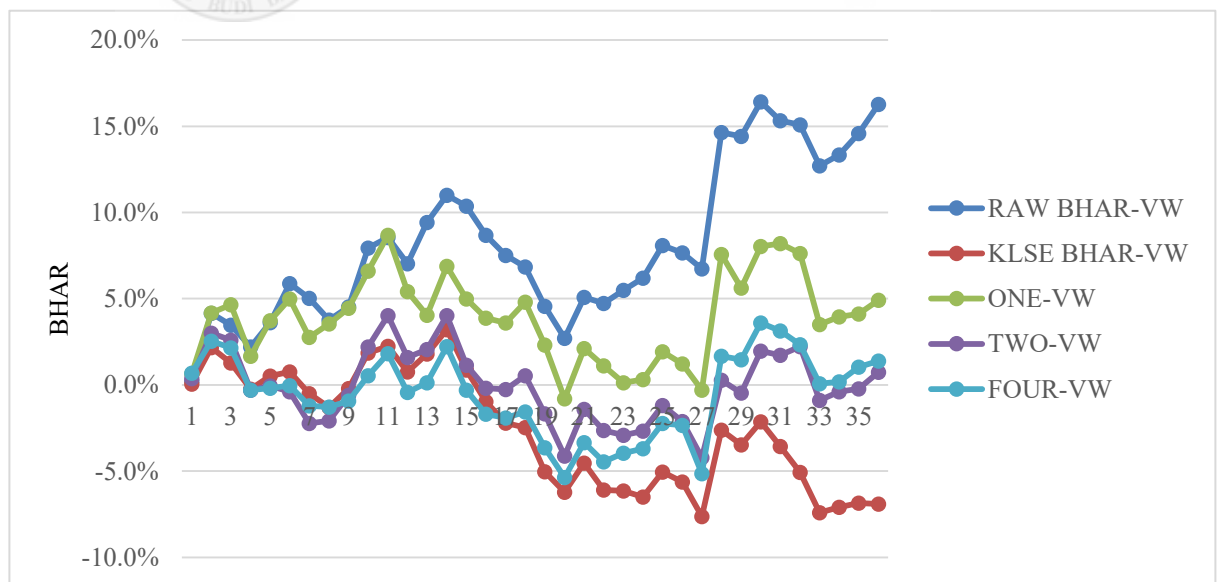
Figure 5.2
Buy-and-Hold Returns over Three-Year Period by Using Value-Weighted (VW) Approach

Table 5.2

Summaries of Equal(EW) and Value-Weighted (VW) Approach of Buy-And-Hold Abnormal Return (BHAR) Following Acquisition Completion

MONTH	NO. FIRMS	PANEL A					PANEL B				
		EW-BHAR RAW (1a)	EW-EMAS Index BHAR (2a)	EW-BHAR ONE MATCH (3a)	EW-BHAR TWO MATCH (4a)	EW-BHAR FOUR MATCH (5a)	VW-BHAR RAW (1b)	VW-EMAS Index BHAR (2b)	VW-BHAR ONE MATCH (3b)	VW-BHAR TWO MATCH (4b)	VW – BHAR FOUR MATCH (5b)
1 to 12	267	5.538% (0.076)*	-3.652% (0.181)	0.105% (0.975)	-0.812% (0.788)	-2.363% (0.373)	7.024% (0.414)	0.766% (0.914)	5.426% (0.469)	1.600% (0.804)	-0.419 % (0.954)
1 to 18	266	8.479% (0.031)**	-4.528% (0.202)	-0.076% (0.987)	-2.800% (0.495)	-3.028% (0.414)	6.852% (0.530)	-2.476% (0.762)	4.803% (0.595)	0.533% (0.945)	-1.568% (0.856)
1 to 24	261	7.694% (0.068)*	-9.074% (0.019)**	-2.579% (0.614)	-3.929% (0.383)	-3.960% (0.328)	6.202% (0.519)	-6.493% (0.389)	0.311% (0.970)	-2.667% (0.703)	-3.685% (0.624)
1 to 30	257	11.571% (0.017)**	-10.262% (0.027)**	-1.183% (0.844)	-3.921% (0.448)	-4.105% (0.379)	16.415% (0.018)**	-2.128% (0.663)	8.028% (0.159)	1.974% (0.791)	3.598% (0.473)
1 to 36	252	10.827% (0.020)**	-17.528% (0.000)***	-4.861% (0.451)	-10.309% (0.091)*	- 10.667% (0.034)**	16.274% (0.005)***	-6.898% (0.094)*	4.916% (0.465)	0.735% (0.925)	1.398% (0.790)

*, ** and *** indicate 10%, 5% and 1% respectively

5.4 Cumulative Average Abnormal Returns (CAARs) based on Stock Prices

Fama (1998) argue that BHARs may not be a good measure for performance in the long-run as BHARs compounded short-term returns to obtain long-run buy-and-hold returns. Thus, as suggested by Fama (1998), this study also estimates returns by using CAARs. Figure 5.3 summarizes the results of EW-CAAR in graphical form. There is upward trend shown by raw returns under EW approach over the three-year period after completion of acquisitions. Meanwhile, returns adjusted by either market index or matching firms show a downward trend over the three-year period.
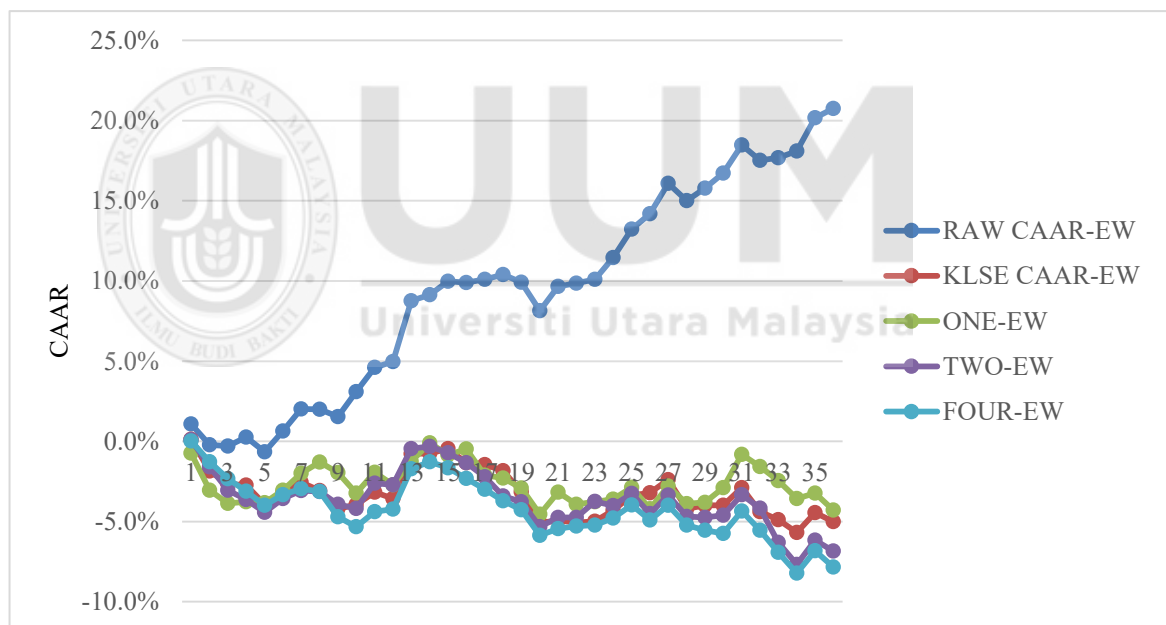
Figure 5.3
Cumulative Average Abnormal Returns over Three-Year Period by Using Equal-Weighted (EW) Approach

Table 5.3 summarizes the results of cumulative average returns of acquiring firms over a three-year period following acquisitions. Column 1(a) of Panel A sets out the cumulative raw returns over the three-year period without adjusting for benchmarks' returns,

according to the definition of raw return given by Rau and Vermaelen (1998) in their study. The results show that the EW raw returns to acquiring firms are positive and increasing. In the first year following an acquisition, acquiring firms earn an average return of 4.976% and this percentage increases to 21.438% over the three-year period. All returns are statistically significant at 1% and 10% levels. When the VW approach is used, the results are significant at 1% for 30-month and 36-month window periods. However, the positive results may be driven by good market performance. To investigate if the results are due to acquisitions, the raw returns have to be compared against the returns of a benchmark. Columns 2(a) to 5(a) summarize the performance of acquiring firms after adjusting for the performance of a benchmark by using EW-CAAR approach. When the performance of acquiring firms is adjusted for the performance of the benchmark, none of the results is significant except for the CAAR of a 12-month period when four matching firms are used as the benchmark. The CAAR is -4.218% and it is significant at a 10% level. These results show that acquisitions do not lead to over- or under-performance of the acquiring firms. In fact, investors react rationally to acquisition completions and their expectations of the future performance do not differ from the actual future performance. In this case, the market, at least in terms of the long-run performance of acquisitions, is found to be efficient in Malaysia.

Table 5.3:

Summaries of Equal (EW) and Value-Weighted (VW) Approach of Cumulative Average Abnormal Return (CAAR) Following Acquisition Completions

MONTH	NO OF FIRMS	PANEL A					PANEL B				
		EW-CAAR RAW (1a)	EW-EMAS Index CAAR (2a)	EW-CAAR ONE MATCH (3a)	EW-CAAR TWO MATCH (4a)	EW-CAAR FOUR MATCH (5a)	VW CAAR-RAW (1b)	VW-EMAS Index CAAR (2b)	VW CAAR-ONE MATCH (3b)	VW CAAR-TWO MATCH (4b)	VW CAAR-FOUR MATCH (5b)
1 to 12	267	4.976% (0.067)*	-3.570% (0.121)	-2.705% (0.327)	-2.710% (0.304)	-4.218% (0.084)*	4.742% (0.587)	-0.957% (0.896)	3.327% (0.678)	-0.891% (0.897)	-2.489% (0.752)
1 to 18	266	10.409% (0.004)***	-1.860% (0.567)	-2.086% (0.623)	-3.301% (0.365)	-3.686% (0.283)	1.037% (0.930)	-7.499% (0.412)	-1.049% (0.920)	-4.683% (0.592)	-7.238% (0.472)
1 to 24	261	11.863% (0.008)***	-4.379% (0.294)	-3.148% (0.531)	-3.925% (0.374)	-4.279% (0.312)	5.350% (0.602)	-6.931% (0.397)	0.611% (0.950)	-4.312% (0.545)	-4.100% (0.628)
1 to 30	257	17.811% (0.000)***	-3.767% (0.414)	-1.570% (0.780)	-3.713% (0.446)	-4.447% (0.347)	16.654% (0.001)***	0.127% (0.977)	8.123% (0.115)	3.789% (0.508)	4.172% (0.305)
1 to 36	252	21.438% (0.000)***	-5.638% (0.236)	-1.991% (0.737)	-4.957% (0.346)	-6.425% (0.203)	19.156% (0.000)***	-1.573% (0.687)	7.385% (0.908)	4.577% (0.482)	3.909% (0.375)

*, ** and *** indicate 10%, 5% and 1% respectively

Figure 5.4 summarizes the results of VW-CAARs in graphical form. Figure 5.4 shows that the returns using VW approach are more volatile as compared to the returns when EW approach is used. When VW measures are used as reported in Panel B of Table 5.3, the results are basically similar to the EW results except that only two values of raw returns are significant, namely the returns over the 30-month and 36-month periods of 16.654% and 19.156% respectively. Both returns are statistically significant at 1% level. However, when the returns are adjusted using the benchmarks, none of the CAARs are find to be significant. This finding corroborates the results of Chi *et al.* (2011) who finds no significant returns when market index is used as the benchmark. Meanwhile, Bougarrou and Navatte (2013) finds no significant effects for 36-month CAARs by using matching firms as the benchmark. Again, these results indicate that investors form an unbiased expectation of future performance. Overall, the results of cumulative average abnormal returns reflect those of buy-and-hold returns, especially when VW measures are used.
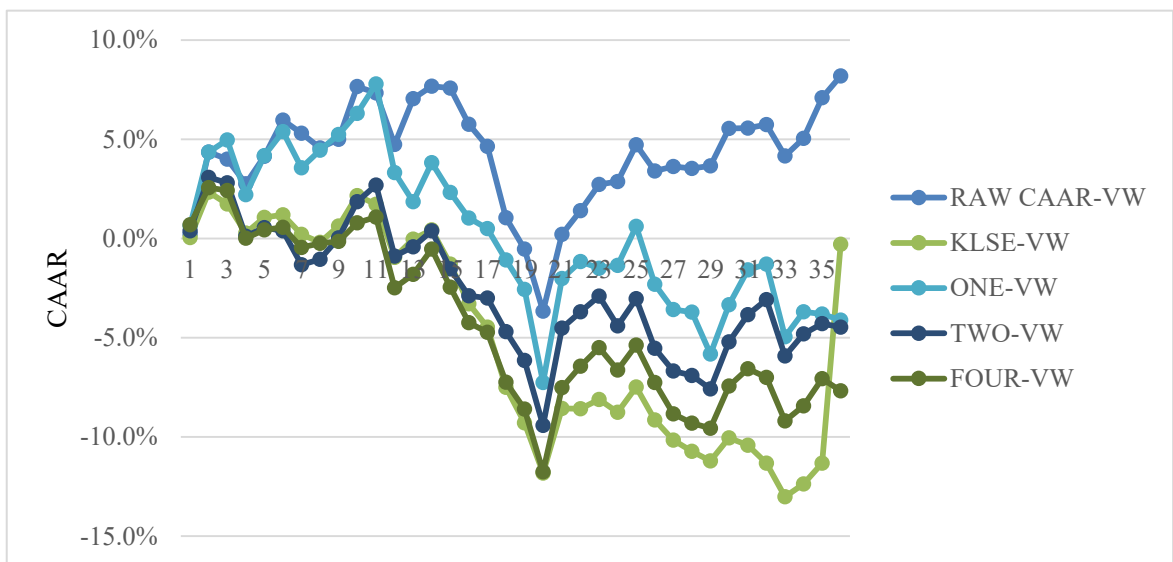
Figure 5.4
Cumulative Average Abnormal Returns over Three-Year Period by Using Value-Weighted (VW) Approach

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5.5   BHARs and CAARs based on total return index (RI)

Section 5.3 and Section 5.4 look at the long-run performance by analyzing the variance of prices, or capital gains yield, of acquirers. A better measure is to use the total RI as it captures both capital gains and dividend yields. However, this study has not been able to discuss the total RI of the market index, or EMAS Index, as the data on total return index for EMAS Index is only available starting from 2009. This factor is the reason for the adoption of price changes as the measure of long-run performance. However, this study intends to investigate whether the results of Section 5.3 and Section 5.4 will still hold if RI is used as the measure of stock returns. The results for long-run performance using BHARs and CAARs based on total RI are reported accordingly in Table 5.4 and Table 5.5.

The results of EW buy-and-hold raw returns of acquiring firms are all positive, increasing, and significant at the 1% level for all periods (refer to Column 1(a) of Table 5.4). In the first year following acquisitions, acquiring firms earn an average return of 9.129% and the returns steadily increase to 21.527% at the end of year three. When VW approach is used, the results are significant at 1% for 30-month and 36-month window periods. Basically, the results of both EW and VW reflect those of stock prices except that the performance is greater when RI is used. When EW buy-and-hold returns are compared to those of the benchmarks, this study finds that the BHARs are significantly negative if two-firm portfolio (-11.713%) and four-firm portfolio (-12.153%) are used as the benchmarks. However, when VW measure is used, none of the BHARs is significant. In summary, the results based on total return index (RI) reflect those based on stock prices.

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Table 5.5 summarizes the results using CAARs-based total RI. Column 1(a) shows that the EW raw cumulative average returns to acquiring firms are positive. In the first year following acquisitions, acquiring firms earn average returns of 7.316% which goes up to 29.154% over a three-year period. All returns are significant at 1% level. When VW approach is used, the results are significant at 1% for 30-month and 36-month window periods. Columns 2(a) to 4(a) and Columns 2(b) to 4(b) summarize the performance of the acquiring firms after adjusting for the performance of a benchmark by using EW and VW approaches respectively. When the performance of the acquiring firms is adjusted for the performance of the benchmark, none of the results is significant based on either approach. Thus, the results of long-run performance based on RI are comparable to the performance based on stock prices. The subsequent sections will use returns based on stock prices.

5.6   Univariate Analyses for the Three-Year Performance

This section discusses the results of univariate analyses for relevant long-run independent variables. Tests of difference in means and Mann-Whitney U tests which assume non-normal distribution, are used to investigate the existence of differences between the two groups. The long-run independent variables used are family, blockholders, independent advice letters to minority shareholders (FO), method of payment (cash and mixed) and types of target (public or private). Equally-weighted (EW) by buy-and-hold returns (BHARs) and cumulative average abnormal returns (CAARs) over a three-year period are used to measure the dependent variable. Table 5.6, Table 5.7 and Table 5.8 summarizes the results of the differences between the two groups when either EMAS Index or matching-firm portfolio is used as the benchmark.

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Table 5.4

Summaries of Buy-and-Hold Returns (BHAR) for Total Return Index (RI) Following Acquisitions Completion

		PANEL A				PANEL B			
MONTH	**NO OF FIRMS**	**EW–BHAR (RI) RAW (1a)**	**EW-BHAR (RI) ONE MATCH (2a)**	**EW-BHAR (RI) TWO MATCH (3a)**	**EW-BHAR (RI) FOUR MATCH (4a)**	**VW-BHAR (RI) RAW (1b)**	**VW-BHAR (RI) ONE MATCH (2b)**	**VW-BHAR (RI) TWO MATCH (3b)**	**VW-BHAR (RI) FOUR MATCH (4b)**
1 to 12	267	9.129% (0.007)***	-1.138% (0.753)	-1.52% (0.635)	-2.810% (0.322)	10.573% (0.216)	4.525% (0.572)	0.944% (0.888)	-0.769% (0.919)
1 to 18	266	13.702% (0.001)***	-1.791% (0.719)	-3.772% (0.374)	-3.768% (0.327)	12.443% (0.257)	4.385% (0.643)	0.095% (0.991)	-1.769% (0.843)
1 to 24	261	14.664% (0.001)***	-4.468% (0.417)	-4.946% (0.301)	-4.743% (0.269)	13.821% (0.164)	-0.363% (0.969)	-2.818% (0.705)	-3.774% (0.637)
1 to 30	257	20.815% (0.000)***	-3.263% (0.627)	-5.133% (0.365)	-5.226% (0.300)	27.327% (0.000)***	8.634% (0.175)	2.551% (0.754)	4.121% (0.444)
1 to 36	252	21.527% (0.000)***	-6.946% (0.336)	-11.713% (0.078)*	-12.153% (0.028)**	30.041% (0.000)***	6.658% (0.360)	2.245% (0.789)	2.536% (0.655)

*, ** and *** indicate 10%, 5% and 1% respectively

Table 5.5:

Summaries of Cumulative Average Abnormal Returns (CAAR) Following Acquisitions Completion

		PANEL A				PANEL B			
MONTH	NO OF FIRMS	EW-CAAR (RI) RAW (1a)	EW-CAAR (RI) ONE MATCH (2a)	EW-CAAR (RI) TWO MATCH (3a)	EW-CAAR (RI) FOUR MATCH (4a)	VW-CAAR (RI) RAW (1b)	VW-CAAR (RI) ONE MATCH (2b)	VW-CAAR (RI) TWO MATCH (3b)	VW-CAAR (RI) FOUR MATCH (4b)
1 to 12	267	7.316% (0.008)***	-3.916% (0.204)	-3.587% (0.177)	-2.974% (0.263)	7.872% (0.361)	2.393% (0.773)	-1.506% (0.828)	-8.447% (0.348)
1 to 18	266	14.194% (0.000)***	-3.267% (0.449)	-4.075% (0.266)	-3.221% (0.367)	6.391% (0.581)	-1.058% (0.920)	-4.558% (0.602)	-16.156% (0.148)
1 to 24	261	16.926% (0.000)***	-4.694% (0.358)	-4.991% (0.263)	-4.322% (0.319)	11.906% (0.240)	-0.112% (0.991)	-2.043% (0.783)	-7.604% (0.450)
1 to 30	257	24.410% (0.000)***	-2.949% (0.606)	-4.651% (0.344)	-5.858% (0.225)	24.124% (0.000)***	8.055% (0.120)	4.046% (0.483)	-3.507% (0.636)
1 to 36	252	29.154% (0.000)***	-3.720% (0.539)	-6.248% (0.240)	-7.742% (0.147)	28.398% (0.000)***	8.215% (0.166)	5.222% (0.418)	-1.437% (0.846)

*, ** and *** indicate 10%, 5% and 1% respectivel

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5.6.1 The Effects of Family Ownership on the Three-Year Performance

The comparison between family and non-family firms where the cut-off point for ownership to be considered as a family firm is 10% and 33% respectively. The results for differences in mean are summarized in Table 5.6, Table 5.7 and Table 5.8. The results show that none of the differences between family and non-family firms are significant within a three-year period. The insignificant difference between the two groups show that the performance of both groups after acquisition is similar.

The results of this study is consistent with Bougarrou and Navatte (2013) who find that family ownership within a three-year period for both BHARs and CAARs, using matching-firm portfolio, is not significant. However, the result is inconsistent with Adhikari and Sutton (2016) who find that by using the BHAR measure, family ownership generates a significant positive return for a three-year period using either market index or matching-firm portfolio as benchmarks.

5.6.2 The Effects of Active Blockholders on the Three-Year Performance

This section separates the firms based on the presence of active blockholders. Table 5.6, Table 5.7 and Table 5.8 summarize the results of BHARs and CAARs as a result of the presence of active blockholders. The results show that all differences for both groups are not statistically significant when either parametric or non-parametric tests are used. If an active blockholder is further separated into an active institutional blockholder or an active individual blockholder, the difference in BHARs between the presence of active institutional blockholders and non-presence of active institutional blockholders is significant at 5% for both tests when EMAS Index is used as a benchmark.

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Table 5.6
Test for Differences in Means by Using BHAR and CAAR for Governance Characteristics

Benchmarks	EMAS Index (BHAR)			EMAS Index (CAAR)		
Variables	1	0	p-value Difference of two means (Mann Whitney U)	1	0	p-value Difference of two means (Mann Whitney U)
1 if family ownership ≥ 10% (N=196)	-0.2019***	-0.0821	0.2862	-0.0687	-0.0134	0.5925
0 if family ownership < 10% (N=56)	(0.000)	(0.412)	(0.329)	(0.220)	(0.8769)	(0.5230)
1 if family ownership ≥ 33% (N=127)	-0.1730**	-0.1770***	0.1974	-0.0872	0.0305	0.2447
0 if family ownership < 33%(N=125)	(0.0130)	(0.0030)	(0.3140)	(0.1285)	(0.7145)	(0.1880)
1 if blockholder is present (N=186)	-0.2141***	-0.0659	0.5970	-0.0810	0.0190	0.2948
0 if blockholder is not present (N=66)	(0.0000)	(0.5254)	(0.4860)	(0.1510)	(0.8300)	(0.4570)
1 for presence of active blockholder (N=104)	-0.1468**	-0.1953***	0.3210	0.0049	-0.0994*	0.163
0 for non-presence of active blockholder (N=148)	(0.0379)	(0.0013)	(0.1930)	(0.9521)	(0.0841)	(0.206)
1 for presence of active institutional blockholder (N=59)	-0.0036	-0.2278***	0.0376**	0.0439	-0.0870	0.1667
0 for non- presence of active institutional blockholder (N=193)	(0.9697)	(0.0000)	(0.0420)**	(0.5581)	(0.1319)	(0.2560)
1 for presence of active individual blockholder (N=50)	-0.3545***	-0.1309**	0.0346**	-0.0811	-0.0503	0.8420
0 for non-presence of active individual blockholder (N=202)	(0.0003)	(0.0115)	(0.0800)*	(0.5823)	(0.2866)	(0.4430)
1 for presence of passive blockholder (N=135)	-0.2820***	-0.0521	0.0120**	-0.1907***	0.0987	0.0025***
0 for non-presence of passive blockholder (N=117)	(0.0000)	(0.4705)	(0.0150)**	(0.001)	(0.1853)	(0.0040)***
1 for presence of passive institutional blockhold (N=83)	-0.3172***	-0.1056*	0.0205**	-0.2317	0.0297	0.0048***
0 for non- presence of passive institutional blockholder (N=169)	(0.000)	(0.0668)	(0.0170)**	(0.001)***	(0.6290)	(0.0040)***
1 for presence of passive individual blockholder (N=69)	-0.3029***	-0.1271**	0.0625*	-0.3029***	-0.1271**	0.0622*
0 for non-presence of passive individual blockholder (N=183)	(0.0002)	(0.0217)	(0.1250)	(0.0002)	(0.0217)	(0.1330)
1 if firm have a toehold (N=47)	-0.1510	-0.1810***	0.7850	-0.0770	-0.0520	0.8200
0 if firm without a toehold (N=205)	(0.1320)	(0.0000)	(0.7100)	(0.4260)	(0.3410)	(0.8250)
1 if firm use cash (N=203)	-0.1400***	-0.3220***	0.0600*	-0.0260	-0.1840**	0.1110
0 if firm use stock and cash (mixed) (N=49)	(0.0080)	(0.0000)	(0.0950)*	(0.6440)	(0.0280)	(0.1420)
1 if firm provide FO (N=45)	-0.1120	-0.1890***	0.4960	0.1160	-0.0940*	0.1720
0 if firm without FO (N=207)	(0.2670)	(0.0000)	(0.4140)	(0.4240)	(0.0530)	(0.3880)
1 if target company is public company (N=27)	0.1119	-0.2097***	0.0369**	0.0920	-0.0742	0.2010
0 if target company is private company (N= 225)	(0.4313)	(0.0000)	(0.010)***	(0.4384)	(0.1489)	(0.580)

*, ** and *** indicate 10%, 5% and 1% respectively

Table 5.7
Test for Differences in Means by Using BHAR for Matching-Firm Portfolio

Benchmarks	BHAR(one-firm portfolio)			BHAR(two-firm portfolio)			BHAR(four-firm portfolio)		
Variables	1	0	-p-value Difference of two means (Mann Whitney U)	1	0	p-value Difference of two means (Mann Whitney U)	1	0	p-value Difference of two means (Mann Whitney U)
1 if family ownership ≥ 10% (N=196)	0.0000	0.0006	0.4350	-0.0863	-0.1619	0.6977	-0.1204**	-0.0587	0.6669
0 if family ownership < 10% (N=56)	(0.8338)	(0.3805)	(0.4880)	(0.1385)	(0.3850)	(0.8270)	(0.0226)	(0.6595)	(0.7270)
1 if family ownership ≥ 33% (N=127)	0.0002	0.0002	0.9467	-0.1300*	-0.0758	0.6575	-0.1573**	-0.0552	0.3107
0 if family ownership < 33% (N=125)	(0.5820)	(0.5970)	(0.6240)	(0.0694)	(0.4478)	(0.5070)	(0.0158)	(0.4756)	(0.2350)
1 if blockholder is present (N=187)	0.0003	-0.0001	0.3524	-0.1501**	0.0320	0.1185	-0.1279**	-0.0457	0.4351
0 if blockholder is not present (N=65)	(0.3307)	(0.6990)	(0.8580)	(0.0496)	(0.7164)	(0.1800)	(0.0366)	(0.5956)	(0.5310)
1 for presence of active blockholder (N=105)	0.0005	0.0000	0.3717	-0.1488	-0.0705	0.5526	-0.0877	-0.1202*	0.7547
0 for non-presence of active blockholder (N=147)	(0.3508)	(0.9314)	(0.5680)	(0.1958)	(0.2814)	(0.7930)	(0.2940)	(0.0561)	(0.5380)
1 for presence of active institutional blockholder (N=59)	0.0011	0.0001	0.1324	-0.1675	-0.0834	0.6565	-0.0804	-0.1147**	0.8054
0 non- presence of active institutional blockholder (N=193)	(0.1541)	(0.6189)	(0.3570)	(0.3538)	(0.151)	(0.8470)	(0.533)	(0.031)	(0.7960)
1 for presence of active individual blockholder (N=51)	-0.0004	0.0003	0.1730	-0.1932	-0.0802	0.4225	-0.1487	-0.0960	0.6269
0 non-presence of active individual blockholder (N=201)	(0.3818)	(0.2199)	(0.3940)	(0.1181)	(0.2519)	(0.5750)	(0.1072)	(0.1030)	(0.8370)
1 for presence of passive blockholder (N=135)	0.0000	0.0004	0.4094	-0.1530	-0.0455	0.3690*	-0.1474*	-0.0597	0.3749
0 for non-presence of passive blockholder (N=117)	(0.9944)	(0.2674)	(0.5320)	(0.1066)	(0.5361)	(0.094)	(0.0571)	(0.3369)	(0.2590)
1 for presence of passive institutional blockholder (N=83)	-0.0002	0.0004	0.2903	-0.1005	-0.1044	0.9750	-0.1371	-0.0917	0.6830
0 for non- presence of passive institutional blockholder (N=169)	(0.6669)	(0.2192)	(0.5310)	(0.3145)	(0.1754)	(0.1900)	(0.1478)	(0.1225)	(0.1970)
1 for presence of passive individual blockholder (N=69)	-0.0001	0.0003	0.5315	-0.2379*	-0.0523	0.2381	-0.1893*	-0.0755	0.3394
0 non-presence of passive individual blockholder (N=183)	(0.8933)	(0.3283)	(0.6420)	(0.0999)	(0.4162)	(0.2740)	(0.078)	(0.180)	(0.6560)
1 if firm have a toehold (N=48)	0.0000	0.0000	0.9370	-0.1500	-0.0920	0.6930	-0.1750	-0.0910	0.4970
0 if firm without a toehold (N=204)	(0.4290)	(0.5430)	(0.2900)	(0.2450)	(0.1840)	(0.3970)	(0.1180)	(0.1100)	(0.3890)
1 if firm use cash (N=203)	0.0003	-0.0006	0.151	-0.0100	-0.4900**	0.0180**	-0.0360	-0.3990***	0.0110**
0 if firm use stock and cash (mixed) (N=49)	(0.1040)	(0.3320)	(0.000)***	(0.8700)	(0.0120)	(0.005)***	(0.4960)	(0.0030)	(0.008)***
1 if firm provide FO (N=46)	0.0010	0.0000	0.2910	-0.0740	-0.1100	0.8040	-0.1060	-0.1070*	0.9940
0 if firm without FO (N=206)	(0.2520)	(0.9010)	(0.3870)	(0.5510)	(0.1150)	(0.4980)	(0.3510)	(0.0580)	(0.9730)
1 if target company is public listed company (N= 27)	0.0007	0.0001	0.6871	0.1349	-0.1317**	0.1559	0.0895	-0.1302**	0.2063
0 if target company is private listed company (N= 225)	(0.6231)	(0.5683)	(0.142)	(0.4395)	(0.0434)	(0.177)	(0.5853)	(0.0141)	(0.163)

*, ** and *** indicate 10%, 5% and 1% respectively

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Table 5.8
Test for Differences in Means by Using CAAR for Matching-Firms Portfolio

Variables	CAAR (one-firm portfolio)			CAAR (two-firm portfolio)			CAAR (four-firm portfolio)		
	1	0	p-value Difference of two means (Mann Whitney U)	1	0	p-value Difference of two means (Mann Whitney U)	1	0	p-value Difference of two means (Mann Whitney U)
1 if family ownership ≥ 10% (N=208)	-0.0383	0.0668	0.4561	-0.0615	0.0068	0.6246	-0.0760	-0.0086	0.5964
0 if family ownership < 10% (N=44)	(0.5680)	(0.5905)	(0.6240)	(0.2890)	(0.9573)	(0.5070)	(0.176)	(0.940)	(0.2350)
1 if family ≥ 33% (N=134)	0.0115	-0.0556	0.5694	-0.0377	-0.0631	0.8078	-0.0476	-0.0832	0.7218
0 if family < 33% (N=118)	(0.790)	(0.404)	(0.898)	(0.6232)	(0.3779)	(0.477)	(0.525)	(0.211)	(0.6110)
1 if blockholder presence (N=182)	-0.0326	0.0130	0.7263	-0.0586	-0.0261	0.7874	-0.0761	-0.0334	0.7387
0 if non-blockholder presence (N=70)	(0.6453)	(0.9054)	(0.8580)	(0.3370)	(0.8029)	(0.1800)	(0.158)	(0.773)	(0.5310)
1 for presence of active blockholder (N=99)	0.0514	-0.0660	0.3266	0.0100	-0.0881	0.3605	-0.0426	-0.0783	0.7229
0 for non-presence of active blockholder (N=153)	(0.5708)	(0.3993)	(0.2340)	(0.9041)	(0.1969)	(0.1400)	(0.567)	(0.477)	(0.8340)
1 for presence of active institutional blockholder (N=48)	0.0893	-0.0456	0.3690	0.0016	-0.0616	0.6510	-0.0752	-0.0617	0.9143
0 for non- presence of active institutional blockholder (N=204)	(0.5077)	(0.4909)	(0.2650)	(0.9899)	(0.2872)	(0.1600)	(0.504)	(0.275)	(0.5630)
1 for presence of active individual blockholder (N=55)	0.0293	-0.0336	0.6425	0.0398	-0.0745	0.3399	-0.0116	-0.0789	0.5433
0 for non-presence of active individual blockholder (N=197)	(0.8024)	(0.6239)	(0.3940)	(0.6994)	(0.2216)	(0.5750)	(0.901)	(0.181)	(0.8370)
1 for presence of passive blockholder (N=130)	-0.0868	0.0514	0.2428	-0.0925	0.0039	0.4016	-0.0897	-0.0371	0.6052
0 for non-presence of passive blockholder (N=122)	(0.3153)	(0.5256)	(0.7260)	(0.1877)	(0.9611)	(0.6260)	(0.150)	(0.645)	(0.9740)
1 for presence of passive institutional blockhold (N=79)	-0.255**	0.0875	0.0126**	-0.2172**	0.0270	0.0305**	-0.1897**	-0.0070	0.0911*
0 for non- presence of passive institutional blockholder(N=173)	(0.0341)	(0.1857)	(0.065)*	(0.0212)	(0.6695)	(0.062)*	(0.035)	(0.908)	(0.2080)
1 for presence of passive individual blockholder (N=67)	0.0521	-0.0460	0.4468	0.0302	-0.0785	0.3386	-0.0111	-0.0915	0.2979
0 for non-presence of passive individual blockholder (N=185)	(0.6289)	(0.5166)	(0.3760)	(0.7491)	(0.2140)	(0.2640)	(0.883)	(0.146)	(0.2440)
1 firm have toehold (N=47)	0.0410	-0.0340	0.5560	-0.0470	-0.0500	0.9780	-0.0280	-0.0720	0.7260
0 firm without toehold (N=205)	(0.7020)	(0.6220)	(0.5500)	(0.6880)	(0.3960)	(0.8200)	(0.802)	(0.200)	(0.6910)
1 if firm use cash (N=203)	-0.0250	-0.0010	0.8840	-0.0640	0.0090	0.5830	-0.0750	-0.0210	0.6490
0 if firm use stock and cash (mixed) (N=49)	(0.7040)	(0.9960)	(0.5340)	(0.2790)	(0.9390)	(0.5900)	(0.194)	(0.842)	(0.6690)
1 if firm provide FO (N=43)	-0.0430	-0.0150	0.8700	-0.1820	-0.0220	0.2830	-0.1700	-0.0420	0.3310
0 if firm without FO (N=209)	(0.7840)	(0.8130)	(0.9440)	(0.1890)	(0.6950)	(0.2630)	(0.157)	(0.446)	(0.4550)
1 if target company is public listed company (N=26)	0.0073	-0.0230	0.8272	-0.0150	-0.0536	0.7946	-0.0631	-0.0644	0.9937
0 if target company is private listed company (N=226)	(0.9528)	(0.7217)	(0.8530)	(0.9130)	(0.3444)	(0.770)	(0.673)	(0.230)	(0.811)

*, ** and *** indicate 10%, 5% and 1% respectively

The BHAR when active institutional blockholders are present is an insignificant -0.36% and the BHAR without the presence of active institutional blockholders is -22.78%. This result indicates that firms without active institutional blockholders experience greater value destruction compared to firms with active institutional blockholders. In this case, active institutional blockholders provide a monitoring role in the sense that they would ensure that firms would not engage in value-destructive acquisitions.

Similarly, the difference in BHARs between the presence of active individual blockholders and non-presence of active individual blockholders is significant. In contrast to the result of active institutional blockholders, the presence of active individual blockholders leads to a lower BHAR of -35.45% compared to the BHAR of -13.09% for the group of firms without the presence of active individual blockholders. This indicates that firms with active individual blockholders perform more poorly than firms without the presence of active individual blockholders. A plausible reason is that active individual blockholders might gain personal benefits from the M&As such as reducing the risk of their investments. In this case, they would neglect their role as monitoring agents in order to achieve their objective.

Finally, when portfolios of matching firms are used as the benchmark, none of the differences in BHAR is significant and when long run performance is measured by using CAAR, none of the differences is significant regardless of the type of benchmark used.

5.6.3 The Effects of Passive Blockholders on the Three-Year Performance

The presence of passive blockholders and the presence of institutional passive blockholders lead to significant impact when either method of measuring abnormal performance (BHAR or CAAR) is used with the EMAS index as the benchmark. The difference in returns between the presence of passive blockholders and non-presence of passive blockholders is significant at the 1% level for CAAR and 5% level for BHAR. The return when using BHAR is -28.20% while when using the CAAR method, the return is -19.07% when passive blockholders are present while the returns for both BHAR and CAAR are not significant in the non-presence of passive blockholders. These results indicate that the existence of passive blockholders in a firm lessens firm value.

When passive blockholders are further segregated into passive institutional blockholders and passive individual blockholders, the difference in returns between the presence of passive institutional blockholders and non-presence of passive institutional blockholders is significant at 1% level while the difference in returns between the presence of passive individual blockholders and non-presence of passive individual blockholders is not statistically significant. The return when BHAR (CAAR) is used is a statistically significant -31.72% (-23.17%) in the presence of passive institutional blockholders while BHAR (CAAR) when passive blockholders is not present is -10.56% (2.97%). These results indicate that the lower performance of passive blockholders is driven by passive institutional blockholders and not by passive individual blockholders. A possible reason is that passive institutional blockholders invest in many companies and hold a diversified portfolio. Thus, they do not participate in decision making, which contributes to less effective monitoring of a

firm's management. If they are not satisfied with the firms' performance, they would just sell their holdings. When returns between the two groups are compared by using matching-firm portfolio, there is no significant difference except for CAAR of passive institutional blockholders if one or two matches are used as summarized in Table 5.8. The difference in CAARs between the two groups is significant at least at a 10% level.

5.6.4 The Effects of Cash on the Three-Year Performance

When acquisitions are classified according to method of payment, both cash and the mixture of stock and cash lead to a lower BHAR. BHAR for cash is -14% and the mixture of stock and cash is -32.20%. The difference for these two types of payment is significant at the 10% level. When portfolios of matching firms are used as the benchmark, the results of differences between the two groups are significant at a 1% level especially when portfolios of two or four matching firms are used with the matching firms experiencing lower returns compared to the acquiring firms. If acquirer finds it difficult to value the attractiveness of an acquisition, the acquirer might prefer to use stock to pay for the acquisition as a way to share the risk of the acquisition with the shareholders of the target companies. As for the CAARs, the differences between the two groups are not significantly different from zero.

5.6.5 The Effects of Fairness Opinion on the Three-Year Performance

The results show the differences in three-year returns between the 45 companies that provide fairness opinion (FO) and the 207 companies without FO are not statistically significant when either parametric or non-parametric test is used regardless of the types of benchmark used. Thus, it can be concluded that the performance of acquiring

companies with fairness opinion (FO) is comparable to the performance of companies without FO.

5.6.6   The Effects of Types of Target on the Three-Year Performance

The BHAR of the 27 public listed target firms is an insignificant 11.19% while the BHAR of the 225 of non-listed target firms is a statistically significant -20.97% when EMAS Index is used as the benchmark. The differences between the two BHARs is significant at least at 5% level when either parametric or non-parametric tests are used. The results indicate that acquirers acquiring non-listed target firms experience greater loss in return compared to acquirers acquiring public listed target firms. A possible reason is that it is easier to value public listed target firms as their prices could be observed. In this case, overpayment could be reduced. This result differs from Peng and Isa (2012) who find that there is no discernible difference in returns between the two groups. As for the rest of the BHARs or CAARs, the differences between the two groups are not significantly different from zero, which is consistent to the findings by Peng and Isa (2012).

5.7   Regression for long-run stock performance

Table 5.9 summarizes the results of stock performance using the equally-weighted (EW) returns for a three-year period with EMAS Index and matching-firm portfolio are used as the benchmarks. Panels A and B of Table 5.9 display the regression results in the forms of buy-and-hold abnormal returns (BHARs) and cumulative average abnormal returns (CAARs) respectively with EMAS Index served as the benchmark while Panels C and D summarize the regression results using BHARs and CAARs respectively as matching-firm portfolios are employed as the benchmark. As for all 18

independent variables, the regression analyses of BHAR and CAAR are carried out. However, Table 5.9 only reports the significant variables. The appropriateness of dropping the variables are tested by using F-test. As observed from Table 5.9, there are more significant variables when EMAS Index is used as the benchmark. However, when matching-firm approach is adopted, the number of significant variable is reduced to at most two.

The F-statistics for Panel A is 4.17 and it is statistically significant at 1%. The F-statistic indicates that jointly, the coefficients of the independent variables are not equal to zero. The value of the F-statistic[14] for the appropriateness of dropping the other 12 variables is 0.31 with a p-value of 0.9836. Thus, the null hypothesis that all 12 omitted variables is equal to zero cannot be rejected. The regression equation is able to explain 9.13% of the variation in the dependent variable while the adjusted R-squared is 6.91% in Panel A. The R-squared and the adjusted R-squared in this study are lower and are found to be in contrast from those of previous studies. In the research conducted by Adhikari and Sutton (2016), they find that the R-squared are between 16.42% and 18.56% when market index is used as the benchmark. Meanwhile, Peng and Isa (2012) observed that the adjusted R-squared is 19.3% for a three-year performance when market index is used. To be simply put, there are six variables that influence BHAR returns, namely active individual blockholder (D4BLIDACT), passive individual blockholder (D4BLIDPSV), passive institutional blockholder (D4BLISPSV), board size (BOARDSIZE) cash (D4CASH) and types of target (D4PUBLIC).

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[14] F-statistic of dropping the variables from stepwise approaches is not reported in the Table 5.9

The presence of active individual blockholder (D4BLIDACT) and passive individual blockholder (D4BLIDPSV) leads to the decrease in shareholders' wealth as they lead to a -22.24% or -19.94% reduction in three-year performance respectively. Both coefficients are statistically significant (p-value = 0.05). This implies that investors react adversely when acquiring firms have more active or passive individual blockholder. Hypothetically, the D4BLIDACT and D4BLIDPSV should produce positive result as these two variables are believed to be able to lower the agency's problem. Interestingly, this study finds negative returns. One possible explanation is that either active or passive blockholder, only seek to diversify their investment in order to reduce their overall risk. Thus, they are willing to accept the non-profitable acquisitions.

The presence of passive institutional blockholder (D4BLISPSV) also shows decreasing returns to acquirers, with three-year wealth reduction of -25.42% and it is statistically significant at 1% level. Based on this data, it is presumable to explain the outcome by saying that passive institutional blockholders invest in many companies and hold a diversified portfolio, thus they do not participate in decision making, which contribute to less effective monitoring of a firm's management. If they are unsatisfied with the firms' performance, they have the option to sell their holdings. The result is different from those of Boubakri *et al.* (2008) and Adhikari and Sutton (2016) who discovers that blockholder does not have any effect on long-run stock returns. Next, the data also suggest that board size (BOARDSIZE) influences three-year performance positively. The coefficient of BOARDSIZE is 0.0422 and it is statistically significant at 10% level. This positive result proposes that larger board creates more value. Hence, a board with more members can then progress to a more efficient decision making.

Table 5.9

Regression Analyses by Using Equally-Weighted (EW) Approach Following Acquisitions Completion

VARIABLE	EMAS Index (BHAR) (A)	EMAS Index (CAAR) (B)	BHAR (C) 1-MATCH	2-MATCH	4-MATCH	CAAR (D) 1-MATCH	2-MATCH	4-MATCH
D4BLIDACT	-0.2224** (0.0350)							
D4BLIDPSV	-0.1994** (0.0343)	-0.228** (0.0267)						
D4BLISPSV	-0.2542*** (0.0062)	-0.2797*** (0.0030)				-0.3427** (0.0125)	-0.2442** (0.0308)	-0.1827* (0.0920)
BOARDSIZE	0.0422* (0.0660)		0.0002* (0.0890)					
D4FOUNDER		-0.3750* (0.0551)						
D4CASH	0.1591* (0.0825)			0.5153** (0.0125)	0.3629** (0.0105)			
D4PUBLIC	0.3201** (0.0308)							
MTBV				0.0473*** (0.0021)				
FAMILY								
FAMBRD								
D4BLISACT								
EXECBRD								
INEDBRD								
D4TOEHOLD								
D4FAIRNESS								
D4MIXED								
CONSIDERATION								
LNMV								
CONSTANT	-0.4560	0.1399	-0.0014	-0.5721	-0.39901	0.0875	0.0270	-0.0070
	0.0196	0.0493	0.1301	0.0064	0.0025	0.1865	0.6702	0.9090
Obs	252	252	252	252	252	252	252	252
F-stat	4.17	5.45	2.91	5.06	6.65	6.33	4.72	2.86
Sign F-stat	0.0005	0.0012	0.0892	0.0070	0.0105	0.0125	0.0308	0.0920
R-squared	0.0913	0.0699	0.0133	0.0490	0.0327	0.0287	0.0185	0.0113
Adj R-squared	0.0691	0.0586	0.0093	0.0414	0.0288	0.0248	0.0146	0.0074

*, ** and *** indicate 10%, 5% and 1% respectively

With regard to deal characteristics, this study finds positive results for acquisitions of method of payment (D4CASH) and public target (D4PUBLIC) on the three-year performance. When acquisitions are financed by cash (D4CASH), it can be noticed that shareholders experienced a return of 15.91% greater than that of the acquisition financed by a mixture of stock and cash. The return is significant at 10% level. The greater returns of cash financing acquisitions might be due to the fact that acquirers will use cash if they are confident that they will not overpay for the acquisitions. If they believe that the targets are difficult to value, they will choose stock financing as in this way, the riskiness of the acquisitions will be shared with target shareholders.

Finally, D4PUBLIC leads to a 32.01% increase in buy-and-hold returns (BHARs) and it is statistically significant at 5% level. The positive returns from acquiring a public target company can be linked to the acquirers' easier access in gaining information regarding the target. Since the target is a listed company, it is a requirement regulated by Bursa Malaysia that all listed companies must provide complete annual reports and to disclose any material information to their shareholders. In this case, it is easier to value a public company and the acquirer can prevent overpayment to obtain the targets. The result is consistent with that of Bhabra and Huang (2013) who claim that acquirer in China generates synergetic benefit in acquiring public listed firms over a three-year period. In contrast, Peng and Isa (2012) state that acquirers who acquired public target companies do not experience value-reduction, but such results might be due to the small sample of public acquisitions, while in fact, the acquisitions of private targets lead to decreasing return to shareholders.

The results in Panel B show the cumulative average abnormal returns (CAARs) when EMAS Index is used as a benchmark. The adjusted R-squared in Panel B is 5.86%. Only three variables are significant. The null hypothesis that all 15 omitted variables is equal to zero cannot be rejected as the value of the F-test is 0.73 with a p-value of 0.7575. Two blockholder variables, D4BLIDPSV and D4BLISPSV, are negatively significant. These results are similar to those in Panel A. The results of both passive individual and institutional are negative with -22.80% and -27.97% respectively. Both results are statistically significant at 5% level. Panel B shows that the existence of founder-director (D4FOUNDER) is negatively significant at 5% level. D4FOUNDER leads to a -37.50% reduction in CAARs for a three-year performance. The negative return suggests that founder-director may acquire other companies to diversify their risks. In this case, chances that they might overpay for the targets are higher. Furthermore, as argued by the hubris hypothesis (Roll, 1986), the founders' intuition in making risky selection of other firms might be due to their previous success in prospering their companies. Thus, the variables D4BLIDACT, BOARDSIZE, D4CASH and D4PUBLIC which are significant in Panel A, are no longer significant.

Panels C and D of Table 5.9 display regression results when the matching-firm portfolios are used as the benchmarks for both BHAR and CAAR. The results in Panel C implies that when one or four matching firms are used, it will only produce one significant variable, in comparison to the application of two matching firms, by which two significant variables are obtained. The null hypothesis that all omitted variables is equal to zero cannot be rejected as the value of the F-test are 0.73 for one-match, 0.80 for two-match and 0.63 for four-match with insignificant p-values. The adjusted R-squareds are 0.93%

for one-match, 4.14% for two-match and 2.88% for four-match. The results also make clear that the coefficient of board size (BOARDSIZE) is 0.0002 if one-match portfolio is used. As for BHAR's, which is based on two-match portfolio, cash (D4CASH) and market-to-book value (MTBV) are positively significant at least at 5% level. The coefficients are 0.5153 and 0.0473, respectively. Based on this result, the positive result of MTBV suggests that the growth opportunity in companies can lead to a better three-year performance. For BHAR that is based on four-match portfolio, only cash (D4CASH) is statistically significant at 5% level.

Next, Panel D shows the results of CAAR. In all three models, only blockholder (D4BLISPSV) is significant at least at 10% level. The null hypothesis that passive institutional that all omitted variables is equal to zero cannot be rejected as the value of the F-test are 0.26 for one-match, 0.47 for two-match and 0.46 for four-match. The adjusted R-squareds for one, two and four matching firm portfolios are 2.48%, 1.46% and 0.74% respectively. The coefficients of D4BLISPSV are -0.3427 for one-match, -0.2442 for two-match and -0.1827 for four-match. The rest of the variables continue to have an insignificant effect on shareholder's wealth for the three-year performance.

In summary, the empirical evidence obtained entails that blockholders do not lead to better performance after acquisitions and family ownership does not lead to value-destruction. Furthermore, there are more significant variables when EMAS is used as the benchmark instead of portfolios of matching firm.

5.8 Conclusion

This chapter provides the results of long-run stock performance that is related to objective three and four. With regards to objective three, there are two methods and two benchmarks with two approaches. Two methods applied are buy and hold return (BHAR) and cumulative average abnormal return (CAAR). Meanwhile, the benchmarks are FTSE EMAS Index and matching firms while two approaches are equally-weighted (EW) and value-weighted (VW). For BHAR under EW approach, result show a negatively significant returns in EMAS Index benchmark and two and four-matching firm's benchmark. For VW approach, the results is not significant at all. Moreover, in objective four, two analyses which are univariate and multivariate are conducted. In multivariate analyses, three variables namely board size, cash and market to book value give significant effect according to BHAR method while only one variable that is passive institutional blockholder affect CAAR returns.
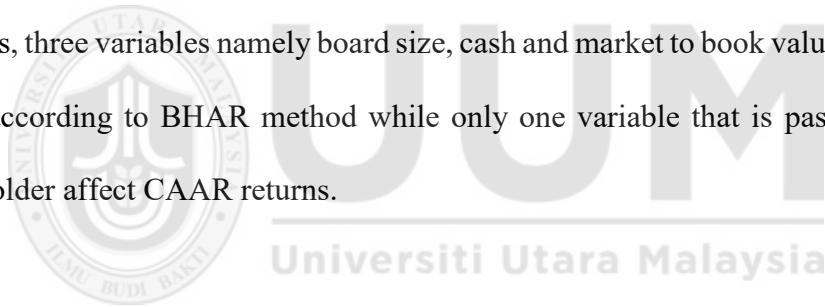
CHAPTER SIX
CONCLUSION AND RECOMMENDATION

6.0 Introduction

The final chapter present the conclusions of the present study. This chapter is structured into five sections. It begins with the summary of the main issues of the study, subsequently, briefly summarizes findings of the study based on announcement of returns and long-run return performance. This is followed by a discussion the contributions and implication of the findings in relation to relevant parties. In the last section of this chapter provided the limitations of the study are outlined and leading to some recommendations for future research and finally summarizes the chapter.

6.1 Overview of the Study

This study explores the announcement effects and long-run returns of acquisition on acquiring firms' performance. Moreover, this study also explores whether governance mechanisms, such as ownership patterns (family, family director and blockholders activism) as well as selected board of director structures (board size, independent director, executive director and founder-director), deal characteristics (fairness opinion (FO) and toehold) and control variables (cash, mixed, public and consideration) could explain short-term and long-run returns in Malaysian acquiring firms. The positive announcement effect of acquisitions by the acquirers has been well documented in various countries especially in the United States, European and Asian markets. Chapter Two illustrates past studies that examine acquisition announcement on stock markets' reactions to acquirers by advancing two prominent hypotheses, namely synergistic theory and agency problem.

Chapter Three discusses samples used in this study which includes all companies listed on Bursa Malaysia that announced acquisitions during the period from 2000 to 2013. After applying certain criteria such as an exclusion of financial related companies, ACE Market companies and missing data from the annual reports or DataStream, the final sample size is 203. The event study methodology is used in order to investigate the announcement effect in which market model (MM) and market adjusted model (MAR) are used to calculate the abnormal returns. In addition, BHAR and CAAR are used as measurement techniques for long run performance. Furthermore, two benchmarks are used namely EMAS Index and matching-firm portfolio. To investigate the factors that explain the announcement returns and long-run returns following announcements and completion of the acquisition respectively, cross-sectional multiple regression analyses are used.

6.2   Summary of Findings

There are four main objectives in this study. The first objective is to determine if acquisitions create immediate value to acquiring firms. The second objective is to determine the factors that affect wealth creation following acquisition announcements. For the second objective, 12 major factors, which are ownership patterns (family, family director and blockholders activism), selected board of director structures (board size, independent director, executive director and founder-director) and deal characteristics (FO and toehold) are tested. The third objective is to examine the long-run effect of acquisitions on firm value and the fourth objective is to determine the factors that affect wealth creation following long-run stock performance.

For the first objective, the result of announcement effect of this study is consistent with previous studies in Malaysia and developed countries (see, for example, Mat Nor & Ismail, 2006; Ma *et al.* 2009; Mat-Rahim & Pok, 2013; Gleason, Pennathur & Wiggenhorn, 2014; Andriosopoulos & Yang, 2015 and Bougarrou & Navatte, 2013) which find positive significant return for short term period. The positive returns to shareholders show that acquisitions in Malaysia are value-enhancing and this could be attributed to the synergistic effects as asserted by Bradley, Desai and Kim (1983) and Duggal and Miller (1999).

In the second objective, six factors are significant in explaining the announcement returns in five different regression models (refer to Table 4.15 and Table 4.16). The factors are family ownership, blockholder activism (active individual blockholders (D4BLIDACT), passive individual blockholders (D4BLIDPSV) and active institutional blockholders (D4BLISACT)), fairness opinion (FO) and cash. In particular, the five-day (-3,1) of acquisition announcements is shown to have a positive effect with family ownership (FAMOWN) and active institutional blockholders (D4BLISACT). In contrast, negative effects are recorded in four variables: active individual blockholders (D4BLIDACT), passive individual blockholders (D4BLIDPSV), fairness opinion (FO) and cash (D4CASH) on acquisition announcement effects. The results show that family ownership and cash are consistently significant across five models applied in explaining returns.

Past studies argue that the conflict of interest between majority and minority shareholders are more severe in family controlled firms (Basu, Dimitrova & Paeglis, 2009; Bauguess & Stegemoller, 2008). However, the finding of this study is inconsistent with that

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argument as this study finds significant positive returns for family controlled firms for short-term performance.

The presence of blockholders in firms could strengthen monitoring of managerial actions. Consistently, this study reports a positive relationship between the presence of institutional active blockholders (D4BLISACT) and abnormal returns. This indicates that they play their monitoring roles effectively in ensuring that managers acquire a valued target firm. In contrast, negative results are observed for individual active blockholders (D4BLIDACT) and individual passive blockholders (D4BLIDPSV). A possible justification for the negative returns is that their objective is to reduce investment risk by diversifying their portfolio.

The effect of fairness opinion (FO) on abnormal returns are mixed. When all independent variables are used in the estimation model, FO is not significant. However, when insignificant variables are dropped through the stepwise method, FO becomes negative and marginally significant at the 10% level. This indicates that investors do not expect that FO could be used to reduce the information asymmetry between minority and majority shareholders. Finally, this study finds that 88.18% of the acquisitions are dominated by cash financing instead of stock financing. Thus, the negative coefficient for D4CASH supports the argument by Jensen (1986) that cash-rich firms could use excess cash for unprofitable investments.

The third objective is examined by looking at the long-run stock price performance within a three-year period. Two benchmarks are used: EMAS and matching-firm portfolio. When

the three-year performance of acquiring firms is compared to those of EMAS using BHAR, it is found that the acquiring firms underperformed EMAS for both equal-weighted (EW) and value-weighted (VW) approaches. When CAAR is used, there is no evidence of differences in the performance between acquiring firms and EMAS under both weighting procedures. However, when matching-firm benchmark is used, evidence of under- or over-performance disappears especially when the VW approach is used. The results using BHAR is negatively significant at 5% level only when four-matching EW portfolio is applied. The rest of the results are insignificant, either when EW or VW is applied. Meanwhile, the entire results in CAAR for all matching portfolios are insignificant regardless of using either EW or VW. The results show that the Malaysian market can be considered as efficient as long-run stock performance does not lead to over or under performance of acquiring firms for almost all measures.

Fourth, to enrich the study on long-run share price performance, an examination of the factors that affect performance is performed. The most obvious finding for BHAR is that there are six significant variables when EMAS is used as the benchmark. While for CAR, three variables are significant. When matching-firm portfolios are used for either 1-match, 2-match or 4-match, results of BHAR show that at most only two variables are significant while for CAAR only one variable is significant. The overall results indicate that most significant variables are D4CASH when BHAR is used and D4BLISPSV when CAR is adopted. Acquirers that used cash financing will create value in the long-run. Meanwhile, the presence of passive institutional blockholders in the acquiring firms leads to value reduction over the three-year period.

6.3   Contributions and Implication of Findings

The study extends the scope of finance literature in Malaysia. It provides better insight to investors, practitioners and academicians on issues in acquisitions. There are four implications of this study.

First, the evidence shows that family ownership leads to positive relationship in explaining returns for short-term performance. This indicates that family-controlled firms do not engage in opportunistic behaviour by expropriating wealth from minority shareholders. Thus, the finding of this study contradicts that of Lemmon and Lins (2003) who find that controlling shareholders in Asia including Malaysia engage in expropriating behaviour. A possible explanation for the positive relationship is that expropriation does not occur in acquisitions as it will reduce the stock prices. The finding has implications to several parties such as managers of acquiring firms, policymakers and academicians. With respect to managers of family-controlled firms, as long as an acquisition is creating value, they do not have to worry about investors penalizing them. Policymakers do not have to worry about opportunistic behaviour because investors will penalize family-controlled firms if they engage in opportunistic behaviour as investors are always monitoring their actions. This study also enriches academicians' knowledge as it shows that investors make rational investment decisions. If they believe that acquisitions by family-controlled firms would create value, they would invest in those companies.

Second, this study sheds light on the role of corporate governance mechanisms in affecting shareholders' wealth in M&As. There are two mechanisms examined in this study, which are blockholder ownership and director characteristics. Investors reacted positively in the

short-term to the presence of active institutional blockholders in the acquiring firms as they could monitor managerial activities in those companies. On the other hand, the presence of either passive institutional blockholders, passive individual blockholders or active individual blockholders leads to lower value, which could be due to lack of monitoring in the case of passive blockholders or to diversifying concern for active individual blockholders. Therefore, a good acquisition decision is in the hands of active institutions as they would ensure the effectiveness of the acquisition. With respect to directorship, the overall results indicate that the presence of directors do not lead to significant effect on value except for independent directors, where in additional analyses, the proportion of independent directors lead to significant value creation. Thus, the recommendation by SC that independent directors should constitute at least one-third of the board is good to shareholders of acquiring firms.

Third, SC requires an acquiring company to hire an independent party to re-evaluate the appropriateness of an acquisition proposal so that minority shareholders would not lose out in the acquisition. However, this study finds that the requirement by SC, or better known as FO, leads to a significantly negative return to the acquiring firms in the short-term while there is no significant effect for all models in the long-run. The finding of this study indicates that the FO policy is unable to solve the conflict of interest problem between majority and minority shareholders in the short term. Therefore, this study provides new insights into the role of FO to policymakers and they should consider improvement to the current ruling about FO to make it more effective.

Fourth, to enrich the study of share price performance, this research examines the long-run performance since there is a lack of studies on long-run performance in Malaysia. To make the results of long run performance more robust, this study uses both methods of estimating returns (BHAR and CAAR), both weightage techniques (EW and VW) and different benchmarks (EMAS and matching firms (1-match, 2-match and 4-match)). A comparison of the two benchmarks shows that the results become less significant when matching-firm is adopted as the benchmark. Since the matching-firm approach compares an acquiring firm with firms with similar characteristics, it is a better benchmark to be adopted. Finally, the findings show that over the three-year period, there is no trading strategy that could be adopted to earn abnormal profits as the performance of the acquirers are basically similar to those of matching firms and none of the factors is significant in all regression models.

6.4   Limitations and Recommendations for Future Research

This study is subject to two limitations. First, an examination of the effects of CEO duality could not be done due to the small sample size of 10 observations out of 203 observations. This is might be due to the recommendation by the Malaysian Code on Corporate Governance 2002 (MCCG) that the positions of chairman and CEO should be held by different individuals. Second, for stock-financing and mixed-financing methods, it is preferable to separate the two groups. However, since only 16 acquirers used stock-financing and eight acquirers used mixed-financing, this study has to combine them into one group.

There are three suggestions for future research. The first suggestion is to include the roles of government-linked investment companies (GLICs) as GLICs hold stakes in many companies in Malaysia. Therefore, it is in their interest to ensure that M&As undertaken by companies under their control are profitable. Second, this study finds that FO cannot alleviate investors' concerns about conflict of interest in the acquisition process. Thus, more research is required to determine the efficacy of the independent adviser and the role of financial adviser should be investigated to ensure that it is truly independent. Third, the Malaysian Code of Corporate Governance 2012 (MCCG) classifies an independent director as a director with less than nine years of attachment to a firm. Thus, further research could consider the effectiveness of independent directors with less than nine years of experience.

6.5 Summary of the Chapter

This study investigates the effect of corporate governance on an acquirer's stock price performance for a sample of companies announcing acquisition in Malaysia from 2000 to 2013. The most obvious finding to emerge from this study is that family and cash play important roles in explaining the effects of acquisition announcements in the short term. Moreover, this study finds that the acquiring firms could only get a normal return over a three-year period following acquisitions. Finally, this study discussed limitations and recommendations for future research.

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