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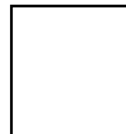

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CORPORATE GOVERNANCE, PERFORMANCE AND TAKE-OVERS: AN EMPIRICAL ANALYSIS OF UK MERGERS

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Abstract

This paper analyses the relationship between the probability of being acquired, firm performance and governance structures. The acquired firms were all fully quoted on the London Stock Exchange and the acquisitions took place between 1990-1993. They were matched by a sample of non-acquired quoted companies. The sample was also analysed in terms of hostile and non-hostile acquisitions. It was found that the key governance characteristics which differentiated between acquired and non-acquired corporations related to the proportion of non-executive directors on the board and to whether or not the roles of chief executive officer and chairman were combined. It was also found that acquired firms were poor performers which suggests that the internal governance structures had been ineffective. These results applied to hostile and non-hostile targets. The findings support the view that hostile acquisitions are disciplinary but cast doubt on the claim that non-hostile acquisitions are purely synergistic. The results also support the view that certain governance characteristics are effective substitutes for the take-over mechanism as a means of minimising discretionary behaviour.

CORPORATE GOVERNANCE, PERFORMANCE AND TAKE-OVERS: AN EMPIRICAL ANALYSIS OF UK MERGERS

I Introduction

Agency problems occur in public companies because the decision control and decision management functions are separated from risk bearing. Decision-making authority is delegated from the principal to the agent and if the objectives of the two groups differ, agency costs will be incurred. However, agency theory argues that the monitoring mechanisms available within public companies ensure that shareholder rather than managerial interests prevail, Jensen and Meckling (1976) and Fama and Jensen (1983). They argue that agency costs can be minimised by means of a variety of governance structures which reduce the scope for managerial discretion. These structures relate to board composition, ownership structure and incentives. If the internal structures are ineffective, the market for corporate control acts as a monitoring mechanism of last resort, Fama (1980).

Take-over activity may therefore be explained in terms of agency theory. Firms with inadequate internal controls are unable to prevent discretionary behaviour and will therefore become take-over targets. The failure of the internal controls will be reflected in poor financial performance which will attract outside bidders who believe they can better manage the firm's resources. This paper analyses the relationship between performance, governance structures and take-over activity. As well as providing an overall analysis of UK mergers, the characteristics of hostile and non-hostile acquisitions are also discussed.

The paper is organised as follows. Section II discusses the empirical evidence relating to the various internal and external governance control mechanisms.

Section III describes the sample and the variables used with section IV analysing the results. Finally section V draws some conclusions.

II Governance mechanisms and the market for corporate control

There are two types of governance mechanism, internal and external. The internal mechanisms to be analysed deal with board composition, ownership structure and incentives. The external monitoring mechanism involves the market for corporate control which comes into play when ownership changes. This section discusses the extent to which corporate governance may be regarded as a substitute for take-overs as a mechanism for ensuring that firms pursue shareholder interests. The objective therefore is to highlight governance structures which may constitute best practice. Firms which do not implement such structures are more likely to experience performance problems and are more likely to become take-over targets. The following outline of the main recommendations of the Cadbury Committee provides the UK context for the discussion.

The Cadbury Committee was set up to investigate the problem of financial reporting and to assess the extent to which auditors were able to provide safeguards to the users of financial statements. The background to the setting up of the Committee was the sudden and spectacular failure of high profile, and apparently successful, businesses such as Polly Peck, BCCI and the Maxwell empire. These examples illustrated a failure of accountability and effectiveness. The Cadbury Report (1992) set out a Code of Practice based upon the concepts of openness, integrity and accountability, with shareholder interests being central to the Code. The report set out the responsibilities of the executive directors, non-executive directors as well as outlining the links which should exist between shareholders, board members and auditors. It also identified a number of characteristics which were claimed to represent good governance

practice. These included a separation of the roles of chairman and chief executive officer, having a significant presence of independent non-executive directors on the board, appointing high calibre non-executive directors and the setting up of independent committees to decide top management remuneration packages.

These governance structures were deemed to be necessary because the board is charged with ratifying and monitoring the most important decisions which affect a firm's direction and performance. The board is therefore responsible not only for supervising the actions of the senior management and preventing discretionary behaviour, but also for protecting shareholder interests, Fama (9180). Three elements of board composition will be discussed, first, the role of outside or non-executive directors, second, the combining of the posts of chief executive officer (CEO) and chairman and third, the quality of the non-executive directors.

First, executive directors are appointed because of their experience, specialised skills, expertise and knowledge. However, even with the available internal checks and balances there is no obvious way of monitoring the activities of a board which consists entirely of executive directors. Consequently an additional governance structure, namely non-executive directors, is charged with fulfilling this key monitoring role, Fama (1980), Fama and Jensen (1983) and Cadbury (1992). A non-executive director's primary functions are to encourage senior management to improve corporate performance, to offer specialised assistance when required and to monitor managerial actions. In spite of this, Main and Johnson (1993) find that UK boards are dominated by inside directors who on, average, make up two thirds of board membership. In contrast, Rosenstein and Wyatt (1994) show that most US boards have a majority of outside directors.

Second, if the internal monitoring mechanisms are to operate effectively, it is important that no individual possesses too much power, Cadbury (1992). The Committee concluded that combining the roles of chairman and CEO, creates a strong power base which could reduce the ability of a board to exercise effective control. The Committee therefore recommended that in large firms, the key roles of CEO and chairman should be separated. This would allow the management of decisions, that is the day-to-day running of the business, to fall within the remit of the CEO. The chairman's responsibilities include the development of strategy as well as appraising the performance of the other directors. Therefore separating the roles provides a means of separating key responsibilities between different office holders and so prevents one person gaining too much power within the decision-making body.

It would therefore appear that combining the roles of CEO and chairman is more likely to make firms take-over targets because outside management teams will perceive the firms to be underperforming. However, Shivdasani (1993) finds that combining the roles reduces the probability of being the subject of a hostile bid while Boyd (1995) finds that duality has a positive effect on firm performance under certain environmental conditions. Further, Baliga, Moyer and Rao (1996) show that neither combining the roles nor moving to a dual status affects performance. Therefore, although the possibility of misusing power exists, the US evidence suggests that not only does this not happen, but combining the roles may actually be beneficial if the person provides strong leadership and direction. This calls into doubt one of Cadbury's main recommendations.

Third, the calibre and standing of non-executive directors may also be measured by the number of additional directorships they hold. This is determined by the market for outside directorships, Fama (1980). If the non-

executive directors are perceived to be effective monitors of management such that corporate performance improves, their value on the external labour market will increase. Consequently they will be offered additional directorships on the boards of other firms. Thus the number of additional directorships held by non-executives may be taken as a proxy for their ability to protect shareholder interests. A high number implies that the non-executive director is perceived to be an effective board member. However, if the number is low, this suggests that the incumbent non-executive directors are either inexperienced or that the market does not regard them as being capable of protecting shareholder interests. These perceptions are important to the operation of this market particularly since outside director remuneration tends to be nominal in nature. Thus the market for outside directorships provides an indication of the perceived calibre of non-executive directors.

Cadbury (1992) recommends that a maximum of three additional directorships should be held, more than this would require too great a commitment of the director's time. Companies which are unable to attract high quality non-executive directors are therefore more likely to become take-over targets because their performance is likely to suffer. Support for this comes from Shivdasani (1993) reports a negative relationship between the probability of a hostile take-over and the number of additional outside directorships. This suggests that the market for outside directorships disciplines poorly performing managers and identifies firms which have not been managed in the best interests of shareholders.

In addition to board structure, Cadbury proposed that the remuneration packages of key directors should be determined by an independent Remuneration Committee. This is consistent with Jensen and Meckling (1976) who maintain that incentives should reduce the agency problem. Support for

the view that incentives have a beneficial impact comes from Demsetz (1983) who argues that incentives link shareholder and managerial wealth and from Murphy (1986) sees incentives as a means of reducing monitoring costs. However, it has been argued that incentives may encourage the embellishment of company performance by, for example, the adjustment of company accounts, Healy (1985).

The evidence suggests that the link between remuneration and corporate performance is positive and significant, Main (1994). This relationship has been found to hold for the US, for example Gibbons and Murphy (1992), Kumar and Sopariwala (1992), and Mehran (1995), and for the UK, for example Main (1991), Main and Johnson (1993) and Conyon and Leech (1994). In addition, Ingham and Thompson (1994) find that high chief executive pay, as measured by the efficiency wage, is associated with above average performance in the mutuality sector. Although this particular result may be sector specific, they argue that the concept of efficiency wages is a powerful incentive mechanism which has received relatively little attention. In contrast, Gregg et al (1993) found a link between director compensation and firm size rather than firm performance. It would appear therefore that incentives do influence corporate performance and hence affect the market for corporate control. The range of incentives and the variety of measures of executive compensation used in the studies indicates that this is an area which requires further analysis. Given the increased disclosure of the composition of remuneration packages, and the apparent importance of bonuses, we look at the effectiveness of share options as a corporate governance incentive mechanism.

Another means of reducing discretionary behaviour relates to the extent to which blocks of shares are held. These blocks may be held internally by directors or externally by institutions. Inside shareholders combine the decision-

making function with the ownership of shares. Thus, as inside shareholdings increase, the interests of decision makers and shareholders should converge, Jensen and Meckling (1976). This reduces any potential conflict of objectives and hence encourages shareholder wealth-maximising behaviour. This is supported by Mikkelson and Partch (1989) who find that target firms have significantly lower inside shareholdings than non-targets. In addition, Walkling and Long (1984) find lower management share ownership in hostile bids compared with non-hostile bids. Shivdasani (1993) also demonstrated that firms acquired by means of hostile bids had lower inside shareholdings than non-acquired firms whilst Davis and Stout (1992) report that family control reduces the probability of being acquired. Thus the evidence suggests that firms with low internal shareholdings are more likely to become take-over targets.

Large outside shareholders are regarded as an effective monitoring mechanism for a number of reasons. For example, they have a vested interest in minimising any asymmetry of information which may exist and will therefore vote in accordance with their own interests, Jarrell and Poulson (1987). In addition to the monitoring role, Schleifer and Vishny (1986) also argue that large outside shareholders assist the market for corporate control simply by being willing to sell their shares should an appropriate bid be made. They therefore have an incentive to monitor the behaviour of managers which should solve the free-rider problem identified by Grossman and Hart (1980).

However, Ambrose and Megginson (1992) reported that the levels of outsider shareholdings have no effect on the probability of becoming a take-over target. Similarly, Davis and Stout (1992) found that outside institutional shareholdings had no effect on the probability of being acquired. In contrast, Shivdasani (1993) found that large external shareholdings significantly increased the probability of

receiving a hostile bid. The weight of evidence therefore indicates that external shareholders do not act as effective monitors and that the asymmetry of information problem is not resolved. One reason for this may be, as Mayer (1995) observes, that there is no compelling reason why the employees of the institutions, themselves agents, should act like principals.

If the governance structures discussed above fail, corporate performance is likely to suffer and the firm is more likely to become a take-over target. Fama (1980) sees the market for corporate control operating as a last resort because of the costs involved in integrating organisations. This is supported by Davis and Stout (1992) who found that a high valuation ratio reduced the probability of take-over and by Bannister and Riahi-Belakaoui (1992) who showed that acquired firms exhibited poor pre-take-over performance. Morck *et al* (1988) found that poor performance increased the probability of a hostile take-over. Zantout (1994), in an analysis of US corporate raiders, reported some support for the market for corporate control being an efficient external control mechanism of last resort. However, in a study of Australian corporate raiders, Eddey (1990) reported no difference in the financial performance of raider and non-raider target firms. This indicates that aggressive acquirers have been unable to identify poorer performers than firms involved in normal acquisition activity. It has also been argued that the threat of take-over is unlikely to remove all managerial discretion, Fama and Jensen (1983) and Jensen and Ruback (1983). Even if discretionary behaviour does occur, it may not be costly to shareholders, Jensen and Meckling (1976). However, the growth of anti-take-over strategies may result in some market distortion which would increase the costs of discretionary behaviour, Sundarsanam (1991). Thus the evidence is equivocal and the extent to which the market for corporate control identifies poor performers and comes into operation when the internal monitoring mechanisms have failed is open to debate.

The discussion has identified a number of issues dealing with the relationship between corporate governance and the take-over mechanism. First, the Cadbury Committee's concerns about the consequences of certain governance structures: second, the role of incentives in reducing discretionary behaviour: third, the effectiveness of holding blocks of shares: and fourth, the extent to which targets are poor performers. These issues will be addressed below.

III DATA, VARIABLES AND HYPOTHESES

Data were gathered on 94 UK public companies which were acquired during the period 1990-1993, of these 71 were non-hostile acquisitions and 23 were hostile. The proportion of hostile acquisitions, 24%, is consistent with that which occurred in the 1980s in the UK, Sundarsanam (1991). The sample includes only wholly independent public companies which were fully quoted on the London Stock Exchange. The sample covered all sectors of the economy. A control sample of non-acquired firms was constructed which matched the acquired firms by company type, size and sector, as defined by the Standard Industrial Classification (SIC). Corporate governance data were taken from the *Price Waterhouse Corporate Register*[1]. The Register provides information on board composition, the names of executive and non-executive directors, the dates of their appointment, director shareholdings and institutional shareholdings. Later editions of the Register were used along with the *FAME*[2] database to ensure that the control sample included only public companies which had remained independent and had not subsequently been acquired. Profit data for the year prior to acquisition were obtained from *FAME*. In addition to firm specific profit data, industry average profitability was also calculated at the two digit SIC level.

Manne (1965) argues that poor performance will make a firm a take-over target. Other managers will seek to acquire the assets with the objective of using them more effectively. The market for corporate control is driven by the relationship between potential and actual performance. Thus:

Probability(take-over) = *f*(potential financial performance-actual performance)

= *f*(gap)

The gap cannot, however, be directly observed. The conclusions of the Cadbury Committee imply that the gap will be smaller when firms adopt good governance structures and larger if the governance structures are ineffective. The combination of bad governance practice and poor performance will make a firm more likely to become a take-over target because they indicate that shareholder interests are not being pursued. Firms which exhibit good governance practice and good performance are less likely to be acquired because they are following policies which appear to be consistent with shareholder interests. If this distinction is found to hold, then it may be argued that effective corporate governance is a substitute for take-overs as a means of achieving better performance.

The variables are defined as follows:

The dependent variable, ACQUIRED, was given the value one if a firm had been acquired and zero if it had not.

The independent variables are:

CEOCHAIR - is a binary variable. If the roles of the Chief Executive Officer and the Chairman are filled by a single individual the variable has the value of one and zero if they are not. The coefficient's expected sign is positive. This is because the effectiveness of the board as an internal governance device will be perceived by bidders to have been compromised by the roles not being

separated. This will increase the probability of being acquired because combining the roles implies the potential for better performance, something which could be achieved by means of acquisition.

PROP - measures the proportion of executive directors on the board. The higher the proportion, the more difficult it will be for the non-executive directors to influence board decisions. This will permit greater managerial discretion and so increase the probability of acquisition. The coefficient will therefore be positive.

BIG - this is the percentage sum of the three largest external shareholders. If groups of shareholders can act in a common interest, their combined shareholding may be sufficient to affect a board's actions. A coalition of the three largest external shareholders would provide an indication of the extent to which a corporation was owner controlled. The coefficient will be positive because large shareholders have the incentive to monitor the board's activities. If there is dissatisfaction with the board, they will be willing to sell their shares.

XORD - measures the total percentage ordinary shares held by the executive directors. The coefficient will be negative because the higher the shareholding the closer the interests of directors and principals, hence the lower the probability of being acquired.

NXDIR - this variable measures the mean number of additional outside directorships held by the non-executive directors of the firms. The expected sign is negative indicating that the non-executive directors appointed by the acquired firms are not perceived to be capable of providing the necessary expertise or control required to maximise shareholder wealth. Thus a low value

for additional directorships indicates a weak governance mechanism which will increase the probability of a firm being acquired**.**

XDIR - measures the mean number of additional outside directorships held by the executive directors. If a firm's executive directors are regarded as being effective, there exists a greater probability of them being asked to serve on the board of other firms in a non-executive capacity. The expected coefficient will be negative because executive directors who are regarded as being ineffective will be more likely to manage firms which become take-over targets.

XOPT - this measures the share options held by the executive directors as a percentage of the total issued ordinary share capital. Share options are becoming an important element of director compensation and XOPT is a measure of its effectiveness as a incentive mechanism. Its coefficient should be negative showing that lower holdings of share options increase the probability of being acquired.

PROFIT 1 - is measured by the return on capital employed and defined as profit before tax / net assets. The coefficient will be negative because poorer performance will increase the probability of being acquired.

PROFIT 2 - this measures firm profitability relative to the industry average.[3] The coefficient will also be negative indicating that relatively poor performers are more likely to become acquired.

The model may be written:

$$Pr(AD) = a_0 + a_1 CEOCHAIR + a_2 PROP + a_3 BIG - a_4 XORD - a_5 NXDIR - a_6 XDIR - a_7 XOPT - a_8 PROFIT$$

where

Pr (AD) = the probability of being acquired

PROFIT = PROFIT1 or PROFIT2

However, if the sample is partitioned by type of merger, hostile or non-hostile, the hypothesised relationships should change. The agency model implies that all mergers are disciplinary in nature because they signal the desire of outside management to replace the inefficient incumbent management team. Shivdasani (1993) has argued that hostile bids are evidence of ineffective internal control mechanisms. Bhide (1989) found that 64% of hostile bids were expected to result in improved profitability by means of efficiency gains. Hostile acquisitions are therefore claimed to identify governance structures which have failed to protect shareholder interests. This suggests that sub-optimal governance structures lead to poor performance and that they are replaced by means of hostile take-overs, Weisbach (1993). This is consistent with the above hypotheses.

Non-hostile bids, however, are more likely to be synergistic rather than disciplinary, Morck *et al* (1988). Both parties recognise potential benefits such as increased market power, marketing economies, improved technical expertise and better research and development. Bhide (1989) found evidence of expected synergistic benefits from non-hostile acquisitions. He also found that, post-acquisition, targets of hostile bids experienced a greater turnover of management that targets of friendly bids. Bhide (1989) further found that the targets of hostile bids performed worse than the targets of non-hostile bids. Friendly acquisitions are therefore less likely to be disciplinary in nature given that the objective is not to replace incompetent management.

The distinction between hostile and non-hostile acquisitions is therefore important because they appear to be undertaken for different motives. The

distinction therefore has important implications for the agency model. If non-hostile targets are selected for reasons other than the identification of poor management, this suggests that they exhibit desirable governance characteristics consistent with those laid down in the Cadbury Code of Practice. We would therefore expect there to be no difference between the governance structures of firms which had been the subject of non-hostile bids and those which had not been acquired. This would provide support for the view that non-hostile targets were selected because they possessed certain characteristics which the bidding firm specifically required.

IV Results

Univariate Analysis

Table 1 provides an overview of the data for the governance and performance variables. The analysis has been split into three parts: the first looks at the sample as a whole, the second deals with hostile take-overs and the third with non-hostile take-overs. The average sales of the whole acquired sample are £127.1 million and for the non-acquired sample it is £147.1 million. The difference is not statistically significant. The average sales of firms acquired in hostile take-overs was £198.1 million and for non-hostile take-overs it was £104.1 million: the average sales of the non-acquired samples was £213.2 million and £126.6 million respectively. Neither difference was significant which indicates that the governance variables were not picking up size effects.

Table 1 shows that for all three samples, target firms are more likely to combine the roles of CEO and chairman and have a significantly higher proportion of executive directors than non-targets. In addition, hostile targets have a significantly lower number of additional directorships held by their non-executive directors. The difference was not significant for non-hostile targets. Thus the board characteristics of acquired firms, particularly hostile targets, are

consistent with these firms experiencing monitoring problems because they focus authority and power in the hands of the boards' internal members. However, contrary to expectations, the board structure differences also apply to non-hostile targets.

There is limited evidence that shareholdings, whether internally or externally held, are different for acquired and non-acquired firms. There is a weak result on XORD, at the 10% level, for hostile acquisitions which shows that the executive directors of acquired firms have significantly lower shareholdings than those of non-acquired firms. Although XOPT, the proportion of share options held by executive directors of acquired firms, was lower than the proportion held by executive directors of non-acquired firms for all three samples, the difference was not significant.

For all three samples, targets have a significantly lower absolute mean profitability than non-targets. Although the non-hostile result is significant only at the 10% level, there is no difference between the profitability of hostile targets and non-hostile targets. This indicates that, contrary to expectations, all targets had been the subject of disciplinary bids. However, when industry relative profitability is used, performance differences become insignificant across all samples. This illustrates the sensitivity of performance definitions and the importance of distinguishing between absolute and relative profitability.

The differences in the governance variables are therefore consistent with monitoring difficulties. This is supported by the profitability results which also provide evidence of underperforming by acquired firms, whether they be hostile or non-hostile targets. The results also suggest that absolute rather than relative performance is important in identifying a potential target.

Multivariate Analysis

Logistic regression was used to estimate the combined impact of the performance and corporate governance mechanisms on the probability of being acquired. Table 2 details the logit estimates for the whole sample with Model 1 including the absolute profit measure and Model 2 the industry relative measure. Both models are significant at the 1% level and the correct classification rates for each are acceptable. Of the governance variables, CEOCHAIR, NXDIR, XORD and PROP are significant for both models with the coefficient signs are as hypothesised. The positive coefficient on CEOCHAIR means that firms which combine the roles of chief executive officer and chairman are more likely to be acquired than firms which separate them. This implies that the target firms had too much power concentrated in the hands of one person, a finding which supports one of the key elements of the Cadbury Committee's Code of Practice. The positive sign on PROP shows that acquired firms are likely to have fewer non-executive directors. This provides further support for the hypothesis that target firms lacked adequate internal monitoring. Thus the composition of the board had a significant effect on the probability of being acquired, particularly where the balance of power favoured the executive board members.

The negative sign on NXDIR shows that the non-executive directors of acquired firms have significantly fewer outside directorships than have the non-executive directors of non-acquired firms. This supports the view that the non-executive directors of acquired firms are perceived to be less effective monitors of shareholder interests will receive fewer requests to serve on other boards.

The negative sign on XORD shows that firms are more likely to become take-over targets the lower the proportion of a firm's ordinary shares owned by the executive directors. In contrast the presence of large external shareholdings, BIG, does not affect the probability of acquisition. This casts doubt on the view

that large external shareholdings solve the free rider problem by providing effective monitoring. XOPT is insignificant showing that this element of a remuneration package has no incentive effect.

The results show the importance of performance definition. In Model 1, acquired firms have significantly lower absolute profitability than non-acquired firms. However, in Model 2 which uses industry relative profit, the differences are insignificant. This indicates that the performance of potential targets is assessed in absolute rather than relative terms.

Results for the hostile and non-hostile sub samples are given in Table 3. In terms of hostile bids, Model 1 shows that there is evidence of poor performance and inadequate monitoring, with the coefficients all having the expected signs. Targets of hostile bids have significantly poorer absolute profitability (PROFIT 1), have a significantly higher proportion of executive directors on the board (PROP) and are more likely to combine the roles of CEO and chairman (CEOCHAIR). These are examples of undesirable governance practice, according to Cadbury (1992). The executive directors of hostile targets also have lower holdings of ordinary shares (XORD) and are more likely to hold lower proportions of share incentives (XOPT). The governance characteristics are therefore indicative of ineffective internal and external monitoring of the board's actions, particularly since BIG is insignificant. As a consequence shareholder interests are not being safeguarded and the market for corporate control comes into play.

However in Model 2, NXDIR, the number of outside directorships held by the non-executive directors also becomes significant, but only at the 10% level. As hypothesised, the negative coefficient shows that the lower the number of additional directorships held, the greater the probability that a firm will become

the target of a hostile bid. XOPT now becomes insignificant which, together with the weak result in Model 1, suggests that the proportion of shares held as share options by executive directors has little effect on the probability of acquisition. Therefore share options are not an effective incentive mechanism for directors. Model 2 further shows that the targets were not underperformers in relation to their respective industries. However, neither are they good performers and it may be that their governance characteristics create the perception of underperforming. Thus with more effective monitoring, performance may be improved to the benefit of shareholders. These results therefore offer indirect support for Shivdasani's (1993) explanation of hostile acquisitions in terms of their disciplinary nature.

Table 3 also shows similar results for non-hostile targets. In Model 1, targets are more likely to have the roles of CEO and chairman combined and have a higher proportion of executive directors on the board. These characteristics are consistent with examples of bad governance practice according to Cadbury (1992). In addition there is some evidence that non-hostile targets also suffer poorer absolute profitability given that PROFIT1 is negative and significant at the 10% level. The same board composition variables, CEOCHAIR and PROP, are significant in Model 2, but once again PROFIT2, relative profitability, is insignificant. The results are therefore similar to those for hostile targets and suggests that UK non-hostile acquisitions incorporate disciplinary and synergistic elements.

A potential specification problem occurs when there is a relationship between governance structures and performance. For example, whereas a number of studies have found that board composition had an important effect on firm performance, (Rosenstein and Wyatt 1994, Brinckley *et al* 1994 and Bernhart *et al* 1994), others have found that it had no effect, (MacAvoy *et al* 1983 and

Hermalin and Weisbach 1992). In addition, Ezzamel and Watson (1993) showed that the proportion of outside directors had little effect on corporate profitability in the UK. The analysis of the impact of large inside shareholdings on performance has also produced conflicting results. For example, Morck *et al* (1988) and McConnell and Servaes (1990) found a non-linear relationship between managerial shareholding and corporate performance. However, Stulz (1988) reports that corporate value was positively related to the voting rights of managers for low shareholdings but negatively related for large shareholdings. Wruck (1989) argues that increasing inside shareholdings enables management to gain control of a firm. This is then associated with the introduction of entrenchment policies, which include anti-take-over strategies such as poison pills and shark repellents which may be regarded as serving the interests of management rather than shareholders. However, as Table 4 shows, the correlation coefficients are low enough to indicate that this potential specification problem does not apply and that there is no bias in the regression estimates.

V Conclusions

The paper deals with the governance and performance characteristics of acquired and non-acquired quoted UK public companies. The characteristics analysed relate to board composition, ownership structure, director compensation and profitability. The results show that probability of becoming a take-over target is affected by governance structures and performance. There is strong evidence that board composition has a significant impact on the probability of acquisition. It was also found that acquired firms are likely to have lower absolute profitability than non-acquired firms.

It has been shown that it is important to distinguish between absolute and relative profitability when assessing the effect of performance on the probability

of being acquired. If absolute profitability is used as a measure of performance, it was found that hostile bids in the UK are disciplinary. Poor performance is combined with weak internal governance structures which make it difficult for adequate monitoring to be undertaken. The boards of acquired firms do not therefore appear to be discharging their responsibilities effectively. In particular there is inadequate ratification and monitoring of important decisions. The interpretation of the board characteristics variables is critical when taken alongside the poor performance result. The significance of the variables CEOCHAIR and PROP suggests the failure of the internal monitoring mechanisms given the power of the internal members of the board. The poor performance combined with inappropriate governance structures provided the signals to other management teams to mount successful hostile bids for the firms.

It was also found the executive directors of acquired firms had significantly lower shareholdings than those of non-acquired firms. This, coupled with the fact that they also held a significantly lower proportion of share options, suggests that the directors were not motivated by the pursuit of shareholders' interests. However, the results also suggest that targets are not poor performers when compared with similar sized quoted firms in the same industry. Thus raiders take the absolute performance rather than relative performance as the signal for mounting a hostile bid.

It has also been shown that the same key governance characteristics are significant for non-hostile acquisitions, CEOCHAIR and PROP. This is combined with weak evidence that non-hostile targets are poor performers. Both of these results are contrary to expectations given the view that non-hostile acquisitions are claimed to be synergistic, Morck *et al* (1988) and Bide (1989). There are a number of possible explanations for this result. First, the

distinction between synergistic and disciplinary motives is too simplistic and it becomes blurred when take-overs are non-hostile. Second, it may be that in general, boards act in the interests of shareholders when a bid is received. For example, combining the roles of CEO and chairman creates a substantial power base from which to persuade a board that a non-hostile bid should be recommended to shareholders. The dual roles may also make it easier to negotiate and arrange a non-hostile bid. This would be consistent with the results of event studies which show that shareholders of target firms benefit from positive abnormal returns when bids are announced. Thus for non-hostile bids the duality of roles may actually promote increases in wealth for target firm shareholders, and would be consistent with the board adopting a stewardship approach to its responsibilities. Third, as the sample shows, most acquisitions of UK public corporations are non-hostile. There may therefore be cultural reasons why bids tend to be accepted rather than contested. Fourth, some accepted bids may be the result of approaches to white knights if an unwelcome bid had been received. Fifth, management may have a better chance of keeping their jobs if an acquisition is not contested.

None of the results found that external shareholdings affected the probability of being acquired. This suggests that these shareholders had not been unhappy with management. However, given the poor corporate performance, this indicates that they had not been effective in their monitoring of the companies. In terms of hostile acquisitions, there is only weak evidence that the non-executive directors of acquired firms are regarded as less effective than those of non-acquired firms. There was no difference however, in the mean numbers of additional directorships held by the executive directors of firms which were hostile targets and non-acquired firms. There was also to be no difference in the calibre of executive and non-executive directors of firms involved in non-hostile acquisitions.

It has been shown that acquired firms exhibit certain governance characteristics which have been identified as being undesirable by the Cadbury Committee. Non-acquired firms are less likely to exhibit these features. However, the Committee's recommendations raise a number of issues. First, a firm's performance may benefit from a strong and committed dual CEO/chairman. It is not certain that a person in that position would by definition misuse their authority. Second, the extent of the independence of the non-executive directors is unclear. It would seem unlikely that a board would appoint non-executive directors who were clearly out of step with the thinking and objectives of the other directors. This would be particularly true if a dominant CEO/chairman wanted to maintain a position of power on the board. Third, non-executive directors are appointed on a part-time basis which means that they may not possess sufficient knowledge and expertise of the breadth of a company's activities to fully be aware of what is going on. This calls into question their ability to provide informed independent advice.

The analysis deals with the position the year prior to acquisition. An area for further research would be to investigate how board composition changed over time and to analyse the problem of board succession. Another area for further research is the analysis of non-hostile acquisitions because they exhibit similar governance and performance characteristics to those of firms which were the subject of hostile bids.

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Notes

1. The Price Waterhouse Corporate Register is published by Hemmington Scott Publishing Limited. It provides details of board composition, the names of directors and the shareholdings of the directors and the main institutions.

2. FAME is compiled by Jordans and published by Bureau Van Dijk. It provides balance sheet and profit and loss information on the main UK firms. It covers quoted and private firms.

3. Industry relative profitability is measured as -

Firm % / (industry average %)*100. This is proposed by Platt and Platt (1990). It produces stability over time and controls for different industry characteristics.

Table 1

Descriptive Statistics - Analysis of Means

	Whole sample			Hostile Sample			Non-Hostile Sample		
Variable	Target	Control	t-value	Target	Control	t-value	Target	Control	t-value
CEOCHAIR	0.44	0.16	4.33***	0.48	0.04	3.78***	0.42	0.20	2.97***
PROP	0.64	0.57	2.93***	0.68	0.58	1.84*	0.63	0.56	2.29**
BIG	25.37	26.62	-0.61	23.64	27.02	-0.68	25.92	26.49	-0.25
XORD	7.98	10.81	-1.17	3.06	9.82	-1.74*	9.57	11.13	-0.53
XDIR	0.32	0.52	-1.00	0.15	0.27	-0.99	0.37	0.59	-0.86
NXDIR	0.66	1.15	-2.63***	0.67	1.70	-2.44**	0.66	0.97	-1.55
XOPT	0.87	1.13	-0.95	0.63	1.36	-1.09	0.95	1.06	-0.38
PROFIT1	5.44	13.27	-2.78***	4.30	18.43	-2.69***	5.81	11.60	-1.75*
PROFIT2	0.02	0.002	1.08	0.01	0.02	-0.62	0.03	-0.005	1.24

Notes

Significance levels:

*** = 1%

** = 5%

* = 10%

Table 2

Logit Results - Whole Sample

Variables	Model 1	Model 2
n	188	188
CEOCHAIR	1.352 (11.84)***	1.294 (11.23)***
PROP	2.70 (6.57)***	2.522 (6.10)**
BIG	0.002 (0.017)	0.002 (0.03)
XORD	-0.024 (3.69)*	-0.026 (4.81)**
XDIR	-0.08 (0.40)	-0.070 (0.30)
NXDIR	-0.250 (3.27)*	-0.299 (5.04)**
XOPT	-0.114 (1.20)	-0.056 (0.32)
PROFIT1	-0.028 (6.69)***	
PROFIT2		1.311 (0.85)
Constant	-1.220 (2.82)*	-1.364 (3.74)*
Model Chi-Square	41.93***	35.12***
Correct %age Classification:-		
Control	77	76
Target	72	60
Overall	74	68

Notes
1 Significance levels:
*** = 1%
** = 5%
* = 10%

2 Figures in parenthesis are Wald statistics

Table 3

Logit Results - Hostile and Non-Hostile Sub-Samples

Variables	Hostile Model 1	Hostile Model 2	Non Hostile Model 1	Non Hostile Model 2
CEOCHAIR	5.228 (2.90)*	3.272 (5.389)**	1.037 (5.99)**	0.983 (5.47)**
PROP	9.307 (4.95)**	5.877 (3.54)*	2.178 (3.34)*	2.186 (3.44)*
BIG	-0.005 (0.02)	0.017 (0.38)	0.005 (0.10)	0.003 (0.05)
XORD	-0.130 (3.15)*	-0.147 (2.79)*	-0.016 (1.76)	-0.017 (2.14)
XDIR	0.007 (0.00)	-0.967 (0.70)	-0.077 (0.33)	-0.059 (0.22)
NXDIR	-0.596 (1.32)	-0.594 (2.78)*	-0.211 (1.77)	-0.236 (2.24)
XOPT	-0.592 (2.90)*	-0.314 (0.61)	-0.042 (0.12)	-0.015 (0.02)
PROFIT1	-0.131 (6.28)***		-0.018 (3.02)*	
PROFIT2		-11.222 (1.82)		1.91 (0.94)
Constant	-3.190 (1.75)	-2.649 (1.82)	-1.159 (1.95)	-1.286 (2.47)
Model Chi-Square	37.75***	28.43***	19.43**	17.85**
Correct %age Classification:-				
Control	83	87	70	76
Target	83	84	61	56
Overall	83	85	65	66

Notes
1 Significance levels:
*** = 1%
** = 5%
* = 10%

2 Figures in parenthesis are Wald statistics

Table 4

Correlation coefficients

	BIG	CEOCHAIR	XORD	NXDIR	PROFIT2	PROP	XDIR	XOPT
CEOCHAIR	-0.12							
XORD	-0.23	0.20						
NXDIR	0.13	-0.09	-0.06					
PROFIT2	0.05	-0.13	-0.04	0.02				
PROP	-0.17	0.30	0.24	0.04	-0.006			
XDIR	0.08	-0.10	-0.06	0.002	-0.008	-.012		
XOPT	0.04	-0.04	0.06	0.28	0.01	0.18	0.03	
PROFIT1	-0.005	0.06	0.08	0.04	-0.02	-0.02	-0.05	-0.16

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