BOARD STRUCTURE, ANTITAKEOVER PROVISIONS, AND STOCKHOLDER WEALTH

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ABSTRACT

This paper's regression analyses from a sample of 261 firms that adopted 486 antitakeover provisions (supermajority, classified boards, fair-price, reduction in cumulative voting, anti-greenmail and poison pills) in the 1984-1988 period indicate that the negative market reactions to antitakeover provisions vary depending on firms' board structures. This paper's empirical evidence indicates that while separating the positions of CEO and chairperson of the board reduces the negative effect, increased outsider representation increases negative market reactions.

Researchers have increasingly used agency theory to study issues relating to the separation of ownership and control in public corporations and the role of alternative governance mechanisms (Beatty and Zajac, 1994; Eisenhardt, 1989; Kosnik, 1987; Mallette and Fowler, 1992; Rediker and Seth, 1995; Singh and Harianto, 1989a; Walsh and Seward, 1990). An important external mechanism believed to monitor managerial performance is the (takeover) market for corporate control (Manne, 1965). The basic position is that the firm will be undervalued by the market when managers are slow to recognize changes in the environment and modify strategies too slowly, or when managers follow inappropriate strategies which serve mainly to promote their self-interests (Jensen and Meckling, 1976). Such undervalued firms become a prime takeover target, enabling incumbent management to be displaced to make way for a new management team and a subsequent change in strategy.

Many corporate managements responded to the active takeover market of the 1980s by adopting several takeover defenses, including antitakeover provisions. These provisions, which include antitakeover amendment changes to a company's charter and poison pill adoptions, can increase the bargaining power of incumbent corporate management and restrict the market for corporate control, thereby triggering considerable controversy regarding the adoption of antitakeover provisions.

The adoption of antitakeover provisions has also received some research attention. A primary focus is on understanding the effects of antitakeover provisions on shareholder value, particularly on stock market reactions (DeAngelo and Rice, 1983; Jarrell and Poulsen, 1987; Malatesta and Walkling, 1988; Ryngaert, 1988). Several studies indicate that the market reacts negatively to the adoption of antitakeover provisions, particularly to those provisions adopted during the takeover wave of the 1980s (Mahoney and Mahoney, 1993).

While prior empirical research has been useful in indicating that the market reacts negatively to several antitakeover provisions, it does not provide insight on how other governance mechanisms suggested by agency theory affect the market reactions to takeover defenses. Studies thus far examine the wealth effects of antitakeover provisions, viewing the influence of the market for corporate control as independent

1

of other governance mechanisms suggested by agency theory. This independence assumption may be a problem since recent work indicates that alternative governance mechanisms may substitute for, or enhance, the takeover market, even though they cannot completely compensate for the absence of an active takeover market (Brickley and James, 1987; Rediker and Seth, 1995). For instance, the presence of a strong corporate board can reduce conflict of interests between shareholders and managers, mitigating the need for the operation of the market for corporate control. In such a case, takeover defenses adopted by strong boards can elicit less negative reactions than those adopted by weak boards where both the internal and external governance mechanisms are failing to reduce conflict of interests.

This study therefore builds on prior work on market reactions to antitakeover provisions by incorporating the influence of an internal governance mechanism, the corporate board. The current paper specifically tests the proposition that a strong board is likely to reduce the negative wealth effects associated with the adoption of antitakeover provisions. The impact of composition and leadership structure of the board on market reactions to the adoption of several antitakeover provisions are studied. The antitakeover provisions are described in **Appendix 1**.

BOARD STRUCTURE AND MARKET REACTIONS TO ANTITAKEOVER PROVISIONS

Within the context of agency theory, a critical internal mechanism for limiting managerial inefficiencies is the corporate board of directors (Zahra and Pearce, 1989). The corporate board's primary responsibility is one of control. More specifically, the board's responsibility is to ensure that management engages in activities that maximize shareholder value. In order to fulfill this fiduciary responsibility, the board possesses the power to hire, fire, and compensate top management, and to ratify important decisions.

Since antitakeover provisions are board-level decisions, the market reactions to these actions are likely to be influenced significantly by its perception of the board's ability to protect shareholder's interests (Hoskisson and Turk, 1990; Kosnik, 1990; Lorsch and MacIver, 1989; Mizruchi, 1983;

Williamson, 1985). Independence of the board from corporate management is important in enabling the board to perform its fiduciary responsibility. Two structural attributes of the corporate board reflect this independence, board composition and its leadership structure. These attributes are examined and their impact on market reactions to antitakeover provisions are hypothesized.

Board composition. Board composition involves the mix of insiders (those employed by the organization in other capacities) and outsiders (Baysinger and Butler, 1985; Baysinger and Hoskisson, 1990). Greater outsider representation is often advocated since outsiders are likely to be more objective in monitoring management actions than inside directors (Baysinger, Kosnik and Turk, 1991; Fama and Jensen, 1983a, 1983b; Johnson, Hoskisson and Hitt, 1993).

Even though the impact of increased outsider representation on the outcome of board actions is less clear (Cochran, Wood and Jones, 1985; Kosnik, 1987; Singh and Harianto, 1989a; Wade, O'Reilly and Chandratat, 1990), the appointment of outside directors is used to signal the monitoring potential of the board (Weisbach, 1988). For instance, Hermalin and Weisbach (1988) find outsiders are appointed to the board following poor firm performance measured by stock returns. Ostensibly, outside directors are appointed since poor performance is an indication of poor management and a lack of adequate monitoring. The appointment of outside directors also serves as a signal to the market that the board's monitoring capacity is being strengthened. Evidence of a significant positive share-price reaction to the appointment of outside directors indicates that the market responds favorably to such appointments (Rosenstein and Wyatt, 1990).

Market reactions to antitakeover provisions adopted by stronger boards are likely to be viewed less unfavorably than those adopted by weaker boards since monitoring by outside members can be a partial substitute for the market for corporate control. For instance, Brickley and James (1987) find that outsider-dominated boards of banks located in states which restrict acquisitions (where no market for corporate control disciplines management teams) control managerial consumption of perquisites, indicating that monitoring by a strong board may substitute for that of the takeover market.

3

An alternative argument leading to the same hypothesis is that a majority of outsiders may create a situation where too much risk is transferred to managers. Managers, without protection, may reduce their time horizon and focus on strategies that are risk averse and not optimal for stockholder wealth (Baysinger, Kosnik and Turk, 1991). In this situation, antitakeover provisions may be a counterbalancing device to allow managers to take a longer view (Baysinger and Hoskisson, 1990). Thus, market reaction to antitakeover provisions adopted by corporate boards with a greater proportion of outsiders is likely to be less negative. This discussion leads to the following hypothesis:

Hypothesis 1

The market is likely to react more negatively to antitakeover provisions adopted by boards with a lower proportion of outsiders on the board than to those adopted by boards with a greater proportion of outsiders.

Board Leadership. Another reform strongly advocated by governance activists is separation of the chairperson of the board and CEO positions either in general or within a contingency framework (Finkelstein and D'Aveni, 1994; Kesner and Johnson, 1990; Mallette and Fowler, 1992; Rechner and Dalton, 1989). The logic of this recommendation rests on the notion that when the CEO and chairperson positions are held by one individual, the board's ability to function effectively as a governance mechanism is severely curbed. The chairperson of the board is responsible for setting the board agenda, scheduling regular and special stockholder meetings, and **monitoring** board committees. These duties provide the chairperson with considerable power to monitor management actions. If the CEO is vested with this power, the board's governing and independent auditing capacity are almost certainly compromised. Therefore, scholars suggest that a separate CEO and chairperson of the board helps to align the interests of directors and stockholders, likely improving board governance (Baysinger and Hoskisson, 1990; Hoskisson and Turk, 1990; Kosnik, 1987).

4

There is some evidence that separation of the CEO and chairperson of the board has a positive impact on corporate board actions and firm performance (Mallette and Fowler, 1992; Rechner and Dalton, 1991). Moreover, in the recent past, stockholder activists have pushed for a separation of CEO and chairperson positions in several under-performing companies, such as General Motors, as a means to restore the firm's credibility with investors. If the separation of powers can signal to stockholders the ability of the board to protect stockholders' interests, one could argue that antitakeover provisions adopted by such a board may be viewed more favorably relative to antitakeover provisions adopted by boards with a CEO-chairperson.

Vesting powers relating to the chairperson position with the CEO already provides the protection needed to encourage the CEO to make firm-specific capital investments and long-term investments. Additional power to corporate managements provided by antitakeover provisions, in the case of firms where the CEO and chairperson positions are held by one individual, may be viewed by the market as further entrenching managements. On the other hand, when the two positions are split, the market is likely to view the adoption of antitakeover provisions as less entrenching. This logic leads to the second hypothesis:

Hypothesis 2

The market is likely to react more negatively to antitakeover provisions adopted by boards chaired by the CEO than to antitakeover provisions adopted by boards not chaired by the CEO.

METHOD

Sample

This paper's sample includes 261 large U.S. corporations adopting 486 antitakeover provisions for the 1984-1988 period. In this period, the takeover wave of the 1980s peaked (Davis and Stout, 1992). Also, the sample begins in 1984 to mark the initial adoption of the poison pill. In fact, prior to the Delaware court decision in 1985 that upheld the legality of poison pill plans, there were only four such plans in the United States (Mallette and Fowler, 1992). In terms of individual provisions, the sample includes 20 supermajority amendments, 106 classified board amendments, 110 fair-price amendments, 21 provisions for reduction in cumulative voting, 33 anti-greenmail provisions, and 196 poison pill provisions.

Antitakeover provisions data were obtained from the Investor Responsibility Research Center's (IRRC) publication (Rosenbaum, 1989). The IRRC is a Washington-based nonprofit organization that, among other activities, follows the antitakeover proposals of 1,500 of the largest American corporations, measured in terms of annual sales.[1] The accuracy of IRRC's data is high with respect to antitakeover provisions (Pound, 1992: 663).

Measures

Dependent variable. The dependent variable is the market reactions or the cumulative average abnormal returns (CARs) earned by shareholders accompanying the adoption of antitakeover provisions. Abnormal returns, estimated using the standard event study methodology extensively used in financial economics, is the difference between the observed return and the normal return as predicted by the capital asset pricing model (CAPM). The security market rates of return utilized in testing were taken from the CRSP (Center for Research in Security Prices, University of Chicago) daily file for firms listed on the

6

New York Stock Exchange, the American Stock Exchange and the National Association of Security

Dealers.

For determining the cumulative abnormal returns, the choice of the "event date" is important (Brown and Warner, 1985). The first public release of the information needs to be used. Unlike many other corporate events, antitakeover proposals are rarely reported by the press (Agrawal and Mandelker, 1990: 149). The first public release of information about these proposals occurs when the firm mails the proxy statement containing the proposal to stockholders. The proxy statement mailing date is therefore utilized as the best available estimate of the date of the first public announcement of antitakeover amendment consideration (Jarrell and Poulsen, 1987). Once the announcement is made, the uncertainty regarding stockholder approval is slight. IRRC reports that some companies employ proxy solicitation firms to assess the voting outcome of a proposed amendment before proposing it to shareholders. If proposing an amendment that fails is expensive, managers will not propose amendments with a high failure probability. In our sample years of 1984-1988, over 95 percent of proposed antitakeover amendments received stockholder approval (Rosenbaum, 1989).

In this study's sample, 36 announcements were located in the Wall Street Journal before the proxy mailing date. For these 36 announcements, this earlier date is used as the announcement date. Finally, for poison pills which have no corresponding proxy statements since stockholder approval is not required, the first public announcement date was taken from Corporate Control Alert, which follows control issues involving U.S. corporations.

This paper considers an event window of 50 days before the proxy mailing date (-50) to 5 days following the proxy mailing date (+5). An average of 27 trading days (and a median of 24) separates the board meeting date (when an amendment is passed) from the proxy mailing date (Linn and McConnell, 1983). Although it is against SEC rules to solicit votes before the proxy mailing date, the possibility remains that the board decision to adopt antitakeover amendments is leaked to some market participants. The market returns in the -40 to -20 interval roughly surround the board meeting date. If one holds to the

7

(semi-strong or strong form) efficient market hypothesis, then a longer event window is not only justified but arguably essential because new information concerning antitakeover provisions is being received by the market throughout this time period. Similar event windows are used in several other studies on antitakeover provisions (Agrawal and Mandelker, 1990; DeAngelo and Rice, 1983; Jarrell and Poulsen, 1987).

A time period of 50 days before the proxy mailing date is chosen to ensure the inclusion of the board meeting date. A time period of 5 days after the proxy mailing date is considered a sufficient time period for the market to react fully to the antitakeover provision. Larcker (1983) finds significant market reaction around the date that the SEC receives the proxy, the so-called "SEC stamp date." Brickley, Bhagat and Lease (1985) find that the SEC stamp date falls, on average, 3.2 days (median of 3.0 days) after the proxy mailing date. Therefore, the event windows for the current paper are intended to give the market sufficient time to react to various possible sources of the announcement of the antitakeover provision adoption.

Independent variables. Board composition is measured in two ways. The first is the proportion of outsiders (not current or previous executives of the firm or its subsidiary) on the board [BOARD COMPOSITION]. The proportion of outside members who were not hired during the incumbent CEO's tenure on the corporate board is used as a more fine-grained measure of outsiders [BOARD COMPBCEO] (Boeker, 1992; Westphal and Zajac, 1994). Since the independence of outside members can depend on who appointed them to the board, those members not appointed during the current CEO's tenure are likely to be less dependent on the CEO and current management. Leadership of the board is coded as a dummy variable: 1, if the CEO and chairperson of the board were held by different individuals and 0, if they were held by the same individual [DUAL CEO/CHAIRPERSON]. Information on both board composition and leadership were obtained from proxy statements.

Control variables. Market reactions to antitakeover provisions can depend on managerial stock ownership (McWilliams, 1990; Stulz, 1988). Corporate governance researchers argue that in the case of

8

firms with high managerial stock ownership, negative stock reaction associated with reduction in perceived probability of a successful takeover is higher than the positive reaction associated with increased bargaining power (Stulz, 1988). McWilliams (1990) finds that firms with greater insider holdings experienced more negative returns. Other empirical studies, however, find no significant impact for insider holdings (Agrawal and Mandelker, 1987; Jarrell and Poulsen, 1987; Lauterbach, Malitz and Vu, 1991). In the current paper, INSIDER OWNERSHIP, found in proxy statements, is measured as percentage of equity held by inside board members including the CEO.

Level of INSTITUTIONAL OWNERSHIP has an impact on stock reactions to antitakeover proposals (Brickley, Lease and Smith, 1988, 1994). Large institutional investors have more at stake in the firm and thus their optimal monitoring expenses will increase the probability of institutional investors uncovering the intended motive for the antitakeover provision. Consequently, it is expected that the negative stockholder wealth effect of antitakeover proposals will be less for firms with larger institutional ownership (Agrawal and Mandelker, 1990; Jarrell and Poulsen, 1987). Therefore, the current paper controls for institutional stock ownership, using the Standard and Poor's Stock Guide in the month-end prior to the antitakeover provision announcement, and institutional stock ownership is measured as a percentage of total equity.

Size is included as a control variable since antitakeover provisions may be particularly effective for discouraging takeovers of large firms (Agrawal and Mandelker, 1990). If size [MARKET VALUE OF EQUITY] is not controlled for, then a correlated variable (such as insider ownership or institutional ownership) may appear significantly related to the antitakeover provision, but the relationship would be purely spurious.

Lang, Stulz and Walkling (1989) show that firms with high book equity/ market equity gain the most in tender offers, and therefore have the most to lose if a firm initiates an antitakeover provision in order to entrench themselves. Due to this relationship, firms with high book/market value will in general suffer the greatest losses from the passage of antitakeover provisions. The inclusion of the book

9

equity/market equity [EQUITY BOOK/MARKET] controls for this effect. The market value of equity is determined using CRSP's shares outstanding and stock price, and book value of equity is taken from COMPUSTAT, using the (fiscal) year-end prior to the announcement of the antitakeover provision.

The current paper also controls for whether the firm passing an antitakeover provision was rumored to be a target [TAKEOVER INDICATOR] according to the Wall Street Journal Index (Singh and Harianto, 1989b). Previous research finds that those under takeover threat experienced more negative stock price reactions to the announcement of antitakeover provisions (Lauterbach, Malitz and Vu, 1991; Ryngaert, 1988).

Five dummy variables [SMIND for supermajority indicator, CBIND for classified board indicator, FPIND for fair price indicator, CUMIND for reduction in cumulative voting indicator, and AGIND for anti-greenmail indicator] are used to control for the effects of the five types of antitakeover amendments studied. The effect of the poison pill provision is captured by the intercept term. Following the logic of Walsh and Seward (1990), it is posited that stockholders are likely to react more negatively to poison pills than to other provisions. Thus, one would anticipate that the effect of these five indicator variables would be positive and significant.

To control for the year of adoption of provisions (1984-1988), four dummy variables were used [IND85, IND86, IND87, and IND88 for measures adopted in 1985-1988, respectively]. The stock price effect in 1984 is captured in the intercept term. Mahoney and Mahoney (1993) found time-effects in that the market reacted more negatively to provisions adopted in the 1980s than to those adopted earlier. Extending this logic, one would expect the effects of the four dummy variables to be negative and significant.

Finally, two additional control variables were used: the number of provisions that the firm had adopted previously, before the current provision [NUMBER PREVIOUSLY ADOPTED], and the number of provisions adopted along with the current provision [NUMBER CURRENTLY ADOPTED]. It is possible that the market may react more negatively to provisions adopted by a firm that has several other

10

provisions in place. Similarly, the market may react more negatively to provisions adopted simultaneously in the same proxy year than to those adopted individually.

Empirical Analysis. To test the relationship between board structure and market reactions to the adoption of antitakeover provisions, the standardized cumulative average abnormal returns (CARs) of firms in the sample are regressed on board composition, leadership, and control variables. Methodologies based on the market model using ordinary least squares (OLS) and using standard parametric tests are well-specified under a variety of conditions for daily stock return data (Brown and Warner, 1985; Peterson, 1989).

The functional form of the regression is expressed in equation 1:

$$
\begin{aligned}
C\hat{A}R_{-50,5} = {} & \beta_0 + \beta_1 \text{ BOARD COMPOSITION} + \beta_2 \text{ BOARD COMPBCEO} \\
& + \beta_3 \text{ DUAL CEO/CHAIRPERSON} + \beta_4 \text{ INSIDER OWNERSHIP} \\
& + \beta_5 \text{ INSTITUTIONAL OWNERSHIP} + \beta_6 \text{ MARKET VALUE OF EQUITY} \\
& + \beta_7 \text{ EQUITY BOOK/MARKET} + \beta_8 \text{ TAKEOVER INDICATOR} \\
& + \beta_9 \text{ CBIND} + \beta_{10} \text{ CUMIND} + \beta_{11} \text{ FPIND} + \beta_{12} \text{ AGIND} + \beta_{13} \text{ SMIND} \\
& + \beta_{14} \text{ IND85} + \beta_{15} \text{ IND86} + \beta_{16} \text{ IND87} + \beta_{17} \text{ IND88} \\
& + \beta_{18} \text{ NUMBER PREVIOUSLY ADOPTED} \\
& + \beta_{19} \text{ NUMBER CURRENTLY ADOPTED}
\end{aligned}
$$

11

RESULTS

This paper regresses the cross sectional variation in the stock price reaction on the independent variables described above. The correlations of independent variables are reported in **Table 1.** The correlations reported in Table 1 indicate that multi-collinearity between non-control variables (outside board membership and dual CEO/chairperson of the board indicator) is not a problem in the sample. However, significant multi-collinearity is found among the control variables. Therefore, several specifications for the regressions were implemented to ensure the robustness of our results to this multi-collinearity. **Table 2** reports the results of the complete model used in the regression analyses which were used to test hypothesis 1 and hypothesis 2.[2,3]

Significance of coefficients on the independent variables

From hypothesis 1 it is expected that the market reacts less negatively to provisions adopted by boards with a greater proportion of outsiders. However, as reported in Table 2, contrary to hypothesis 1, both measures of outsiders indicate that a larger percentage of outside board members leads to a more negative stock reaction to antitakeover provisions.

Insert Tables 1 and 2 about here

The results provide support for hypothesis 2. Antitakeover provisions adopted by firms with an individual occupying the positions of CEO and chairperson of the board lead to a significantly more negative stock price reaction than antitakeover provisions adopted by a firm with a separate CEO and chairperson of the board.

Significance of the coefficients on the control variables

Inclusion of the control variables leads to several interesting results. Inside ownership and institutional ownership appear to have no (linear) relationship with stock price reaction to antitakeover provisions. The current paper's result of no statistically significant stock price effect of inside ownership and institutional ownership is consistent with the findings of Jarrell and Poulsen (1987), Agrawal and Mandelker (1990) and Lauterbach, Malitz and Vu (1991) but runs counter to the findings of McWilliams (1990).

Large firms (where agency problems may be greater) receive a more negative (and statistically significant) stock market response upon adoption of antitakeover provisions. This empirical result suggests that the market may regard antitakeover provisions adopted by large firms to be particularly effective in lowering the probability of a takeover.

Firms with larger book equity / market equity (and therefore are probably performing poorly due to inefficiency) also receive a more negative (and statistically significant) stock market reaction upon adoption of antitakeover provisions. These firms empirically have the most to gain (via larger takeover premiums) in a takeover, thus confirming the hypothesis of Lang, Stulz, and Walkling (1989).

The dummy variable indicating whether the firm is a takeover target does not enter as significant in the regression. This empirical result is contrary to the findings of Ryngaert (1988) and Lauterbach, Malitz and Vu (1991).

With regard to the five dummy variables reflecting the effects of the type of amendments, empirical results indicate that only the antitakeover amendment of the elimination of cumulative voting differs marginally from poison pill provisions. That is, the market reacts more negatively to the elimination of cumulative voting than to the adoption of poison pills. These findings do not lend support to Walsh and Seward's (1990) logic that the market is likely to react more negatively to poison pills than to other antitakeover amendments.

13

Regarding the dummy variables used to control for time effects, results indicate that provisions adopted in 1985 differ significantly from those adopted in 1984. The market reacts more negatively to those provisions adopted in 1985; this finding is consistent with the negative time trend found in Mahoney and Mahoney's (1993) study.

DISCUSSION AND CONCLUSIONS

Previous research on antitakeover provisions focusses on market reactions to antitakeover provisions without incorporating the influence of the corporate boards adopting these provisions. The current study is one of the first to examine the impact of the corporate board, an important internal governance mechanism, on market reactions to antitakeover provisions. Results indicate that the level of negativity of the market reactions to antitakeover provisions are influenced by the structure of the corporate board (its composition and leadership) adopting these provisions.

As expected, the market reacts less negatively to antitakeover provisions adopted by boards with a chairperson who is not the CEO than to antitakeover provisions adopted by boards chaired by the CEO. Several board reformists have advocated the value of separating the positions of CEO and chairperson of the board because it enables chairpersons to perform effectively their governance roles. Whether such a board structure actually adds to board independence, or is simply perceived as better able to protect shareholder interests, the market reacts more negatively to antitakeover provisions adopted by boards in which the CEO and chairperson positions are held by one individual. Thus, the market seems to take the monitoring role of the chairperson into account in its reaction to antitakeover provisions, which is consistent with Kesner and Johnson's (1990) finding that corporate boards which are led by a chairperson other than the CEO tend to be sued less often. These findings endorse the value of approval of board actions by (presumably) a more impartial chairperson and indicate that the monitoring effect of such a chairperson can substitute somewhat for the external takeover market which is restricted by antitakeover

14

provisions. Evidence of such substitution between internal and external governance mechanisms is complementary to the findings of Rediker and Seth (1995) concerning substitution between several internal governance mechanisms.

The market reacts more negatively to antitakeover provisions adopted by outsider-dominated boards than to antitakeover provisions adopted by boards with fewer outsiders. This empirical finding is contrary to agency theory expectations. Furthermore, it indicates that the market not only does not take into account the monitoring role of outsiders but actually discounts their presence. One explanation for this finding may be that since stockholder activists have sought and achieved to a considerable extent increased outsider representation on corporate boards, the market has had an opportunity to gauge the actual contribution of outsiders in practice, which runs contrary to agency theory expectations. The current paper's empirical finding lends credence to Singh and Harianto's conclusion that, "adding outsiders to corporate boards is misplaced. Activists seeking to add outsiders have presumed that the latter are objective and independent; our finding can be interpreted as refuting the basis of this activism" (1989a: 21).

An alternative explanation may be due to the use of the proportion of outsiders on the board as a measure of board vigilance. Prior findings of the effects of outsider representation on other governance issues are inconclusive. For instance, some studies indicate that increased outsider representation has positive outcomes such as reducing the probability of a firm paying greenmail (Kosnik, 1987), or being subject to shareholder suits (Kesner and Johnson, 1990). On the other hand, some studies indicate negative outcomes such as reduced R&D spending (Baysinger, Kosnik and Turk, 1991), and increased probability of a firm adopting golden parachutes for its executives (Cochran, Wood and Jones, 1985; Singh and Harianto, 1989a). Other studies indicate that outsider representation is not related to outcomes such as corporate illegal acts (Kesner, Victor and Lamont, 1986). While this study's more fine-grained measure of outsiders to some extent captures outside board members' intent to monitor because of the potential independence associated with their nomination to the board prior to that of the CEO's, it does not gauge

15

the capacity of these members to actually monitor. Board members' educational background, knowledge of the industry, and experience on other corporate boards may be vital in determining ability to monitor effectively corporate managements.

The current paper's empirical results thus indicate that while separating the chairperson and CEO positions is valued in terms of its potential to increase board independence, increased outsider representation is viewed less favorably. These empirical results indicate that the market is cognizant of changes to the corporate board which can substitute for the monitoring effects of the takeover market. Therefore, strengthening the corporate board and substituting the board's monitoring for that of the external market can be a less expensive governance option for firms.

Corporate governance researchers need to be able to identify in greater detail corporate board characteristics which not only aid effective functioning of the board, but are also recognized by the market. Such identification entails a richer description of corporate board processes and mechanisms which link board membership to its performance. Who are external directors and what motivates them to join corporate boards? How are external members selected and how and why do patterns of relationships develop between and among internal and external directors and the CEO? Such issues need to be addressed in greater detail. Case studies of board functioning, large scale questionnaire surveys, and interviewing of directors would be valuable in providing insight on corporate board characteristics that may influence board performance. Such investigations would be worthwhile since the empirical findings of the current study indicate that corporate board characteristics influence market reactions to board actions such as adoption of antitakeover provisions.

1. Since the IRRC publication follows the larger firms, most of the firms in the current paper's sample are traded on the NYSE and AMEX. Therefore, few firms in this paper's sample are traded on NASDAQ: 4 of the 196 firms adopting poison pills and 15 of the 185 firms adopting other antitakeover provisions were traded on NASDAQ. Since these firms comprise only 5 percent of this paper's sample the empirical results are robust to the decision to include them.

2. For the current sample, significantly negative CARs and fraction negative for the entire sample at the 0.01 level using a two-tailed test are robust to various event windows [e.g., (-50, +5), (-10, +5), (-2, +5)]. For poison pills, significantly negative CARs and fraction negative at the 0.01 level using a two-tailed test are robust to various windows (e.g., (-50, +5), (-10, +5), (-5, +5). There was mixed empirical results testing Walsh and Seward's (1990) prediction that poison pills will have significantly greater negative stock price reactions than non-operating antitakeover amendments that require stockholder approval (e.g., supermajority amendments, classified board provisions, fair-price amendments, reduction in cumulative voting, and anti-greenmail provisions). *While this prediction is supported for smaller event windows, it did not hold for the (-50, +5) window.* One could argue that the market reaction to the poison pill is not greater because for many firms other antitakeover provisions are already in place. However, Ryngaert (1988) finds that the stock price effect of the poison pill is not significantly influenced by the existence of an antitakeover provision. Details on the robustness of results to various methodological specifications are available from the authors upon request.

3. In cross-sectional regressions of residuals on firm-specific independent variables, some authors (e.g., Brickley, Coles and Terry, 1992) use the standardized residuals while others (e.g., McWilliams, 1990) use the unstandardized residuals. The current paper reports the results from the standardized residual regressions, and the test were re-run using the unstandardized residuals, with and without adjusting for heteroskedastic error terms (White, 1980). The signs and significance levels of the coefficients were virtually identical under all methodologies. Since the dependent variable is the standardized residual from the market model, the interpretation of the *magnitude* of the coefficient relies more on a statistical interpretation than an economic interpretation.

Appendix 1

DESCRIPTION OF ANTITAKEOVER PROVISIONS

(1) <u>SUPERMAJORITY MERGER APPROVAL PROVISIONS</u> typically stipulate stockholder approval percentages in the 66-80 percent range, thus superseding the approval requirement of the charter of the state in which the firm is incorporated. Various supermajority stockholder approval requirements may block a bidder from implementing a merger even when the bidder controls the target's board of directors since stockholder approval may remain below the specified percentage. If the board is able to determine when and if the supermajority provisions will be in effect, the amendment is said to have a board-out clause (Linn and McConnell, 1983). Pure supermajority provisions would seriously limit the management's flexibility in takeover negotiations.

(2) <u>CLASSIFIED BOARD PROVISIONS</u> segment (or stagger) the board of directors into classes with one class standing for election each year. Typically, with a classified board provision, one-third of the board is elected each year for a three-year term. With a classified board, a new majority stockholder would have to wait for two annual meetings to attain majority representation on the board before being guaranteed a successful proposal of a merger for stockholder vote (DeAngelo and Rice, 1983).

(3) <u>FAIR-PRICE AMENDMENTS</u> require supermajority voting approval by stockholders for the transfer of control if the bidder does not offer a "fair-price". Usually, the fair-price is defined as the highest price paid by the bidder for any shares acquired in the target firm during a specified period or some premium over market price. Some fair-price amendments require outside appraisals. For example, the price paid in the merger may have to be approved as fair by an independent investment banking firm selected by independent directors. In many cases more than one test is used, and the required fair-price must at least match the highest of them. The amendments are effective mainly against hostile two-tier tender offers, where the bidder obtains control of the firm in two stages (Jarrell and Poulsen, 1987).

(4) <u>REDUCTION IN CUMULATIVE VOTING PROVISIONS</u> restrict the rights of stockholders to accumulate their votes in favor of a particular director or board of directors. The number of votes to which a stockholder is entitled is the number of shares owned multiplied by the number of directors to be elected in a given year. Therefore, with cumulative voting it may be possible for minority stockholders to elect some board members even if the majority of stockholders oppose their election. A reduction in cumulative voting rights reduces the minority stockholders' ability to elect their nominees as directors (Bhagat and Brickley, 1984) and thus makes the firm a less desirable takeover target.

(5) <u>ANTI-GREENMAIL PROVISIONS</u> are amendments to corporate charters which prohibit payment of greenmail. Greenmail involves private repurchase of a sizeable block of company stock at a premium (Davis, 1991; De and Kenz, 1993). These transactions often occur under the explicit or rumored threat of takeover by a substantial stockholder or stockholders (Bagwell, 1991; McChesney, 1993). In exchange for a premium above market price, the raider agrees not to acquire the firm and displace incumbent management (Duggal and Cudd, 1993; Mikkelson and Ruback, 1991). Often this transaction is followed by a standstill agreement whereby the raider also agrees not to acquire stock in the concerned company for a specified period of time, often for as long as five years (Shleifer and Vishny, 1986). Managers who engage in targeted block share repurchases frequently are expelled from corporate ranks and the probability of being replaced increases with the repurchase premium paid (Ang and Tucker, 1988). Klein and Rosenfeld (1988) find the average premium over market paid in greenmail is 22 percent. Typical anti-greenmail charter amendments prohibit firms from repurchasing some or all of the common (voting) stock of an "interested" stockholder, normally defined as a stockholder who owns 5 percent or more of the outstanding common stock and who acquired this ownership within the past three years (Eckbo, 1990).

(6) <u>POISON PILL PROVISIONS</u> are operating measures and do not require stockholder approval. Poison pill provisions provide target stockholders the right to purchase additional shares at a discount or to sell shares to the target at very attractive prices. The target stockholders' right to purchase at a discount is known as a <u>flip-over plan</u>. Under the flip-over plan, the firm declares a common stock dividend in the form of rights to purchase some class of its own securities, usually common stock. For example, Crown Zellerbach's common stock purchase rights had an exercise price of $100 per share while Crown common stock traded at $30 per share (Malatesta and Walkling, 1988). If an acquirer merges with the firm, the rights "flip over" and holders are entitled to purchase shares in the surviving firm at a substantial discount from the post-merger market price, typically 50 percent (MacMinn and Cook, 1991). In our example, if the rights' exercise price is $100 and the surviving firms' stock when the merger is consummated trades at $50 per share, each right entitles its holders to purchase 4 shares of stock for $100. In the more potent <u>flip-in plan</u>, the mere acquisition of a threshold stake (usually between 10 percent and 20 percent) enables the rights' holders to purchase additional shares of the target firm at a discount (Choi, Kamma and Weintrop, 1989). The intended result is that no one dares to pass the flip-in triggering percentage, and bidders are forced to negotiate with target boards. Approximately half the flip-over plans contain a flip-in provision. Finally, the right to sell shares to the target at an attractive price is called a <u>back-end plan</u> (Ryngaert, 1988). Back-end plans are so named because they attempt to place a specific minimum price on the back end of a two-tier acquisition bid (Malatesta and Walkling, 1988).

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Table 1

This table presents the correlation matrix of independent variables (except for the dummy variables) for the regression

$$
\begin{aligned}
C\hat{A}R_{-50,5} = \beta_0 &+ \beta_1 \text{ BOARD COMPOSITION} + \beta_2 \text{ BOARD COMPBCEO} \\
&+ \beta_3 \text{ DUAL CEO/CHAIRPERSON} + \beta_4 \text{ INSIDER OWNERSHIP} \\
&+ \beta_5 \text{ INSTITUTIONAL OWNERSHIP} + \beta_6 \text{ MARKET VALUE OF EQUITY} \\
&+ \beta_7 \text{ EQUITY BOOK/MARKET} + \beta_8 \text{ TAKEOVER INDICATOR} \\
&+ \beta_9 \text{ CBIND} + \beta_{10} \text{ CUMIND} + \beta_{11} \text{ FPIND} + \beta_{12} \text{ AGIND} + \beta_{13} \text{ SMIND} \\
&+ \beta_{14} \text{ IND85} + \beta_{15} \text{ IND86} + \beta_{16} \text{ IND87} + \beta_{17} \text{ IND88} \\
&+ \beta_{18} \text{ NUMBER PREVIOUSLY ADOPTED} + \beta_{19} \text{ NUMBER CURRENTLY ADOPTED}
\end{aligned}
$$

The first number represents the estimated correlation, the second number represents the p-value under the hypothesis of zero correlation, and the third number represents the sample size.

	Mean	Stan. dev.	1.	2.	3.	4.	5.	6.	7.	8.
1. Board composition	0.687	0.142	1.000 0.0 486	-0.362 0.001 486	-0.088 0.055 474	0.011 0.817 483	0.050 0.274 471	-0.142 0.002 486	0.117 0.012 466	0.045 0.322 486
2. Board composition before CEO	0.515	0.208		1.000 0.0 486	0.215 0.001 474	0.009 0.851 483	0.008 0.864 471	-0.017 0.708 486	0.015 0.739 466	0.070 0.122 486
3. Dual CEO/Chairperson	0.184	0.388			1.000 0.0 474	0.029 0.524 473	-0.022 0.641 461	-0.052 0.261 474	0.037 0.426 456	-0.044 0.341 474
4. Insider ownership	3.65	9.46				1.000 0.0 483	0.020 0.671 471	-0.108 0.018 483	-0.108 0.020 466	0.013 0.774 483
5. Institutional ownership	43.32	18.63					1.000 0.0 471	-0.065 0.158 471	0.052 0.268 456	0.006 0.897 471
6. Market value of equity ($ millions)	3082	3118						1.000 0.0 486	-0.172 0.0002 466	-0.110 0.016 486
7. Equity book-to-market	0.703	0.335							1.000 0.0 466	-0.031 0.506 466
8. Takeover indicator	0.135	0.342								1.000 0.0 486

Table 2

Regression of Stock Price Reaction to Firm Characteristics

In order to find what characteristics of firms affect stock price reaction, the standardized cumulative average abnormal returns of firms in the current paper's sample are regressed on observable firm characteristics. (T-statistics are in parentheses)

Independent variables	Parameter estimate	t-statistic
β_0: Intercept	1.394	2.566 **
β_1: Board composition (fraction of <u>outside</u> board members)	-1.610	-3.69 ***
β_2: Board composition before CEO (fraction of outsiders hired before CEO)	-0.598	-1.99 **
β_3: Dual CEO/Chairperson indicator (= 1 if separate, = 0 otherwise)	0.341	2.25 ***
β_4: Insider ownership (percent of equity)	-0.002	-0.27
β_5: Institutional ownership (percent of equity)	0.00008	0.026
β_6: Market value of equity	-0.00007	-3.42 ***
β_7: Equity book/market	-0.535	-3.02 ***
β_8: Takeover indicator (= 1 if firm has received or rumored to receive bid, = 0 otherwise)	0.190	1.07
β_9: Classified board indicator	0.132	0.724
β_{10}: Reduction in cumulative voting indicator	-0.523	-1.70 *
β_{11}: Fair price amendment indicator	-0.093	-0.48
β_{12}: Anti-greenmail indicator	-0.054	-0.21
β_{13}: Supermajority indicator	-0.249	-0.73
β_{14}: Indicator for 1985	-0.397	-2.03 **
β_{15}: Indicator for 1986	-0.314	-1.48
β_{16}: Indicator for 1987	-0.371	-1.49
β_{17}: Indicator for 1988	-0.244	-0.98
β_{18}: Number of previously adopted provisions	0.052	0.662
β_{19}: Number of concurrently adopted provisions	0.144	0.127
Adjusted R^2		0.061

* - parameter is significantly different from zero at the 10% level, using a two-tailed test
** - parameter is significantly different from zero at the 5% level, using a two-tailed test
*** - parameter is significantly different from zero at the 1% level, using a two-tailed test