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BOARD OF DIRECTOR INVOLVEMENT IN RESTRUCTURING: THE EFFECTS OF BOARD VERSUS MANAGERIAL CONTROLS AND CHARACTERISTICS

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Board of director involvement in restructuring reveals whether restructuring is brought on as an action by the board in its central oversight role or whether managers are purusing positive strategic action or correction. Therefore, based on an integration of organization economics (agency theory and market for corporate control) and strategic management theory (internal control and strategic leadership contingencies), this research examines board involvement in restructuring. Board involvement is hypothesized to be contingent on the governance mechanisms used by the board to monitor top management, control emphasis used by managers to process strategic information and board and managerial characteristics. The basic premise of the paper is that, due to their oversight role, board members (especially outside directors) become involved in restructuring only when managerial strategy implementation appears to be deficient. Top management team equity stakes are found to be negatively related to board involvement in restructuring, while outside director ownership is found to be positively related. Emphasis on strategic controls by managers was found to be negatively related to board involvement in restructuring. Top management team tenure and top management organizational tenure are negatively related to board involvement. Outsider representation on the board is positively related to board involvement in restructuring, while board tenure was found to be unrelated. Results imply that incentives to monitor (ownership) and emphasis on strategic controls reinforced by higher top mangement team tenure result in less board involvement in restructuring. However, restructuring may be initiated by outsiders on the board when other governance and control mechanisms fail. This implies a substitution process between governance tactics (ownership vs. board monitoring) and internal controls (managerial vigilance).

In the 1980s a high percentage of large firms restructured their businesses, primarily through divestiture. A central debate in the strategic management literature is whether restructuring is required for better governance and managerial oversight by the board of directors (Hoskisson and Turk, 1990) or whether restructuring is a strategic adjustment by top managers, for instance, to reduce product diversification to an optimal level (Markides, 1992). Harrison (1987), concluded that most boards are involved in oversight of strategy and managerial monitoring rather than strategy formulation. Therefore, if the board is involved in the decision to restructure, board members likely

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perceive deficient strategic management. Furthermore, the lack of board involvement in restructuring may indicate effective managerial strategic control and, therefore, appropriate strategic restructuring by managers. Of course, these indicators may depend largely on the quality of governance and managerial control. Therefore, we examine board involvement in restructuring to focus on the governance and control issues related to restructuring actions.

For the purposes of this study, we seek to examine corporate restructurings that are more 'voluntary,' not the direct result of a takeover, tender offer, or leveraged buyout that forced the board to act. Although external pressure may create the need for managerial restructuring, outside of these situations, the board is not forced to initiate restructuring except in the cases of takeover attempts, tender offers and LBOs. By limiting the focus, we can better understand the governance, control and political conditions that motivate the board to become more involved in strategic actions (restructuring).

Because top management teams and board member characteristics may affect strategic changes such as restructuring decisions (Wiersema and Bantel, 1992), they are examined as proxies of cognitive structures of managers and board members and top management team and board processes that may affect restructuring changes. Furthermore, board and managerial characteristics can provide information on the power of managers and board members to effect strategic change such as restructuring (Finkelstein, 1992; Singh and Harianto, 1989). Thus, we also seek to ascertain how indicators for cognitive structures and power as measured by managerial and board characteristics influence board involvement in restructuring actions.

Hypotheses herein detail how managerial and board controls as well as managerial and board characteristics help explain board involvement in corporate restructuring. Although the restructuring decision is often precipitated by performance difficulties, it may also be initiated by board pressure. For instance, if primary monitoring mechanisms (ownership arrangements) fail, the board is more likely to be involved in the decision to restructure. Furthermore, board characteristics (e.g., outsider representation on the board) likely affect board involvement in the decision to restructure. However, if managers maintain strong strategic controls, the board may have less need to be involved in strategic actions such as restructuring because such control should induce managers to initiate restructuring to achieve effective continuous strategic adjustment. Also, manager equity stakes, and the heterogeneity of the top management team (e.g., position tenure, organizational tenure) may affect the need for board involvement). Thus, there is likely a substitution among ownership monitoring, board involvement and managerial control vigilance. As explained below, these alternative governance devices may substitute one for another thereby affecting the need for board involvement (positively or negatively).

BACKGROUND THEORY OF BOARD INVOLVEMENT IN RESTRUCTURING

Proponents of agency theory assume that a market for corporate control exists and becomes active when managers do not maximize shareholder wealth (i.e., when a significant agency problem exists) (Fama and Jensen, 1983). An agency problem arises because of the separation of ownership and control and indicates that managerial decisions are not aligned with those of shareholders. Agency arguments suggest that board involvement in strategic actions, such as restructurings, will occur, when performance reaches lower levels (prior to activation of the market for corporate control).[1]

If 'perfect' governance is achieved, no performance problems should result. However, the complexity of corporate governance makes it difficult to achieve the optimal mix for any one firm. Furthermore, unintended deviations from efficient actions may occur. For example, Markides (1992) recently provided evidence that an optimal level of diversification is idiosyncratic to each firm. While it may be difficult for executives to identify precisely *a priori* minor performance problems due to deviations from optimal diversification, managers using appropriate strategic control should be able to identify these problems

[1] This proposition could have been a research hypothesis and, as can be seen, is tested by the results shown in Table 3. The results are significant in all tests. However, we employ it as a control variable because we are interested in predicting potential board involvement based upon governance and control characteristics.

and take corrective actions. However, if effective governance systems (e.g., appropriate executive incentive compensation) are not in place, these deviations may become more severe motivating greater board involvement in formulating appropriate strategic action. If the board fails to act or makes ineffective decisions, the firm may become significantly undervalued in the market, prompting action in the market for corporate control. While the market for corporate control is assumed to promote shareholder value, a board generally prefers to promote firm efficiency without activating this market. Thus, board involvement should be motivated to control agency problems and promote firm efficiency in order to maintain high levels of shareholder value. However, recent research by Walsh and Kosnik (1993) found that corporate raiders (market for corporate control) often tried to acquire firms operating with above normal returns (not significantly undervalued as suggested by the theory). This suggests a potentially imperfect market for corporate control and that conceptualization in addition to agency theory may help explain board involvement in strategic restructuring actions.

Both agency theory and strategic choice approaches suggest that the top management team plays a prominent role in directing the firm. Thus, top managers may choose to restructure the firm before the board or the market for corporate control forces such actions. Williamson (1985) argues that managerial controls may substitute for other governance devices essential for monitoring managerial strategic actions in large firms. Research examining internal control theory relies on the type of information being collected and processed by corporate level managers and the board (Baysinger and Hoskisson, 1989, 1990). Subjective information on the external and internal environment based on strategic controls often is more complete than quantitative information generated by financial controls and this should be more effective in preventing performance problems. As a result, vigilant application of strategic controls may provide early identification of potential performance problems thereby allowing managers to take restructuring actions before board involvement becomes necessary.

Upper echelon theorists also envision the management team as the principal decision makers in the firm (Hambrick and Mason, 1984). The strategic importance of the top management team in a large corporation has been acknowledged in organization theory (Child, 1972). Child (1972) argued that the top executives fill a critical role in determining how the firm adapts to changes in external and internal contingencies. This strategic choice view emphasizes the role of learning and choice in the process of organizational adaptation. If the firm's top executives take appropriate actions, there is less need for the board to become involved. However, power and political processes may also play a role in the board's strategic involvement. For example, Finkelstein (1992) argues that power accrues to executives acting as agents for the stockholders and that such power determines the strength of the executive's position in the principal/agent relationship. Top executives with power are able to translate it into implicit control over board members, thus they may be able to prevent or forestall board involvement in strategic actions. Furthermore, the characteristics of the top management team and the board may influence their power, motivation to be involved and/or ability to effectively take action. Our purpose is to understand the predictors of board involvement in strategic actions in a set of restructuring firms, firms that have made significant divestitures, prior to active interference from the market for corporate control. We integrate agency, control and upper echelon theoretical perspectives to understand the determinants of board involvement (or lack thereof) in the strategic actions of restructuring firms.

HYPOTHESES

Board structure and ownership

The distinction between outside and inside directors has been judged to be critical in corporate governance. While insiders can provide more detailed information concerning firm operations, thereby enhancing the monitoring capabilities of board members (Baysinger and Hoskisson, 1990), they may be beholden to the CEO for their jobs and thus unlikely to challenge him/her in a board meeting (Patton and Baker, 1987). Outsiders, on the other hand, are expected to be more closely aligned with stockholders' interests and thus represent guardians of share-

holder wealth. As a result, the primary responsibility for the monitoring of top management rests with the outsiders, who should have the best interests of the shareholders. Given that board decisions are determined through voting, the composition of the board may influence its ratification and monitoring duties.

Research supports the assertion that outsiders are aligned with shareholder interests. Therefore, where firm performance is declining, CEO dismissal becomes more likely with more outsiders on the board (Coughlan and Schmidt, 1985; Weisbach, 1988; Warner, Watts, and Wruck, 1988). Fama and Jensen argued that 'outside directors will monitor the management that chooses them because outside directors have incentives to develop reputations in decision control' (1983: 315). Thus, managerial oversight may be largely determined by outsider representation on the board.

Outside directors focus on financial performance (as opposed to more subjective assessments by insiders) because they lack day-to-day operating knowledge of the firm. Because performance represents the principal monitoring component, they are more aligned with shareholders. Indeed, Hermalin and Weisbach (1988) found that firms add outsiders to their boards following poor performance. Outside directors may, therefore, play a major role in board involvement in strategic actions, particularly actions to restructure the firm. While inside members likely have better information than outsiders, they may be reluctant to propose changes, if they conflict with the CEO's plan. Potentially controversial decisions, (e.g., significant divestitures) are more likely to originate from outside board members. Therefore, as the ratio of outside directors to total board members increases, there is a higher probability of board involvement in strategic restructuring decisions.

Hypothesis 1: The ratio of outside board members to total board members is positively related to the likelihood of board involvement in strategic restructuring.

While outside director goals may be more aligned with shareholder interests, their motivation to become involved in the strategic direction of the firm should be heightened by equity ownership in the firm. Under normal circumstances, changes in firm performance likely have a negligible effect on outside directors' personal wealth because their compensation is rarely tied to firm performance. Thus, without significant knowledge of firm operations and effects on personal wealth, they may be less willing to act unless reductions in performance are large. However, equity ownership produces greater self interest as performance changes, may affect their wealth and thus may motivate outside directors to increase their knowledge of the firm and to become involved in important strategic decisions.

For example, Miller and Komorita (1987) found that board members with large equity holdings were likely to initiate and lead coalitions and have strong influence on board decisions. A high level of equity holdings should result in a greater degree of 'bonding' to firm outcomes and therefore an increase in strategic monitoring, as opposed to traditional oversight activity.

Hypothesis 2: Board equity holdings of outside directors are positively related to board involvement in strategic restructuring.

Managerial ownership

High managerial equity holdings should also bond managerial actions to shareholder interests (Fama and Jensen, 1983). High equity ownership by top management reduces the prospect of managerial interests diverging from those of shareholders in the case of takeovers (Turk, 1992), greenmail decisions (Dann and DeAngelo, 1983; Kosnik, 1990), and the adoption of poison pill amendments (Malatesta and Walkling, 1988). This research suggests that managers will take actions as they identify the need for restructuring, when they have a large equity stake in the firm. Therefore, because managers with higher equity stakes are willing to initiate early strategic actions when required, the board is less likely to become involved in such actions.

Hypothesis 3: Top management team equity is negatively related to board involvement in restructuring.

Internal controls

Managerial internal controls represent an alternative governance structure that may help managers

identify the need to act sooner and prevent board involvement in restructuring. Thus, an important aspect of managing a diversified firm with multiple business divisions involves the control systems utilized to evaluate managers, allocate resources, and assess performance. Hitt, Hoskisson, and Ireland (1990) described the types of control systems available to management in diversified firms. Financial controls refer to annual budgeting procedures, post performance auditing and manager incentive compensation linked to financial returns. In contrast, strategic controls describe both the quality of the relationship between corporate and business levels and the depth of understanding of business unit operations by corporate managers. Strategic controls also require more open and subjective evaluation (Gupta, 1987).

For instance, within dominant business (less diversified) firms, top management can evaluate plans, performance, and decisions of division managers using strategic criteria, because the span of management control is lower and the expertise of managers is closely aligned with the markets in which the firm competes. More diversification increases the amount of information that top management must process (Hill and Hoskisson, 1987) and eventually may lead to overreliance on financial controls to reduce information processing requirements. Emphasis on financial evaluation criteria may not allow managers to foresee the need for changes until performance has declined. This orientation may produce inertia and an overemphasis on meeting current plans as opposed to adaptation and thus make it difficult to design and initiate change. In contrast, the use of strategic controls, allows managers to identify problems and correct them on a real-time basis.

Hypothesis 4: Emphasis on strategic controls by top management is negatively related to board involvement in strategic restructuring.

Board and managerial characteristics

Research (e.g., Finkelstein and Hambrick, 1989; Hambrick and Mason, 1984; McGrath, 1984) utilizes individual and organizational demographics to gain insight into political processes and managerial decision making. Critical demographic variables in organizational change decisions include, position and organizational tenure, education, and the heterogeneity of the decision making group. These characteristics may reflect the need for and ability of the board to actively monitor top management decisions become involved in strategic decisions and affect managers' ability to implement internal controls.

Top management team tenure

Research has shown the time an individual has been associated with the firm (tenure) may be relevant to board involvement because it may affect strategic decisions made by top management tenures. Specifically, Katz (1982) found tenure to be positively related to reliance on standard practices and traditions, while Salancik (1977) found it related to conformity to values and expectations of organizational leaders. Tenure is likely to lead to more power through tradition and precedent (Pfeffer, 1983). The average tenure of a firm's top management team also is an indicator of cohesion (Michel and Hambrick, 1992). Michel and Hambrick (1992) suggest that long tenures indicate self selection whereby those who share the values and norms agree with the strategic direction of the firm. Furthermore, managers with long tenures likely have had common organizational experiences that affect the development of similar dominant logics (Prahalad and Bettis, 1986). Michel and Hambrick (1992) found long top management tenures in vertically integrated and related constrained firms, and suggested they may be indicative of clan type organizations (Ouchi, 1980) with well developed socialization systems. Finally, Wiersema and Bantel (1992) argued that long tenured top management teams were less receptive to change and less willing to take strategic risks. Thus, a longer tenured top management team is more likely to become entrenched.

While a long-tenured top management team is likely to be cohesive and entrenched (less likely to undertake strategic changes), it also is likely to have built important bases of power (Finkelstein and Hambrick, 1989). In so doing, top executives are more likely to appoint sympathetic board members, who are more likely to vote with them on strategic proposals. Furthermore, the longer a top management team remains in place, the higher the likelihood that this team

power will become institutionalized. Therefore, a long-tenured top management team may have the power to forestall board involvement and to gain board agreement to its proposed restructuring actions (likely to produce less change).

Hypothesis 5: There is a negative relationship between top management team tenure and board involvement in strategic restructuring.

These same arguments above are likely to apply to top managers with high organization tenure (not just on the top management team). That is, these managers are likely to have power relative to board members because of long standing relationships and, therefore, be entrenched. Change is also unlikely because of lower risk taking.

Hypothesis 6: There is a negative relationship between top management team organization tenure and board involvement in strategic restructuring.

Board tenure

Moreover, research suggests that boards experiencing low turnover often tolerated top management inefficiency which, in turn, led to poor performance (e.g., Vance, 1983). Therefore, a board composed of senior directors is more likely to be inertial. Highly inertial firms often respond to external threat with traditional patterns (Kiesler and Sproul, 1982; Staw, Sandelands, and Dutton, 1981). Therefore, long tenure among board members may compromise governance of top management regardless of their efficiency. Additionally, the longer a group works together the higher the social pressures within the group for conformity to group norms. Thus, board tenure is likely to be negatively related to board involvement in strategic restructuring.

Hypothesis 7: There is a negative relationship between average board tenure and board involvement in strategic restructuring.

Board tenure heterogeneity

Inertial forces are accentuated in homogeneous groups, with greater average tenure (Allen and Panian, 1982; Katz, 1982; Wagner, Pfeffer, and O'Reilly, 1984). Kosnik (1990) argued that the distribution of a board's tenure is more important for active monitoring of top management actions and interceding in those actions, if necessary, than the diversity of the outside directors' occupations. For example, boards with member tenure heterogeneity are more likely to dismiss the CEO because cohesion and allegiances are more difficult to establish and maintain (Fredrickson, Hambrick, and Baumrin, 1988). In addition, heterogeneity should reduce the possibility of groupthink and inertia (Kiesler and Sproul, 1982), thereby increasing the probability of board action. Heterogeneity should reduce social cohesion on the board that might insulate board members from external pressures or make them oblivious to internal signals of needed change (Michel and Hambrick, 1992). Wiersema and Bantel (1992) note that tenure heterogeneity produces a greater diversity of information, sources and perspectives.

Hypothesis 8: Heterogeneity in board member tenure is positively related to board involvement in strategic restructuring.

Top management team tenure heterogeneity

Heterogeneity in tenure among top management team members, however, should be related to less socially cohesive top management teams. Heterogeneous top management teams should be less entrenched and less likely to maintain the *status quo*. Heterogeneity is likely to produce differences in information knowledge and perspective (Wiersema and Bantel, 1992). Greater differentiation in a group's belief structure increases the search for information, enhances the probability of change (Dutton and Duncan, 1987; Wiersema and Bantel, 1992), and produce increased innovation (Bantel and Jackson, 1989).

Michel and Hambrick (1992) found more homogeneous tenure among top management teams of highly diversified firms. Unrelated diversified firms may be overdiversified firms (i.e., past their optimal level of diversification) (Markides, 1992; Hoskisson, Hitt, and Hill, 1991). Highly diversified firms often display agency problems where governance has been ineffective and the agents (top executives) diversified the firm in their own self interests. Additionally, executives in unrelated diversified firms are

unlikely to utilize strategic controls (Hoskisson and Hitt, 1988). Therefore, top management team heterogeneity is likely to produce more effective strategic decisions, less entrenchment, greater use of strategic controls and preclude the need for board involvement.

Hypothesis 9: Heterogeneity in top management team tenure is negatively related to board involvement in strategic restructuring.

Education

Executives' educational background provides an indication of their knowledge and skill base and thus, should affect executive decisions. For example, Hitt and Barr (1989) found that managers with higher levels of formal education made different managerial compensation decisions from those with less formal education. Furthermore, Hambrick and Mason (1984) proposed that managers' formal education level was positively related to firm innovation. Highly educated managers are more favorably predisposed toward and more likely to champion innovation. As executives' education increases, their training experiences and paradigmatic perspectives become more complete and well rounded. As a result, Hitt and Tyler (1991) proposed that the amount of education affects executives' cognitive models and thereby their strategic decisions.

Executives with higher education (e.g., B.S. vs. M.B.A.) are more likely to have a broader educational experience (e.g., undergraduate degree in engineering or liberal arts and masters degree in business). As a result, their knowledge and cognitive experience likely allows them to manage more complex situations. Thus, a top management team with higher levels of education should be more likely to use strategic controls, and forestall board involvement in major strategic decisions.

In addition, education may also affect top management team power, both expert and prestige (Finkelstein, 1992). Top management teams with more education may be perceived to have more expertise, reducing the likelihood that the board would feel it necessary to intervene in strategic decisions. The level of education may also affect prestige, particularly if the graduate degree was earned from one of the elite schools (D'Aveni, 1990). Managers' standing in the 'managerial elite' sends powerful signals to others about their personal importance (Finkelstein, 1992). As noted earlier, top management team power helps to forestall active board involvement in major strategic decisions of the firm. As a result, we expect a negative relationship between the amount of education of the top management team and board involvement in strategic restructuring.

Hypothesis 10: Education level of the top management team is negatively related to board involvement in strategic restructuring.

METHODS

Sample

The sample was drawn from Standard and Poor's COMPUSTAT II Annual Data Tape and from the COMPUSTAT Business Segment Tapes. The sampling frame consists of those firms that had undergone voluntary restructuring from 1985 to 1990, with some operations in the industrial manufacturing segment (SIC codes 2000–4000). The sample includes some firms with dominant SIC codes in mining and service sectors (all firms have some manufacturing operations).

Companies that divested multiple businesses (more than two) during 1985–90, involving at least a minimum of 10 percent of their total assets were identified as restructuring. This cutoff has been used by others examining significant strategic changes (divestitures or acquisitions) (Hoskisson and Johnson, 1992; Simmonds, 1990). Information on divestitures and restructuring was obtained from *Mergers and Acquisitions Journal, Wall Street Journal Index*, the popular press (i.e., *Fortune, Business Week*, etc.) and *Compact Disclosure*. A total of 218 firms met the specified criteria.

Only 176 firms had the necessary COMPUSTAT and Proxy information. Lack of COMPUSTAT and Proxy information combined with the number of returned surveys reduced the number of firms with all necessary data to 92.

Survey data

There have been few studies that have addressed internal control systems or board involvement in

strategic decisions. A survey instrument was developed to measure type of controls and board involvement because this information is unavailable from secondary sources. Top management team members were identified from *Standard and Poor's Directory of Corporate Affiliations* and were contacted by telephone to secure their cooperation in completing the survey because response rates can be increased significantly when verbal commitment is obtained prior to sending the survey instrument (O'Keefe and Homer, 1987).

The overall response rate for the survey was 42.2 percent (92 surveys out of 218). To check for potential nonresponse bias, analyses for all hypothesized relationships not involving survey items were conducted with the total sample of restructuring firms. Potential nonresponse bias was examined by including a dummy variable in the analyses. The dummy variable was insignificant in all models, indicating that no nonresponse bias exists in the data.

Measures

No empirical studies have examined the time period between occurrence of lower than expected performance and action by the market for corporate control. Some set of discrete events or a nontrivial inefficiency threshold must be met before a tender offer premium will be made (Williamson, 1970). Jain (1985) found that firm performance began to suffer approximately a year prior to divestiture and resulted in negative excess returns of −10.8 percent from day −360 to day −11. These findings suggest that the time between lower than expected performance and manager or board action may be relatively short. Therefore, in this study performance and other archival measures are examined for the two years prior to the announcement of restructuring.

Dependent variables

The dependent variable used in this study was the strategic board involvement (in both restructuring and acquisitions). This variable is composed of two items using a 7-point Likert scale on which high scores represent significant board pressure or involvement in the decision to restructure or acquire business units. The responses to the two items were summed to obtain a scale score.

Independent variables

Variables obtained from the COMPUSTAT tapes were averaged for the 2 years prior to restructuring, while objective data (e.g., proxy statements) were collected one year prior to restructuring. Board structure was operationalized as the ratio of outside members divided by total board size (Morck, Shleifer, and Vishny, 1989). Outside directors were identified using a procedure described by Cochran, Wood, and Jones (1985) and Gilson (1990). Outside directors were operationalized as those directors with no personal or professional relationship with the firm, other than in their capacity as directors. Insiders are managers of the firm (top management team members), and quasi-insiders are retired managers of the firm, relatives of current managers, or lawyers who serve as the firm's counsel.

Both outside director and top management team equity was obtained from proxy statements. Equity interests for top management and outside directors were operationalized as the sum of their equity holdings divided by common shares outstanding.

Internal controls used by management (and the board) to process external and internal information were measured using survey items. These survey items describe the importance of different control systems types on a 7-point Likert scale. The strategic control variable is composed of three survey items. Level of strategic control in the pre-restructuring period was measured using a survey item based on a 7-point Likert scale anchored by the labels decreased emphasis and increased emphasis relative to the post-restructuring period. The change in strategic control variable was used to adjust the measure of current emphasis on strategic control to obtain a measure of pre-restructuring emphasis. For example, if the change in strategic control suggested a stronger emphasis post-restructuring (current), the current measure was adjusted downward to more accurately reflect the pre-restructuring emphasis.[2]

[2] We conducted the analyses separately, using the current strategic control and the adjusted strategic variables. All

Demographic characteristics were collected for members of the top management team and the board of directors from the proxy statement and *Dun & Bradstreet Reference Book of Corporate Managements* for the year preceding restructuring. Top management team members were defined as the chairman, CEO, president, chief financial officer, as well as the next highest tier of managers (Wiersema and Bantel, 1992). Mean top management team tenure, organizational tenure, and board tenure represent the number of years in which individuals were a member of the top management team, employed by the firm, and served on the board of directors, respectively (Wagner *et al.*, 1984; Fredrickson, *et al.*, 1988). Top management team educational level was measured using the average number of years of education (Hitt and Tyler, 1991; Wiersema and Bantel, 1992). Both Pfeffer (1983) and Priem (1990) recommended use of the frequency distribution of the characteristic across the population, to reflect demographic homogeneity or heterogeneity. Therefore, variance in mean top management team tenure and variance in mean board tenure were operationalized as the coefficient of variation (i.e., standard deviation divided by mean board tenure) (Allison, 1978).

Control variables

We controlled for team size when examining group demographic characteristics (Wiersema and Bantel, 1992). Large groups have a greater potential for dissimilarity (Bantel and Jackson, 1989). Firm size of the firm's top management team and board size were used as controls. Previous research has shown that the log of total firm assets may influence diversification (Bettis, 1981; Montgomery, 1982), the amount of risk-taking through R&D expenditures (Baysinger and Hoskisson, 1989), and the types of internal controls used by top management to manage information flow (Hitt, *et al.*, 1990).

The level of diversification may affect restructuring (Hoskisson *et al.*, 1991) and therefore, was used as a control variable for each analysis. The entropy measure of diversification (Jacquemin and Berry, 1979; Palepu, 1985; Baysinger and Hoskisson, 1989) is commonly used to calculate the level of diversification.

$$\text{Entropy Measure (DT)} = \Sigma P_j * \ln(1/P_j)$$

where P is defined as the sales attributed to business segment j and $\ln(1/P_j)$ is the weight for each segment j (this is the logarithm of the inverse of its sales). This measure, therefore, takes into account the number of segments in which a firm operates and the relative importance of each segment in firm sales (Palepu, 1985). The entropy measure creates a continuous diversification measure from the COMPUSTAT business segment tapes and has been found to have good construct validity relative to other diversification measures (Hoskisson *et al.*, 1993).

Firm performance relative to industry performance was also a control variable. Research by Morck *et al.* (1989) and Meindl, Ehrlich, and Dukerich (1985) suggested that board members compare firm performance relative to average industry performance when evaluating managerial decisions and performance. In effect, industry performance becomes the expected level of performance against which to measure firm performance. Firm performance was operationalized as both accounting-based performance (ROA) and a market measure, Jensen's alpha. The accounting-based measure of performance was measured using average return on assets (ROA) minus industry average ROA for the 2 years prior to the onset of restructuring. Jensen's alpha is commonly used to assess firm performance relative to the market (Brown and Warner, 1980). Daily stock market returns, market index returns, and the risk-free rates were obtained from the CRSP tapes for the year preceding restructuring.

The number of previous divestitures were also used as a control variable. *Mergers and Acquisitions Journal*, the *Wall Street Journal*, and *Moody's Industrial Manual* were used to determine the number of divestitures between 1980 and the initiation of restructuring. In 1980 divestiture activity increased dramatically (Williams, Paez, and Sanders, 1988). The willingness to make divestitures may have become institutionalized and accepted by the board, thereby promoting greater board involvement in subsequent divestitures.

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results remain the same regardless of which variable was used. However, we present the results showing the adjusted strategic control variable because it is most consistent with the theoretical arguments.

Restructuring firms were further partitioned into categories reflecting activity type. Despite the large number of divestitures, many restructuring firms made limited acquisitions while some made many acquisitions during or post-restructuring. Firms were classified as downscoping if they divested businesses worth at least 10 percent of their total assets, while firms that divested 10 percent of their assets and acquired businesses worth from 3 to 10 percent of their total assets between 1986 and 1990 were classified as pursuing a mixed strategy. Dummy variables were entered into each linear regression model to control for possible differences between these types of firms. 121 firms were classified as downscoping and 97 were classified as pursuing a mixed strategy.

Reliability and validity

Principal Components analysis was utilized to generate a strategic control factor and a board strategic involvement factor. Results of a Scree test indicated two factors should be kept. A minimum eigenvalue of 1 was required before a factor was accepted. A VARIMAX rotation was employed to simplify the factor matrix. Results of the Principal Components analysis with a VARIMAX rotation are presented in Table 1. Factor 1 was labeled strategic control while the second factor was labeled board strategic involvement. Cronbach's Alpha was used to examine the reliability of the survey items comprising each factor. Results are shown in Table 1. The Alpha value of the strategic control factor was 0.72. Only two items loaded on board strategic involvement so the interitem correlation ($r = 0.75$, $p < 0.0002$) is reported.

Two different indicators were used to provide an external validity check on board strategic involvement. First, articles relating to these firms were scanned to determine board involvement. Involvement or pressure by the board of directors was assumed when board dissatisfaction with firm's performance or board intervention is explicitly reported in a major newspaper (e.g., *Wall Street Journal*) or the popular business press (e.g., *Business Week, Fortune*, etc.). This variable was coded '0' if no mention of board involvement was made and '1' if board involvement was inferred. The Spearman rank order correlation between the dummy variable and board strategic involvement was $r = 0.61$, $p < 0.0001$. The

Table 1. Results of the principle components factor analysis and interrater reliability check on survey items

	VARIMAX rotation Rotated factor pattern[1]	
	Factor 1[2]	Factor 2
Factor name	Strategic	Board strategic
Variable	controls	involvement
Face to face meetings	0.856	0.017
Informal meetings	0.891	−0.007
Subjective criteria	0.667	−0.061
Board involvement in restructuring decisions	−0.113	0.925
Board involvement in acquisition decisions	0.062	0.931
Eigenvalues	1.989	1.727
Cronbach Alpha	0.720	
Interitem correlation		0.72***[3]
Interrater reliability correlation	0.74***	0.70***

$N = 284$. $N = 62$ for the interrater reliability check, Pearson correlations are reported.
[1]Results of the Scree test suggested the use of two factors. In addition, a minimum Eigenvalue criterion was used to allow only factors with eigenvalues > 1 into the factor analysis.
[2]Underlining denotes the factor upon which survey item loaded. Factor loadings > 0.5 were considered acceptable.
[3]A Pearson correlation is reported in place of Cronbach Alpha as only two items loaded on the factor.
***$p < 0.001$).

second validity check used CEO dismissal as an indicator of board strategic involvement. This dummy variable was operationalized by using CEO dismissal as a proxy for board involvement. The dummy variable was coded '1' if the CEO was dismissed or resigned in the year immediately preceding the initiation of restructuring or during the first year of the restructuring and '0' if no change occurred. Determination of CEO dismissal was obtained from a variety of sources (e.g., *Business Week*, proxy statements, *Compact Disclosure*, *Wall Street Journal Index*). The context of CEO replacement was examined by Vancil (1987) and more recently by Cannella, Lubatkin, and Kapouch (1991). Consistent with these studies, managerial dismissal was operationalized as a change in CEO in which the CEO had no continuing ties with the firm and did not die, or retire (less than 65 years old). Articles in the popular business press or firm

publications which stated the CEO was dismissed during the restructuring period and gave a reason were considered cases of dismissal. The Spearman rank order correlation between the CEO dismissal dummy variable and board strategic involvement was $r = 0.63$, $p < 0.0001$. These results provide support for the external validity of the board involvement factor.[3]

In order to assess interrater reliability, duplicate surveys were sent to a random sample of responding firms. A total of 62 firms returned the duplicate questionnaire. The interrater reliability for use of strategic controls was $r = 0.80$, $p < 0.0001$, for the strategic control factor was 0.74 ($p < 0.0001$) and 0.76 ($p < 0.0001$) for the board strategic involvement factor. The results provide support for the reliability of these measures.

RESULTS

Table 2 presents means, standard deviations, and correlations for the dependent, independent, and control variables. As Table 2 indicates intercorrelations among independent variables were generally low thereby minimizing the problem of unstable coefficients (because of collinearity) in the linear regression models.

The results of the study are presented in Table 3. Six regression models were tested: (1) control variables only, (2) agency model, (3) internal control model, (4) power and characteristics model, (5) the full model, and (6) the full model with significant noncontrol variables only.

Model 1 regressed board strategic involvement on the control variables. Relative firm performance, previous divestitures and mean top management team size appear to explain a significant amount of variance in the dependent measure. The adjusted R^2 is 0.26.

Model 2 regressed board strategic involvement on the control variables and the equity variables varied from agency theory. Results support our hypotheses, outside director representation on the board (Hypothesis 1) and outside director equity (Hypothesis 2) are both positively related to board involvement. Top management team equity holdings are negatively related to board involvement (Hypothesis 3) as hypothesized. The adjusted R^2 is 0.48 for this (agency) model.

In Model 3 board strategic involvement is regressed on strategic controls and the control variables from Model 1. Results support Hypothesis 4 that strategic control usage is negatively related to board involvement. The adjusted R^2 for the model is 0.43.

Model 4 regressed board strategic involvement on the control variables and the power and characteristics variables. Mean top management team tenure (Hypothesis 5), mean top management team tenure (Hypothesis 6) and top management team educational level (Hypothesis 10) were statistically significant and the relationships were negative, the predicted direction. Mean board tenure (Hypothesis 7), board tenure heterogeneity (Hypothesis 8), top management team tenure heterogeneity (Hypothesis 9), were not statistically significant predictors of board involvement, providing no support for these hypotheses. The adjusted R^2 is 0.39.

Model 5, the full model, regressed board involvement on the control variables and variables from the agency model (Model 2), internal control model (Model 3), and the power and characteristics model (Model 4). All hypotheses supported in the partial models were also supported in the full model. The full model (Model 5) explains 0.67 of the variance in board strategic involvement (adjusted $R^2 = 0.58$). Signs and levels of statistical significance are generally consistent across models. Model 6 is the adjusted full model including only those variables that were significant in Model 5.

DISCUSSION

Support was found for the agency, internal controls, and power and trait perspectives. 7 of the 10 hypotheses were supported by the results.

[3] This research differs from Judge and Zeithaml (1992) in that they examined board involvement in a wide variety of situations whereas this research focused on a particular type of activity, restructuring decisions. While Judge and Zeithaml (1992) used survey and interview data from multiple parties to assess board involvement in strategic decisions their focus was much broader and less transparent than ours. It is more difficult to assess board involvement in all strategic decisions vs. their involvement in a specific type of strategic decision (e.g., restructuring). Furthermore, the data on the factor structure, internal reliability, interrater reliability and relations with objective measures provide strong support for the construct validity of our measure of board involvement in restructuring.

Table 2. Means, standard deviations, and intercorrelations for variables used in the study

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Board strategic involvement	8.37	4.40																		
2. Outside director representation	0.60	0.17	−0.28*																	
3. Outside director ownership	0.01	0.03	0.34*	0.26*																
4. Top mgmt team ownership	0.03	0.06	−0.34*	−0.46*	−0.15															
5. Strategic controls	4.61	2.04	−0.41*	−0.18†	−0.19†	0.36*														
6. Mean top mgmt team tenure	9.62	3.75	−0.19†	−0.17	−0.07	0.40*	0.29*													
7. Mean top mgmt team org. tenure	20.27	8.92	−0.26*	0.02	−0.23*	−0.07	−0.13	0.34*												
8. Mean board tenure	9.07	3.71	−0.14	−0.19†	−0.06	0.12	0.03	0.39*	0.35*											
9. Board tenure heterogeneity	0.73	0.22	−0.08	0.27*	−0.03	−0.14	−0.08	0.22*	0.17	−0.28*										
10. Top mgmt team tenure heterogeneity	0.58	0.30	0.09	0.00	−0.14	−0.08	−0.12	−0.26*	−0.01	0.15	0.18†									
11. Mean top mgmt education level	16.69	1.31	−0.18†	−0.01	0.06	0.15	0.18†	−0.24*	−0.11	−0.15	0.05	−0.12								
12. Top mgmt team size	5.01	1.72	−0.14	−0.02	−0.01	0.30*	0.07	−0.18†	0.28*	0.11	0.03	0.09	0.20*							
13. Board size	11.28	3.69	−0.08	0.20*	−0.14	−0.36*	0.00	−0.17	0.38*	−0.00	0.29*	0.02	0.27*	0.40*						
14. Firm size	6.42	1.57	0.09	0.22*	−0.18†	−0.38*	0.02	−0.07	0.40*	0.18†	0.13	0.07	0.21*	0.47*	0.69*					
15. Level of diversification	1.41	0.56	0.23*	0.41*	0.05	−0.25*	−0.22*	0.03	0.27*	0.02	0.30*	−0.04	0.09	0.13	0.41*	0.46*				
16. Relative firm performance	−0.16	7.44	−0.40*	0.03	−0.02	0.05	0.19†	0.06	0.11	0.04	0.13	−0.08	0.17	0.08	0.23*	0.16	−0.10			
17. Market performance	−0.07	0.11	−0.34*	0.03	−0.18†	−0.14	0.04	0.00	0.32*	0.04	0.14	−0.16	0.11	0.32*	0.32*	0.31*	0.06	0.51*		
18. Previous divestitures	4.43	3.34	0.30*	0.24*	−0.06	−0.29*	−0.09	−0.18†	0.37*	−0.02	0.14	0.09	0.06	0.26*	0.47*	0.40*	0.46*	−0.05	0.17	
19. Restructuring category	0.48	0.50	−0.20*	0.12	−0.07	−0.13	0.01	−0.08	−0.00	0.07	0.15	0.01	0.01	0.16	0.31*	0.15	0.24*	0.20*	0.34*	−0.01

†$p < 0.10$, *$p < 0.05$, $N = 92$.

Table 3. Results of the linear regression analysis[1]

Dependent variable: $N = 92$ Independent variables	Model 1 control variables β-estimate	Model 2 agency model β-estimate	Board Strategic Involvement Model 3 internal controls β-estimate	Model 4 power & characteristics model β-estimate	Model 5 full model β-estimate	Model 6[2] adjusted model β-estimate
Outside-director representation		0.36*			0.32*	0.31*
Outside director ownership		0.32***			0.22**	0.22**
Top management team ownership		−0.26**			−0.20*	−0.18*
Strategic controls			−0.30**		−0.22**	−0.21**
Mean top management team tenure				−0.18†	−0.17†	−0.18†
Mean top management team org. tenure				−0.35**	−0.28**	−0.30**
Mean board tenure				−0.10	−0.09	
Board tenure heterogeneity				0.07	0.16	
Top management team tenure heterogeneity				0.03	0.08	
Mean top management education level				−0.19†	−0.17†	−0.20†
Controls:[3]						
Top management team size	−0.17†	−0.21*	−0.27*	−0.10	−0.17	−0.18
Board size	−0.21	−0.22†	−0.21	−0.11	−0.10	−0.13
Firm size	0.15	0.19	0.25	0.21	0.18	0.27†
Diversification level	0.04	0.01	0.02	0.12	0.06	0.02
Relative firm performance	−0.39***	−0.40***	−0.39***	−0.32***	−0.33***	−0.33***
Previous divestitures	0.35**	0.30**	0.28*	0.34**	0.29*	0.30*
Restructuring category	−0.07	−0.06	−0.03	−0.14	−0.11	−0.13
F-Statistic	6.24***	8.90***	7.27***	5.50***	8.24***	9.79***
R-Square	0.32	0.55	0.50	0.50	0.67	0.65
Adjusted *R*-Square	0.26	0.48	0.43	0.39	0.59	0.59

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, †$p < 0.10$.

[1]β-Estimates are standardized regression coefficients.

[2]Model 6 contains variables that were significant in Model 5. Independent variables that were not significant were removed.

[3]Use of Jensen's Alpha as a control for market performance after removing relative firm performance produced similar results.

Specially, more outside board members and outside board member equity were positively related to the involvement of the board on restructuring decisions. On the other hand, top management team equity ownership, use of strategic controls, to management team tenure, top management team organization tenure, and top management team education level were all negatively related to board involvement in restructuring decisions.

These results suggest that boards with a higher proportion of outside members and outside members with equity ownership are more likely to become involved in major strategic decisions. On the other hand, when members of the top management team have equity ownership in the firm they have the power to forestall board involvement but they also have the incentive for greater monitoring and making decisions in the best interest of the stock holders. That is, because they share in the ownership of the firm, when top management team members have longer tenure on the team as well as longer tenure in the organization, they are likely to have more power which allows them to forestall board involvement. For example, this power may allow them to select outside board members and/or to build a strong positive relationship with the board. As result, they may be more effective in opposing board involvement in major strategic decisions.

Likewise, top management teams with higher levels of education may be perceived as having more expertise and considered to be a part of the 'managerial elite.' Teams that are perceived expertise and to have more prestige are likely to be better able to forestall active board involvement in major strategic decisions. Therefore, the arguments regarding the power of top management teams receive considerable support from this research.

While the results provided considerable support for the hypotheses, there were some hypotheses that did not receive support. For example, there were no relationships found between board tenure, board tenure heterogeneity, and top management team heterogeneity, in board involvement in restructuring decisions. There may be several explanations for these outcomes. First, it may be inappropriate to extend upper-echelon theory/arguments to board members. The board of directors function quite differently than top mangement teams. While a top management team meets and interacts on a regular basis, boards of directors meet only a few times a year (the most common being four times a year). Therefore, power and political processes may have less effect on board operations than in top management teams. Furthermore, tenure heterogeneity of the board may have less effects as well. Finally, neither of the two heterogeneity variables, serving as proxies for group processes, were found to affect board involvement in restructuring decisions. Above we speculated that group processes may not be important in board of directors' decisions/actions. Additionally, while top management team tenure is important (for reasons of power), tenure heterogeneity may have less effect on the processes used by top management teams. Other differences (e.g., heterogeneity of functional expertise) among the top management members may have greater effects on group decision processes.

Recent research by Judge and Zeithaml (1992) examined institutional antecedents of board involvement in strategic decisions. They found that board size, greater insider representation and higher levels of firm diversification were negatively related and firm financial performance was positively related to board involvement in strategic decisions. Our results showed a positive relationship between the proportion of outside board members and board involvement is supportive of their work. In fact, this result along with the relationships found between outside director equity ownership, top management team equity ownership and the ratio between the two and board involvement provide strong support for agency theory arguments. When there are more outside board members and they have equity ownership in the firm, the board is more likely to be involved in critical strategic decisions, such as restructuring. However, when top management has equity ownership, there is less need of board involvement, because there decisions are more likely to be in the best interest of the stockholders.

While there have been several conceptual works that argue the importance of strategic controls, and some empirical research that utilized proxies for strategic controls (e.g., Hoskisson and Hitt, 1988), this study directly measures strategic controls. Furthermore, the results support prior research arguing the importance of strategic controls. For example, we found that

when strategic controls are utilized there is a lower probability of board involvement in strategic decisions. That is, an emphasis on strategic controls increases the probability of appropriate strategic decisions (i.e., in the best interest of the stockholders), obviating the need for restructuring. Strategy controls may substitute for other forms of governance (ownership, outsider board representation, etc.)

This research represents one of the few tests of the power arguments advanced by Finkelstein and Hambrick (1989) and Finkelstein (1992). Effectively, the research showing negative relationship between top management tenure and top management team organization tenure and board involvement support arguments of greater top management team power allowing it to forestall board involvement in strategic restructuring decisions. Therefore, we concluded the results provide strong support for the power and political process arguments advanced by Finkelstein and Hambrick (1989). Furthermore, it extends the application of their power arguments to the relationship between the top management team and the board of directors.

This research has several implications. First, it suggests that the extent of board of involvement in strategic restructuring decisions can not be fully predicted by one perspective. Rather, one must integrate agency theory arguments, perspectives on internal control and arguments regarding power and political processes both within and between top management teams and board of directors in order to have an effective understanding of board involvement in such decisions. While our research focused on specific relationships, the regression models and theoretical logic suggests that the relationships are more complex. For example, when the top management team has more equity ownership, there are fewer numbers of outsider directors on the board. The results of this study suggest there is a dynamic relationship between the governance and managerial control. For instance, as top management team equity increases, the number of outside directors decreases. Outside director representation is negatively related to board equity holdings. These findings may indicate a complex interrelationship to which firms can adjust in finding their optimal governance structure. The top management team equity – outside board representation link may suggest that outside directors are brought in to increase monitoring when the top management team has a lower equity stake in the firm. That is, higher top management team equity reduces the need for board monitoring because managerial ownership bonds managerial wealth to firm outcomes. This is consistent with research by Beatty and Zajac (1990) who found firms going through an initial public offering were more likely to increase outside directors if the top management team had a small equity stake in the firm. Furthermore, top management team equity ownership is positively related to an emphasis on strategic controls. As a result, future research should probably examine a more complex model of the antecedents of board involvement in major strategic changes.

CONCLUSION

This research provides support for continued integration of both organization economics and strategic management theory to examine the relationship between governance and critical corporate strategic issues such as restructuring. This study adds to the research by showing that firm governance, internal control devices and characteristics of the top management team and the board of directors affect the extent to which the board becomes involved in such strategic actions. The study also illustrates the need to integrate top management team research with research on firm governance to develop a more complete and accurate picture of the determinants of strategic change. Specifically, this research advances theory on corporate restructuring by identifying factors that influence board involvement in restructuring.

The results of this study open avenues for more research questions on restructuring. For instance, governance, managerial control and politics may influence the decision to restructure. Future research could examine specific board actions and board decision processes during and subsequent to restructuring rather than utilize rough proxies of such processes. Similarly, process decisions are likely to affect post-restructuring changes affecting strategy, internal controls and outcomes (performance, innovation) of such changes. For instance, examination of changes and outcomes may produce answers to questions raised by this research about the governance role

of outside and inside board members and strategy and long-term performance trade-offs that may result from governance execution (Baysinger and Hoskisson, 1990). Although many firms have downscoped, some firms have also continued making acquisitions after downscoping (Hoskisson and Johnson, 1992). Research on these firms vs. those maintaining a more stable downscoped position could further our knowledge of the effects/outcomes of different restructuring approaches. In general, we need to explore how governance, internal controls, strategy and performance outcomes among post-restructured firms function in comparison to nonrestructured firms, takeover firms and in competition with firms concentrated in other countries.

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