THE INEFFICIENT MANAGEMENT AND DISCIPLINARY MOTIVES FOR TAKEOVER IN AUSTRALIA

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Abstract

The disciplinary motive and removal of inefficient target management are widely cited as explanations for takeovers. This study tests the prevalence of these explanations using Australian takeover targets from 1990 to 2002. We find that the vast majority of target firms are unlikely candidates for disciplinary action. Contrary to the disciplinary hypothesis, we find that target shareholdings are highly concentrated and are more concentrated than non-target firms. Unlike Agrawal and Jaffe's (2003) US study, we find ASX targets are typically poor performers but, contrary to the inefficient management hypothesis, we find that takeover success is higher for better performing targets.

Keywords: Mergers and Acquisitions, Takeovers, Disciplinary Motive, Corporate Governance

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1. Introduction

Takeover activity has many potential causes including: the prospect of the generation of synergies, gaining monopoly power, taking advantage of undervalued companies and hubris on the part of acquiring managers. The diverse possible motives and other salient features of takeover activity, such as its increased incidence in share market "boom" periods and concentration in a few industries at any time, leave room for many competing explanations of M&As. Nevertheless, in the legal and economic literature, the disciplinary motive or hypothesis for takeover has attained remarkable prominence. For example, Mitchell and Netter (1989) argue that the anticipated passage of legislation that would have reduced the profitability of hostile (i.e., disciplinary) takeovers in the US triggered the 1987 stock market crash. Further, Shliefer and Vishny (1997, p. 756) observe that "takeovers are widely interpreted as the critical corporate governance mechanism in the United States, without which managerial discretion cannot be effectively controlled." This proposition has been assumed to apply in Australia as well. For instance, Paper No 4 of the Corporate Economic and Law Reform Program (CLERP No 4) on takeovers recommends reforms based, in part, on the premise that "the prospect of a takeover acts to overcome the principal-agent problems inherent in the separation of company ownership and control, for example, where it is impracticable or too costly for shareholders to ensure that directors act in their interests" (1997,

p.7).³³ The main research question tested in this study tests is whether the disciplinary hypothesis is relevant for Australian takeover targets from 1990 to 2002.

The disciplinary hypothesis of takeover activity rests on the premise that managers further their own interests at the expense of shareholders. In instances where failure of the firm's internal monitoring mechanisms results in managers' non-value maximizing behaviour being egregiously large, hostile takeovers reassert the interests of shareholders by replacing the incumbent managers and transferring to shareholders, via the takeover premium, a portion of the expected gains from value-increasing management (Manne 1965). Internal monitoring mechanisms are most likely to be ineffective in firms characterized by diffuse share ownership and excess liquidity, which frees the manager from the discipline of the capital market.34

The disciplinary hypothesis is sometimes termed the inefficient management hypothesis (e.g., Agrawal and Jaffe, 2003). The conflation is understandable since both hypotheses imply the replacement of the incumbent management team with another that is expected to be more value-increasing for shareholders. Nevertheless, it is useful to maintain a

³⁴ Shleifer and Vishny (1988) discuss other common weaknesses in firms' internal control mechanisms.



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³³ Another example, Thompson (2002, p.323) in "Takeover regulation after the 'convergence' of corporate law" discusses the role for takeover regulation in a dispersed ownership system, a reach designed to be broad enough to encompass the American *and Australian* legal systems as well as the United Kingdom (emphasis in italics added).

distinction between the two hypotheses. The disciplinary hypothesis implies a divergence in managers' and shareholders' interests whilst the inefficient management hypothesis does not. As Dodd (1987, p. 5) observes, "management need not be incompetent in some absolute sense, nor the board of directors neglectful of shareholders' interests, for takeovers to perform a useful, economically important role". Disciplinary takeovers are a subset of those takeovers motivated by a perceived or expected difference in the relative efficiency of competing management teams to maximize shareholder return.

The prevalence of the disciplinary motive is an important issue, in part, because of a view becoming more widely held that much acquisitive activity is symptomatic of market inefficiency (e.g., Shleifer and Vishny, 2003; Rhodes-Kropf and Viswanathan, 2004) rather than ameliorative of it. If the disciplinary motive does not feature in a substantial proportion of takeovers, it undermines one of the most oft-cited reasons for viewing them in a benign light. Managerial resistance to a takeover bid is also more likely to be viewed more positively if it is established that the resistance does not reflect a divergence of interests in the outcome of the bid between the target firm's managers and its shareholders.³⁵ The basis of takeover regulation may also need to be reconsidered, in particular, the view expressed by a prominent legal scholar that "much of current academic scholarship suggests a convergence in [regulatory] competition [across countries] toward the dispersed ownership model with its reliance on strong securities markets, extensive disclosure and the use of the market for corporate control to discipline management (Thompson, 2002, p. 323, emphasis in italics added). Finally, testing the validity of the disciplinary hypothesis outside the US is important also because, as our results illustrate, US-based findings are not always generalisable, even to equity markets thought commonly to share verv similar characteristics with their US counterpart.

Agrawal and Jaffe (2003) investigate whether US target firms under-perform in the pre-acquisition period using both operating and share returns. They find little evidence on both measures that target firms perform poorly, even among sub-samples that they identify as being more likely candidates for disciplinary takeovers. We follow Agrawal and Jaffe (2003) in reviewing target firms' pre-bid share market performance to assess whether they under-perform as

³⁵ It is pertinent to note that hostile deals are not necessarily disciplinary in nature. Further, counting the incidence of bids classified as "hostile" on the basis of overt or at least publicly observable signs of management resistance is an unreliable measure of the true incidence of hostility. Schwert's (2000) study of the characteristics of ostensibly hostile M&A bids in the US reveals that "most deals described as hostile in the press as not distinguishable from friendly deals in economic terms, except that hostile transactions involve publicity as part of the bargaining process" (p. 2599).

a group. We also investigate performance amongst various sub-samples that are more likely to be a target for disciplinary reasons. To investigate the prevalence of the disciplinary motive we use a variable -ownership concentration - that is closely related to separation of ownership and control and the attendant agency costs. This allows us to undertake a stronger test of the disciplinary motive by identifying those takeovers that are most likely to exhibit agency problems.

Consistent with the presence of agency costs, our results show that target firms are characterized by low managerial ownership. However, target firm ownership concentration is such that in over 90% of cases, the top 20 shareholders have control of the target firm. This finding is consistent with Dignam and Galanis (2005) who contend that Australia's equity market has many of the characteristics associated with "insider" systems in which shareholders and creditors are more actively involved in the control of companies. Remarkably, we find that firms subject to takeover bids are even more concentrated in ownership than the typical firm, which further reduces the credibility of the claim that the market for corporate control in Australia plays a significant role in resolving problems associated with the separation of ownership and control.

An important difference between our analysis and that of Agarwal and Jaffe (2003) should be noted. Agarwal and Jaffe conclude that evidence in support of the disciplinary hypothesis is weak because US target firms are typically not under-performers. In contrast, we conclude that the disciplinary hypothesis is largely irrelevant in Australia because there is no substantive separation of ownership and control and not because the targets are indistinguishable from the market in terms of performance. In fact, unlike Agrawal and Jaffe (2003), we find that target firms have significant negative abnormal returns prior to the bid. This result is consistent with the inefficient management hypothesis but even here the evidence is not unequivocal. We find that poorer performing targets are more and not less likely to resist a takeover, using board recommendation to accept or reject a bid as an indicator of resistance. Schwert's (2000) analysis of hostile bids suggests that bid resistance may simply reflect a rational bargaining strategy, however, even when we review bid outcome rather than resistance, we find no relationship between the target's pre-bid performance and the likelihood of a takeover bid succeeding. In sum, whilst poor performance makes it more likely that a firm will be the subject of a bid, we find that the success of takeovers is unrelated to prior firm performance, which indicates that target firms' controlling shareholders do not necessarily consider a takeover as the best mechanism to improve their share returns. We leave further exploration of this issue to future research.



The rest of the paper is organized as follows. Section 2 reviews prior research relevant to the inefficient management and disciplinary motives for takeover and points to writings that show takeover related legislation reflects an assumption that ownership of capital is highly dispersed, generating a preoccupation with agency costs. Section 3 describes the sample and presents results whilst section 4 comprises a conclusion and suggestions for future research.

2. Prior research

The removal of inefficient target managers is often raised as motivation for corporate takeovers. The evidence in support of this hypothesis is, nevertheless, inconsistent. Agrawal and Jaffe (2003) review twelve prior studies and find that only two present evidence of significant target underperformance prior to the takeover. Their own study of US takeovers between 1926 and 1996 reveals no evidence that target firms under-perform the market in the period leading up to the takeover. Similarly, Bishop, Dodd and Officer (1987) find that Australian (i.e., ASX-listed) target firms earn an average cumulative abnormal return (CAR) of 2% over the period [-36,-11] months before the takeover announcement.³⁶ However, for takeovers of ASX-listed firms made between 1981 to 1989, Bugeja and Walter (1995) document an average CAR of -16.8% over the period [36,-11] months prior to the takeover bid announcement.

An alternative way of assessing if target firms are under-performing prior to the takeover is to examine if target performance influences the probability of a firm being subject to a takeover offer. Weir (1997) and O'Sullivan and Wong (1999) find a negative relationship between return on assets and the probability of a firm being a takeover target in the UK. However, Weir (1997) finds industry-adjusted return on assets is insignificant in explaining takeover likelihood. Similar inconsistent results are reported in US-based studies. Ambrose and Megginson (1992) find prior period excess returns and sales growth do not contribute to the probability of a firm being Song and Walkling (1993) find sales acquired. growth and return on equity are insignificant in explaining the probability of being a takeover target. Similarly, insignificant results are found in North (2001) for return on assets and sales growth.

Whether takeovers result in the target's incumbent management team being replaced has been extensively investigated in the US. The general conclusion is that CEO and director turnover is significantly higher in the period following a successful takeover (e.g., Walsh and Ellwood, 1991;

well known negative relationship between firm size and

returns. Brown and Da Silva Rosa (1998) show that not

controlling for firm size results in an upward bias to

recorded abnormal returns to target firms.

Consistent with the disciplinary hypothesis, Australian takeover research generally reports that target firms have low levels of management ownership. For example, Henry (2004), in a study of the determinants of takeover outcome reports that takeover targets between 1990 and 2000 have average directors' ownership of approximately 9%. In earlier research, Bugeja and Walter (1995) report average holdings of 10.4%. These findings are in line with US results. For example, North (2001) reports mean (median) ownership by directors of 15% (6%) in acquired firms between 1990 and 1997.

At first glance, these findings are consistent with the disciplinary motive for takeover as they suggest a widely dispersed shareholding structure in which individual shareholders lack the incentive to monitor target firm management. Such a conclusion, however, fails take into account the size of holdings of nonmanagement shareholders. If non-management shareholdings are highly concentrated, it is likely that these shareholders will actively monitor target management (Shleifer and Vishny, 1986). Some evidence of non-management share ownership in Australia is provided in Henry (2004). This study reports average institutional holdings and outside block ownership in target firms of 17% and 19% respectively.³⁸ In the US, North (2001) finds nonaffiliated blockholders own an average of 18% of target share ownership.

The assumption that ownership of share capital highly dispersed is reflected in Australian takeover's legislation. For instance, the Companies and Securities Law Review Committee's Takeover Threshold Report notes that the Eggleston Committee, meeting in 1969, stated that:

> "we consider that any person who is seeking to gain control of 15% or more of the voting power is likely to be aiming at control of the company itself."

The assumption is not just an Australian phenomenon. Legislators and business commentators in the US and UK have held it as well. In their landmark study, Corporate Ownership Around the

³⁷ The authors are not aware of any published Australian

ownership of 5% or more. Institutional shareholders are defined as holdings in the top 20 shareholders held by: insurance companies, superannuation funds, funds management companies, investment companies investment trust companies (p425).



^{1994;} Harford, 2003; and Kini, Kracaw and Mian, 2004). Pertinently, the evidence also indicates a negative relationship between prior performance and management turnover (e.g., Harford, 2003; and Kini, Kracaw and Mian, 2004).

research that investigates the turnover of directors and Martin and McConnell, 1991; Agrawal and Walkling, executives post-takeover. 38 Blockholders are defined as those shareholders with an ³⁶ Bishop, Dodd and Officer (1987) did not control for the

World, which shows shareholdings are more highly concentrated than is commonly believed, La Porta, Lopez-de-Silanes, and Shleifer (1999) contend that Berle and Means' 1932 classic, *The Modern Corporation and Private Property*, is responsible for popularising the view that ownership of capital is widely dispersed among small shareholders, giving rise to the assumption that holdings of as little as 15% may be close to yielding effective control to a single shareholder.

La Porta et al's evidence on ownership concentration among the largest 20 firms (by market capitalisation) in each stock exchange around the world shows that the Australian sharemarket indeed ranks among the least concentrated, along with the US, UK, Canada, Ireland and Japan. However, La Porta et al adopt a very loose definition of dispersion, classifying each firm as widely held only if a single shareholder does not control more than 20% of voting rights.³⁹ This means, for instance, that a firm would still be defined as widely held where the top five or top twenty shareholders controlled 90% of voting rights despite small (i.e., retail) investors having negligible influence on corporate decisions. Additionally, as La Porta et al study the largest firms on each exchange their results are likely to understate the degree of ownership concentration of target firms which are typically relatively smaller listed firms.

As the CLERP No 4 paper on takeovers indicates, takeovers' legislation in Australia is predominantly concerned with the rights of retail investors, 40 that is, it is concerned with protecting the interests of the overwhelming majority of the 5.7 million Australians with a direct investment in the stock market (2004 ASX Share Ownership Study), who do not rank among the top 20 shareholders in any of the 1,400 or so companies listed on the ASX. Legislative recognition that the top 20 shareholders are likely to have a disproportionate influence on company affairs and, by extension, are well placed to protect their own interest is evident in the requirement that they be listed in public companies' annual reports, along with the number of issued shares they own.

We make use of this mandatory revelation of the top 20 shareholders in Australian public companies to

identify the proportion of outstanding shares held by them in 751 ASX listed companies that were subject to a formal takeover bid between January 1990 and December 2002. This analysis will determine the extent to which the votes of shareholders outside the top 20 matter in determining the outcome of each takeover. In short, we take the view that, in terms of the aims of the takeover legislation, an economically sensible definition of shareholder concentration is the proportion of shares held by the top 20 largest shareholders.

3. Sample and results

All takeovers announced for companies listed on the Australian Stock Exchange (ASX) between 1990 and 2002 were identified using the Current Takeovers section of the Australian Financial Review. The Connect 4 Mergers and Acquisition database was used to confirm the sample for the period 1997 to 2002. This search identified 751 takeover bids. The announcement date and bid outcome were identified by searching announcements made to the ASX. Table 1 presents the distribution of the sample over the period of the study classified by takeover outcome. The number of takeovers is highest in the first two years of the sample period. Just below 65% of takeover offers lead to a successful acquisition, where success is defined as the bidding firm acquiring over 50% of the outstanding issued shares of the target company.

INSERT TABLE 1 HERE

Target firm financial statements for the year prior to the takeover announcement were used to hand collect summary financial information on the targets. Data was collected on total assets, total liabilities, and total owners' equity. Information was also collected on profit after tax and cash from operations for the two years prior to the bid. Table 2 presents a summary of this information.

INSERT TABLE 2 HERE

The average target firm has assets of \$205 million, although the size distribution is skewed with median assets being \$32 million. Mean and median target firm profit are respectively \$2.3 million and \$296,000 in the year prior to the offer. Target firms also disclose a profit, on average, two years before the bid. Further examination reveals that 44% of targets report a loss in the year preceding the offer, with 41% making a loss two years before the takeover. However, these proportions are not dramatically different to those that apply to the population of ASXlisted firms. Balkrishna (2004) reports that over the 12 years from 1992 to 2003, the proportion of all ASXlisted firms that reported a loss in each year was 36.6%, on average. In 2001 and 2002, the proportions were 43.9% and 47.3% respectively. The majority of

⁴⁰ CLERP Paper no 4 on Takeovers states that "the basic objective of takeover regulation is to improve market efficiency. Specifically, regulation is directed at achieving an appropriate balance between encouraging efficient management and ensuring a sound investor protection regime, *particularly for minority investors*" (p. 7, emphasis in italics added).



³⁹ La Porta et al's analysis arguably overestimates the degree of dispersion of ownership even in the US. Gadhoum, Lang, and Young (2005) report that "in all size ranges, the USA has more corporations controlled by families than by financial institutions. In almost all size ranges, it has a higher percentage of family-controlled corporations than any of the next four largest economies."

target firms disclose positive cash-flow from operations in the year prior to the bid (69%) and two years before the bid (67%).

3.1 Target ownership structure and the disciplinary motive for takeovers

Crucial to the argument that takeovers act as a disciplinary mechanism is the assumption that target firms are characterized by a separation of ownership and control. Information on the ownership of target firm directors is obtained from the Part B/Target's Statement lodged with the ASX during the takeover contest. The average level of ownership is 12.2%. This percentage, however, conceals the distribution of managerial ownership. In Table 3, data is presented on the number of target firms within bands of management ownership. A striking finding is that managerial ownership is less than 1% in 39% of target firms, and is less than 3% in just over half of targets.

INSERT TABLE 3 HERE

Although the low level of managerial ownership presented in Table 3 is consistent with the presence of agency costs, this assumes that non-managerial ownership in the target firm is widely dispersed so that these shareholders lack the incentive to monitor target firm managers. To assess if this is the case, the dispersion of target share ownership is estimated from the share ownership held by the top 20 shareholders in the target firm disclosed in the financial report immediately preceding the takeover offer. Where the target firm also provided a breakdown of the individual ownership of each of the top twenty shareholders (rather than just giving the total percentage held) the percentage ownership interest of the top 5 shareholders was manually collected. Panel A of Table 4 summaries the ownership concentration of the target firms.

INSERT TABLE 4 HERE

⁴¹ Mikkleson and Partch (1989) find that management ownership in the US is inversely related to the probability that a firm will be subject to a takeover. Other studies find similar results (see Shivdasani, 1989; Song and Walkling, 1993; and North, 2001). UK studies also find that the holdings of executive directors are negatively related to the probability of receiving a takeover bid (see Weir, 1997; and O'Sullivan and Wong, 1999).

Inconsistent with targets having a dispersed ownership structure, the total holdings of the top 20 shareholders comprise an average (median) 75% (79%) of target shares at the financial year-end prior to the takeover. The total holdings of the top 5 shareholders alone constitute an average 57% (58%) of total outstanding shares. The last average figure is substantially above the 28.8% average holdings held by the top 5 shareholders in Fortune 500 firms reported in Shleifer and Vishny (1986). findings lend credence to Dignam and Galanis' (2005) view that Australian-listed firms are more accurately described as insider-controlled organizations than as companies with significant separation of ownership and control. Dignam and Galanis observe that "blockholders exercise control as to the key decision over the sale of the company" (p. 20).

Further examination reveals the extent to which target firms are closely held. In 91% of bids, the top 20 shareholders own more than 50% of target shares. Similarly, the top 5 shareholders hold greater than 50% target ownership in 63% of targets. These statistics are inconsistent with target firms generating substantial agency costs arising from a separation of ownership and control. The results also indicate that in most takeover bids retail shareholders outside the top 20 have little part to play in determining bid outcome.

Unlike Henry (2004), nominee shareholdings listed in the top 20 shareholdings have been retained when measuring ownership concentration. This option was preferred because as described by Stapledon (1999) nominee shareholdings are typically used to register the holdings of superannuation funds and unit trusts. Since nominee shareholdings are typically owned by institutions, to exclude their ownership would understate the holdings of owners that would be more likely to actively monitor the performance of management. Nevertheless to ensure our findings are not driven by the holdings of nominees, data was collected on the percentage of shares held by nominees in the top 20 shareholders list of the target firms in our sample. The mean (median) holdings of nominees in the top 20 shareholders were respectively 16% and 10%. The total holdings of nominees in the top 5 shareholders comprise an average (median) 12% (6%). Panel B of Table 4 presents the ownership concentration of target firms after excluding nominee shareholdings. Consistent with the data in Panel A, non-nominee shareholders in the top 20 list of target firms on average control the majority (58%) of voting rights. Similarly, on average the top 5 non-nominee shareholders in target firms own 45% of shares giving them substantial influence in determining the outcome of takeovers.

Due to the typically high proportion of total shares owned by the top 20 shareholders in target firms we do not believe that bids for them are prompted by agency costs associated with the separation of ownership and control. We however, acknowledge La Porta et al's (1999, p. 476) point,



⁴² In response to a takeover bid, the Corporations Law (2001) requires the target to prepare a Target's Statement. This document requires the target to provide all information that would be reasonably required by shareholders in deciding whether or not to accept the bid. Typically, the Target's Statement includes a recommendation from the target board to shareholders on whether the offer should be accepted. Prior to the Corporate Law Economic Reform Program, Target Statements were referred to as Part B statements.

that there is no theoretical model of shareholder interaction that allows us to test the proposition formally. It could be the case that although the top 20 shareholders collectively control enough shares to control their companies, they are unable to coordinate their monitoring thus giving rise to agency problems. However, if this is true of firms that are subject to a takeover bid, we would expect them to have top 20 shareholders who are either less concentrated in their ownership or at least equally concentrated as the rest of the population of firms. The data in Table 5 does not support the proposition that target firms are more likely to have agency problems associated with separation of ownership and control. If we assume that top 20 ownership holdings for ASX-listed firms in 2003 are representative of such holdings over our entire sample period, Table 5 shows that across all firm size ranges, target firms are more concentrated than the rest of the population. In short, our data suggests that ownership concentration facilitates rather than impedes the making of takeover bids.

INSERT TABLE 5 HERE

3.2 Target firm performance and the removal of inefficient target management

As a measure of target firm performance prior to the takeover, cumulative abnormal returns (CARs) are calculated over the following event windows:

- i) the period from 36 months to 6 months prior to the bid;
- ii) the period from 24 months to 6 months prior to the bid.

CARs are calculated by subtracting expected return from the buy-and-hold equity return (adjusted for dividends and changes in basis of quotation) to our sample firms over the relevant event-window. Expected return is proxied in several ways to check for robustness: (a) the equally weighted average buyand-hold return to all listed companies with share price data over the relevant event-window, (b) the value-weighted buy-and-hold return to all listed companies with share price data over the relevant event-window, (c) the equally-weighted buy-and-hold return to all listed companies in the same size-decile (based on market capitalization as at the start of the event-window) with share price data over the relevant event-window, and (d) the value-weighted buy-andhold return to all listed companies in the same sizedecile with share price data over the relevant eventwindow. Prior performance is measured to six months preceding the bid to ensure information leakage from the takeover is not captured in the event windows.

Abnormal performance is shown in Table 6. Panel A presents results for the event window commencing three years prior to the offer, whilst Panel B shows returns for the shorter event window. In both panels, results are given for market-adjusted

and size-adjusted returns and within these groupings for equally-weighted and value-weighted returns.

INSERT TABLE 6 HERE

Average target firm abnormal returns over the (-36,-6) event window are negative and significant except for the market-adjusted value-weighted portfolio. When performance is measured over the shorter event window, performance is significant only for the market-adjusted equally-weighted portfolio. noticeable that the distribution of returns is skewed with median performance indicating much lower prior performance for target firms than the mean. Detailed analysis reveals that the percentage of targets that exhibit positive performance prior to the bid ranges from 25.5%, when CARs are measured using marketadjusted equally weighted returns over the (-36,-6) window, to 37% when CARs are measured using market-adjusted value weighted over the (-24,-6) window. We conclude that, inconsistent with the US evidence, target firms are typically underperforming in the period prior to the takeover.

Evidence that firm performance is related to managerial ownership is presented in Morck, Shleifer and Vishny (1988). To examine if target firm performance pre-offer is associated with managerial ownership, Table 7 presents mean CARs for each of the managerial ownership bands presented earlier in Table 3. Inconsistent with an association between target firm performance and managerial ownership, there is no discernible relationship evident in Table 7.

INSERT TABLE 7 HERE

3.3 Takeover characteristics and target prior performance

3.3.1 Management resistance

Morck, Shleifer and Vishny (1988) argue inefficient management will be hostile to takeovers. Agrawal and Jaffe (2003) present limited evidence consistent with this argument. They find that target firms with negative operating performance are more likely to resist the takeover. To see if this finding applies in Australia, we compare CARs to those targets where the board recommends rejection against CARs to targets where directors recommended acceptance (see Table 8, Panel A). CARs are measured on a market-adjusted equally weighted basis. Consistent with the argument of Morck et al, returns are lower where management recommends rejection. The difference however is insignificant.

INSERT TABLE 8 HERE

⁴³ All the results in Table 8 are unchanged if CARs are calculated using the alternative measures of abnormal returns.



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As an additional test, following the approach of Agrawal and Jaffe (2003), target firms are classified (for the remainder of this study) as being "poor performers" if they have a negative CAR over the period (-36,-6). The proportion of "poor performers" that recommend rejection is then compared to the proportion for other targets. The comparison presented in Panel A Table 9 indicates that targets with negative prior performance are significantly more likely to resist the takeover.

INSERT TABLE 9 HERE

To assess whether the results are sensitive to using an accounting measure of performance, target return on assets (ROA) and cashflow return on assets (CFROA) were calculated for the financial year-end prior to the takeover. The average for each of these performance measures is then compared across directors' recommendation with the results shown in Table 8. Consistent with the sharemarket results, there is no difference in accounting performance between reject and accept recommendations. As a final test, target firms were classified as "poor performers" if, respectively, their ROA and CFROA were negative. The proportion of firms that provided an accept recommendation was then compared across the two groups with the results presented in Panels B and C of Table 9. For both ratios, there was no significant difference in the proportion of firms that issued an accept recommendation. Overall, the results indicate that target management resistance in takeovers is unrelated to prior firm performance.

3.3.2 Competing bidders

Agrawal and Jaffe (2003) argue that targets exhibiting greater under-performance will attract competing offers as a higher level of improvement can be achieved post-bid. In support of this argument, they find that poorly performing targets (i.e., those with negative CARs) are significantly more likely to receive competing bids. In Panel B of Table 8, CARs and accounting performance for targets that receive single bids are compared to those that receive multiple bids. Inconsistent with Agrawal and Jaffe (2003), there is no evidence of an association between prior target performance and the number of bidders. As an alternative test, the proportion of "poorlyperforming" targets that receive multiple bids is compared to the proportion for other targets. This comparison is shown using the alternative measures of performance in Table 9. The results are insignificant when performance is measured using ROA and CARs. For CFROA, inconsistent with the argument of Agrawal and Jaffe (2003), there is a higher proportion of competing bids for targets that have positive performance.

3.3.3 Method of payment

Mayer and Walker (1996) find that bidders are more likely to use cash as payment where management

resists the bid. Following the argument in Morck, Shleifer and Vishny (1988) that management resistance is higher in disciplinary takeovers, one would expect that the use of cash would be negatively related to target firm performance prior to the offer. Table 8 compares CARs and accounting performance in cash bids to the returns in non-cash bids. Consistent with expectations, share returns are lower in cash takeovers the difference however is insignificant. The results for accounting performance are opposite to expectations with cash bids being associated with higher performance with the difference significant for CFROA.

In Table 9, the use of cash to bid for "poorly performing" targets is compared to the use of cash for other targets. The result is again insignificant when performance is measured using CARs with cash actually used more frequently for targets with positive pre-offer performance. Both measures of accounting performance indicate that cash is used more often when target firms have positive prior performance. This finding is consistent with the model of Fishman (1989), who argues that bidders offer equity for its contingent pricing effect. When targets are performing poorly an equity offer forces target shareholders to share in the risk that performance will not improve post-merger.

3.3.4 Takeover outcome

As the removal of inefficient target management is frequently put forward as a justification for takeover activity, it is interesting to examine whether takeover outcome is related to prior target firm performance. It can be argued that if the role of takeovers is to remove non-performing management then it is in the public interest that takeovers succeed more frequently where target performance is worst.

Table 8 compares target performance prior to the offer classified by takeover outcome. There is no evidence that takeover outcome is related to prior sharemarket performance. However, the accounting performance ratios indicate that targets successfully acquired are actually performing significantly better that those not acquired. This result is consistent with Henry (2004), who finds that successfully acquired Australian firms have significantly higher operating cash flows to total assets.

In Table 9, the proportion of successful takeovers where the target is "poorly-performing" is compared to the rate of success for other targets. For all three performance measures the results indicate that the proportion of takeovers that are successful is lower where the target is a poor performer with the difference significant for the two accounting performance measures. The failure to find evidence that takeover success is higher for the poorer performing targets casts doubts on whether the takeover process is successful in removing the most under-performing managers.



3.3.5 Takeover premium

Bugeja and Walter (1995) find there is no association between takeover premiums and target firm performance prior to the bid using a sample of takeovers drawn from the 1980s. To assess if consistent results are found using a sample from a later time period, the takeover premium measured over the three months prior to the takeover until three months after are calculated using a market-adjusted equally-weighted approach. Consistent with prior research, target shareholders gain substantially from the takeover announcement with average CARs of 22.5%.

The final row of each panel in Table 9 compares takeover premiums offered for "poorly performing" targets to those offered for other targets. In contrast to Bugeja and Walter (1995), the results indicate that takeover premiums are significantly higher for targets with positive sharemarket performance prior to the takeover. The results for the accounting performance measures are insignificant.

Consistent with the disciplinary motive for takeover, Moeller's (2005) study indicates that takeover premiums during the 1990s are higher at managerial ownership levels below 5%. To determine if similar results are found in Australia, takeover premiums for target firms where management ownership is below 5% are compared to takeover premiums for other targets. Although the average premium (28.4%) for targets with ownership below 5% was higher than for other targets (22.3%), a t-test indicated the difference was not statistically different (p = 0.42).

4. Conclusions and discussion

It is frequently argued that takeovers are motivated by a need to discipline the management of the takeover target or to remove inefficient target management. Although our results are consistent with the inefficient management hypothesis we however obtain only limited support for the disciplining of target management in Australian takeovers. We find that target firms have a low level of management ownership consistent with the disciplinary motive for takeovers. However, the high degree of ownership concentration in target firms means it is unlikely that these firms exhibit agency problems associated with a separation of ownership and control. This conclusion is reinforced by the finding that in 90% of takeovers, control of the target can be achieved by acquiring only the interest of the top 20 shareholders. The assumption, reflected in takeover legislation, that target share ownership is widely dispersed is clearly inaccurate. Our findings suggest that it may be worthwhile for the takeover provisions of the Corporations Law to be revisited.

In contrast to the US results in Agrawal and Jaffe (2003), this study finds that the majority of target firms in Australia under-perform the stock market in the three-year period prior to the bid. This result is consistent with the removal of relatively inefficient target management as a motivation for takeover. However, we find no association between management ownership and target firm performance prior to the bid. This reiterates Dodd's (1987) point that relative incompetence is not always symptomatic of the agency costs of separation of ownership and control.

This study also examines whether prior target firm accounting and share market performance is related to various takeover characteristics. The majority of results show that the directors' recommendations, takeover premium and the number of competing bidders appear unrelated to target performance. Consistent with a contingent pricing effect of equity, accounting measures of performance show that bidders use equity as payment when the target firm is underperforming. Finally, the results indicate that the rate of takeover success is higher for better performing targets. This finding questions whether takeovers are an effective mechanism for removing inefficient target management.

Although this study indicates that Australian target firms are underperforming, consistent with the removal of inefficient management as a motivation for takeovers, this study only provides indirect evidence on this hypothesis. A more direct approach to testing this hypothesis is to examine whether the turnover of target management is greater for underperforming firms. Despite their being a substantial body of literature in the US which shows an increased turnover of directors and executives subsequent to a takeover bid, this matter remains untested in Australia. Such research is particularly important given the findings of this study that indicate the rate of takeover success is higher for better performing firms. This being the case, it is important examine whether the internal monitoring mechanisms of firms in unsuccessful takeovers are able to remove inefficient management after the bid. We leave this question for future research.

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⁴⁴ A comparison of premiums was also conducted using 10% ownership as the cut-off. The difference in premiums was again insignificant.



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Appendices

Table 1. Frequency Distribution of Takeovers

The sample is identified from all takeover announcements for ASX-listed companies between 1990 and 2000. Takeovers announced over this period are identified from the Current Takeovers section of the Australian Financial Review and the Connect 4 Mergers & Acquisitions Database. "Year of takeover" is the year in which the takeover bid was announced.

Year of takeover	Successful	Unsuccessful	Withdrawn	Total
	takeovers	takeovers	takeovers	takeovers
1990	67	14	6	87
1991	45	24	11	80
1992	31	11	6	48
1993	35	15	6	56
1994	21	8	5	34
1995	42	9	12	63
1996	45	12	5	62
1997	34	8	4	46
1998	39	14	5	58
1999	32	8	11	51
2000	35	18	13	66
2001	35	11	10	56
2002	26	9	9	44
Total	487	161	103	751

Table 2. Descriptive Statistics

Selected financial information collected from the financial statements prepared in the year immediately preceding the takeover announcement.

Variable	N	Mean	Median	Std. Dev	Min.	Max.
Total assets (\$000)	742	205,953	32,247	653,591	1	8,429,800
Total liabilities (\$000)	742	108,386	11,756	406,023	7	6,265,700
Total equity (\$000)	742	97,543	17,064	291,476	-30,579	4,964,200
Operating profit after tax (\$000): (one year prior)	742	2,344	296	32,910	-240,249	371,500
Operating profit after tax (\$000): (two years prior)	721	2,997	430	46,517	-860,000	331,200
Cash from operations (\$000): (one year prior)	742	16,659	1,512	57,175	-44,325	646,400
Cash from operations (\$000): (two years prior)	721	15,053	1,560	53,935	-148,927	774,300

^{*} The total number of target firms on which financial information could be collected is lower that the total sample as target firms only listed on the ASX in the one and two years prior to the takeover announcement.

Table 3. Target firm management ownership

Management ownership in the target firm is collected from the Part B/Target's Statement provided to the ASX during the takeover period.

Ownership interest	Number of	%	Cum.
	targets*		%
Zero ownership	39	6.00%	6.00%
>0%, ≤ 1%	216	33.23%	39.23%
$>1\%, \le 2\%$	51	7.85%	47.08%
$>2\%, \le 3\%$	27	4.15%	51.23%
$>3\%, \le 4\%$	18	2.77%	54.00%
$>4\%, \le 5\%$	18	2.77%	56.77%
> 5% \le 10%	56	8.62%	65.38%
$> 10\% \le 20\%$	71	10.93%	76.31%
$> 20\% \le 30\%$	64	9.84%	86.15%
$> 30\% \le 50\%$	52	8.00%	94.15%
50% or above	38	5.85%	100.00%
Total	650		

^{*} The total number of target firms on which management ownership data could be collected is lower than the total sample due to the takeover offer being withdrawn prior to the issue of a Part B/Target's Statement.



Table 4. Target firm ownership concentration

Information on target firm ownership is collected from the disclosure of the top 20 shareholders in the annual report for the financial year immediately prior to the takeover announcement

	Mean	Median	Min	Max	Std dev	N
Panel A: All holdings						
Top20	75.29%	78.61%	19.89%	99.58%	16.49%	710
Top 5	57.09%	57.58%	10.96%	98.22%	19.87%	592
Panel B:						
Non-nominee holdings						
Top20	57.58%	60.16%	4.02%	98.98%	24.20%	592
Top 5	45.04%	45.20%	0.00%	98.22%	25.77%	592

Table 5. Average proportion of shares held by the largest 20 shareholders in target and non-target firms, classified by size range (measured in total assets)

Target firms are ASX-listed companies subject to a takeover bid by another ASX-listed firm over the period 1992 to 2002. Data on their top 20 shareholders and size of firm assets are drawn from their annual report in the year prior to their becoming a target. Non-target firms are all ASX companies in Aspect Financial database as at May 2004 not subject to a takeover bid at that time. Their data were drawn from their 2003 annual reports.

		Number		
Total assets	Targets	Firms	Non-Targets	Number Firms
Up to \$1 million	78.98%	17	58.53%	35
Between \$1m and \$10m	70.35%	96	59.36%	293
Between \$10m and \$20m	74.83%	82	61.98%	146
Between \$20m and \$50m	76.46%	93	65.66%	166
Between \$50m and \$100m	72.08%	73	65.28%	82
Between \$100m and \$200m	73.49%	60	65.42%	77
Between \$200m and \$500m	71.98%	66	60.88%	71
Between 500m and \$1 billion	74.11%	29	58.92%	53
Over \$1 billion	69.09%	29	62.80%	92
Average (total)	73.24%	545	62.44%	1,015

Table 6. Target firm abnormal returns prior to the takeover

Target firm CARs in the period prior to the takeover. Abnormal returns are measured over two event windows. In Panel A CARs, are measured from the period running from 36 months to 6 months before the takeover announcement. In Panel B, CARs are measured from the period running from 24 months to 6 months before the takeover announcement. The table presents the results of testing the null hypothesis that mean abnormal returns are equal to zero.

Panel A: Perf. over	Mean	Median	25%	75%	Std dev	%	N
(-36,-6) months						Positive	
Size adj equally weighted	-10.72%***	-26.55%	-57.68%	14.12%	107.76%	33.5	632
Size adj value weighted	-10.22%***	-26.65%	-58.32%	13.44%	106.99%	32.3	632
Mkt adj equally weighted	-18.91%***	-34.57%	-64.67%	1.25%	111.27%	25.5	632
Mkt adj value Weighted	-0.14%	-24.07%	-58.49%	18.75%	115.01%	35.4	632
Panel B: Perf. over (-24,-6) months							
Size adj equally weighted	-4.66%	-16.19%	-45.34%	17.81%	95.92%	36.4	682
Size adj value weighted	-4.75%	-16.37%	-46.15%	16.18%	96.04%	36.2	682
Mkt adj equally weighted	-9.98%***	-21.97%	-56.43%	13.01%	99.14%	32.3	682
Mkt adj value Weighted	1.49%	-13.37%	-45.10%	17.87%	99.90%	37.0	682

^{***} Significant at 0.01 level



Table 7. Target firm abnormal returns prior to the takeover classified by management ownership bands Target firm CARs in the period prior to the takeover. Mean abnormal returns are measured over two event windows: the period running from 36 months to 6 months before the takeover announcement and alternatively the period running from 24 months to 6 months before the takeover announcement. Managerial ownership is collected from the Part B/Target's Statement.

		Event wind	low (-36,-6)			Event wind	low (-24,-6)	
Ownership interest	SizeEq	SizeVal	MktEq	MktVal	SizeEq	SizeVal	MktEq	MktVal
Zero ownership	-20.80%	-18.00%	-23.14%	-14.32%	-4.63%	-3.61%	-2.76%	10.85%
>0%, \le 1%	-19.67%	-20.00%	-31.86%	-16.41%	-12.85%	-13.25%	-21.99%	-12.69%
>1%, \le 2%	10.33%	9.61%	2.49%	27.42%	1.02%	0.20%	-9.25%	10.21%
>2%, \le 3%	8.22%	9.28%	-1.20%	21.08%	23.46%	24.14%	14.76%	39.37%
>3%, \le 4%	-17.03%	-16.25%	-32.40%	-25.14%	-12.34%	-12.24%	-18.17%	-11.64%
>4%, \le 5%	-15.76%	-14.89%	-37.68%	-11.47%	-9.67%	-10.34%	-25.92%	-7.66%
>5%, \le 10%	-30.06%	-29.26%	-32.08%	-11.36%	-12.74%	-12.33%	-15.05%	0.12%
>10%, \le 20%	-14.38%	-14.23%	-9.16%	-9.43%	-4.91%	-5.67%	-0.23%	-5.99%
>20%, \le 30%	21.72%	21.86%	16.92%	23.30%	5.35%	5.43%	2.63%	8.23%
>30%, \le 50%	-17.70%	-15.94%	-26.01%	8.45%	-12.80%	-12.39%	-16.59%	2.45%
50% or above	-15.63%	-11.21%	-9.97%	21.78%	-11.64%	-11.92%	-8.95%	7.61%

Table 8. Performance for subsamples of targets

A comparison of sharemarket and accounting performance for various subsamples of target firms. Sharemarket performance is measured as the mean market-adjusted equally weighted CARs prior to the takeover. Accounting performance is measured as return on assets (i.e., ROA) or cashflow return on assets (i.e., CFROA) for the financial year-end prior to the takeover announcement. The initial directors' recommendation, presence of multiple bidders, method of payment and takeover outcome are obtained from target and bidder takeover documents lodged with the ASX.

Panel A: Directors' reco	ommendation		
Perf.	Accept	Reject	t-Stat
measure	(n = 295)	(n = 205)	
CAR (-36,-6)	-13.74%	-28.07%	1.62
CAR (-24,-6)	-10.75%	-17.16%	0.99
ROA	-5.82%	-8.48%	0.61
CFROA	3.30%	4.26%	-0.49
Panel B: Number of bid	ders		
Perf.	Multiple	Single	t-Stat
Measure	(n = 134)	(n = 498)	
CAR (-36,-6)	-27.41%	-16.62%	-1.30
CAR (-24,-6)	-15.54%	-9.49%	-0.78
ROA	-19.0%	-10.8%	-1.17
CFROA	3.38%	3.18%	0.08
Panel C: Method of pay	ment		
Perf.	Cash	Non-cash	t-Stat
Measure	(n = 419)	(n = 213)	
CAR (-36,-6)	-21.01%	-14.77%	-0.59
CAR (-24,-6)	-12.24%	-7.88%	-0.42
ROA	-11.07%	-15.46%	0.88
CFROA	4.85%	0.02%	2.47**
Panel D: Takeover outc	ome		_
Perf.	Successful	Unsuccessful	t-Stat
Measure	(n = 416)	(n = 216)	
CAR (-36,-6)	-17.42%	-21.78%	0.46
CAR (-24,-6)	-13.04%	-6.39%	-0.65
ROA	-7.87%	-21.37%	2.42**
CFROA	5.15%	-0.01%	2.58***

^{***} Significant at the 1% level



^{**} Significant at the 5% level

Table 9. Takeover characteristics by prior stock returns

A comparison of takeover deal characteristics for poor and good performing target firms. In Panel A, poor performing target firms are defined as those targets where the market-adjusted equally weighted CARs over the period (-36,-6) are negative. In Panel B, poor performing targets are defined as those targets that report a negative return on assets for the financial year-end prior to the takeover.

Takeover Characteristics	Poor performing	Good performing	z-stat
	targets	targets	
	(n = 471)	(n = 161)	
Panel A: Performance measured	using CARs		
Accept recommendation	44.8%	52.2%	-1.62*
Multiple bidders	22.1%	18.6%	0.92
Cash payment	65.6%	68.3%	-0.633
Successful outcome	64.3%	70.2%	-1.35
Takeover premium	24.7%	96.7%	-5.00***
Panel B: Performance measured	using ROA		
	Poor performing	Good performing	z-stat
	targets	targets	
	(n = 327)	(n = 413)	
Accept recommendation	60.5%	59.6%	0.22
Multiple bidders	19.6%	23.9%	-1.42
Cash payment	57.2%	71.3%	-3.99***
Successful outcome	59.6%	69.1%	-2.68***
Takeover premium	25.1%	20.6%	0.55
Panel C: Performance measured	using CFROA		
	Poor performing	Good performing	z-stat
	targets	targets	
	(n = 230)	(n = 510)	
Accept recommendation	62.0%	59.1%	0.64
Multiple bidders	17.0%	24.3%	-2.23**
Cash payment	54.8%	69.6%	-3.91***
Successful outcome	58.3%	67.8%	-2.53**
Takeover premium	15.1%	26.1%	-1.06

^{*} Significant at the 0.10 level



^{**} Significant at the 0.05 level

^{***} Significant at 0.01 level