The Impact of Target Board Recommendations in Australian Takeovers

This version 12th January 2006

Larelle Chapple
TC Beirne School of Law, University of Queensland, Australia

Sirimon Treepongkaruna
School of Finance and Applied Statistics, Australian National University, Australia

Abstract

This paper examines the impact of targe board recommendations on the probability of the bid being successful in the Australian takeovers context. Specifically, we model the success rate of the bid as a binary dependent variable and target board recommendations or the board hostility as our key independent variable by using logistic regression framework. Our model also includes bid structures and conditions variables (such as initial bid premium, bid conditions, toehold, and interlocking relationship) and bid events (such as panel and bid duration) as our control variables. Overall, we find board hostility has statistically significant negative effect on the success rate of the bid and almost all control variables (except for the initial bid premium) are statistically significant with the correct sign. That is, we find toehold, the percentage of share required to make the bid becomes successful, and the unconditional bid have positive impact on the success rate of the bid, at least as predictive determinants prior to the release of any hostile recommendation. Consistent with Craswell (2004), we also find the negative relation between interlocking relationship and the success rate of the bid. Our finding supports that from target investors' point of view, interlock is consistent with the negative story of self interest by directors. Finally, like Walking (1985), we find that the initial bid premium does not have influence on the success rate of the bid. Hence our results reinstate Walking's bid premium puzzle in Australian context.

JEL Classification:

Keywords: Australian Takeovers, Bid Premium, Toehold Puzzle, Target Statements, Managerial Resistance, Corporate Governance

*****Corresponding author: Larelle Chapple, TC Beirne School of Law, University of Queensland, Australia, Tel: +61 7 3365 6583, Fax: +61 7 33469408 , Email: l.chapple@law.uq.edu.au
Sirimon Treepongkaruna, School of Finance and Applied Statistics, Australian National University, Australia Tel: +61 2 612 53471, Fax: +61 2 612 50087, Email sirimon.treepongkaruna@anu.edu.au

We would like to acknowledge the comments and suggestions of Tom Smith, Phil Huang, Jason Foo (ANU), Joseph Fan (HKUST), the workshop participants at the School of Finance and Applied Statistics ANU, the participants at Accounting and Finance association Conference, Alice Springs, 2004, Dr Marion Hutchinson & Mr Simon Rowell (UQ), and financial support from ANU.

The Impact of Target Board Recommendations in Australian Takeovers

Abstract

This paper examines the impact of targe board recommendations on the probability of the bid being successful in the Australian takeovers context. Specifically, we model the success rate of the bid as a binary dependent and target board recommendations or the board hostility as our key independent variable by using logistic regression framework. Our model also includes bid structures and conditions variables (such as initial bid premium, bid conditions, toehold, and interlocking relationship) and bid events (such as panel and bid duration) as our control variables. Overall, we find board hostility has statistically significant negative effect on the success rate of the bid and almost all control variables (except for the initial bid premium) are statistically significant with the correct sign. That is, we find toehold, the percentage of share required to make the bid becomes successful, and the unconditional bid have positive impact on the success rate of the bid, at least as predictive determinants prior to the release of any hostile recommendation. Consistent with Craswell (2004), we also find the negative relation between interlocking relationship and the success rate of the bid. Our finding supports that from target investors' point of view, interlock is consistent with the negative story of self interest by directors. Finally, like Walking (1985), we find that the initial bid premium does not have influence on the success rate of the bid. Hence our results reinstate Walking's bid premium puzzle in Australian context.

1. Introduction

Target shareholders who receive an offer to sell their interests to a bidder face the interesting investment problem of deciding whether to accept or reject the offer. To assist target shareholders in their decision making, Australian regulatory requirements impose certain forms of disclosures on the bidder and the target board. In addition to necessary information outlining the terms of the offer, target shareholders also receive a recommendation with reasons from each target director as to whether the offer should be accepted or rejected, or an explanation for the absence of such a recommendation. The importance of this recommendation to the target shareholder decision making process is unclear.

Accordingly, this study investigates the impact of target board recommendations on the outcome of an Australian takeover bid. If an explicit target recommendation has a significant impact on a takeover, then this also provides a setting to analyse the association between bid structure characteristics, such as bid premium and target size, corporate governance demographics, such as board composition, target director recommendation and their significance to the outcome of the bid. If the target board recommendation contains no credible information or is devalued due to perceived agency conflicts, then we would expect target board disclosures to be a detailed and costly disclosure exercise with little effect on takeover outcomes. Anecdotal evidence suggests bid success rates are high, and that target board resistance appears to do little to repel the bid (Clegg, 2003). However, in a descriptive study, Dignam (2005) found that only 7.2% of bids during the period 1992-2001 were successful hostile bids (where the target was an Australian listed company).

The perceived differential in perception between increasing bid success rates overall in Australia compared to success of hostile bids is an interesting phenomenon to study. Particularly in the context of changes in the takeover regulatory environment since 13 March 2000. In March 2000, the *Corporate Law Economic Reform Program Act* 1999 substantially

rewrote takeovers regulation in Australia.[1] Hence, we refer to the period after March 2000 as the "post-CLERP" period.

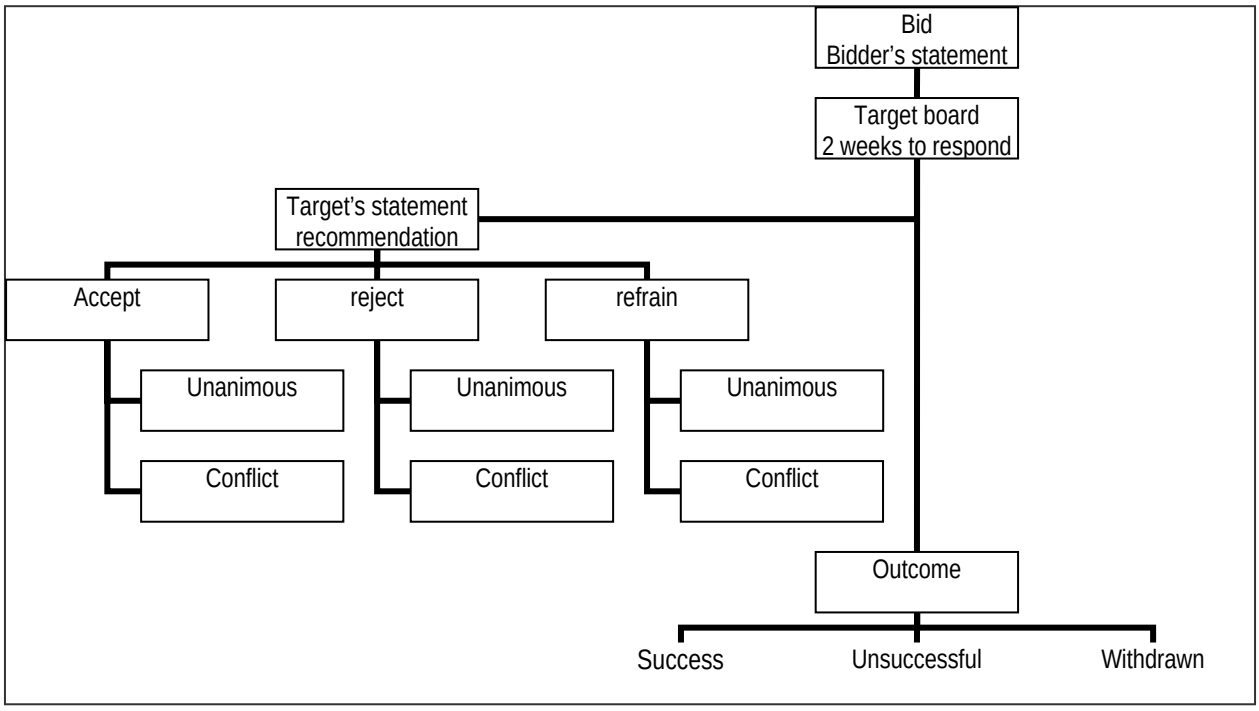
Our study has two aims. First, we document target board responses to bids. In examining the target boards' recommendations to the bid, we identify three formats of recommendation:

1. accept
2. reject
3. refrain from making a recommendation.

Second, within these three formats, it is noted that the recommendation is not uniform, that is, each director is required to make a personal recommendation, so the board in many cases is not united in responding to the bid. Although the literature usually distinguishes overall between hostile and non-hostile bids (for example, Schwert, 2000; Maheswaran and Pinder, 2004), we examine the information impact of all three types of recommendation on the bid outcome. The three types of recommendation, and how this can vary from bid to bid, is shown in Figure 1.

[1] Chapter 6 – takeovers of the Corporations Act.

Figure 1: Types of target director recommendation under Ch 6 bids



By 'impact', we are simply examining the evidence on the degree to which the target directors' recommendation affects the outcome of the bid, and hence also infer the degree of consistency with aggregate target shareholder preferences. However the framework utilizes information that is often available early in the bid, and hence able to be interpreted as a predictive model which can be utilized by interested parties when the bid is "in play". By outcome of the bid, we determine this as either success or unsuccessful, so we ignore withdrawn bids.

2. Data and descriptive statistics

2.1 Sample

The data sample was collected from the Connect 4 Takeovers and Mergers & Acquisitions modules, and contains all mergers and acquisitions relating to ASX listed companies. The entire dataset up to 31 December 2003 provides 473 mergers and acquisitions, some of which involve the same transaction due to multiple bid-attempts.

Our first task has been to test the perception of success rates by presenting descriptive data. Using all takeovers available on the Connect 4 database where the target is listed, between 1997 to 2003, permits division of the sample into pre-CLERP and post-CLERP periods. Figure 2 presents the descriptive statistics from Table 1, which shows an overall bid success rate of around 70% for the entire period. However, this full sample includes takeovers whether by scheme or bid. A takeover by scheme is generally accepted as "less-hostile". Part 5.1 *Corporations Act* permits a scheme of arrangement, which is essentially a non-hostile merger, so that if the 'bidder' knows it has the target board on side, the target board calls a general meeting to procure the target shareholders' consent to a re-arrangement of capital. The re-arrangement usually takes the form of either:

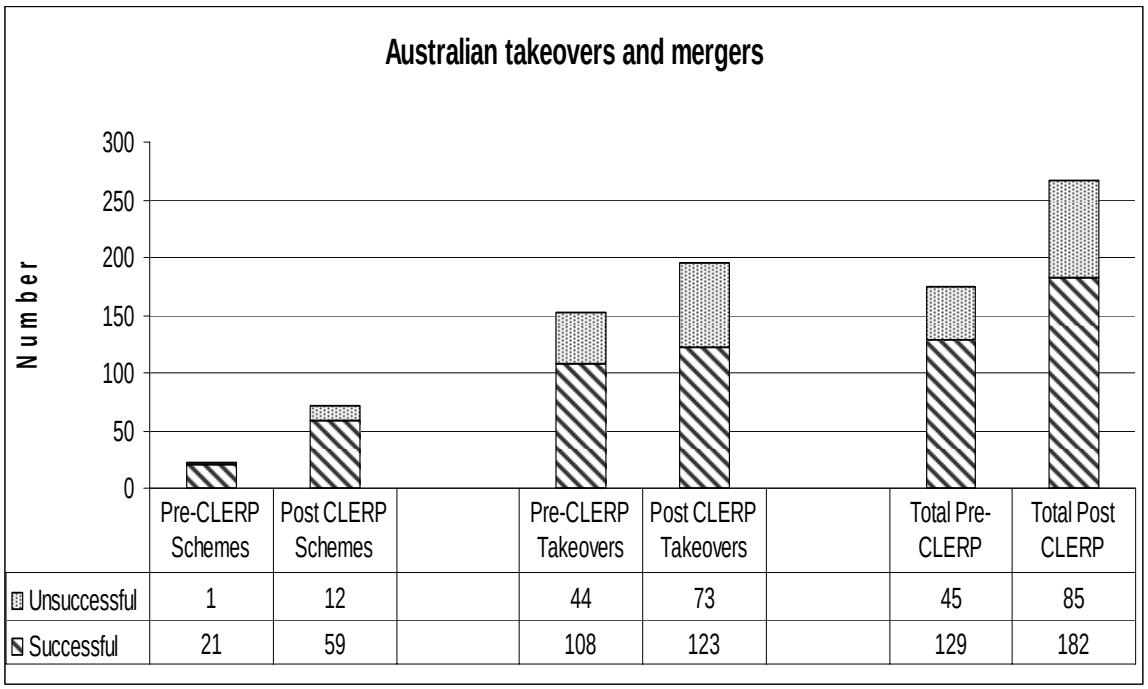
- a transfer of all the existing holders' shares to the bidder; or
- a cancellation of all the existing holders' shares (except for the bidders' shares) in a reduction of capital (in which case, new shares are then issued to the bidder to replace the cancelled shares) (Levy, 2002).

To control for potential pre-CLERP regulatory issues, only unique transactions[2] between 13 March 2000 (being the operational date for the new laws) and 31 December 2003 are documented. This provides 267 unique transactions as the last column in Figure 1 shows.

[2] Where the same transaction is involved, we take the most recent transaction (i.e. the final bid) as the representative sample and remove the previous related attempts.

Deletions from the sample were: 71 schemes, 25 withdrawn, plus 2 bids were withdrawn after submission of the bidder statement,[3] leaving a sample of 169 unique bids.

Figure 2: Bid success rates 1997 - 2003



	Pre-CLERP Schemes	Post CLERP Schemes		Pre-CLERP Takeovers	Post CLERP Takeovers		Total Pre-CLERP	Total Post CLERP
Unsuccessful	1	12		44	73		45	85
Successful	21	59		108	123		129	182

Disregarding schemes from the sample indicates a surprising result: bid success rates have actually decreased from 71% in the pre-CLERP period to 63% in the post-CLERP period.

2.2 Success and bid structure

In Table 2 and Table 3, we examine the characteristics of takeover bids in the post-CLERP period in more detail, particularly reporting the target board response to the takeover, bid characteristics and the bid's eventual outcome.

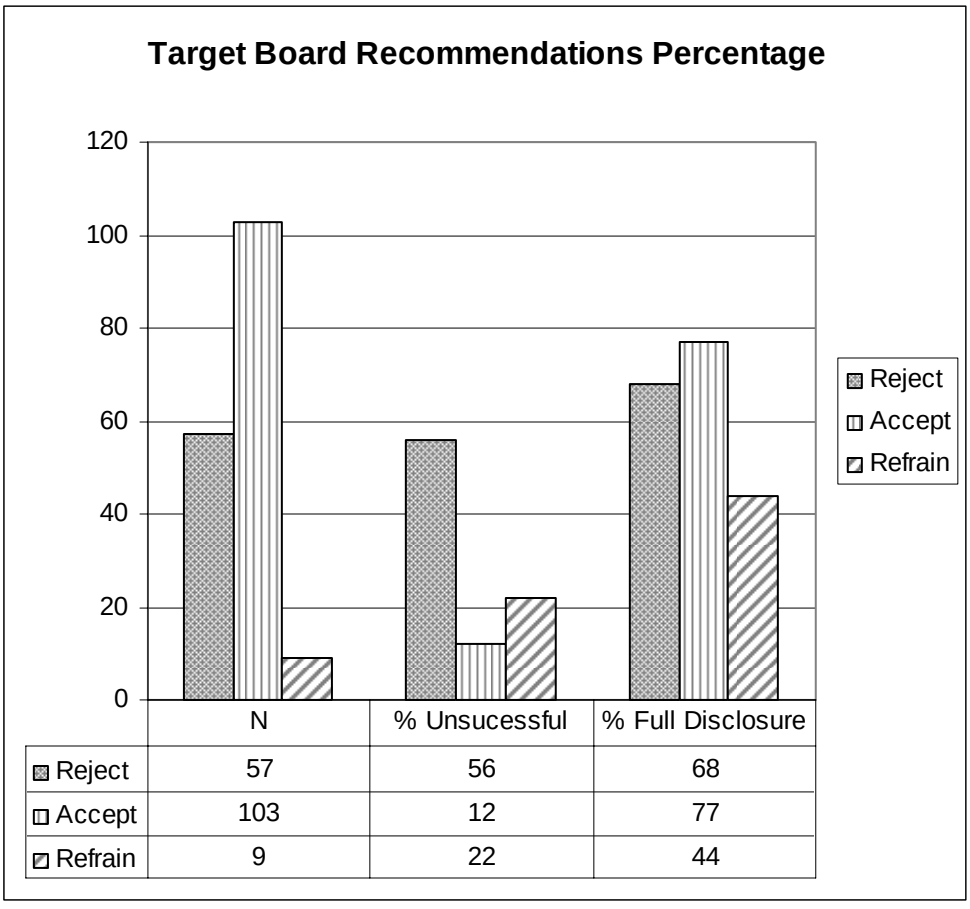
We generally adopt the Connect 4 classification of "Success" – when the bid is unconditional and receives over 50% acceptance. However, if the bidder already has over 50% of the target's shares prior to the bid (i.e., if "toehold" is more than 50%) then we require the

[3] These two were the Qantas Longreach and Shell Australia bid, and are excluded from the sample: this is to control for failures due to bidder driven externalities or conditions.

bidder's holding to increase by at least 5% if the total acquisition is still less than 90% at the close of the offer. The latter rule results in 3 bids which are reclassified from Connect 4 as unsuccessful.

In Figure 3, we present graphically the statistics for the post-CLERP period only. This figure is compiled from Table 2 and Table 3. Using the final sample of 169 takeover bids, 73% of bids are successful. When dissembling success according to recommendation, we show that an unsuccessful bid is more likely to be accompanied by a strong reject recommendation

Figure 3: Bid success rates 2001-2003 as compared to bid recommendation for final sample of 169 bids



	N	% Unsucessful	% Full Disclosure
Reject	57	56	68
Accept	103	12	77
Refrain	9	22	44

In Table 3, we demonstrate the quality of the recommendation. There are 57 "Hostile" takeovers, which we define as the number of bids rejected by the board, and represents 34% of the sample (Table 3, Panel A). However, the reject recommendation is strongly associated

with 56% of the unsuccessful bids. Also we note that an accept recommendation is associated with 12% of the unsuccessful bids, which suggests that in a small number of cases only, the bid fails despite a strong target board's favourable response. This raises our interest in the other aspects of the bid structure

The recommendation has been classified as 'reject', 'accept' or 'refrain' by recording the majority of the board's view. For example, 'accept' means a majority of the board is in favour of the bid. It is rare to find unanimous acceptance; and also difficult to assess conflict as full participation in the recommendation is unusual. Accordingly, a 'strong' recommendation is one which emerges as the majority view of the board where all directors have participated. "Full disclosure" here refers to the proportion of bids that the recommendation can be identified by the majority of recommendations and where all directors have participated in providing a recommendation. The balance of the recommendations, which although are classified as a majority view, are a majority of the directors who participated in the recommendation, as opposed to a majority view of the whole board. Non-participation (refrain) is due to a disclosed conflict of interest in the bidder. A recommendation classified as 'refrain', although unusual, arises where the majority of the board have refrained from participating in the recommendation.

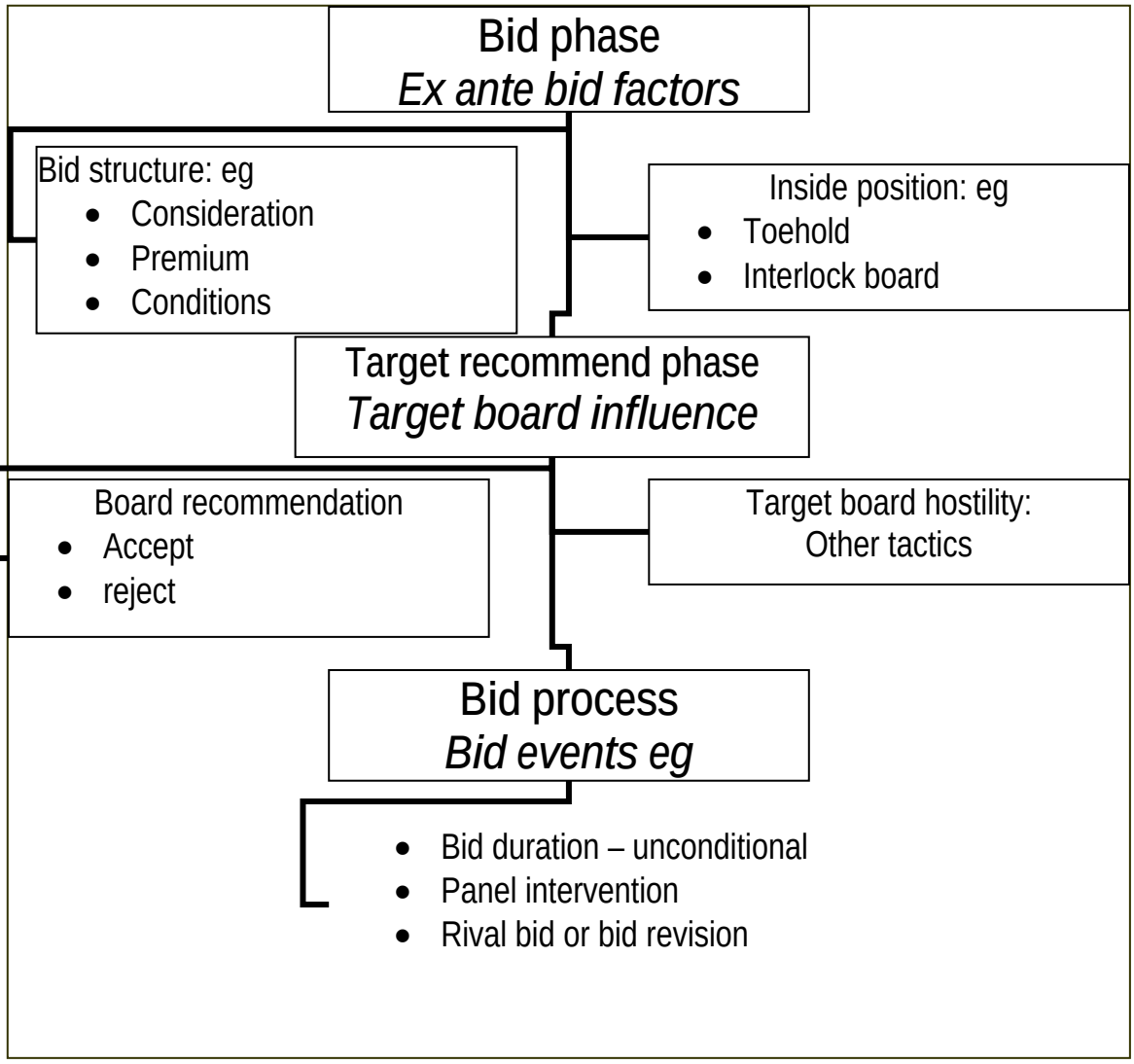
These descriptive statistics from Table 3 suggest that the recommendation can have a qualitative aspect depending on the degree of overall board participation. It also suggests that bids involving interlocking directorships between participants may face some particular challenges to success by the bidder.

3. Model development

3.1 The phases of the bid

In developing the variables that will have an effect on ultimate success, recall our 'bid in play' strategy. Thus, the bid can be seen as having 3 important phases (illustrated in Figure 4)the bid phase, the recommendation phase and the bid process:

Figure 4: The 'bid in play' – three phases of the bid



The bid phase

The 'bid phase' relates to elements of bid structure and bid conditions either known or controlled by the bidder going into the bid, such as the price offered, the extent of 'inside' position such as pre-bid ownership stake or interlocking directors and the conditions attached to the bid.

Making the bid

A takeover bid of voting shares in an Australian company is a highly regulated transaction. Under s606 *Corporations Act*, any person who acquires an interest in voting shares in a listed

Australian company (or an unlisted target with more than 50 members) such that their voting power in the target exceeds the threshold, is prevented from acquiring the voting shares, unless they are prepared to launch a full bid for the target. The thresholds for voting power are:

- for bidders who already have an interest in less than 20% of the shares, that bidder cannot exceed 20%;
- for bidders who already have between 20-90% of the target shares, they cannot acquire any more shares.

The bid may either be a market bid or off-market bid. There are four key differences between the market and off market bids:

1. Consideration: a market bid must be cash only: s621.
2. Full bid or proportionate bid: off-market bids may be proportional. Even though the bidder may not wish to acquire 100% of the target, the bidder must still send an offer to all shareholders for a proportion of their shares (s618(1)). In a market bid, the bidder must be prepared to acquire all shares that come on to the market during the bid period (s618(3)).
3. Conditional bids: only off-market bids may be conditional (s625). Typical examples of conditions are the “no material adverse change” condition and the minimum acceptance condition (Levy, 2002, p82).
4. Withdrawal of bids: as market bids are not conditional, s652C allows market bidders to withdraw upon the happening of specified events, for example, the target disposes or charges the whole or substantially all of its business or property, or if the target is liquidated.

Accordingly, the general principles upon which chapter 6 are based include a 20% threshold of control, beyond which a bid must be launched; equal opportunity for all target shareholders to participate, which means proportional bid are allowed, but not partial bids; and a full expectation of disclosure by the bidder and the target board.

Our sample only has a small number of market bids (4% Table 2).

The recommendation phase

The primary mandatory responsibility of the target board is to prepare the target's statement, which is the disclosure document to respond to the bid, within two weeks of the bid. The target board is subject to less prescriptive disclosure, as there are only two matters the target board is required to respond to (s638):

- a general obligation to include all the information that shareholders would reasonably require to make an informed assessment whether to accept the offer under the bid; and
- a statement by each director of the target recommending whether the bid be accepted and the reasons for the recommendation (or an explanation of the absence of a recommendation, in lieu.)

A target's statement may, but doesn't have to be, accompanied by additional (voluntary) disclosure by an outside expert.[4] The utility of the expert's report as a defensive tactic has not been directly tested, although Bluff and Clarkson (2004) find preliminary results to suggest that the effect of an independent expert's report is generally subsumed by the effect of the independent directors' recommendation.

The target's response to the bid is regarded as an important event in the bid phase, which US literature suggests in highly influential in determining success: Walkling, 1985. Although the directors' response is highly informative as to the hostility of the bid, there may be other indicators of bid hostility.

Rejecting the bid may be seen as a powerful defensive mechanism by the target board. One relevant post-CLERP change has been the involvement of the Takeovers Panel ("Panel") in resolving takeover disputes. In addition to deciding individual disputes brought to it, the Panel has also been proactive in commenting on takeover law and policy. In its guidance note on "Frustrating Action" (Takeovers Panel, GN 12, 2003), the Panel has indicated that target

[4] Under s640, the expert valuation report is only required (mandatory) where the bidder already has a 30% stake in the target, or where there are common directors.

directors may generally recommend rejection of a bid or seek alternatives to a bid without breaching their duties or contravening the policy of Chapter 6. Apart from refraining to sell their personal interests in the target, disclosure to repel the bid (whether direct disclosure or indirect disclosure through the voluntary use of a valuation report) is virtually the only remaining tactic that target directors may legitimately employ during the course of a bid. Despite a longer tradition in the US literature examining the effectiveness of takeover defensive activity (for example, Comment and Schwert, 1995), ASX rules and the legislation effectively stymie much defensive action by a target boards in Australia once a bid is launched (Casey and Eddey, 1986; Rowell, 2003). Accordingly, the target's statement represents an important opportunity for the board to deter the bid.

The bid process phase

This phase related to bid events that play out during the course of the bid.

As the bid proceeds, there are events that occur, both within the control of the bidder and independent of the bidder, which may impact on bid success. Accordingly, we examine such other important events as:

- a higher bid, either through the presence of a rival bidder, or the revision of the existing bid
- the duration of the bid period, and whether the bidder extends it or otherwise truncates it by announcing fulfilment (or waiving) conditions attached to the bid
- third party intervention, such as dispute resolution by the Panel.

Accordingly, in the remainder of this section we identify the important variables impacting success, to isolate the effect of recommendation.

3.2 Bid premium puzzle

Figure 4 above illustrates that the process between making the bid and the bid outcome may be 'interrupted' by events that occur during the recommendation phase and during the process of the bid. It is rational to believe that the overwhelming factor for bid success is simply the size of the bid premium and the structure (ie conditions, cash versus scrip offer) of the bid. However, given the regulation surrounding the bid process and the role of the target board, bid success is not simply a function of bid premium.

Indeed, early evidence indicated that managerial resistance had a larger influence on bid success and that bid premium was not significant (Hoffmeister and Dyl, 1981, Ruback, 1988). Walkling (1985) questioned this result as counter-intuitive to the existence of bid premiums and described this as the "bid premium anomaly". Walkling's results confirmed that prior studies failing to identify the significance of bid premium to bid success were a result of a failure to correctly specify bid premium. However, he also confirmed that target board opposition was a significant deterrent to success. This is consistent with the prior Australian study by Eddey and Casey (1989).

Bid premium

The takeover literature attempting to fit bid premiums is extensive, and forms the de-facto framework for many modern takeover studies. Typical of these studies is the desire to focus on performance prior to and post the acquisition period in order to explain the pricing differential (or premium) and to evaluate the economic and behavioural reasons underlying the acquisition decision by the bidder (e.g., Shliefer and Vishny, 2003). Australian evidence provides support wealth effects to target shareholders accruing from successful bids, Bishop, Dodd and Officer (1987); Bujega and Walter (1995). The Australian studies generate significant returns to successful target shareholders of between 16.5% and 37.0%.

A critical implied assumption is that the offer price, and hence the initial premium, is uniformly meaningful and realizable in an economic sense for all target shareholders. Many complex conditions are often attached to the offer price, and hence this interpretation of the bid premium is not necessarily valid for all target shareholders. The premium is often only realized when the bid becomes "unconditional" – even then, this premium may not necessarily be the correct point estimate for the target shareholders' economic decision making. For example, shareholders may have acquired shares after the normalisation date used in estimating the premium (often 20 working days prior to announcement), i.e., not all target shareholders will be initial shareholders when the bid is 'in-play'. We argue that the level of uncertainty associated with these conditions must be carefully taken into account: but this may not always be possible, especially for bids which remain conditional until the close

of the offer period. This means that the present value of the offer price, and hence the premium, is inextricably linked with the likelihood of bid success (see for example, Samuelson and Rosenthal, 1987, Brown and Raymond, 1986, Hutson, 2000).

Since takeover outcomes have uncertainty, and combined with estimation errors arising from the premium normalising process, the natural consequence is that many empirical studies which depend upon the initial bid premium have a very low goodness of fit. A more direct measure of impact is the outcome of a takeover, which is easily measured and can be intuitively interpreted as the aggregate target shareholder response to the bid as a whole. Bid outcome is also meaningful to the bidder since it has clear consequences: bid success results in the acquisition of target shares as per the bid, otherwise the bid is either withdrawn or fails outright (that is, fails to acquire the shares as per the bid conditions by the closing date). Hence takeover success, especially of conditional off-market offers, reflects both the economic and managerial ability (i.e, the seriousness or credibility) of the bidder to complete the bid transaction and also the aggregate shareholder response to the offer. More importantly, it is not clear that this measure is necessarily related to initial bid premiums: although economic intuition and the old result in Walkling (1985) suggest otherwise. This issue has become known as the takeover bid premium anomaly or puzzle (Walkling, 1985).

This leads us to examine the literature relating to three facets of bid success:

1. What is bid premium and what is its role in bid success?
2. What is continuing significance of board hostility (primarily REJECT recommendation) to bid success?
3. What are the other factors assisting in predicting bid outcome? Here we use the phases of the bid to suggest that the degree of the bidder's insider knowledge and the other conditions attached to the bid (apart from just consideration and premium) are important.

3.3 Toehold puzzle

Toehold, or pre-bid stake, is important to the bidder as it elevates the status of the bidder as 'insider', hence providing the bidder with pre-bid information superiority. As shown by Walkling (1985) and Betton and Eckbo (2000) a bidder with a toehold has a reduced possibility of an unsuccessful outcome. This may simply be a function of the proportion of outstanding shares, or it may be more complex, such as a reduced expectation of hostility or resistance to the bid.

Walkling (1985) emphasised an upward sloping supply curve theme: as the value of premiums increase, then an increase in supply of shares tendered (to the bidder) is expected. Similarly, target resistance implies adverse actions which may restrict the supply of obtainable shares, but the presence of prior ownership by the bidder is seen to mitigate the likelihood of bid resistance through influence on the target firm's management (see for example, Choi, 1991). This interpretation of toehold is also labelled as "interlocking directorships": hence toehold and measures of interlocking directorships tend to be correlated (see, Cotter et al, 1997). However, Hirshleifer and Titman (1990) argue that it is the required number of shares to achieve control, i.e. required shares minus the toehold, which contributes to bid success. This is a subtle, but significant difference to Walkling's analysis. Hence, we collect both toehold, and number of shares required to achieve control, in our sample data. The number of shares required for control is also influenced by the bidder nomination of minimum acceptance condition (see below).

However, recent literature has canvassed several competing views as to the efficacy of a pre-bid stake, particularly the cost of acquisition argument.

The pre-bid stake puts the potential bidder in a position of information advantage over a non-shareholder bidder. As a shareholder, the potential bidder has rights to access information, beyond the statutory mandated disclosure such as annual reports. Publicly available

information may be historical, whereas shareholders are entitled to access current information to inspect the company's 'books', [5] with a court order: s247A.

However, the acquisition of the pre-bid stake may in itself be costly, as well as drive up the expected consideration for the actual bid. Accepting that average bid premia in Australia is 23% (as determined by our calculation),[6] the bidder avoids paying the bid premium on the pre-bid stake acquired. This may be of minimal advantage in the Australian environment, depending on the duration of the pre-bid holding. According to s621(3), the minimum consideration offered for securities in the bid must equal or exceed the maximum price that the bidder paid during the 4 months preceding the bid. In this case, we would expect the 4 month rule to set the expectation of the price without any premium, that is, target shareholders would expect to be offered this price plus the premium for control.

Again depending on the duration of the pre-bid stake, the process of acquisition may itself ramp up the target stock. Schwert (1996) finds that pre-bid run up increases the price. The potential bidder's acquisition can draw the market's attention to the stock, fuelling a rumoured bid run up. Betton, Eckbo and Thorburn (2005) doubt that mark up pricing explains the near absence of short term toehold. They instead suggest that toehold has a negative influence on success as the bidder's pre-bid stake encourages target resistance. Target directors react negatively to the potential bidder and behave aggressively to deter. They prefer this explanation of the observed absence of short term toehold in their sample.

In contrast, Bris (2002) finds that pre-bid ownership can be an effective bargaining position for the bidder, as it is viewed by target firm shareholders as a positive indication of the bidder's intentions.

In Australia, we would not expect to find that toehold engenders hostility in target management. Chapter 6C nominates investors as 'substantial holders' as soon as they acquire

[5] "Books" includes any register or other record of information however compiled, recorded or stored and any financial reports or financial records.
[6] This is comparable to the result of 25.7% in Clarkson et al (2004), (although they cover earlier Australian bids from 1997-2000).

a threshold of 5%. From that point, substantial holders are obliged to notify the market of the initial acquisition of 5% and any incremental changes of 1%. The market is fully informed of the progress of pre-bid acquisition, hence negating the surprise aspect hypothesised by Betton et al (2005). We would expect toehold to be a significant determinant of bid success, and the absence of toehold may be more plausibly explained by the mark up price effect.

Of course, it is also conjectured that toehold is of indirect benefit to the bidder's success, in that it deters rival bidders. The greater the toehold of a particular bidder, the less likely another prospective bidder will make a competing bid (Betton and Eckbo, 2000).

The only further control on the bidder is that where toehold is 30% or more, the target board is compelled to provide an independent expert's report on the bid as to whether the bid is fair and reasonable: s640.

3.4 Interlocking directors

As toehold puts the bidder in the position of insider and is expected to enhance bid success, similarly, the presence of interlocking directorships on both bidder and target boards would tend to indicate success. Despite legal and fiduciary controls on proprietary information,[7] it is compelling to believe that information flow between the bidder and the target is superior, and that target resistance would be reduced. Cotter 1997 finds that toehold and measures of interlocking directorship tend to be correlated. In their sample of US bids, they find that interlocking directorships appear to be the result of bidder toehold. This is logical, in that as mentioned above, toehold provides the potential bidder with shareholder rights, including voting rights to influence the composition of the target board.

However, this is not saying that interlocking boards is itself related to success. From the target investors' point of view, interlock is consistent with the negative story of self interest by directors (Clarkson, Craswell and McKenzie, 2004). For this reason, additional regulatory disclosure is imposed in Australia. In the case of interlocking boards, s640 also requires the

[7] Such as s183, which prevents a director from improperly using corporate information for the benefit of another party.

board to provide an independent expert's report on the bid as to whether the bid is fair and reasonable.

Accordingly, in our sample data, we record the presence of the interlocking board, and also measure the magnitude (i.e. number of directors involved) of the interlock.

3.5 Conditional bids

There are two major factors of the bid phase that the bidder has direct control over – the price (and premium) and the bid conditions.

Our sample comprises primarily off market bids. One of the flexible features of an off market bid is that is may be an offer that still allows the bidder to specify conditions of success (s630). Typically, such conditions of acceptance include:[8]

- A minimum acceptance condition, such that the bid is not successful if the bidder does not receive a stated minimum number of acceptances fro target shareholders;
- Approval of Foreign Investment Review board
- Completion of a prior or concurrent transaction.

The circumstance where a bid commences with a defeating condition intuitively is deleterious to a successful outcome. Accordingly, the date on which the bid becomes unconditional (either because the condition is met, or is waived by the bidder) is expected to affect target shareholders' acceptance of the bid. Many shareholders, for a number of reasons, are reluctant to accept a bid which is conditional as it reduces their investment choices and leaves the investment in a form of abeyance until the bid is unconditional: Levy (2005) and Bosmans (2005). Therefore, a bid that commences as, or becomes unconditional, is expected to be related to success. In our sample data, we collect data on whether the bid is unconditional, and also a measure of the numeric number of conditions. Minimum acceptance conditions in particular are relevant in informing the market of the number of shares required by the bidder to obtain control (after factoring in the toehold, above).

[8] The following conditions are illegal: ·s 626: maximum acceptance conditions; s 627: discriminatory conditions; s 628: conditions requiring payments to officers of target; s 629: conditions turning on the bidder's or an associate's opinion.

3.6 Board hostility

We are interested in studies that have focussed on target board hostility to the bid. Primarily, hostility can be measured by the target board recommendation, that is, where the majority of the board rejects the bid. Although target board directors have an incentive to deter and repel the bid (since many directors are not retained post successful bid – Harford, 2003), these motives are not uniform. Boards are mixture of non-executive and executive directors, though some non-executive directors may not necessarily be independent, giving rise to possible conflicts of interest or the "agency problem" (Jensen and Meckling, 1976; Fama and Jensen, 1983). Depending on board composition, there is evidence that independent non-executive directors are aligned to shareholders' interests due to the reputation effect (Harford, 2003; Clarkson, Craswell and McKenzie, 2004). That is, a regard for their personal reputation (and hence ex-post settling up) as committed company directors motivates independent directors to consider the bid in the interests of shareholders (Harford, 2003).

More fundamentally, to understand these dynamics we analyse the sources of power of a target board, i.e. why would a bidder or target shareholder's actions be influenced by target board actions. Target boards have the power to influence the outcome of a bid through "cheap talk" to shareholders (claims of inadequate value, opportunism by the bidder, promises of restructuring and improved long run performance).

In particular, Australian evidence provides a unique perspective on the role of board recommendation. Compared to international experience, the Australian market, in prior samples, exhibited a high degree of takeover hostility (Henry, 2005; Henry, 2004). Henry, using a sample from an earlier period (1991 – 2000), finds an overall hostility rate of 49.3% and a bid success rate of 66%. These findings are presented in a corporate governance context, that is, Henry (2005) examines the factors that are important to the target directors in formulating their recommendations, and Henry (2004) examines the influence of ownership structures. Of present interest is that Henry (2005) finds no evidence to suggest that directors are more likely to favourably recommend bids that offer higher premiums. This suggests that

whilst board recommendation is still significant to bid outcome, target directors base their recommendation on a variety of factors, consistent with the ulterior or self interest motivation hypothesis.

This is even more moderate than the findings on bids for an earlier period reported in Casey and Eddey (1986) and Eddey and Casey (1989). These earlier studies are not completely comparable to the Henry and the present study, as the authors Casey and Eddey examined not just 'hostility' as defined by board response, but they examined "defended bids", which encompasses a wider range of target board response and tactics, not just board recommendation. Casey and Eddey (1986) report that of their sample of defended bids, the dominant tactic observed (in 95% of defended bids) was rejection of the bid by target directors, due to inadequacy of the price offered. The 'hostility' factor in the Australian market from these prior studies is summarised in Figure 5 below.

Figure 5: Hostility factor in Australian bids: Evidence from the literature

Australian Evidence	Sample Period	Average hostility rate over the whole sample period	Average success rate	Failure rate for hostile bids
Casey & Eddey (1986)	Jan 71 to June 85	13%[9]		70%
Hutson and Kearney (2001)	Jan 85 to July 93	NA	79%	
Henry (2005)	Jan 91 to Aug 00	49.3%	66%	
Current study	March 00 to Dec 03	34%	63%	56%

Further, the modern Australian market for control is significantly different to that of prior US studies. Much of the US literature that examines hostility in terms of the tactics of managerial resistance to the bid, and these tactics are simply not relevant or not legal in the Australian regulatory environment.

There has been little apparent interest in Australian literature on the utility of takeover defensive tactics since the former regulator, the National Companies and Securities Commission, issued its discussion paper on defensive schemes in 1986 (NCSC, 1986). This discussion paper is the general authority for the distinction between frustrating actions during the course of a bid ('tactics') and pre-bid manoeuvres ('strategies'). As we focus on bid events, we are interested to investigate the relevance of hostility 'tactics', that is, events that the target board manufacture while the bid is on play.

One relevant post-CLERP change to hostility has been the involvement of the Takeovers Panel ("Panel") in resolving takeover disputes. In addition to deciding individual disputes brought to it, the Panel has also been proactive in commenting on takeover law and policy. In its guidance note on "Frustrating Action" (Takeovers Panel, GN 12, 2003), the Panel has indicated that target directors may generally recommend rejection of a bid or seek

[9] Although the authors report that between 1982 -1985, there was a substantial increase in defended bids, as high as 29%, whereas in the early 1970s, the hostility rates were much lower (single figures).

alternatives to a bid without breaching their duties or contravening the policy of Chapter 6 of the Corporations Act that regulates Australian takeover bids. Accordingly, virtually the only tactics left to target board while the bid is in play is to delay the bid by seeking panel intervention on the bidder's conduct or disclosure; or 'cheap talk', that is, disclosure to repel the bid, (whether direct disclosure or indirect disclosure through the voluntary use of a valuation report).

This suggests that takeover recommendations from Australian target boards could be more influential than expected. However, we also collect in our sample data the instances of bids involving panel intervention, as this is a reasonably observable event of hostility.

3.7 Other factors influencing bid success

In testing the determinants of bid success, we identified the 3 phases of the bid and the factors that relate to each phase. The bid phase, we determined above, is the most important phase, as this is the factors and ex ante conditions going into the bid that the bidder either controls or is aware of. Accordingly, we prioritised:

- The offer price, measured as the bid premium
- The pre-bid stake held by the bidder
- The degree of interlocking directorships
- Whether the bid is conditional.

The second bid phase is the target company directors' reaction to the bid and the third bid phase relates to events that occur while the bid is in play. Definitions of the variables employed according to these phases are provided in Table 4 below.

Table 4: Variable Definitions

Theoretical Construct	Variable Name	Measured As
Dependent Variable		
Successful Bid	SUCCS	Value=1 if the bidder has over 50% of the target's shares and the bid is unconditional at the close of the offer (Connect4 classification). However, if the bidder has already acquired over 50% of target shares prior to the bid, then we require the bidder to increase target shareholding by at least 5% (over the TOE value) to avoid an automatic "Success" classification. Value=0 otherwise
BID PHASE 1 - INDEPENDENT VARAIBLES – BID STRUCTURE AND CONDITIONS		
Cash payment	CASH	Value=1 if the offer is cash, 0 otherwise.
Conditional bid – where condition is minimum acceptance condition	CONSHR	This is minimum acceptance condition. If the bid is unconditional, this variable is set equal to 50.1%
Interlocking board between bidder and target	INTLCK	Value=1 if at least one director of the target firm is director of the bidder, 0 otherwise
Large Target	LARGE	Value=1 if the implied market value of the target exceeds the median value of the sample AUD$58mio.
Number of special conditions	NSPCND	If special conditions are attached to the bid, we count total number of special conditions. Hence, zero represent unconditional bid.
Number of directors who sit on both boards	NSITBT	This variable is the number of board directors who serve in both bidder and target. Hence , it also captures the interlocking relationship.
Initial Bid Premium	PREM	The initial premium is measured from the price differential between the bidder's initial offer price and the target's share price 20 working days prior to the announcement date of the bid
On market bid	ONMKT	Value=1 if the offer is on-market, 0 if not
Shares required to achieve control	SHREQ	This variable is equivalent to CONSHR – TOEHOLD. It tells us percentage share the bidder needs to acquire to make the bid becomes successful. WHEN TOEHOLD MORE THAN MIN. acceptance level , SET THIS = 0%, INSTEAD OF NEGATIVE RESULT IF BID IS SUCESSFUL, SET TO 5% (INSTEAD OF NEGATIVE) WHEN BID IS UNSUCESSFUL ACCORDING TO OUR CRITERIA
Toehold	TOEHOLD	Percentage value of shares held by the bidder prior to the bid.
Unconditional	UNCOND	Value =1 if bid is or becomes "unconditional" prior to the close of the offer period if "off-market" (i.e., there are no condition precedents attached to the payment upon acceptance of the offer by a target shareholder), 0 if CONDITIONAL
BID PHASE 2 - INDEPENDENT VARIABLES – TARGET BOARD RESPONSE		
Conflict in board	CONFLT	Value=1 if there exists a target director giving an opposing recommendation

recommendation		as another target director, 0 otherwise.[10]
Disclosure of board participation	DISC	Value=1 if the target statement discloses which directors are independent, executive status, director intentions, and makes a recommendation regarding the bid, 0 otherwise.
Higher bidder	HIGHBID	Value=1 if the target board recommends a REJECT citing the presence of a higher bidder, or a potential higher bidder in the target statement, 0 otherwise.
No recommendation disclosed	NOREC	Value=1 if the target statement deliberately contains no explicit recommendation.
Reject recommendation	REJECT	Value=1 if the initial target Board recommendation is majority "Reject", 0 otherwise.
Participation in recommendation	PARTIC	The percentage of the target board that provided a recommendation in the target statement, i.e. did not refrain.
BID PHASE 3 - INDEPENDENT VARIABLES – BID EVENTS		
Duration of the bid	DURA	This variable measures the age of the bid i.e. the number of day from the announcement date to the date when the bid is accepted or rejected divided by 365 days.
Panel intervention	PANEL	Value = 1if the bid involves Panel decision and zero otherwise.

Table 5 reports the correlation matrix of all variables of interest. Results from Table 5 inform the relations of the independent variables for the models based on the phases of the bid. Specifically, it appears that most of our phase 1 independent variables from the bid structures and conditions, except for interlocking relationship variables (INTLCK and NSITBT) and method of payment (CASH) are highly correlated with the success rate of the bid.

For the phase 2 model independent variables, it appears that only bid competition (HIGHBID) and board hostility (REJECT) variables are highly correlated with the success rate of the bid.

Finally, PANEL is the only variable from our phase 3 that is moderately correlated with the success rate of the bid. Among independent variables from all three phases, we find the highest correlation (-38%) between REJECT and SUCCS.

[10] Note: if a director sells shares, and makes no recommendation or makes a reject recommendation, the directors actions constitutes an "accept".

In terms of what could influence the target board to issue reject recommendation, we find that board hostility (REJECT) is highly associated with competing bid (HIGHBID) with 49% correlation. We also find that other independent variables from our phase 2 variables such as CONFLT, DISCL are also moderately associated with the board hostility. Interestingly, CONSHR and TOEHOLD from our bid structures and conditions and PANEL from our bid events are also moderately correlated with the board hostility.

We now develop the models, according to the phases of the bid, to test the determinants of bid success.

4. The relation between target board recommendation and the bidder's success

We examine the impact of board recommendations on the success of the bid by using four main model specifications. In the first specification **(model 1),** we test our phase 1 (the bid phase) by examining the impact of bid structures and conditions before the target board recommendations on the success of the bid. Specifically, we include CASH, INTLCK, LARGE, NSITBT, ONMKT, PREM, SHREQ, TOEHOLD and UNCOND as our independent variables.

In the second specification, we test the second phase, when the target board issues its recommendation. In addition to our phase 1 independent variables, we also include CONFLT, NOREC and REJECT to our **model 2**.[11] Model 2 is a variation of model 1, using the results from Table 4 (correlation table) to select the most likely variables to capture phase 2, the recommendation.

For our third specification of the **full model**, we include all variables from all 3 phases: pre-recommendation, release of target recommendation, and later bid events. The only important

[11] To minimise multicollinearity problem, we do not include HIGHBID variable as the correlation between HIGHBID and REJECT is fairly high. Further, DISCL and PARTIC are marginally correlated with the success rate of the bid. Hence we also exclude them from our model 2. For our robust check, we perform logistic regression where we include all variables from phases 1 and 2 and results are quite similar to results from our 2nd specification. That is, HIGHBID, DISCL and PARTIC are not statistically significant.

data for phase 3 is panel intervention (PANEL) and that the bid is unconditional (UNCOND). That a bid is unconditional is actually important in phases 1 and 3. This variable captures bids that are unconditional from the beginning, and it also captures bids that become unconditional while the bid is in play.

Finally, for parsimonious reasons, our fourth specification or **final model** (**model 3**) is confined to 11 variables. These are CONFLT, INTCK, LARGE, NOREC, NSITBT, PANEL, PREM, REJECT, SHREQ, TOEHOLD, and UNCOND as our independent variables.[12] Specifically, we deleted from the full model CASH and ONMKT as sample size is too small. The variables relating to a conditional bid (CONSHR, NSPCND) apart from unconditional are removed. The reject recommendation itself is of interest, so the variables that relate to the strength of this signal, participation in the recommendation and the quality of disclosure in the target statement (PARTIC, DISC) are deleted. Finally, two matters of bid structure that the bidder can control, the revised bid (HIGHBID) and duration of the bid (DURA) are disregarded.

[12] We also estimate model 2 with additional variable (PANEL), representing the bid event phrase as a variant of model 3. However, the likelihood ratio test is in favour of model 3. These results are available upon request.

4.1 Multiple logistic regression analysis of the bidder's success

We estimate the following multiple logistic regression model:

$$g(X) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mathrm{K} + \beta_p X_p \tag{1}$$

where probability that the bid being successful is given by: $P(Y = 1 \mid X) = \frac{e^{g(X)}}{1 + e^{g(X)}}$, e is the exponential function, $X_1, X_2, \mathrm{K}\ X_p$ are independent variables, and $\beta_1, \beta_2, \mathrm{K}\ \beta_p$ are the regression coefficients for the independent variables. For example, our **model 1** can be written as follows:

$$\begin{aligned} g(X) = {} & \beta_0 + \beta_1 CASH + \beta_2 INTLCK + \beta_3 LARGE + \beta_4 NSITBT + \beta_5 ONMKT \\ & + \beta_6 PREM + \beta_7 SHREQ + \beta_8 TOEHOLD + \beta_9 UNCOND \end{aligned} \tag{2}$$

Alternatively, equation 1 can be written as:

$$\ln\left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mathrm{K}\ \beta_p X_p \tag{3}$$

In this case, P/(1-P) is the odds of Y being equal to 1 or the odds that the bid being successful.

Hence, the alternative representation of **model 1** is:

$$\begin{aligned} \ln\left(\frac{P}{1-P}\right) = {} & \beta_0 + \beta_1 CASH + \beta_2 INTLCK + \beta_3 LARGE + \beta_4 NSITBT + \beta_5 ONMKT \\ & + \beta_6 PREM + \beta_7 SHREQ + \beta_8 UNCOND \end{aligned} \tag{4}$$

This implies that if CASH increases by 1 unit, the odds of the bid being successful are $\exp(\beta_1)$. Finally, we also conduct likelihood ratio tests to measure which model (among the above four specifications) performs best in our sample.

4.2 Empirical Results

Panel A of Table 6 reports our results from all four models. Overall, all of our four models perform quite well with the prediction accuracy ranging from 83% to 86%.[13] During phase 1 (the pre-target recommendation period or the bid phase), we expect that several bid structures and conditions such as the method of payment, interlocking relationship, firm size, premium, toehold and bid conditions can influence the likelihood of a bid being successful. That is, we expect that if the method of payment is cash, the target firm size is large, the initial bid premium and toehold is high, and the bid has no condition attached and low interlocking relationship, it is more likely that the bid will become successful. (Although realistically the incidence of a fully cash bid in Australia is very low). Model 1 in panel A of Table 6 supports most of our prediction. That is, we find the coefficients for toehold and bid condition (i.e. SHREQ, TOEHOLD, and UNCOND) are positive and statistically significant.

The magnitude of coefficient of SHREQ, TOEHOLD and UNCOND implies that the odds of bid being successful are equal to 110, 119, and 8.8 for a one unit increase of SHREQ, TOEHOLD and UNCOND, respectively. In addition, we find the coefficient for the interlocking relationship is statistically significant and negative. Interestingly, the coefficients for method of payment, firm size, and premium are not statistically significant. This implies that method of payment, firm size, and initial bid premium do not have any impact on the takeovers success. Among these three, the insignificant initial bid premium confirms Walking (1985)'s bid premium puzzle. As part of their investment strategy, it could be that target investors value not just the expected pay off from the bid, but the degree of certainty inherent in the bid. Factors influencing certainty are an unconditional bid and the magnitude of the pre-bid stake.

The next phase between making a bid and the bid outcome is the recommendation phase (phase 2), which is specified according to **model 2** in panel A of Table 6. Our result demonstrates strong evidence in favour of our predicted board hostility. Specifically, results from Table 6 indicate that adding board recommendation to **model 1** weakens the

[13] This number is slightly higher than Henry (2004) model, indicating that our models have more chance to predict the success rate of a bid than does Henry (2004) model.

relationship between the bid structures and conditions and the success rate of the bid. Specifically, two independent variables from the bid structures and conditions (i.e. the interlocking relationship and toehold) are no longer statistically significant in **model 2** while the coefficient for board hostility becomes statistically significant and negative. We also find that in **model 2,** the coefficients for SHREQ and UNCOND (proxied for bid structures and conditions) remain statistically significant and positive while the coefficient for REJECT is statistically significant and negative. With the reject recommendation, the odds of the bid being successful become lower. In the presence of reject recommendation, the magnitude of coefficient for SHREQ and UNCOND now implies the odds of the bid being successful is now only 25.13 and 10.75, respectively.

The final phase between making a bid and the bid outcome is the bid event phase (our phase 3), which is specified according to our full model. That is, during this phase, we include all independent variables that are likely to affect the outcome of the bid as discussed in details in section 4. Results from panel A of Table 6 demonstrate that only two variables – one from the board recommendation (REJECT) and the other from the bid structures and conditions (UNCOND) are statistically significant with negative and positive signs, respectively. It appears that target investors value target's reject recommendation highly and hence results in lower rate of takeover success in presence of board hostility. In addition, the investors also view that the unconditional feature attached to the bid is valuable and hence increases the likelihood of the bid being successful in the presence of unconditional bid, bearing in mind that a conditional bid can become unconditional while the bid is on play.

Panel B of Table 6 report the likelihood ratio tests. When the full model is an unconstrained model, we are unable to reject the null hypothesis that those variables (that are in full model but not in models 1, 2, and 3) have no effect on the odds of the bid being successful; hence we can exclude those variables out of the model. Specifically, we are in favour of a more parsimonious model (i.e. either models 1 or 2 or 3 rather than the full model).

Following the time frames between making a bid and the outcome of the bid as shown in Figure 4, we start our bid process with **model 1**, which include only the bid structures and

conditions as our explanatory variables for the probability of takeovers success. We then nest **model 1** by **model 2** and we find that we are able to reject the null hypothesis that CONFLT, NOREC, and REJECT have no effect on the odds of the bid being successful. This implies that these variables relating to the board recommendation have to be maintained in the model. We move along the time frame to include our bid events variable (PANEL) in our **model 3**, and then we nest our **model 1** by **model 3** and find that we are able to reject the null hypothesis that CONFLT, NOREC, REJECT, and PANEL have no effect on the odds of the bid being successful. Hence, variables relating to the board recommendation and bid event such as PANEL have to be maintained in our model. These results reinforce the importance of board recommendations on the takeovers success.

5 Conclusion

5.1 Summary

Research on takeover bids in Australia contributes to our understanding of the dynamics of this transaction, which takes place in a highly regulated environment. Intuitively, we might expect that a bidder motivated to achieve success in a bid will determine that the price offered (the bid premium) will be the primary determinant of success. Typical average bid premia in Australia have been calculated at around 23%. Further, anecdotal evidence suggests that on balance, Australia is a less hostile environment for bids, as the degrees of flexibility open to target directors to resist the bid are reduced by regulation.

However, we argue that target investors are influenced by factors beyond bid price when adjudicating the merits of the bid. The reasons why bid premium itself is not compelling are:

1. US literature, bid premium
2. investors have come to the bid at different times (bid in play)
3. mandatory disclosure regime in Aust
4. pay their managers, wait for recommendation
5. hold out for higher bid
6. hold out for higher certainty (uncond, no other hostility, panel intervention etc)

We concentrate particularly on the impact of target director recommendation as a determinant of success. Target directors are required to provide a personal recommendation of the bid. Our first contribution to research design is to discriminate among three types of recommendation. The recommendations available are accept, reject or refrain from comment (usually due to conflict of interest with the bidder). Our second contribution to research design is to identify that the recommendation may have variable quality, depending on the number of directors who participate in making the recommendation, and their position in the company (independent, non-independent). Accordingly, in collecting the data on recommendation, we have looked at aggregate recommendation to classify the

bid as accept, reject or refrain, and we have also collected data on how many of the directors participate in the recommendation and their disclosure about their position in the target firm.

Further, in designing this study into the determinants of takeover bid success, we recognise that in a highly regulated environment, the bid plays out according to a fairly predictable set of variables. Hence, we place the recommendation as a chronological phase in the bid (the recommendation phase), preceded by the elements of bid structure that are known to the target investors when the bid is launched (the bid phase) and proceeded by events as they play out during the bid (the bid process phase).

We know that the literature suggests that factors in the bid phase that may be influential to bid success, apart from price (premium), are the degree of insider position the bidder has in the target (represented by pre-bid stake and interlocking boards). We also suggest that the method of payment and the conditional nature of the bid are influential factors.

In the recommendation phase, prior literature in the managerial resistance area suggests that board attitude to the bid affects success. We add to the literature by a preliminary examination of not just the classification of the recommendation, but the quality of this signal.

The bid process phase may comprise events outside the control of the bidder, so may be less relevant to predicting bid success. However the bidder may control the offering of a higher bid, declaring the bid as unconditional during the course of the bid, so we examine the impact of these factors on success. Finally, takeover participants in Australia, including but not limited to the bidder, may take disputes on process to the Takeovers Panel, so we have also examined panel intervention as a possible determinant of success.

5.2 Findings

Our testing is based on fairly simply logistical regression, using success as the dependent variable. In collating nineteen independent variables, we have been influenced by our research design of the three phases.

For the first phase, the bid phase, we find that the inside position of the bidder and that the bid is unconditional (ex ante) determines success. That is, the variables for pre-bid stake (toehold and shares required for success) and bid condition are positive and statistically significant. However, the literature posits another measure of inside position, and that is interlocking boards. Interestingly, we find that the interlocking board relationship is statistically significant and negative to success.

In the second phase, we find that adding board recommendation to the model weakens the importance of ex ante bid structure and conditions to the success rate of the bid. The comparative predictive advantage of inside position (toehold positive, interlocking board negative) is no longer statistically significant. The measure of board hostility (reject recommendation) becomes statistically significant and negative. However, the predictive power of an accept recommendation is undetermined.

However, the unconditional nature of the bid is still important, and remains so after the testing in the third phase.

The final phase, the bid event phase confirms that the board recommendation (REJECT) and the unconditional bid (UNCOND) are statistically significant with negative and positive signs, respectively.

5.3 Significance

The bidder has a high degree of control over the first phase. Interestingly, the coefficients for method of payment, firm size, and premium are not statistically significant. Method of payment (cash) could be due to the small sample size, as overwhelmingly our sample

shows that bids in Australia tend to involve bidder scrip. The insignificant initial bid premium confirms Walking (1985)'s bid premium puzzle. This challenges us to examine other aspects of the bid that may determine success. The hostility of the board (a reject recommendation) is significant.

The negative relationship with interlocking boards strengthens the underlying policy reason for the mandatory regulation of director recommendation. Further, it justifies the 3 way classification of recommendation – providing directors with the opportunity to refrain in the event of a conflict. This supports the conclusion that target shareholders wait for the recommendation, but that a reject recommendation is more compelling. Faced with a reject recommendation, target investors wait for the bid to play out to see if other factors, such a price (revised bid or rival bidder) or an unconditional offer, become more favourable.

This study has confirmed that bid premium is not the primary determinant of takeover success, nor is it powerful in predicting success. An unconditional bid is influential, but the absence of conditions is not necessarily apparent until the bid is in play, after the director recommendation is released anyway. Some of the posited reasons in the literature for toehold disadvantage (such as perceived 'hostility' of the bid) probably does not apply in Australia.

Table 1: Summary Statistics for Australian Mergers & Acquisitions 1997 to 2003: source Connect 4

Panel A - Pre CLERP Period: 1 Jan 1997 - 12 March 2000

	N1	% Sample
Schemes (s411)	22	13%
Takeovers (s611)	152	87%
Total	174	100%
	N2	% Successful
Total "Successful" Schemes	21	95%
Total "Successful" Takeovers	108	71%
Total "Successful"	129	74%

Panel B - Post CLERP Period: 13 March 2000 - 31 December 2003

	N3	% Sample
Schemes (s411)	71	27%
Takeovers (s611)	196	73%
Total	267	100%
	N4	% Successful
Total "Successful" Schemes	59	83%
Total "Successful" Takeovers	123	63%
Total "Successful"	182	68%

Table 2: Summary of bid success in post-CLERP period: 13 Mar 2000-31 Dec 2003

Panel A - Takeover bid summary

	N	% Sample
Successful	123	63%
Unsuccessful	46	23%
Effective sample	***169***	***86%***
Withdrawn bids	27	14%
Total	196	100%

Panel B - On-Market vs Off-market Bids (Effective Sample)

	N	% Sample
On-market Bids	6	4%
Off-market Bids	163	96%
Total	169	100%

Panel C – Takeover bid summary Effective Sample		% Sample
Successful	123	73%
Unsuccessful	46	27%
Total Effective Sample	169	100%

Table 3: Summary of Initial Target Board Recommendations and bid characteristics

Panel A: Classification by Target Board Recommendations

	N	Unsuccessful	% Full Disclosure
Reject	57	56%	68%
Accept	103	12%	77%
Refrain	9	22%	44%
Total	169		

Panel B: Classification by Medium of Payment

	Cash	Cash & Scrip	Scrip	Total
Reject	39	1	17	57
Accept	71	4	28	103
Refrain	6	0	3	9
Total	116	5	48	169

Panel C: Classification by Conditions

	Conditional	Unconditional	Total
Reject	23	34	57
Accept	29	74	103
Refrain	2	7	9
Total	54	115	169

Panel D: Classification by Conditions

	On-market	Off-market	Total
Reject	3	54	57
Accept	2	101	103
Refrain	1	8	9
Total	6	163	169

Table 5: Correlation matrix of variables of interest

	CASH	CONSHR	CONFLT	DISCL	DURA	HIGHBID	INTLCK	LARGE	NOREC	NSPCND	NSITBT	ONMKT	PANEL	PARTIC	PREM	REJECT	SHREQ	SUCCS	TOEHLD	UNCOND
CASH	1.00																			
CONSHR	-0.14	1.00	-0.09	0.04	0.09	-0.14	0.08	-0.01	-0.05	0.26	0.17	-0.16	-0.20	0.03	-0.03	-0.23	0.71	0.29	0.00	-0.06
CONFLT	-0.01	-0.09	1.00	0.04	-0.10	0.03	0.19	0.04	-0.08	-0.11	0.07	0.10	0.05	-0.14	0.16	0.21	-0.06	-0.08	0.03	-0.04
DISCL	0.09	0.04	0.04	1.00	-0.07	-0.06	0.17	0.06	-0.15	0.09	0.12	-0.01	0.03	0.05	0.01	-0.09	-0.05	0.04	0.12	-0.02
DURA	*-0.17*	0.09	-0.10	-0.07	1.00	-0.14	0.03	-0.13	-0.13	0.08	-0.02	-0.12	-0.15	-0.09	-0.07	-0.06	0.07	0.01	-0.03	-0.12
HIGHBID	0.06	-0.14	0.03	-0.06	-0.14	1.00	-0.16	0.01	0.12	0.01	-0.14	0.05	0.28	0.02	-0.12	0.49	-0.02	-0.31	-0.13	-0.09
INTLCK	0.05	0.08	0.19	0.17	0.03	-0.16	1.00	-0.08	0.11	-0.13	0.76	0.19	-0.07	-0.45	-0.04	0.00	-0.28	-0.06	0.51	0.01
LARGE	0.06	-0.01	0.04	0.06	-0.13	0.01	-0.08	1.00	-0.19	0.03	0.03	-0.12	0.07	0.10	0.04	0.01	-0.03	0.17	0.04	0.10
NOREC	-0.04	-0.05	-0.08	-0.15	-0.13	0.12	0.11	-0.19	1.00	0.01	0.13	-0.04	0.03	-0.53	-0.05	-0.16	-0.21	-0.04	0.19	-0.01
NSPCND	0.10	0.26	-0.11	0.09	0.08	0.01	-0.13	0.03	0.01	1.00	-0.02	-0.24	0.17	0.08	0.17	-0.10	0.23	0.16	-0.11	0.06
NSITBT	0.00	0.17	0.07	0.12	-0.02	-0.14	0.76	0.03	0.13	-0.02	1.00	0.09	-0.09	-0.32	-0.05	0.04	-0.11	0.05	0.34	0.02
ONMKT	0.09	-0.16	0.10	-0.01	-0.12	0.05	0.19	-0.12	-0.04	-0.24	0.09	1.00	-0.07	-0.02	0.02	0.17	-0.17	-0.21	0.04	0.13
PANEL	0.04	-0.20	0.05	0.03	-0.15	0.28	-0.07	0.07	0.03	0.17	-0.09	-0.07	1.00	0.02	-0.05	0.33	-0.10	-0.12	-0.06	-0.13
PARTIC	*0.08*	0.03	-0.14	0.05	-0.09	0.02	-0.45	0.10	-0.53	0.08	-0.32	-0.02	0.02	1.00	-0.08	0.05	0.34	0.08	-0.46	0.03
PREM	-0.11	-0.03	0.16	0.01	-0.07	-0.12	-0.04	0.04	-0.05	0.17	-0.05	0.02	-0.05	-0.08	1.00	-0.05	0.01	-0.10	-0.07	0.01
REJECT	0.06	*-0.23*	*0.21*	*-0.09*	-0.06	*0.49*	0.00	0.01	-0.16	*-0.10*	0.04	0.17	*0.33*	0.05	-0.05	1.00	*-0.09*	-0.38	-0.11	0.00
SHREQ	*-0.27*	0.71	-0.06	-0.05	0.07	-0.02	-0.28	-0.03	-0.21	0.23	-0.11	-0.17	-0.10	0.34	0.01	-0.09	1.00	0.14	-0.68	-0.06
SUCCS	*0.02*	0.29	-0.08	0.04	0.01	-0.31	*-0.06*	*0.17*	-0.04	0.16	*0.05*	*-0.21*	-0.12	0.08	*-0.10*	-0.38	*0.14*	1.00	*0.10*	0.32
TOEHOD	0.24	0.00	0.03	0.12	-0.03	-0.13	0.51	0.04	0.19	-0.11	0.34	0.04	-0.06	-0.46	-0.07	-0.11	-0.68	0.10	1.00	0.01
UNCOND	0.03	-0.06	-0.04	-0.02	-0.12	-0.09	0.01	0.10	-0.01	0.06	0.02	0.13	-0.13	0.03	0.01	0.00	-0.06	0.32	0.01	1.00

Note: all variables are as defined in Table 4.

Table 6: Analysis of successful of the bid

Panel A - Logit regression where success is the binary dependent variables, estimated using QML (BHHH)
Dependent Variable: SUCCESS

Independent Variables	Full Model			Model 1			Model 2			Model 3		
	Coeff.	**Z-Stat**	**Odds**	**Coeff.**	**Z-Stat**	**Odds**	**Coeff.**	**Z-Stat**	**Odds**	**Coeff.**	**Z-Stat**	**Odds**
C	-3.87	-(1.45)		-3.36	-(2.74)		-1.44	-(1.06)		-1.76	-(1.35)	
CASH	0.27	(0.40)	1.30	0.32	(0.61)	1.38	0.17	(0.29)	1.18			
CONDSHR	5.47	(0.85)	236.86									
CONFLT	0.86	(0.93)	2.37				0.61	(0.70)	1.84	0.66	(0.74)	1.94
DISCL	0.01	(0.02)	1.01									
DURA	2.86	(0.62)	17.41									
HIGHBID	-0.90	-(1.07)	0.41									
INTRLCK	-2.46	-(1.84)	0.09	**-2.41**	**-(1.97)***	**0.09**	-2.42	-(1.93)	0.09	**-2.49**	**-(2.11)***	**0.08**
LARGE	0.46	(0.72)	1.58	0.35	(0.67)	1.42	0.42	(0.70)	1.52	0.39	(0.66)	1.48
NOREC	-0.68	-(0.38)	0.51				-1.65	-(1.36)	0.19	-1.65	-(1.36)	0.19
NSPCND	-0.09	-(0.19)	0.92									
NSITBT	0.81	(1.08)	2.25	0.92	(1.32)	2.50	0.84	(1.19)	2.31	0.74	(1.22)	2.10
ONMKT	-2.05	-(1.01)	0.13	-2.00	-(1.55)	0.14	-2.05	-(1.25)	0.13			
PANEL	1.03	(1.18)	2.80							0.80	(1.05)	2.24
PARTIC	1.19	(0.82)	3.27									
PREM	-0.86	-(0.92)	0.42	-0.40	-(0.55)	0.67	-0.83	-(1.03)	0.44	-0.90	-(1.14)	0.40
REJECT	**-2.17**	**-(2.68)***	**0.11**				**-2.25**	**-(3.41)***	**0.11**	**-2.54**	**-(3.61)***	**0.08**
SHREQ	-1.24	-(0.19)	0.29	**4.70**	**(2.98)***	**(109.62)**	**3.22**	**(1.99)***	**25.13**	**3.84**	**(2.33)***	**46.75**
TOEHLD	0.90	(0.18)	2.45	**4.78**	**(2.53)***	**119.33**	4.02	(1.93)	55.79	**4.72**	**(2.31)***	**112.69**
UNCOND	**2.60**	**(3.49)***	**13.41**	**2.18**	**(3.74)***	**8.88**	**2.37**	**(3.69)***	**10.75**	**2.43**	**(3.63)***	**11.39**
McFadden R-squared	41%			28%			38%			38%		
Hannan-Quinn criteria	1.22			1.10			1.06			1.04		
Log likelihood	-38.7714			-47.744			-40.7872			-41.1187		
no. of successful takeover	85			85			85			85		
no. of unsuccessful takeover	30			30			30			30		

cut-off	0.6144	0.6144	0.6144	0.6144
Prediction accuracy (%)	86.09	84.35	85.22	83.48
Total obs	115	115	115	115

Panel B- Likelihood Ratio Tests

Unrestricted Model		**Restricted Model**					
	LR	**Model 1**		**Model 2**		**Model 3**	
Full Model	-38.7714	17.95	(0.06)	4.03	(0.78)	4.69	(0.79)
Model 1	-47.744	n/a		n/a		n/a	
Model 2	-40.7872	13.91	(0.00)	n/a		n/a	
Model 3	-41.1187	13.25	(0.00)	n/a			

Note: Panel A of this table reports results from our logit regression where success is dependent variable and take on value of 1 when takeover is successful and 0 otherwise. Z-statistics are reported in the blanket with * represents statistically significant at 95% level. The cut-off probabilities reported in Panel A is calculated as $\sum P_i^2$, where P_i are the percentage proportions of successful and unsuccessful takeovers. The prediction accuracy, based on the reported cut-off probability, represents the expected probability based on chance, calculated using the actual distribution of takeover outcomes for our entire sample. Panel B of this table reports the likelihood ratio tests (LRTs) results. P-values are reported in the blanket. n/a in Panel B indicates that we are unable to run LRT tests as models involved are not nested.

Table 7: Analysis of board recommendations

Panel A: Logit regression where REJECT is the binary dependent variables, estimated using QML(BHHH)

						Independent Variables								
C	CASH	INTLCK	LARGE	ONMKT	PREM	TOEHLD	CONSHR	CONFLT	DISCL	HIGHBID	NSPCND	PANEL	SHREQ	UNCON
-0.56	0.44	0.90	-0.02	0.88	0.13	-1.53	-2.01	1.31	-0.68	**3.22**	-0.43	**2.05**	0.82	0.58
-(0.46)	(0.79)	(1.27)	-(0.03)	(0.61)	(0.16)	-(0.34)	-(0.36)	(1.52)	-(1.10)	**(3.62)***	-(1.09)	**(2.47)***	(0.15)	(0.91)

McFadden R-squared	32%
Hannan-Quinn criter.	1.27
Total obs	115

Panel B: Logit regression where ACCEPT is the binary dependent variables, estimated using QML(BHHH)

						Independent Variables								
C	CASH	INTRLCK	LARGE	ONMKT	PREM	TOEHLD	CONSHR	CONFLT	PANEL	PARTIC	DURA	DISCL	SHREQ	UNCON
-4.02	-0.18	-0.23	0.41	-0.81	1.11	8.02	-5.63	-1.23	**-2.35**	**2.11**	3.99	0.96	8.09	-0.16
-(2.42)*	-(0.36)	-(0.35)	(0.84)	-(0.62)	(1.58)	(1.68)	-(1.07)	-(1.53)	**-(3.02)***	**(2.04)***	(1.11)	(1.71)	(1.48)	-(0.31

McFadden R-squared	24%
Hannan-Quinn criter.	1.42
Total obs	115

References

Betton, S. and Eckbo, B.E., 2000, 'Toeholds, bid jumps, and expected payoffs in takeovers.' *Review of Financial Studies.* 13 (4), 841-882.

Betton, S. Eckbo, B.E. and Thorburn, K.S., 2005, 'The Toehold Puzzle'. *European Corporate Governance, Finance Working Paper Series.* 88/2005.

Bishop, S., P. Dodd and R. Officer, 1987. *Australian Takeovers: The Evidence 1972 – 1985*. The Centre for Independent Studies Ltd., Policy Monograph Series.

Bluff, D. and P. Clarkson, 2004. 'The use of independent expert's reports in Australian takeovers'. Working paper, UQ.

Bris, A., 2002, 'Toeholds, takeover premium and the probability of being acquired'. *Journal of Corporate Finance.* 8, 7-253.

Bosmans, G., 2005. 'Overcoming shareholder inertia in takeovers'. *CCH Corporate News.* 12, 1-4.

Brown, K. C., & Raymond, M. V., 1986. 'Risk Arbitrage and the Prediction of Successful Corporate Takeovers'. *Financial Management* Autumn, 54-63.

Bujega, M. and T. Walter, 1995. 'An empirical analysis of some determinants of target shareholder premium in takeovers'. *Accounting Finance.* 35(2) 33-60.

Casey and Eddey, 1986. 'Defense strategies of listed companies under the takeover code'. *Australian Journal of Management*, 153-171.

Choi, D., 1991. 'Toehold Acquisitions, Shareholder Wealth, and the Market for Corporate Control'. *The Journal of Financial and Quantitative Analysis*. 26: 3, 391-407.

Clarkson, P., A. Craswell & P. McKenzie, 2004. 'The effect of an independent board on target shareholder wealth during a takeover'. Working paper UQ.

Clegg, B, 2003, 'You Still Need That Shining White Knight'. *Australian Financial Review*, April 3.

Cotter, J., A. Shivdasani & M. Zenner, 1997. 'Do independent directors enhance target shareholder wealth during tender offers?' *Journal of Financial Economics.* 43, 195-218.

Dignam, A., 2005, 'The Takeovers Panel, the Market Efficiency Principle and the Market for Corporate Control - An Empirical Study'. *Company & Securities Law Journal*. 23, 59-65.

Eddey, P. & R Casey, 1989. 'Directors' recommendations in response to takeovers bids: Do they act in their own interests?' *Australian Journal of Management*. 14, 1-28.

Fama, E. & M. Jensen, 1983. 'Separation of ownership & control'. *Journal of Law & Economics.* 26, 301-325.

Harford, J., 2003. 'Takeover bids and target directors' incentives: Retention, experience and settling-up'. *Journal of Financial Economics.* 69, 51-83.

Henry, D., 2005. 'Directors' recommendations in takeovers: An agency and governance analysis'. *Journal of Business Finance and Accounting.* 32, 129-159.

Henry, D., 2004. 'Corporate governance and the ownership structure of target companies and the outcome of takeovers'. *Pacific Basin Journal of Finance.* 12, 419-444.

Hirshleifer, D. & Titman, S., 1990. 'Share Tendering Strategies and the Success of Hostile Takeover Bids'. *The Journal of Political Economy*. 98: 2, 295-324.

Hoffmeister, J.R. & E.A. Dyl, 1981. 'Predicting outcomes of cash tender offers'. *Financial Management*. 19, 50-58.

Hutson, E., 2000. 'Takeover targets and the probability of bid success: Evidence from the Australian market'. *International Review of Financial Analysis.* 9:1 45-65.

Hutson, E. and C, Kearney, 2001. 'Volatility in stocks subject to takeover bids:Australian evidence using daily data'. *Journal of Empirical Finance.* 8, 273-296.

Jensen, M.C & W. Meckling, 1976. 'Theory of the firm: Managerial behaviour, agency costs and ownership structure'. *Journal of Financial Economics*. 3, 305-360.

Levy, R., 2002. *Takeovers: Law and Strategy* (Lawbook Co, Pyrmont, 2nd ed).

Maheswaran, K. and S. Pinder, 2003, 'An empirical investigation into the determinants of managerial resistance to takeovers and the impact of resistance on the takeover process'. Paper presented at the annual AFAANZ conference, Brisbane. (Forthcoming *Accounting and Finance*).

National Companies & Securities Commission, NCSC, 1986, *Defensive schemes and duties of directors*, discussion paper accessed at http://www.takeovers.gov.au/display.asp?ContentID=505.

Rowell, S., 2003. *The Role of Capital Restructuring as a Takeover Defence.* BCom Honours thesis, The University of Queensland.

Ruback, R.S., 1988. 'Do target shareholders lose in unsuccessful control contests'. In A.J. Auerbach (ed) *Corporate Takeovers: Causes and Consequences* University of Chicago Press

Samuelson, W. & Rosenthal, L., 1986. 'Price Movements as Indicators of Tender Offer Success'. *The Journal of Finance*. 41, No. 2 481-499.

Schwert, G., 2000. 'Hostility in takeovers: In the eyes of the beholder?' *Journal of Finance.* 70, 2599 – 2640.

Shleifer, A & R Vishny, 2003. 'Stock market driven acquisitions'. *Journal of Financial Economics.* 70, 295-311.

Takeovers Panel Guidance Note 12, 2003. *Frustrating Action*, accessed at http://www.takeovers.gov.au/display.asp?ContentID=120.

Walkling, R.A., 1995. ‘Predicting tender offer success: A logistic analysis’. *Journal of Financial and quantitative Analysis.* 20, 461-478