

## Cash Richness, Acquisitions and Internal Governance

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*This study investigates the relevance of Jensen's (1986) free cash flow theory to the market for corporate control in Australia. Specifically, we introduce two proxies of free cash flow, excess cash holdings and excess accounting cash flow and test the relationship between governance structures of cash rich bidders and their long-run post-acquisition performance. Results indicate that the proportion of non-executive directors on the board is significant in explaining the long-run returns to cash rich bidders with excess accounting cash flow, supporting the monitoring role of non-executive directors.*

**Field of Research:** Acquisitions; Corporate governance; Free cash flow; Cash holdings

### 1. Introduction

This study tests the agency costs of free cash flow proposed by Jensen (1986) who argues that when managers have more cash than is needed to fund all positive NPV projects (i.e., free cash flow), there is an incentive for managers to waste the excess cash on unprofitable investments such as acquisitions. Therefore, this study investigates if corporate governance mechanisms are effective in monitoring takeover decisions. Specifically, based on a sample of cash rich bidders (defined as those with excess cash), we examine the relationship between the long-run takeover performance and internal governance structures including managerial ownership, board composition and board size. An implicit assumption of the free cash flow hypothesis is that managers of firms with excess cash flow are entrenched. Thus, by focusing on the long-run performance of cash rich bidders who are expected to face greater conflicts of interest between managers and shareholders, we can gain a better understanding of the effectiveness of corporate control mechanisms in mitigating agency costs when free cash flow exists in the firm.

Two contributions to the literature are made by this study. First, in addition to the "excess cash holdings" measure used in Harford (1999), this study also measures the level of excess cash flow, which is closer to Jensen's definition of free cash flow than the measures used in previous studies. Second, this study is the first comprehensive Australian study that examines how internal governance characteristics influence the cross-sectional dispersion of post-acquisition performance of cash rich firms.

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Overall, our results show that the proportion of non-executive directors on the board is the only governance variable found to be significant and is positively related with the long-run performance of cash rich bidders with excess accounting cash flow. This result is consistent with the corporate governance recommendation released by the Australian Stock Exchange (ASX) that a majority of the board should be independent directors.

This paper is organized as follows. In section 2, we review the relevant literature on bidder takeover performance and internal governance. In section 3, we outline the hypotheses tested in this study. Section 4 describes the data sources and sample selection that we use in our empirical analysis. In section 5, the methodology and variable definitions used in this study are provided. In section 6, the test results on the relationship between long-run takeover performance of cash rich bidders and their internal governance are presented. Concluding remarks and areas for future research are offered in the last section.

## 2. Literature Review

One implicit assumption of the free cash flow hypothesis is that the presence of ineffective corporate governance within a firm, coupled with excess cash, leads to increased agency costs. Thus, the objective of this study is to test the effectiveness of internal governance mechanisms in controlling the agency problem associated with free cash flow in the takeover context.

### 2.1 Managerial Ownership

Two major empirical studies on the relationship between managerial ownership and firm value are by Morck et al. (1988) and McConnell and Servaes (1990). Both report a non-linear relation between management ownership and firm valuation, supporting both the convergence of interest and management entrenchment hypotheses depending on which force dominates at a particular range of managerial ownership.

A study by You, Caves, Smith and Henry (1986) finds a significant positive relationship between the abnormal rate of returns around the takeover announcement period and share ownership by managers and directors. However, the study by Aziz and Mortazavi (1993) uses a sample of 59 US acquiring firms to explore the relationship between acquiring firms' boards of directors and cumulative abnormal rate of returns surrounding the announcement day. Contrary to the findings from earlier studies, Aziz and Mortazavi (1993) report that the percentage of share ownership by acquiring firms' officers and directors is insignificant in explaining acquirers' returns. Aziz and Mortazavi (1993) suggest that their results may be explained by the presence of an active market for takeovers and hence the agency cost is at its optimal level.

The weight of empirical evidence supports a non-linear relation between ownership by managers and firm valuation. Hence, this study expects a non-linear relationship between ownership by bidder management and long-run returns to bidders.

## **2.2 Board Composition**

Outside board members are more likely to be objective and independent than inside directors (Kosnik, 1987). Consistent with this argument, Fama (1980) posits that reputation effects can motivate independent outside directors to be good monitors. However, some scholars hold an opposing view because the board is not always independently and objectively formed. Both Jensen (1993) and Lipton and Lorsch (1992) argue that boards can be ineffective in monitoring management because the CEO plays an influential role in the selection of board members. As a result, outside directors may become less critical of management policies. In support of this view, Bhagat and Black (2002) find evidence against the conventional wisdom that independent outside directors are effective monitors of the management. Specifically, based on a large and long-horizon US sample, they find that firms with more independent boards, measured by the fraction of independent directors minus the fraction of inside directors, do not outperform other firms.

Several empirical studies have investigated the influence of outside directors on the takeover process. Byrd and Hickman (1992) examine the board structures of acquiring firms using a sample 128 takeover bids over the period 1980 to 1987 and find support for the argument that outside directors are better monitors of management. However, the study by Aziz and Mortazavi (1993), based on a sample of 59 acquiring firms identified from S&P's COMPUSTAT Research Annual File issued in 1987, reports that the proportion of outside directors on the board is an insignificant determinant of the abnormal rate of returns around the announcement date. They argue that an active market for corporate control may be sufficient for controlling managers' opportunistic behaviour and may thus explain the insignificant results found in their study.

In summary, this study tests if acquirers with a higher proportion of outside directors on the board have better long-run post-acquisition performance.

## **2.3 Board Size**

Board size can have an impact on the governance function of the board and the outcome of a firm's performance. Arguments in favour of larger boards are based on the resource dependence theory, which suggests that larger boards can enhance the board's ability to form environmental links and secure critical resources (Goodstein, Gautam, & Boeker, 1994). Belkhir (2009) based a sample of 174 bank and savings-and-loan holding companies from 1995-2002 find a positive relationship between board size and performance, measured by Tobin's Q and return on assets. The result suggests that increasing the number of directors in banking firms is associated with better performance.

However, some scholars argue against large boards. For example, Jensen (1993) suggests that as the board size increases, it becomes difficult to coordinate among board members and this outweighs the benefits of having more people on the board. This view is shared by Lipton and Lorsch (1992) who argue that larger boards are more likely to be associated with inefficient board decision making. Judge and Zeithaml (1992) also suggest that larger boards are less participative and less cohesive and are thus less likely to reach consensus and make

value-maximising decision than smaller boards. Accordingly, Lipton and Lorsch (1992) recommend that the size of the board should be limited to ten people, with a preferred size of eight or nine.

Smaller boards are more likely to achieve consensus and reach a positive corporate governance decision in a timely fashion. Yermack (1996) finds evidence supporting this view. The relationship between firm performance and board size is negative, indicating that the benefits associated with large boards is overwhelmed by poor communication and the slow decision-making process. Goodstein, Gautam and Boeker (1994) focus on the healthcare industry and find support for smaller boards. Specifically, they document a negative relationship between board size and the initiations for a strategic change in reorganization. The study by Mak and Kusnadi (2005) using Singapore and Malaysian firms as the sample also finds support for smaller boards. They report a negative relationship between board size and firm value, measured by Tobin's Q.

Interestingly, a more recent study by Coles, Daniel and Naveen (2008) find that the relationship between board size and firm value, measured by Tobin's Q, is U-shaped, indicating that firm value will be maximized when the board size is either very small or very large. Coles et al. (2008) argue that their results can be explained by the fact that firms with different characteristics have different needs. For example, firms that are more diversified, have larger firm size or higher leverage are more likely to benefit from larger boards as directors, in particular outside directors, can bring in different expertise to the board.

Since it is more costly for firms to adopt very large boards, this study posits that smaller boards will be associated with better long-run post-acquisition returns to acquirers.

### **3. Hypotheses Development**

To provide a stronger test of the effect of internal governance mechanisms on bidder performance, we focus on a sample of bidders that are cash rich. Cash rich bidders arguably have the greatest opportunity for expressing their non-value-maximising preferences.

#### **3.1 Managerial Ownership**

Based on the findings of Morck et al. (1988), we test if there is a non-linear relationship between bidder takeover performance and managerial ownership and posit that:

- H1a:** Managerial ownership is positively associated with the long-run post-acquisition performance of bidders at low levels of managerial ownership.
- H1b:** Managerial ownership is negatively associated with the long-run post-acquisition performance of bidders at middle levels of managerial ownership.
- H1c:** Managerial ownership is positively associated with the long-run post-acquisition performance of bidders at high levels of managerial ownership.

### 3.2 Board Composition

We test if independent outside directors can better protect shareholder interests in cash rich firms where agency costs of free cash flow are more prevalent, and we posit that:

**H2:** Cash rich bidders with a higher proportion of non-executive directors on the board have better long-run post-acquisition performance.

### 3.3 Board Size

We test if smaller boards are more effective in reducing the agency costs of free cash flow in cash rich firms and are less likely to allow value-decreasing acquisitions to be carried out. Thus, we posit that:

**H3:** Cash rich bidders with smaller boards have higher long-run takeover performance.

## 4. Data Sources and Sample Selection

This section describes the data sources and the sample selection criteria. The takeover data are obtained from the SDC Platinum database and are limited to “completed” takeovers in order to test the long-run post-acquisition performance.

To test the relationship between cash rich bidders’ long-run takeover performance and internal governance, cash rich firms are first identified based on two definitions of “excess cash”. An “Excash rich firm” is defined as a firm whose ratio of cash holdings to total assets is greater than 1.5 standard deviations of the predicted ratio of cash holdings to total assets. An “Exaccf rich firm” is defined as a firm whose ratio of accounting cash flow to total assets is greater than 1.5 standard deviations of the predicted ratio of accounting cash flow to total assets. The identification of cash rich firms is carried out using the cash normal model, shown in Table 1.

Then, the SDC Platinum database is used to identify which cash rich firms have carried out takeovers after being identified as cash rich. For each cash rich bidder, the names of board members, executive / non-executive directorship and the number of shares held by each board member are collected as of the most recent reporting date prior to the completion of the takeover from DataDisc CD-Rom database produced by the Australian Stock Exchange (ASX) and their annual reports. Given that the director and ownership data in DataDisc is available for the period between 1997 and 1999, the sample period for this test on the relationship between cash rich bidders’ long-run takeover performance and internal governance is confined to fiscal years 1998-2000.

**Table 1: Specification of the cash normal model for two different measures of cash richness**

This table shows the dependent and independent variables used in the pooled time-series cross-sectional regression analysis for two different measures of cash richness. CASH is the ratio of cash and short-term deposits deflated by total assets. ACCCF is the ratio of earnings after interest paid, tax paid and dividend paid but before depreciation to total assets. TD\_a is the ratio of total debt to total assets. Capex\_a is the ratio of capital expenditures to total assets. NWC\_a is the ratio of net working capital excluding cash to total assets. SIZE is the natural log of total assets in 1990 prices. MV/BV is the ratio of book value of total assets minus the book value of equity plus the market value of equity to book value of assets. VARCASH is calculated as the difference between the max and min values of CASH divided by the mean over a six year period which includes two years prior to and three years after the sample year plus the sample year itself. VARACCF is the difference between the max and min values of ACCCF divided by the mean over a six year period which includes two years prior to and three years after the sample year plus the sample year itself. YD refers to year dummy variables.

Cash Normal Models		
Variables	Model 1	Model 2
Dependent	CASH <sub>it</sub>	ACCCF <sub>it</sub>
Independent	TD_a <sub>it</sub>	TD_a <sub>it</sub>
	Capex_a <sub>it</sub>	Capex_a <sub>it</sub>
	NWC_a <sub>it</sub>	NWC_a <sub>it</sub>
	SIZE <sub>it</sub>	SIZE <sub>it</sub>
	MV/BV <sub>it</sub>	MV/BV <sub>it</sub>
	VARCASH <sub>it</sub>	VARACCF <sub>it</sub>
	YD93	YD93
	YD94	YD94
	YD95	YD95
	YD96	YD96
	YD97	YD97
YD98	YD98	
YD99	YD99	

## 5. Methodology and Variable Definitions

Since the agency problem is likely to be more severe in cash rich firms, this study provides a stronger test of the effectiveness of internal governance in takeover decisions by focusing on a sample of cash rich bidders. Cash rich firms based on the excess cash holdings measure and excess accounting cash flow measure are abbreviated as “Excash rich firms” and “Exaccf rich firms”, respectively, thereafter. The tests on the relationship between internal governance and long-run takeover performance based on these two samples of cash rich bidders are carried out using the following regression model:

$$BHAR_{it} = \alpha_i + \beta'_{t-1} X_{t-1} + \delta'_{t-1} Z_{t-1} + u_t$$

where  $BHAR_{it}$  measures the cash rich bidders' three-year post-acquisition performance and is calculated as the buy-and-hold abnormal return over the event window [+1, +36] defined in months relative to the first takeover announcement. In this study, two proxies are used, equal weighted decile adjusted returns (**EDEAR**) and equal weighted market adjusted returns (**EMKAR**).  $X_{t-1}$  is a set of control variables.  $Z_{t-1}$  is a set of internal governance variables.  $u_t$  is the error term.

Internal governance variables that are included in the model are outlined below:

- **OWNER** is directors' shareholdings in the acquiring firm, measured at the most recent financial year-end prior to the year of takeover. Since the information on managerial ownership is not readily available in Australia, directors' share ownership is used to proxy for managerial ownership. The shareholdings of directors include beneficial as well as non-beneficial directors' holdings, in which the latter include holdings by directors on behalf of their families and charitable trusts.
- **OWNER2 and OWNER3** are the square and cube of the percentage of share ownership by directors. They are included in the regression model to capture the possibility of a non-linear relationship between director ownership and long-run performance.
- **NONEXE** is the number of non-executive directors divided by the total number of members on the board, and is measured at the most recent financial year-end before the year of takeover.
- **BSIZE** is the size of the board, measured by the total number of directors on the board at the most recent financial year-end before the year of takeover.

Other variables related to bidder characteristics and deal characteristics are controlled for and defined below:

- **SIZE** is the natural log of total assets in 1990 prices and the consumer price index serves as the deflator.
- **FOCUS** is set to 1 if the bidder and the target belong to the same industry (i.e., the same two-digit SIC code) and 0 otherwise.
- **DUMMOP** is an indicator and is equal to one if the bidder uses cash only in financing the acquisition and zero otherwise.
- **BV/MV** is defined as the ratio of book value of total assets to market value of total assets minus the book value of equity plus the market value of equity, measured at the financial year before the year of takeover.
- **MULTI** is a dummy variable used to control for the cases where a firm may engage in multiple acquisitions in one acquisition year. MULTI is set to one if the acquirer has been involved in more than one acquisition and zero otherwise.

## 6. Results

This section presents the univariate and multivariate results of the test on the relationship between long-run takeover performance of cash rich bidders and their internal governance structures.

### 6.1 Univariate Results

Table 2 provides descriptive statistics of the financial characteristics, long-run post-acquisition performance, internal governance mechanisms and deal characteristics of Excash rich bidders, defined as bidders who are cash rich based on the definition of excess cash holdings. Panel C of Table 2 shows that for a full sample of Excash rich bidders, non-executive directors on average make up 69.1% of the board members. A similar proportion is reported by Lawrence and

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Stapledon (1999) who examine a sample of top 100 Australian companies listed on the ASX at the end of 1995 and find that the average proportion of non-executive directors on the board is 73%. Another Australian study by Kiel and Nicholson (2003) based on a sample of top 500 Australian public companies in year 1996 reports that non-executive directors make up 69% of the board members. Panel C also shows that the board size of Excash rich bidders ranges from 2 to 13 members, with an average of 6 members.

Statistics on financial characteristics, long-run post-acquisition performance, internal governance mechanisms and deal characteristics of Exaccf rich bidders (defined as bidders who are cash rich based on the excess accounting cash flow measure) are given in Table 3. Panel A of Table 3 shows that the average excess accounting cash flow of Exaccf rich firms is 0.671. From Panel B, we find that compared to the average long-run post-acquisition performance of Excash rich bidders, cash rich bidders with high accounting cash flow have poorer long-run performance.

Statistics on governance characteristics of cash rich bidders with excess accounting cash flow are given in Panel C. The average director ownership is 16.4% while the median value is 2.6%, revealing that a few outliers are distorting the mean. The mean values for the proportion of non-executive directors on the board and board size are 68.8% and 6 members, respectively. Lawrence and Stapledon (1996) report that for a sample of top 100 Australian public companies in year 1995, the average board size is 9 members, which is considerably larger than the average found in this study. Another Australian study by Kiel and Nicholson (2003) shows that based on a sample of top 500 companies listed on ASX in 1996, the average board size is 7 members. The discrepancies in findings between this study and other Australian studies mentioned above are most likely to be due to the differences in the composition of sample firms examined. In Kiel and Nicholson (2003), mining companies and companies that have head offices outside Australia are removed from the population, resulting in a final sample of 348 companies.

In Table 4, we test whether the financial characteristics and board structures are significantly different between cash rich firms that carry out takeovers and those that do not using Wilcoxon rank-sum test for equal medians between cash rich bidders and the rest of cash rich firms. Panel A reveals that cash rich bidders with excess cash holdings have significantly larger firm size and board size than the rest of cash rich firms at the 10% level, suggesting that the former firms with greater resources and personnel available are more likely to carry out acquisitions.

Panel B of Table 4 shows that the median book-to-market ratio of Exaccf rich bidders is 0.534 and the difference is significant at the 5% level. The finding suggests that cash rich bidders with excess accounting cash flow have greater growth opportunities. Hence, one possible explanation for Exaccf rich bidders to build up excess accounting cash flow is to avoid the costly external financing whilst expecting high future investment opportunities.



**Table 2: Summary statistics for a sample of Excash rich bidders**

Panel A presents the mean, median, minimum, maximum and standard deviation values of the financial characteristics of Excash rich bidders. Excash is defined as the difference between the firm's ratio of cash holdings to total assets and the average value predicted for its industry. Exaccf is defined as the difference between the firm's ratio of accounting cash flow to total assets and the average value predicted for its industry. SIZE is measured as the natural log of total assets in 1990 prices. BV/MV is defined as the ratio of book value of assets to book value of total assets minus the book value of equity plus the market value of equity. Panel B presents the mean, median, minimum, maximum and standard deviation values of Excash rich bidders' long-run post-acquisition performance. EDEAR is the equal weighted decile adjusted return; VDEAR is the value weighted decile adjusted return; EMKAR is the equal weighted market adjusted return; VMKAR is the value weighted market adjusted return. Panel C provides summary statistics of directors' share ownership (OWNER), board composition (NONEXE) and board size (BSIZE). Panels D, E and F provide descriptive statistics on deal characteristics.

	Mean	Median	Min	Max	Std. Dev	N
<b>Panel A: Financial characteristics</b>						
Excash	0.387	0.376	-0.121	0.860	0.208	52
Exaccf	-0.064	-0.043	-0.885	1.788	0.361	52
SIZE	11.810	11.561	7.657	17.609	2.002	52
BV/MV	0.847	0.632	0.067	2.847	0.660	52
<b>Panel B: Long-run post-acquisition performance</b>						
EDEAR	0.062	-0.443	-1.416	5.989	1.558	52
VDEAR	0.074	-0.432	-1.325	5.974	1.560	52
EMKAR	0.043	-0.487	-1.179	6.023	1.590	52
VMKAR	0.111	-0.388	-1.002	6.031	1.604	52
<b>Panel C: Internal governance mechanisms</b>						
OWNER	0.222	0.159	0.000	0.765	0.223	52
NONEXE	0.691	0.750	0.333	1.000	0.149	52
BSIZE	5.788	5.000	2.000	13.000	2.577	52
	<b>No. of bidders</b>	<b>%</b>				
<b>Panel D: Focused vs. diversifying acquisitions</b>						
Focused acquisition	28	53.8				
Diversification	24	46.2				
Total	52					
<b>Panel E: Method of payment</b>						
Cash	30	57.7				
Common stock	10	19.2				
Hybrid	12	23.1				
Total	52					
<b>Panel F: Single vs. multiple acquirers</b>						
Multiple acquirer	22	42.3				
Single acquirer	30	57.7				
Total	52					

**Table 3: Summary statistics for a sample of Exaccf rich bidders**

Panel A presents the mean, median, minimum, maximum and standard deviation values of the financial characteristics of Exaccf rich bidders. Exaccf is defined as the difference between the firm's ratio of accounting cash flow to total assets and the average value predicted for its industry. Excash is defined as the difference between the firm's ratio of cash holdings to total assets and the average value predicted for its industry. SIZE is measured as the natural log of total assets in 1990 prices. BV/MV is defined as the ratio of book value of assets to book value of total assets minus the book value of equity plus the market value of equity. Panel B presents the mean, median, minimum, maximum and standard deviation values of Exaccf rich bidders' long-run post-acquisition performance. EDEAR is the equal weighted decile adjusted return; VDEAR is the value weighted decile adjusted return; EMKAR is the equal weighted market adjusted return; VMKAR is the value weighted market adjusted return. Panel C provides summary statistics of directors' share ownership (OWNER), the proportion of non-executive directors on the board (NONEXE) and board size (BSIZE). Panels D, E and F provide descriptive statistics on deal characteristics.

	Mean	Median	Min	Max	Std. Dev	N
<b>Panel A: Financial characteristics</b>						
Exaccf	0.671	0.359	0.128	3.452	0.800	22
Excash	0.032	-0.024	-0.649	0.726	0.268	22
SIZE	13.116	12.492	8.919	19.248	2.445	22
BV/MV	0.531	0.534	0.067	1.367	0.354	22
<b>Panel B: Long-run post-acquisition performance</b>						
EDEAR	-0.129	-0.481	-1.065	2.118	0.889	22
VDEAR	-0.116	-0.458	-1.083	2.146	0.892	22
EMKAR	-0.152	-0.462	-1.177	2.105	0.883	22
VMKAR	-0.131	-0.438	-0.987	2.013	0.860	22
<b>Panel C: Internal governance mechanisms</b>						
OWNER	0.164	0.026	0.000	0.600	0.208	22
NONEXE	0.686	0.708	0.250	1.000	0.195	22
BSIZE	6.273	6.000	4.000	13.000	2.434	22
	<b>No. of</b>	<b>%</b>				
<b>Panel D: Focused vs. diversifying acquisitions</b>						
Focused acquisition	11	50.0				
Diversification	11	50.0				
Total	22					
<b>Panel E: Method of payment</b>						
Cash	13	59.1				
Common stock	4	18.2				
Hybrid	5	22.7				
Total	22					
<b>Panel F: Single vs. multiple acquirers</b>						
Multiple acquirer	10	45.5				
Single acquirer	12	54.5				
Total	22					

**Table 4: Summary statistics for cash rich bidders and the rest of cash rich firms**

The table presents the mean, median and standard deviation values of the financial and internal governance variables for cash rich bidders and the rest of the cash rich firms, and Wilcoxon rank-sum test is used to test for any significant differences in variable median values. Excash is defined as the difference between the firm's ratio of cash holdings to total assets and the average value predicted for its industry. Exaccf is defined as the difference between the firm's ratio of accounting cash flow to total assets and the average value predicted for its industry. SIZE is measured as the natural log of total assets in 1990 prices. BV/MV is defined as the ratio of book value of assets to book value of total assets minus the book value of equity plus the market value of equity. OWNER is directors' shareholdings. NONEXE is the number of non-executive members on the board divided by the total number of directors on the board. BSIZE is the size of the board. Numbers in parentheses are p-values (2-tailed). \*\*\* denotes significance at the 1% level (2-sided); \*\* denotes significance at the 5% level (2-sided); \* denotes significance at the 10% level (2-sided).

<b>Panel A: Excash</b>		<b>Excash rich bidders</b>			<b>The rest of Excash rich firms</b>			<b>Z test for diff. in</b>
<b>Variables</b>	<b>Mean</b>	<b>Median</b>	<b>Std. Dev</b>	<b>Mean</b>	<b>Median</b>	<b>Std. Dev</b>	<b>median values</b>	
Excash	0.387	0.376	0.208	0.381	0.358	0.237	0.240 (0.810)	
Exaccf	-0.064	-0.043	0.361	-0.214	-0.049	1.003	0.239 (0.811)	
SIZE	11.810	11.561	2.002	11.397	11.151	1.869	1.694 * (0.090)	
BV/MV	0.847	0.632	0.660	0.753	0.684	2.126	-0.027 (0.979)	
OWNER	0.222	0.159	0.223	0.231	0.161	0.245	-0.070 (0.944)	
NONEXE	0.691	0.750	0.149	0.656	0.667	0.206	1.168 (0.243)	
BSIZE	5.788	5.000	2.577	5.059	5.000	2.095	1.911 * (0.056)	
No. of firms	52			371				
<b>Panel B: Exaccf</b>		<b>Exaccf rich bidders</b>			<b>The rest of Exaccf rich firms</b>			<b>Z test for diff. in</b>
<b>Variables</b>	<b>Mean</b>	<b>Median</b>	<b>Std. Dev</b>	<b>Mean</b>	<b>Median</b>	<b>Std. Dev</b>	<b>median values</b>	
Exaccf	0.671	0.359	0.800	0.477	0.477	0.477	-0.588 (0.556)	
Excash	0.032	-0.024	0.268	0.051	0.051	0.051	-0.206 (0.837)	
SIZE	13.116	12.492	2.445	12.868	12.868	12.868	-0.144 (0.885)	
BV/MV	0.531	0.534	0.354	0.805	0.805	0.805	-2.012 ** (0.044)	
OWNER	0.164	0.026	0.208	0.253	0.253	0.253	-1.466 (0.143)	
NONEXE	0.686	0.708	0.195	0.717	0.717	0.717	-0.530 (0.596)	
BSIZE	6.273	6.000	2.434	6.033	6.033	6.033	-0.309 (0.757)	
No. of firms	22			61				

## 6.2 Multivariate Results

The multivariate regression results from the test of the relation between internal corporate governance mechanisms and long-run performance of cash rich bidders based on the excess cash holdings measure are presented in Table 5. Across all models, the variable FOCUS has a significant explanatory power for the long-run post-acquisition performance, showing support for the argument that with focused acquisitions, managers have better understanding of the business environment that the firm operates in, so the likelihood of success in the long-run is greater.

With regard to director ownership, the estimated coefficients of OWNER, OWNER2 (i.e., the square of the percentage of share ownership by directors), and OWNER3 (i.e., the cube of the percentage of share ownership by directors) have the expected sign, suggesting that as director ownership increases, directors' interests move from alignment, then entrenchment and back to alignment with other shareholders' interests. Although results show that the three measures of director ownership have the expected sign, they do not exert a significant influence on bidders' long-run performance.

Further, contrary to expectation the coefficient of NONEXE is negative, though the relationship is statistically insignificant. Using a sample of Australian companies, Grace et al. (1995) report a similar result and find no statistically significant relationship between firm performance and the proportion of non-executive directors on the board. Results from Models 6-10 where equal weighted market adjusted return is used as the dependent variable are found to mimic those in Models 1-5, which use equal weighted decile adjusted return as the dependent variable.

Table 6 presents the cross-sectional regression results on the relationship between the board structures and ownership characteristic of cash rich firms based on the definition of excess accounting cash flow and their long-run stock returns. The only deal characteristic that is significant in explaining cash rich bidders' long-run takeover performance is MULTI in Model 1, at the 10% level. The negative coefficient of MULTI suggests that Exaccf rich bidders that are involved in more than one acquisition in the acquisition year experience significantly lower long-run performance. This finding is consistent with that reported in Dong (1997) who argues that as multiple bidders tend to be large firms with low growth opportunities, they are more subject to agency costs of free cash flow and consequently, are more likely to make diversifying acquisitions.

**Table 5: Multivariate regressions of Excash rich bidders' long-run post-acquisition performance and internal governance mechanisms**

Long-run (36-month) buy-and-hold returns are regressed on internal governance variables and other explanatory controls. The T-stats are in parentheses. Significance is based on White-adjusted standard errors. \*\*\* denotes significance at the 1% level; \*\* denotes significance at the 5% level; \* denotes significance at the 10% level. Model 1 to Model 5 use equal weighted decile adjusted returns as the dependent variable; Model 6 to Model 10 use equal weighted market adjusted returns as the dependent variable. SIZE is measured as the natural log of total assets in 1990 prices. BV/MV is defined as the ratio of book value of assets to book value of total assets minus the book value of equity plus the market value of equity. FOCUS is equal to one if both the target and the acquirer have the same two-digit SIC code and zero otherwise. DUMMOP is an indicator and is equal to one if the bidder uses cash only in financing the acquisition and zero otherwise. MULTI is a dummy variable and is equal to one if the acquirer is involved in more than one takeover in the acquisition year and zero otherwise. OWNER is directors' share ownership, NONEXE is the proportion of non-executive directors on the board and BSIZE is board size. # 3 firms have equal weighted decile adjusted returns and equal weighted market adjusted returns greater than 2.575 standard deviations from the mean and hence are removed from the analysis.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
<b>Constant</b>	-1.208 *	-1.837 *	-1.348 ***	-1.099	-0.925	-1.140	-1.746 *	-1.346 ***	-1.064	-0.831
	(-1.795)	(-1.932)	(-3.591)	(-1.607)	(-1.446)	(-1.597)	(-1.787)	(-3.535)	(-1.479)	(-1.221)
<b>SIZE</b>		0.067 (1.091)					0.065 (1.082)			
<b>BV/MV</b>	0.270 * (1.706)	0.207 (1.307)	0.252 (1.590)		0.225 (1.491)	0.188 (1.150)	0.128 (0.768)	0.162 (0.977)		0.141 (0.888)
<b>FOCUS</b>	0.454 ** (2.119)	0.481 * (2.262)	0.465 ** (2.306)	0.446 ** (2.031)	0.437 ** (2.031)	0.475 ** (2.150)	0.502 ** (2.265)	0.492 ** (2.381)	0.470 ** (2.095)	0.458 ** (2.069)
<b>DUMMOP</b>	0.346 (1.453)	0.271 (1.152)	0.324 (1.563)	0.255 (1.037)	0.397 * (1.751)	0.337 (1.443)	0.264 (1.181)	0.305 (1.465)	0.273 (1.125)	0.391 * (1.737)
<b>MULTI</b>	0.279 (0.929)	0.230 (0.770)	0.264 (0.987)	0.239 (0.817)	0.292 (1.086)	0.370 (1.208)	0.323 (1.071)	0.348 (1.275)	0.342 (1.149)	0.384 (1.392)
<b>OWNER</b>	1.246 (0.355)	1.959 (0.539)	1.061 (0.343)	1.136 (0.323)		1.336 (0.383)	2.023 (0.556)	1.065 (0.343)	1.259 (0.363)	
<b>OWNER2</b>	-3.569 (-0.297)	-5.222 (-0.429)	-2.702 (-0.260)	-3.411 (-0.281)		-3.734 (-0.312)	-5.328 (-0.438)	-2.460 (-0.237)	-3.623 (-0.303)	
<b>OWNER3</b>	4.138 (0.365)	4.966 (0.437)	3.322 (0.323)	3.909 (0.342)		4.297 (0.380)	5.097 (0.450)	3.100 (0.302)	4.138 (0.366)	
<b>NONEXE</b>	-0.247 (-0.218)	-0.105 (-0.095)		0.094 (0.084)	-0.413 (-0.404)	-0.362 (-0.312)	-0.226 (-0.197)		-0.124 (-0.108)	-0.545 (-0.516)
<b>BSIZE</b>	0.034 (0.963)		0.034 (0.946)	0.028 (0.798)	0.032 (0.796)	0.033 (0.901)		0.033 (0.873)	0.029 (0.793)	0.031 (0.737)
<b>N</b>	49 <sup>#</sup>	49	49	49	49	49	49	49	49	49
<b>Adj R<sup>2</sup></b>	0.005	0.013	0.028	-0.001	0.043	0.028	0.035	0.049	0.038	0.062
<b>F statistic</b>	1.03	1.07	1.17	1.00	1.36	1.15	1.20	1.31	1.24	1.53
<b>P-value</b>	0.438	0.405	0.339	0.454	0.254	0.351	0.326	0.266	0.302	0.193

**Table 6: Multivariate regressions of Exaccf rich bidders' long-run post-acquisition performance and internal governance mechanisms**

Long-run (36-month) buy-and-hold returns are regressed on internal governance variables and other explanatory controls. The T-stats are in parentheses. Significance is based on White-adjusted standard errors. \*\*\* denotes significance at the 1% level; \*\* denotes significance at the 5% level; \* denotes significance at the 10% level. Model 1 to Model 4 use equal weighted decile adjusted returns as the dependent variable; Model 5 to Model 8 use equal weighted market adjusted returns as the dependent variable. SIZE is measured as the natural log of total assets in 1990 prices. BV/MV is defined as the ratio of book value of assets to book value of total assets minus the book value of equity plus the market value of equity. FOCUS is equal to one if both the target and the acquirer have the same two-digit SIC code and zero otherwise. DUMMOP is an indicator and is equal to one if the bidder uses cash only in financing the acquisition and zero otherwise. MULTI is a dummy variable and is equal to one if the acquirer is involved in more than one takeover in the acquisition year and zero otherwise. OWNER is directors' share ownership, NONEXE is the proportion of non-executive directors on the board and BSIZE is board size.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
<b>Constant</b>	-0.139 (-0.182)	0.648 (0.442)	-1.021 (-2.298)	** 0.458 (0.529)	-0.044 (-0.055)	0.716 (0.484)	-0.902 (-1.889)	* 0.499 (0.562)
<b>SIZE</b>		-0.026 (-0.343)				-0.033 (-0.435)		
<b>BV/MV</b>	0.259 (0.469)		0.466 (0.693)	0.654 (1.121)	0.203 (0.352)		0.404 (0.583)	0.563 (0.947)
<b>FOCUS</b>	0.354 (1.068)	0.235 (0.649)	0.383 (1.141)	0.220 (0.628)	0.295 (0.851)	0.187 (0.508)	0.323 (0.925)	0.173 (0.482)
<b>DUMMOP</b>	-0.108 (-0.246)	0.061 (0.125)	0.181 (0.501)	0.027 (0.058)	-0.099 (-0.219)	0.064 (0.132)	0.181 (0.491)	0.024 (0.050)
<b>MULTI</b>	-0.502 (-1.863)	* -0.378 (-1.191)	-0.301 (-0.894)	-0.412 (-1.408)	-0.479 (-1.646)	-0.366 (-1.107)	-0.284 (-0.810)	-0.397 (-1.294)
<b>OWNER</b>	-10.890 (-1.739)	-12.719 (-2.394)	** -8.952 (-1.283)	-9.866 (-1.483)	-9.391 (-1.370)	-10.954 (-1.918)	* -7.509 (-1.001)	-8.460 (-1.183)
<b>OWNER2</b>	43.707 (1.287)	50.236 (1.746)	37.661 (1.005)	35.740 (0.999)	36.375 (0.994)	41.671 (1.374)	30.500 (0.767)	29.123 (0.767)
<b>OWNER3</b>	-51.099 (-1.225)	-54.963 (-1.537)	-44.995 (-0.982)	-38.393 (-0.877)	-42.545 (-0.951)	-45.262 (-1.207)	-36.613 (-0.757)	-30.979 (-0.670)
<b>NONEXE</b>	1.963 (3.409)	***	1.204 (2.047)	* 0.1787 (2.893)	**	1.050 (1.673)		
<b>BSIZE</b>	-0.146 (-1.654)			-0.073 (-0.828)	-0.142 (-1.594)			-0.076 (-0.852)
<b>N</b>	22	22	22	22	22	22	22	22
<b>Adj R<sup>2</sup></b>	-0.009	-0.155	-0.071	-0.112	-0.118	-0.201	-0.166	-0.183
<b>F statistic</b>	0.98	0.60	0.83	0.74	0.75	0.50	0.63	0.59
<b>P-value</b>	0.501	0.748	0.595	0.66	0.659	0.822	0.743	0.768

Also, we find that the variable OWNER (i.e., director ownership) and its respective squared and cubed values do not explain any of the cross-sectional variation in long-run post-acquisition performance. Further, the result from Table 6 provides evidence consistent with the tested hypothesis that cash rich bidders with a higher proportion of non-executive directors on the board have better long-run takeover performance. Table 6 shows that NONEXE is significantly positively related with long-run post-acquisition performance, thereby providing support for the view that reputation effects provide non-executive directors the incentives to monitor managers. The evidence also suggests that firms that conform to ASX's corporate governance recommendations perform better in the long-run.

## **7. Conclusion**

In this study, we examine whether the level of excess cash has any impact on firms' decisions to make takeover attempts using two measures of excess cash, excess cash holdings and excess accounting cash flow. Specifically, we test the relationship between governance structures of cash rich bidders and their long-run post-acquisition performance.

The multivariate regressions of long-run post-acquisition performance of cash rich bidders with excess cash holdings on governance variables and other control variables indicate that focused acquisitions undertaken by cash rich bidders with excess cash holdings create long-run shareholder value. The result suggests that with focused acquisitions, managers have fairly good knowledge of the business environment that the firm operates in, so the chances of success in the long-run is greater and accordingly, investors view focused acquisitions as value-adding.

The results from the cross-sectional variation of long-run post-acquisition performance of cash rich bidders with excess accounting cash flow indicate that non-executive directors play a valuable role in monitoring management. The coefficient on the proportion of non-executive directors on the board is significantly positive. The evidence also suggests that bidders that conform to ASX's corporate governance recommendations that a majority of the board should be independent directors perform better in the long-run.

However, we recognize that as the focus of the study is to examine corporate governance structures of cash rich firms that carry out acquisitions, this study may have the small sample problem, particularly in testing the cash rich bidders with excess accounting cash flow. Future empirical studies could overcome this issue by using bidders as the sample and then adopting a dummy variable for firms that are cash rich.

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