This paper presents a model that incorporates the behavior of chief executive officers (CEOs) into an explanation of how boards of directors affect organizational outcomes. Hypotheses are tested with archival data on corporate strategy, CEO compensation, board structure, and demographics, together with data from an original survey of both CEOs and outside directors from 221 large and medium-sized U.S. corporations. The findings indicate that (1) changes in board structure that increase the board's independence from management are associated with higher levels of CEO ingratiation and persuasion behavior toward board members, and (2) such influence behaviors, in turn, serve to offset the effect of increased structural board independence on corporate strategy and CEO compensation policy. Implications for theory and research on CEO-board power and effectiveness and the larger literature on power and influence are discussed.

Over the past decade, institutional investors and other stakeholders have strongly criticized corporate boards of directors for failing to meet their perceived legal responsibility to monitor and control management decision making on behalf of shareholders (Wall Street Journal, 1995a, 1995b, 1996). Longstanding calls for board reform have emphasized specific changes in board structure thought to increase the board's ability to exercise control. Such changes include increasing the presence of outside or non-employee directors on the board, allocating board leadership to someone other than the chief executive officer (CEO), increasing demographic diversity on the board, and selecting directors who lack social or other ties to the CEO (Council of Institutional Investors, 1989; Economist, 1994). Several of these changes, including increases in the number of outsiders and changes in board leadership structure, appear to have spread somewhat among large companies in recent years (Kessner and Johnson, 1990; Heidrick & Struggles, 1996; Korn/Ferry, 1996). Moreover, descriptive surveys suggest that many companies are considering changes in board structure that are assumed to increase the board's power to protect shareholder interests (Korn/Ferry, 1996).

Academic research on boards has also focused largely on issues of board structure and control over management behavior and strategic decision making. Empirical studies in a number of disciplines, including strategic management, financial economics, and organization theory, have examined whether specific changes in board structure can influence specific outcomes, such as CEO compensation or corporate diversification, that have implications for shareholders' interests (e.g., Kesner, Victor, and Lamont, 1986; Hermelin and Weisbach, 1991; Westphal and Zajac, 1994). The theoretical basis for this research lies primarily in agency theory and secondarily in a structuralist view of power and control. According to this perspective, boards that are structurally more independent from management are better able to control management decision making on behalf of shareholders (Fama and Jensen, 1983). For instance, boards composed largely of inside directors are considered less likely than those with many outside directors to override management decisions that threaten shareholders' interests because such
directors are subordinate to and therefore dependent on the CEO.

This dominant perspective on CEO-board relationships essentially suggests that structural board independence increases the board’s overall power in its relationship with the CEO. Many studies have simply equated structural independence with board power (e.g., Zahr and Pearce, 1989), while others have discussed how CEOs exploit structural bases of power to maintain ultimate control over the board. For instance, several authors have suggested that CEOs may use their leadership position on the board to dictate the agenda of board meetings and otherwise minimize dissent (Lorsch and MacIver, 1969). Walsh and Seward (1990) discussed various mechanisms by which CEOs might exploit their structural position to avoid or bias board monitoring, including concealing negative information from the board, symbolically conforming to institutional correct procedures, and mandating passivity among directors by “advising” them that challenges to managerial preferences are inappropriate (Mace, 1971: 30). Conversely, recent empirical research has explored how structurally independent boards might limit top managers’ ability to rely on such practices to maintain control. Abrahamson and Park (1994) provided some evidence that structurally independent boards limit the concealment of negative outcomes in letters to shareholders, and Westphal and Zaheer (1994) found that structural board independence reduced the adoption of “symbolic” incentive plans that appeared to align management’s and shareholders’ interests without actually putting CEO pay at risk. Board independence is also thought to limit the CEO’s ability to mandate passivity among directors and force renegade directors to resign (Lorsch and MacIver, 1969).

While some research suggests that structural board independence may reduce the viability of concealment or overt forms of CEO influence, research investigating the relationship between board structure and the board’s overall power to protect shareholders’ interests has reported weak or negative relationships with such outcomes as firm performance (e.g., Hermalin and Weisbach, 1991; Baliga, Moyer, and Rao, 1996), the adoption of takeover defenses (Davis, 1991; Buchholtz and Ribbens, 1994), the commission of illegal acts (Kesner, Victor, and Lamont, 1986), the use of long-term incentive plans (Westphal and Zaheer, 1994), and corporate diversification (Hill and Snell, 1998; Baysinger and Hoskisson, 1990). There seems to be little consensus that increased board independence necessarily improves corporate performance (Walsh and Seward, 1990: 433).

The study presented here sought to explain why greater structural board independence may not necessarily enhance the board’s overall power in its relationship with the CEO. Existing research has considered how CEOs may adapt to the loss of structural sources of power. Greater structural board independence may prompt the CEO to use interpersonal influence tactics that significantly blunt or offset the effect of structural independence on the board’s overall power to protect shareholders. Structure and interpersonal influence behavior can provide alternative sources of power, such that individuals may rely on certain interpersonal influ-
ence tactics such as ingratiating in the absence of structural sources of power (cf. Porter, Allen, and Angle, 1981). CEOs may not respond passively to the threat of losing ultimate control over management decision making (Brehm and Brehm, 1981). There has been remarkably little investigation into the behavioral processes that mediate relationships between board structure and effectiveness, such as the interactions that occur between top managers and board members in formal or informal meetings. This study considers how interpersonal influence processes in CEO-board relationships can offset the effects of structural board independence on important organizational outcomes such as corporate diversification and CEO compensation.

**STRUCTURAL BOARD INDEPENDENCE AND CEO INTERPERSONAL INFLUENCE BEHAVIOR**

Traditional agency and legal perspectives on corporate boards generally do not address how top managers respond to the threat of greater board monitoring and control over their decision making. But losing structural sources of power as a result of greater structural board independence from management may prompt CEOs to initiate specific interpersonal influence attempts, such as ingratiating and persuasion, toward board members. As Mowday (1978) noted, individuals “compensate for [structural] disadvantages” by making greater use of interpersonal sources of influence. CEOs may be especially prone to such behavior because of their high intrinsic power motivation (Birch and Veroff, 1966; Mowday, 1978). In addition, the ambiguity and uncertainty inherent in CEOs’ performance provides ample opportunities for interpersonal influence (Pfeffer, 1981; Liden and Mitchell, 1988; Ferris and King, 1992; Westphal and Zajic, 1995). These factors may reinforce a more basic, psychological response to the threat of losing control. According to psychological reactance theory, changes that threaten to reduce individuals’ discretion over important outcomes will motivate efforts to maintain that discretion (Brehm and Brehm, 1981; Wright et al., 1992). In effect, psychological reactance is a motivational state that compels individuals to protect their freedom or discretion to realize preferred outcomes (Brockner and Elkind, 1985). In the context of CEO-board relations, the threat of losing some control over strategic decision-making outcomes should precipitate efforts by CEOs to maintain their discretion over the firm’s strategic direction, and some evidence suggests that reactance may be especially strong for managers (Brehm and Brehm, 1981). The empirical literature indicates that reactance is most likely among individuals with particularly high self-esteem, or an internal locus of control (Brockner and Elkind, 1985). To the degree that these traits are highly prevalent among top managers, psychological reactance to increased structural board independence may be especially likely. Traditional reactance theory implies that CEOs are motivated to maintain discretion for its own sake. In addition, to the extent that CEOs anticipate specific, aversive consequences from greater structural board independence, such as restructurings that enhance their employment risk (cf. Amihud and Lev, 1981) and reduce their compensation, reactance may be especially strong.
Reactance may represent a fundamental mechanism leading CEOs to compensate for the loss of structural sources of power over their boards by initiating interpersonal influence attempts toward relatively independent board members. This study examines whether increases in various structural sources of board power prompts the use of two distinct interpersonal influence tactics in CEO-board relationships: persuasion and ingratiation. The literature on interpersonal influence processes has shown that these tactics in particular may be used to compensate for structural power disadvantages (Mowday, 1978; Pfeffer, 1981; Porter, Allen, and Angle, 1981).

**Persuasion and Ingriatation**

Persuasion involves the application of reason or logic to “convince a target that the agent’s request or proposal is feasible and consistent with shared objectives” (Yuki and Tracey, 1992: 527). The use of reason and logic is central to most descriptions of persuasion in the literature. Yuki and Tracey’s (1992: 526) definition, for instance, referred to the use of “logical arguments and factual evidence” to exercise influence, and Kipnis and Schmidt (1989: 529) referred to the use of “reason and logic to gain compliance.” Thus, individuals are more likely to use persuasion in upward influence attempts when they possess more expertise than the influence target on relevant dimensions (Manwell and Schmitt, 1967). CEOs facing structural disadvantages from greater board independence may exploit their superior firm-specific expertise, or the presumption of such expertise (Lorsch and MacIver, 1969: 85; Demb and Neubauer, 1992: 72), to persuade independent board members to support their position. In effect, CEOs seek to influence directors’ views about their strategy or the need to change strategy. In attempting to persuade directors to maintain the current strategy, for instance, CEOs may defend the strategy and implicitly or explicitly blame other, less controllable factors if performance has been less than satisfactory, or they may use “enhancements” that credit the strategy for relatively good performance outcomes (Staw, McKerrow, and Puffer, 1983; Sutton and Callahan, 1987; Eselbach, 1994).

Ingratiation encompasses a set of influence tactics that serve to “increase one’s attractiveness in the eyes of (an other) person” (Kumar and Beyerslen, 1991: 619). The seminal theoretical development and laboratory research conducted by Jones (1964) and Jones and Wortman (1973) identified four different kinds of ingratiation behaviors: opinion conformity, other-enhancing communications, or flattery, self-enhancing communications, and favor doing (see also Tedeschi and Melburg, 1984; Kumar and Beverylen, 1991). Thus, impression management is an important component of ingratiation behaviors. A considerable body of research suggests that people commonly use such tactics in organizational settings to compensate for dependencies or structural disadvantages (e.g., Jones, 1964; Kipnis and Schmidt, 1988; Yuki and Falbo, 1990). For instance, Perreault and Miles (1978: 96) showed how individuals lacking personal relationships with peers or superiors relied on ingratiation tactics such as opinion conformity to “bring the unpredictable relationship under control” (see also Davis and Florquist, 1965).
Board Games

There is also some evidence that ingratiation and persuasion represent the most commonly used upward-influence styles among managers (Mowday, 1978; Kipnis and Schmidt, 1988). Research on social influence processes in organizations suggests that these tactics are generally more effective than relatively confrontational or overtly political behaviors, such as coercion or coalition building, especially from a structurally disadvantaged position (Mowday, 1978; Kipnis and Schmidt, 1988; Yukl and Tracey, 1992). According to Kelman’s (1958) theory of interpersonal influence, tactics that involve the internalization of favorable attitudes about the request or the influencer are more effective than tactics that seek compliance without changing the target’s attitudes. As Yukl and Tracey (1992) noted, in the absence of structural sources of power, more forceful or explicitly political tactics such as coercion and coalition building can engender hostility rather than support. Such tactics are more likely to “backfire” than behaviors that appeal to normative models of organizational decision making (e.g., persuasion) or that build rather than threaten interpersonal relationships (e.g., ingratiation; Eisenhardt and Bourgeois, 1988; Brass and Burkhardt, 1993). This suggests the following hypothesis:

Hypothesis 1: Greater structural board independence from management will lead to an increase in CEOs’ ingratiation and persuasion attempts.

Sources of Structural Board Independence

Structural board independence is defined by those aspects of formal position and informal social structure that can potentially reduce the extent to which directors are socially or professionally beholden to the CEO. This definition incorporates both formal and informal sources of structure in CEO-board relationships, while excluding other possible sources of power such as ownership and tenure that do not clearly indicate both structure and independence. The following discussion describes how each dimension of structural board independence could enhance the board’s power to protect shareholders in the absence of CEOs’ interpersonal influence behavior, thus suggesting why CEOs might use ingratiation or persuasion in response to change on each particular dimension.

The ratio of outside to inside directors. The portion of the board composed of outside directors (outsider ratio) represents one dimension of formal structural independence from management. While both inside and outside directors are responsible for overseeing corporate strategy, agency theory and legal perspectives on corporate boards emphasize that outsiders have the potential to evaluate strategic decision making more objectively (Brudney, 1982; Fama and Jensen, 1983; Zahra and Pearce, 1989). Since outsiders are not “beholden to CEOs for their jobs” (Fredrickson, Hambrick, and Baumrin, 1988: 262), they are potentially more willing to challenge or seriously question the CEO’s position on strategic issues (Boeker, 1992). Therefore, increases in the proportion of outsiders on the board may prompt CEOs to seek greater informal, interpersonal influence as a substitute for the structural source of power associated with having more subordinate managers (i.e., insiders) on the board.
CEO/board chairman split. Corporate governance researchers and reformers have traditionally argued that "CEO/board chair duality," in which the CEO also serves as chairman of the board, reduces the ability and/or willingness of outside directors to challenge the CEO in board meetings (Vance, 1983). By contrast, when CEOs are deprived of formal leadership over board affairs as the chair, they potentially lose the ability to formally dictate the agenda of meetings to limit board involvement (Harrison, Torres, and Kukalis, 1988; Cannella and Lubatkin, 1993; Zajac and Westphal, 1980) and may use influence attempts to compensate.

CEO-board friendship ties. The literature on power and influence suggests that structural sources of power can include both formal and informal dimensions (e.g., authority vested in one's position and social structural position) (Brass and Burkhardt, 1993), and the prevalence of friendship ties in individuals' networks is a critical variable in social structural analysis (e.g., Granovetter, 1973; Brass, 1984; McPherson, Popielarz, and Drobnic, 1992). Although little systematic empirical evidence exists regarding the prevalence or consequences of friendship ties between CEOs and other board members, several authors have suggested that such personal relationships represent a potential mechanism of co-optation (Mace, 1971; Fredrickson, Hambrick, and Baumrin, 1986; Wade, O'Reilly, and Chandratat, 1990; Pfeffer, 1992). Considerable research on social structure at lower levels of the organization has demonstrated that friendship ties with coworkers or powerful individuals have the potential to enhance one's power and influence (Brass, 1984; Pfeffer, 1992; Ibarra and Andrews, 1993). As Krackhardt and Stern (1988: 126) noted, "friendship implies trust" or the expectation of personal loyalty. Thus, the loss of friendship ties to the board might reduce CEOs' confidence that directors will refrain from publicly challenging their position on strategic issues in board meetings or backing opponents; accordingly, CEOs faced with the loss of friendship ties might seek to fill the resultant gaps in social structure with higher levels of ingratiation or persuasion to maintain support.

Demographic distance. Demographic distance between an individual and other individuals or groups is also commonly used as an indicator of the strength of social ties (i.e., strong versus weak ties), which is a critical variable in social structural analysis (Granovetter, 1973; Brown and Reingen, 1987). For instance, McPherson, Popielarz, and Drobnic (1992) examined the effects of strong versus weak ties between a focal individual and other groups using both the prevalence of friendship ties and "social distance" (i.e., demographic distance) as indicators. Demographic similarity is also thought to enhance interpersonal trust (Kanter, 1977), such that the perceived need to monitor management decision making closely could potentially be diminished when a large portion of board members have a similar demographic profile to that of the CEO (Westphal and Zajac, 1990). Several studies have shown the potential for demographic similarity to engender bias in evaluation decisions by enhancing interpersonal attraction or attitudinal compatibility (e.g., Latham, Wexley, and Pursell, 1975; Tsui and O'Reilly, 1989; Judge and Ferris, 1993); conversely, it has been suggested that
greater demographic dissimilarity between the CEO and board members has the potential to reduce bias and enhance objectivity in a board’s control over decisions, for example, as manifested by a willingness to advocate change in the CEO’s strategy (Westphal and Zapec, 1995). Thus, where demographic similarity has diminished (e.g., as more diverse directors are added to the board), CEOs may use persuasion or ingratiation tactics with these directors to maintain mutual agreement and compatibility in their relationship to the board.

The Consequences of CEO Interpersonal Influence Behavior

A growing body of research in organizational behavior has examined the consequences of interpersonal influence behavior in superior-subordinate dyads for specific human resource management and resource allocation decisions. Several studies have established a link between ingratiation or persuasion tactics and more positive performance evaluations, higher salary increases, and faster career advancement (e.g., Kipnis and Schmidt, 1988; Ferris and King, 1992; Yukl and Tracey, 1992; Ginzel, 1994). In an early laboratory study, Kipnis and Vanderveer (1971) established that flattery consistently garnered higher pay raises. More recently, field research has demonstrated how upward influence styles emphasizing ingratiation or persuasion generate higher performance evaluations for managers (Kipnis and Schmidt, 1988; Yukl and Tracey, 1992).

There is also evidence that specific ingratiation tactics such as flattery and favor doing effectively bias performance evaluations by enhancing superiors’ positive affect toward subordinates (Tsui and Barry, 1986; Wayne and Ferris, 1990). Given the well-established finding in social psychology that similarity in attitudes, values, and beliefs is directly related to mutual affect (Byrne, Clore, and Worcel), 1966; Wayne and Liden, 1995), displays of opinion conformity should also increase the superior’s liking of the subordinate. Opinion conformity is an especially subtle approach; as Jones (1964: 121) noted, “it is difficult to discriminate between conformity and genuine attitude similarity.” Whereas flattery engenders liking by openly validating the target’s competence, opinion conformity indirectly reinforces the target’s self-esteem by validating his or her attitudes (Byrne, Clore, and Worcel, 1968). Favor doing has the further benefit of invoking the universally held norm of reciprocity, which socially obligates superiors to benefit subordinates in the future (Gouldner, 1960). In fact, the mere offer to provide assistance can have a powerful effect. Kipnis and Vanderveer (1971) showed that flattery accompanied by an open-ended offer to help superiors in any way possible was particularly effective in securing more generous pay raises. In using such tactics, individuals may also give the impression that they hold valued resources, even when they actually have little structural power (Brass and Burkhardt, 1993). Thus, the prior literature on interpersonal influence would suggest that individuals can use ingratiation tactics to secure favorable outcomes when they lack structural advantages.

Ingratiation by CEOs may be especially powerful because, while persuasion exploits the CEO’s unique expertise, de
rived from firm-specific knowledge, ingratiation exploits the CEO’s status. Compliments or favors from a high-status individual such as the CEO may be particularly effective in generating positive affect. Thus, ingratiation tactics yield “a wide (and flexible) range of benefits” by engendering positive affect and securing generalized social obligations (Izard and Mitchell, 1988: 576). Although persuasion differs sharply from ingratiation in approach, it can generate a similarly broad range of benefits. While persuasion directed at a superior has the direct effect of gaining compliance on particular issues, it also has the indirect consequence of promoting more favorable evaluations of the manager’s overall competence or “effectiveness in carrying out his or her job responsibilities” (Yukl and Tracey, 1992: 330). Kipnis and Schmidt (1988) found that upward influence styles that emphasize persuasion generated higher salaries for a sample of hospital managers. This finding is consistent with Brass and Burkhardt’s (1993) suggestion that rational persuasion can enhance power independence of structural position because rational appeals give the impression of expertise.

Prior studies have also suggested that interpersonal influence processes can provide an alternative source of power to structural position, such that individuals can use ingratiation and persuasion tactics to enhance their overall power regardless of whether they hold significant structural sources of power in the organization (Porter, Allen, and Angle, 1981). Thus, for instance, people who lack hierarchical authority or friendship ties that secure the loyalty of colleagues can instead enhance their influence by using flattery, self-enhancement, or other influence tactics that engender positive affect, secure social obligations, or raise sympathy for their preferred outcomes. Accordingly, people may be able to blunt or offset the effect of structural disadvantages on their power by increasing their reliance on interpersonal influence behavior. In this context, while changes in board structure that increase the board’s independence from management might otherwise increase the board’s power to protect shareholders’ interests on issues over which CEOs and shareholders’ interests conflict (i.e., if CEOs responded passively), CEOs’ interpersonal influence attempts involving ingratiation or persuasion may effectively blunt or offset the expected benefits to shareholders from greater structural board independence. The effect of CEO ingratiation and persuasion may be especially pronounced for two important organizational outcomes in which managerial and shareholder preferences are thought to conflict: corporate diversification strategy and CEO compensation policy.

Corporate diversification strategy. According to several theoretical perspectives, including managerialist and agency theory, top managers have personal incentives to pursue corporate diversification beyond the level at which shareholder wealth is maximized (Amihud and Lev, 1981; Hill and Snell, 1986; Hoskisson, Johnson, and Moesel, 1994). From these perspectives, top managers are overinvested in the firm relative to diversified stockholders, and their jobs, reputation, and career prospects are highly dependent on the firm’s performance. Given that a major objective of unrelated diversification is to stabilize corporate earnings, diversific-
tion reduces these career risks while also stabilizing the CEO's personal income. Shareholders obviously avoid the career risks faced by the CEO, and they avoid firm-specific investment risk through portfolio diversification. Thus, shareholders should favor lower levels of diversification than managers. Coffee (1988: 83) argued that this conflict in risk preferences has a "powerful impact" on strategy.

Organization theorists have long argued that a variety of other behavioral factors lead managers to prefer diversification levels that are excessive, from the perspective of shareholders. Managers may pursue diversification simply to enhance their personal status and visibility (Marris, 1964), and evidence suggests that managers become overly attached to the acquisitions they make and overly committed to their prior decisions to expand into new businesses; moreover, this commitment is thought to extend to other insiders on the management team (Tushman and Romanelli, 1985; Haspeslagh and Jemison, 1991; Hambrick, Gelbrkanyecz, and Fredrickson, 1993). Several researchers have suggested that independent directors may help counteract management's commitment to maintain diversification (e.g., Goodstein and Boeker, 1991; Finkelstein and Hambrick, 1996). In the absence of alternative sources of CEO influence, therefore, more structurally independent boards, as relatively objective representatives of shareholders' interests, should prompt lower levels of corporate diversification (e.g., by forcing management to shed unrelated businesses).

Conversely, the use of ingratiating and persuasion tactics should help CEOs build directors' support for their strategic preferences by securing social obligations, biasing evaluations of the CEO's decision-making capabilities, and raising directors' confidence in the diversification strategy itself. Such processes should enhance the CEO's overall power even in the absence of structural sources of influence derived from formal board leadership, hierarchical position, friendship ties, or social similarity. Thus, interpersonal influence behavior should lead to smaller reductions (or larger relative increases) in diversification:

**Hypothesis 2:** CEOs' ingratiating and persuasion attempts will lead to a subsequent increase in the level of corporate diversification.

**CEO compensation.** Both economic and behavioral perspectives on corporate governance suggest that CEOs' and shareholders' preferences diverge on the level and form of CEO compensation (Tosi and Gomez-Mejia, 1989; Westphal and Zajac, 1994). External constituents depend on boards of directors to promote their interests by controlling the CEO's self-interest in higher levels of compensation, while also designing contingent compensation contracts (i.e., contracts linking pay to firm performance) that serve to align the CEO's decision-making with the preferences of shareholders (Marris, 1964; Jensen and Meckling, 1976). The provision of long-term incentives such as stock options or performance shares represents a primary mechanism by which corporate boards effect incentive alignment (Tosi and Gomez-Mejia, 1989; Kerr and Krej, 1992; Gibbs, 1993). At the same time, from a normative agency theory perspective, CEOs prefer less risk in their compensation contracts (Harris and Raviv, 1979). By making pay contingent on future firm perfor-
mance, however, long-term incentives add uncertainty to a CEO’s compensation, and, given this conflict, traditional perspectives on CEO-board relations would suggest that more structurally independent boards should not only limit the size of total CEO compensation but also promote higher levels of CEO compensation contingency (Westphal and Zajac, 1995). As in the case of corporate diversification, however, higher levels of CEO persuasion and ingratiation behaviors may effectively blunt or suppress the effect of greater structural board independence on CEO compensation.

Hypothesis 3: CEOs’ ingratiation and persuasion attempts will lead to a subsequent increase in the level of CEO compensation and a subsequent decrease in compensation contingency.

METHOD
Sample and Data Collection
The sample frame for this study consisted of 600 large- and medium-sized companies randomly selected from the Forbes 1000 index of U.S. industrial and service firms. To measure CEO upward influence behavior, I sent a questionnaire survey in April 1995 to all 600 CEOs from these companies. To permit interrater reliability assessments, I sent a separate survey to all individuals serving as outside director at one or more companies where the CEO responded (N= 1,312 directors).

To ensure the highest possible response, I took the following steps: (1) I used an in-depth pre-test (discussed below) to streamline the survey, making it easier and more appealing to complete; (2) requests for participation linked the current study with an ongoing series of surveys on top management issues conducted by a major business school (to which hundreds of their peers had responded), emphasized the need for research on CEO-board relations, and engaged respondents’ natural interest in the topic; (3) about 21 days after the initial mailing, I sent nonrespondents a second letter with a new questionnaire (Forstyth, 1977; Groves, Cuddi, and Couper, 1992; Fowler, 1993). Two hundred and sixty-three CEOs and 564 outside directors responded, representing response rates of 44 percent and 43 percent, respectively. Diversification, compensation, or demographic data were unavailable for 42 of the companies with responding CEOs, leaving a final sample of 221 CEOs.

To check for nonresponse bias, I collected archival data for companies in the larger sample frame. For the 518 companies with complete data, I examined whether respondents and nonrespondents differed significantly on the ultimate endogenous variables (diversification, CEOs’ total compensation, and compensation contingency), two of the formative indicators of structural board independence (demographic distance and the outsider ratio), and all of the control variables (return on equity, log of sales, board ownership, and CEO tenure), using the Kolmogorov-Smirnov two-sample test (Siegel and Castellan, 1988). This test assesses whether significant differences exist in the distribution of respondents and nonrespondents for a given variable, including differences in central tendency, dispersion, skewness, etc. The
results of this test provided consistent evidence across all of these variables that respondents and nonrespondents came from the same population.

Data on board structure and demographic characteristics came from the following sources: Standard and Poor’s Register of Corporations, Directors, and Executives, the Dun and Bradstreet Reference Book of Corporate Management, Who’s Who in Finance and Industry, and corporate proxy statements. I obtained compensation data from proxies and diversification data from the COMPSTAT Business Segment Database and Compact Disclosure.

Measures

To enhance the construct validity of the survey measures, I conducted a pre-test involving in-depth pilot interviews with 22 top managers and board members (cf. Fowler, 1993: 102). After completing the pilot questionnaire, each individual was asked to identify questions that were unclear, difficult to answer, or potentially subject to bias. I also used these interviews to ensure that questions were interpreted as expected, to identify improvements to the format of the survey, and to modify its length. To reduce response bias, multiple response formats were used, and items measuring each construct were scattered throughout the survey (DeVel- lis, 1991). Moreover, questions were carefully worded to minimize the likelihood of social desirability bias, using input from the pilot interviews. An objective of the survey was to capture the full range of CEO-board interaction, and when the different kinds of interactions measured in the survey are summed together, they are very highly correlated (p = .93, including CEO and director surveys) with the respondent’s assessment of the total number of CEO-board interactions.

Interpersonal influence behavior. Survey items measured the frequency of CEO persuasion attempts and ingratiation. Drawing from available qualitative research suggesting how top managers and directors describe their interactions with each other (Lorsch and Maciver, 1989; Demb and Neubauer, 1992), as well as feedback from the pilot interviews, I developed two multi-item scales. Items in the ingratiation scale were adapted from Kumar and Beyenslein’s (1991) “Measure of Ingratiatory Behaviors in Organizational Settings,” which yielded high reliability and convergent validity for a diverse sample of employees from different industries. The survey items are showed in table 1.

To assess interrater reliability, I calculated kappa coefficients for the four survey items used in both the CEO and director surveys. The sample for this analysis included companies with a responding CEO and at least one responding outside director (N = 192). Kappa is a correlation coefficient that corrects for the expected level of correlation between raters that occurs by chance. Values exceeding .75 are typically thought to indicate excellent agreement beyond chance, and values between .40 and .75 are considered indicative of fair to good agreement beyond chance (Landis and Koch, 1977; Fleiss, 1981). As shown in table 1, kappa coefficients exceed .75 for all survey items but one, and the overall kappa is .81.
### Table 1

<table>
<thead>
<tr>
<th>Items</th>
<th>Interater Agreement</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Expected</td>
<td>Kappa†</td>
<td>Lambda†</td>
</tr>
<tr>
<td>Integration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Express agreement with his/her viewpoint on a strategic issue, even when you do not completely share his/her opinion.</td>
<td>86.92%</td>
<td>24.15%</td>
<td>.83</td>
<td>.85</td>
</tr>
<tr>
<td>2. Try to make sure that he/she is aware of your accomplishments as CEO.</td>
<td>89.63%</td>
<td>22.56%</td>
<td>.96</td>
<td>.79</td>
</tr>
<tr>
<td>3. Give director advice on a personal matter.</td>
<td>77.84%</td>
<td>22.51%</td>
<td>.71</td>
<td>.86</td>
</tr>
<tr>
<td>4. Slightly exaggerate how much you rely on his/her advice to make him/her feel competent or valuable.</td>
<td>86.19%</td>
<td>23.00%</td>
<td>.85</td>
<td>.73</td>
</tr>
<tr>
<td>5. Give the director advice on a personal matter.</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Point out attitudes/opinions you have in common.</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Try to make him/her aware of your leadership ability.</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Slightly exaggerate how much you rely on his/her advice to make him/her feel competent or valuable.</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Persuasion

1. To what extent do you communicate with directors outside of meetings to help inform them about the rationale for strategic action/decision? | 87.34% | 25.39% | .83 | .78 |

2. To what extent do you engage in “pre-selling” with directors outside board meetings to build support for your strategic decisions? | 93.25% | 22.93% | .91 | .75 |

Over the last twelve months:

3. How often did you contact directors to persuade them to support your position on a strategic issue? | 84.81% | 26.73% | .79 | .72 |

4. How often did you contact individual directors to explain the rationale for a strategic decision? | 81.86% | 24.89% | .76 | .83 |

* N = 192. When multiple outside directors responded for the same company, director responses were averaged to ensure that reliability estimates were not inflated by common perspectives derived from holding the same position in the same firm. The phrasing of each survey item is taken from the CEO survey; most items were altered appropriately for the director survey. Four of the eight integration items were not included in the director survey. For purposes of comparison across items, kappas were calculated for continuous-scale items by converting them into categorical variables (e.g., divided into quantiles).† Statistics for all kappas are highly significant. Standardized lambda's are reported. All coefficients are statistically significant at alpha = .001.

---

### Change in structural board independence.

Three of the four formative indicators of structural board independence discussed above were measured with archival data, and one of the indicators (friendship ties) was measured with survey data. Demographic distance between the CEO and the board was assessed across multiple characteristics commonly used in the top management team literature to measure demographic differences: functional background, age, and educational degree type (e.g., Wiersema and Bantel, 1992; Main, O’Reilly, and Wade, 1995). To measure CEO-board demographic similarity, I first created categorical measures for functional background and educational background. Functional background was coded according to Hambrick and Mason’s (1984) classification, which distinguishes between throughput functions (i.e., operations, engineering, or research and development), output functions (i.e., marketing or sales), and peripheral functions such as finance and law (see also Chaganti and Sambharya, 1987). I followed Wiersema and Bantel’s (1992) classification for educational background, which divides education into the following categories: (1) less than a bachelor’s degree; (2) less than a master’s degree; (3) less than a doctoral degree; and (4) a doctoral degree.

572/ASQ, September 1998

Copyright © 1998. All rights reserved.
gree. Age was operationalized as a continuous variable. I then created three continuous measures of similarity by aggregating similarity measures of all CEO-director dyads. Age similarity was measured with an analog of the euclidean distance measure commonly used in research on organizational demography (O’Reilly, Caldwell, and Barnett, 1989), while similarity in functional background and education indicates the squared proportion of CEO-board member dyads in which both individuals share the same category. While it might be argued that directors with similar functional backgrounds could more easily monitor implementation of the CEO’s chosen strategy, the results presented below were substantively unaffected when I excluded functional background from the overall measure of demographic distance.

I created a composite measure of CEO-board demographic distance by summing the z-scores of all three variables and subtracting this composite from the highest value in the sample, so that higher values indicate greater demographic distance. Change in demographic distance was then calculated as the value of CEO-board demographic distance in the current year minus similarity in year t–2 (Westphal and Zajac, 1996). I chose a two-year period because changes in board membership sometimes require more than one year to achieve (when CEO tenure was less than two years, change was measured from the year of appointment). In a separate analysis, however, I observed change over a one-year period for all four measures of structural independence, and the results presented below were substantively unchanged, suggesting that the findings are robust to different change windows.

Change in the outsider ratio was calculated as the ratio of non-employee directors (i.e., directors who are not full-time employees) to total board members in the current year, minus the value in year t–2. CEO/board chairman split was a binary variable, coded as 1 if different individuals occupied the CEO and board chair positions in the current year, while the same individual held both positions in year t–2. Finally, to assess the prevalence of friendship ties between the CEO and the board, CEOs were asked to consider their personal relationships with other board members and to indicate (a) how many directors they considered to be acquaintances but not friends and (b) how many directors they considered to be friends (further questions permitted assessment of friendship ties for each of the last three years). Change in CEO/board friendship ties was then calculated as the current number of perceived friendships divided by the total number of board members, minus the value in year t–2 (survey questions assessed the number of friends on the board in prior years as well as in the current year).

One might suppose that in modeling compensation outcomes, structural independence should be measured for the compensation committee rather than for the entire board. As Westphal and Zajac (1995: 72) noted, however, Lorsch and MacVicer (1989) suggested that compensation decisions are informed by the informal or formal evaluations of top managers that occur in general board meetings. They also noted that non-committee members can influence evaluations indirectly through their informal conversations with directors.
who sit on the committee. Thus, change in structural board independence was measured at the board level.

Change in diversification and CEO compensation. I used the entropy measure of diversification, which takes into account the number of segments in which a firm operates and weights each segment according to its contribution to total sales (Palepu, 1985). It is defined as follows:

\[ \sum_{i=1}^{n} P_i \cdot \ln(1/P_i) \]

where \( P \) is the sales (dollar valued) attributed to segment \( i \) and \( \ln(1/P) \) is the weight for each segment \( i \), or the logarithm of the inverse of its sales. This measure captures not only the extent of diversity across a firm’s activities but also the relatedness of that diversity (Palepu, 1985). I also adjusted this measure for industry differences in each year by subtracting the average value for the firm’s primary industry (see Hoskisson, Johnson, and Moesel, 1994). Following Wiersema and Bantel (1992), change in diversification was then calculated as the absolute (i.e., raw) change in this measure over the subsequent two-year period, year \( t \) to year \( t+2 \). This time period is long enough to capture change in firms with more protracted decision making processes but also short enough to reflect the influence of managers and directors at time \( t \) (Wiersema and Bantel, 1992). Nevertheless, in separate analyses, I measured change over a one-year period, and the results discussed below were substantively unchanged. When CEO succession occurred before the end of the time period, change was measured to the year of departure.

The CEO’s total compensation includes base salary, short-term bonus awards, and the total value of long-term incentives granted in a given year (Crystal, 1984). Stock options were valued using the Black-Scholes (1973) method, which estimates option value based on the historical price volatility of the underlying security, and other grants (e.g., restricted stock, performance shares), etc. I were valued according to the market price at date of grant (Westphal and Zaheer, 1994). Compensation contingency was calculated as the total value of long-term incentive grants divided by total compensation. I did not include short-term bonuses in this measure because they have been shown to be susceptible to manipulation (Healy, 1985). This is the favored approach to measuring compensation contingency among compensation consultants (Crystal, 1984). I also adjusted the compensation variables for industry differences by subtracting the average value for the firm’s primary industry. Change in total compensation was then calculated as the logarithm of compensation in year \( t+2 \) minus the same measure in the current year (Kerr and Kren, 1992), and change in compensation contingency was calculated as contingency in year \( t+2 \) minus the same measure in the current year (Westphal and Zaheer, 1995). In separate analyses, change was measured over the subsequent one-year period, and the results discussed below were unchanged.

Control variables. Some researchers have suggested that stock ownership may enhance the power and activism of
outside directors (Kosnik, 1990; Hoskisson, Johnson, and Moessel, 1994). Increased director ownership may prompt 
irritation and persuasion attempts by CEOs to counteract 
the effects of greater board ownership power on diversifica-
tion and compensation. Accordingly, I included change in 
board ownership as a control variable in the model, mea-
sured as the current percentage of total common stock 
owned by outside directors minus the same value at 
time t−2.

Researchers have also suggested that, for a variety of rea-
sons, CEOs may tend to acquire influence as their tenure 
increases (e.g., Finkelstein and Hambrick, 1989; Hill and 
Phan, 1991). For instance, CEOs may develop firm-specific 
expertise over time that increases firms’ dependence on 
their leadership. Thus, CEO tenure was included as a control 
variable in the model, measured as the number of years in 
the CEO position. In separate models, tenure was measured 
as the number of years employed by the firm, as well as the 
number of years in the CEO position. Results for the hypoth-
thesized relationships were substantively unchanged.

Given evidence that firm performance predicts subsequent 
change in diversification strategy, as well as the form of 
compensation contracts, I also included return on equity as a 
control variable in the empirical model (Wiersema and Ban-
tel, 1992; Westphal and Zajac, 1994). The relationship be-
tween firm size and CEO compensation is also well estab-
lished (Hambrick and Finkelstein, 1990), and firm size could 
also reflect inertial tendencies toward greater diversification. 
Thus, I also controlled for firm size, measured as log of 
sales.

I also controlled for the possible direct effects of structural 
board independence on diversification and compensation. The 
literature on power and influence suggests that certain 
forms of influence (e.g., coercion) are less viable from a 
structurally disadvantaged position (Porter, Allen, and Angle, 
1981). Thus, structural board independence may reduce the 
CEO’s ability to use coercive tactics such as pressuring 
board members not to raise objections in formal meetings or 
forcing difficult directors to resign (Lorsch and Maclver, 
1989). There is also some evidence that structural board in-
dependence may reduce the CEO’s ability to conceal nega-
tive information about firm performance (Abrahamson and 
Park, 1994). Therefore, greater structural board indepen-
dence may still have a positive, direct effect on the board’s 
overall power to protect shareholders’ interests (i.e., when 
irritation and persuasion are held constant).

While there is some evidence for a relationship between the 
firm’s debt-to-assets ratio and diversification (Amit and 
Livnat, 1988), it is not clear why this variable would be inde-
pendently related to the use of CEO influence processes. 
Nevertheless, I conducted a separate analysis in which the 
debt-to-assets ratio was included as a control variable, and 
the results discussed below were substantively unchanged. I 
also conducted a separate analysis with the prior level of 
each organizational outcome included as a control (i.e., the 
level of diversification, CEO compensation, and compensa-
tion contingency at time t−1). Again, the results were sub-
stantially unchanged.
stantly unchanged, suggesting that the observed relationships are not somehow confounded by the prior level of diversification or compensation. Past studies using change measures for organizational outcomes have typically not controlled for the prior level, and Tsik and Smith (1984) have noted difficulties with this approach. Thus, I did not include these controls in the final model. Table 2 provides the means, standard deviations, and bivariate correlations for all firms in the final sample.

Table 2

Descriptive Statistics and Pearson Correlation Coefficients (N = 221)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D.</th>
<th>1a</th>
<th>1b</th>
<th>1c</th>
<th>1d</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Change in structural board independence</td>
<td>-0.25</td>
<td>0.69</td>
<td>-0.21</td>
<td>-0.29</td>
<td>-0.23</td>
<td>-0.26</td>
<td>-0.24</td>
<td>-0.24</td>
<td>-0.24</td>
<td>-0.24</td>
<td>-0.24</td>
<td>-0.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Percentage of independent directors</td>
<td>0.21</td>
<td>0.19</td>
<td>0.18</td>
<td>0.20</td>
<td>0.21</td>
<td>0.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Percentage of independent board members</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Percentage of independent board members</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Percentage of independent board members</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Percentage of independent board members</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Percentage of independent board members</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Percentage of independent board members</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Percentage of independent board members</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Percentage of independent board members</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Mean and S.D. reflect actual values, correlations reflect inverse values.
† The average number of questionnaire items was 1.02, with a standard deviation of 0.34. Correlations reflect all four survey items.

Analysis

I used LISREL 8 to test the hypotheses (Joreskog and Sorum, 1993). LISREL generates unbiased estimates for samples larger than 150 (Anderson and Gerbing, 1984). Compared with alternative approaches, such as OLS hierarchical regression analysis, a primary advantage of structural equation modeling is that it offers a stronger test of validity (Bollen, 1989). Whereas classical validity tests are correlational and fail to incorporate latent variables into the analysis, structural equation modeling assesses validity according to the magnitude of the direct structural relation between a latent variable and its purported indicator, allowing relationships between that indicator and other indicators and constructs to vary.

LISREL permits a two-stage approach to model fitting and assessment in which measurement properties of the model are assessed prior to considering structural relationships between constructs. In the first stage, a measurement model with all paths between latent constructs freed and allowed to vary is fitted to the sample covariance matrix. Given evidence for acceptable model fit across multiple indexes, the theoretical model is then estimated by fixing structural paths to zero where relationships are not hypothesized to exist. Although this study is concerned primarily with testing the significance of hypothesized structural relationships between constructs rather than developing a comprehensive model.

©2005 ASQ. September 1998. All rights reserved.
theoretical model of corporate diversification. I also assessed the overall fit of the theoretical model across multiple in-
dexes.

RESULTS

Table 1, above, provides confirmatory factor analysis results for the survey items. As these results show, the standard-
ized validity coefficients (lambda-betas) are highly significant for all survey items, suggesting that all of these indicators are similarly responsive to changes in the underlying constructs they are purported to measure (Bollen, 1989). Moreover, the overall chi-square for the measurement model was not sta-
tistically significant ($p = .59$), and the values of three widely used fit indexes exceeded 5.0, providing further evidence for acceptable convergent and discriminant validities. Table 3 includes structural parameter estimates for the hypothesized relationships and control paths, as well as model statistics. The results are also shown in Figure 1, which reports t-values for the significant paths. The model statistics in Table 3 indicate an excellent, overall model fit: the chi-square for the

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description of Path</th>
<th>Path Coefficient</th>
<th>t*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Change in structural board independence → ingratiation</td>
<td>4.29</td>
<td>7.62***</td>
</tr>
<tr>
<td>2</td>
<td>Change in structural board independence → persuasion</td>
<td>5.22</td>
<td>8.63***</td>
</tr>
<tr>
<td>3</td>
<td>Ingratiation → change in diversification</td>
<td>0.87</td>
<td>3.09***</td>
</tr>
<tr>
<td>4</td>
<td>Persuasion → change in diversification</td>
<td>0.75</td>
<td>2.58***</td>
</tr>
<tr>
<td>5</td>
<td>Ingratiation → change in total compensation</td>
<td>1.34</td>
<td>3.62***</td>
</tr>
<tr>
<td>6</td>
<td>Persuasion → change in total compensation</td>
<td>0.27</td>
<td>2.79***</td>
</tr>
<tr>
<td>7</td>
<td>Ingratiation → change in compensation contingency</td>
<td>-0.09</td>
<td>-0.33***</td>
</tr>
<tr>
<td>Control</td>
<td>Change in structural board independence → diversification (direct path)</td>
<td>-0.42</td>
<td>-2.26*</td>
</tr>
<tr>
<td>Control</td>
<td>Change in structural board independence → total compensation (direct path)</td>
<td>-0.51</td>
<td>-2.04*</td>
</tr>
<tr>
<td>Control</td>
<td>Change in structural board independence → comp. contingency (direct path)</td>
<td>0.44</td>
<td>1.82</td>
</tr>
<tr>
<td>Control</td>
<td>Firm sales → ingratiation</td>
<td>0.04</td>
<td>0.76</td>
</tr>
<tr>
<td>Control</td>
<td>Firm sales → persuasion</td>
<td>-0.50</td>
<td>-2.70</td>
</tr>
<tr>
<td>Control</td>
<td>Firm sales → change in diversification</td>
<td>0.57</td>
<td>2.41***</td>
</tr>
<tr>
<td>Control</td>
<td>Firm sales → change in total compensation</td>
<td>0.39</td>
<td>2.80***</td>
</tr>
<tr>
<td>Control</td>
<td>Return on equity → ingratiation</td>
<td>-0.18</td>
<td>-0.40</td>
</tr>
<tr>
<td>Control</td>
<td>Return on equity → persuasion</td>
<td>-0.16</td>
<td>-0.32</td>
</tr>
<tr>
<td>Control</td>
<td>Return on equity → change in diversification</td>
<td>0.32</td>
<td>2.11*</td>
</tr>
<tr>
<td>Control</td>
<td>Return on equity → change in total compensation</td>
<td>-0.19</td>
<td>-2.01</td>
</tr>
<tr>
<td>Control</td>
<td>Return on equity → change in compensation contingency</td>
<td>-0.24</td>
<td>-1.78</td>
</tr>
<tr>
<td>Control</td>
<td>CEO tenure → CEO ingratiation</td>
<td>-0.18</td>
<td>-2.60***</td>
</tr>
<tr>
<td>Control</td>
<td>CEO tenure → CEO persuasion</td>
<td>-0.02</td>
<td>-1.47</td>
</tr>
<tr>
<td>Control</td>
<td>CEO tenure → change in diversification (direct path)</td>
<td>0.03</td>
<td>.82</td>
</tr>
<tr>
<td>Control</td>
<td>CEO tenure → change in total compensation (direct path)</td>
<td>0.00</td>
<td>0.00*</td>
</tr>
<tr>
<td>Control</td>
<td>CEO tenure → change in compensation contingency (direct path)</td>
<td>-0.02</td>
<td>-2.40***</td>
</tr>
<tr>
<td>Control</td>
<td>Board ownership → CEO ingratiation</td>
<td>0.22</td>
<td>4.74***</td>
</tr>
<tr>
<td>Control</td>
<td>Board ownership → CEO persuasion</td>
<td>0.02</td>
<td>4.86***</td>
</tr>
<tr>
<td>Control</td>
<td>Board ownership → change in diversification (direct path)</td>
<td>-0.03</td>
<td>-2.31**</td>
</tr>
<tr>
<td>Control</td>
<td>Board ownership → change in total compensation (direct path)</td>
<td>-0.43</td>
<td>-2.01*</td>
</tr>
<tr>
<td>Control</td>
<td>Board ownership → change in compensation contingency (direct path)</td>
<td>0.03</td>
<td>1.57</td>
</tr>
</tbody>
</table>

Ch-square: 203.68
Goodness of fit index (GFI): 93
Normed fit index (NFI): 94
Comparative fit index (CFI): 96

* $p = .05$. ** $p = .01$. *** $p = .001$.
* t-values indicate the significance of the path coefficients.
structural equation model is not significant, and the fit indexes exceed .90.

The structural parameter estimates in Table 3 and Figure 1 provide strong support for hypothesis 1. More positive change in structural board independence, as determined by relative increases in the outsider ratio and CEO-board demographic distance, CEO/board chair split, and relative decreases in CEO-board friendship ties, was positively related to the level of CEO ingratiation behavior and the level of CEO persuasion attempts. The results also support hypothesis 2, which addresses the consequences of CEO influence tactics for corporate strategy. CEO persuasion and ingratiation behavior directed toward the board were both related to increased corporate diversification. The results also support hypothesis 3, on the consequences of CEO influence tactics for subsequent change in CEO compensation. CEO persuasion and ingratiation behavior are both related to a subsequent increase in CEO compensation and a subsequent decrease in CEO compensation contingency.

Thus, the results indicate that CEO ingratiation and persuasion mediate the effects of change in board structure on subsequent diversification and compensation: greater structural board independence is associated with an increase in diversification and compensation (and a decrease in compensation contingency) through higher levels of ingratiation and persuasion. The results also indicate significant direct effects of structural independence on CEO compensation. Specifically, greater structural board independence is associated

*Solid lines are for hypothesized paths and dashed lines are for control paths.

SUDAQO, September 1999
Copyright © 1999. All rights reserved.
with smaller increases in CEO compensation and larger increases in compensation contingency when the hypothesized indirect effects through ingratiation and persuasion are held constant. Overall, however, the indirect effects more than outweigh the direct effects, such that greater structural board independence leads to larger increases in diversification (0.036, r = 2.11), larger increases in the level of CEO compensation (0.061, r = 2.05), and smaller increases in compensation contingency (0.035, r = -1.96). When ingratiation and persuasion are excluded from the model, however, the model fit decreases significantly (chi-square difference = 58.63, p > .10), and the overall model fit is inadequate.

DISCUSSION

The findings of this study provide strong evidence that widely hypothesized relationships between board structure and organizational outcomes are affected significantly by interpersonal influence processes in CEO-board relationships. The findings indicate that CEOs’ interpersonal influence behavior mediates the effects of increased structural board independence on subsequent change in several different organizational outcomes. For instance, increases in structural board independence lead to larger subsequent increases in CEO compensation by increasing the level of CEO interpersonal influence behavior. As a result, even after controlling for other possible effects of structural board independence on compensation (i.e., direct effects), the overall or total effect of increased structural board independence is also positive, leading to greater subsequent increases in compensation. This pattern of results also held for change in diversification and compensation contingency. Thus, the findings challenge conventional perspectives on the determinants of board power.

Prior research has typically focused on changes in board structure that increase the board’s structural independence from management as a primary means by which the board’s power to protect shareholders can be enhanced (Ghara and Pearce, 1989). The findings of this study suggest, however, that increasing structural board independence can decrease the board’s overall power to protect shareholders by prompting CEOs to use interpersonal influence behavior as an alternative source of power. In addition, while including the mediating effects of interpersonal influence behavior in relationships between structure and diversification and compensation significantly improved the overall model fit, the causal model did not fit the data adequately when the process variables were excluded. These findings are consistent with research on power and influence in organizations, which suggests that interpersonal influence behavior can provide an alternative source of power to structural advantages (Porter, Allen, and Angle, 1981; Brass and Burkhardt, 1993).

The general finding that increasing structural board independence can reduce the board’s overall power is also consistent with social psychological perspectives on control. When CEOs lose their structural base of power over the board, they are threatened with the loss of some control over their
preferred strategy and compensation outcomes. According to reactance theory, the threat of losing control over an outcome raises the perceived attractiveness of that outcome, so that the individual’s motivation to attain it increases (Brehm and Brehm, 1981). This reactance effect has been demonstrated in many empirical studies conducted in a variety of contexts (e.g., Schwartz, 1984). In this case, the threat of losing some control over strategy and compensation may lead CEOs to develop an even stronger interest than before in maintaining diversification or in avoiding smaller increases in their compensation. This reactance effect should then manifest itself as a much higher level of ingratiation and persuasion and, to the extent those influence attempts are successful, a greater increase in diversification and compensation than would have occurred if CEOs’ preferences had not been threatened by changes in board structure. The results are also consistent with evidence that reactance could be especially strong among managers (Brehm and Brehm, 1981). The apparent success of CEOs’ ingratiation and persuasion in reversing the effects of increased structural independence on strategy and compensation is consistent with the view that CEOs possess latent expert power and prestige power from their firm-specific expertise and ties within the organization, as well as their position of leadership, and interpersonal influence behaviors serve to exploit those alternative bases of power.

Accordingly, the theoretical perspective and overall findings of this study may begin to explain why prior empirical research examining relationships between board structure and the board’s tendency to protect shareholder interests has been somewhat inconclusive (for reviews, see Walsh and Seward, 1990; Finkelstein and Hambrick, 1996). Several studies have found positive relationships between structural board independence and diversification or other strategic outcomes that favor CEOs’ preferences over shareholders’ interests (e.g., Hill and Snell, 1988; Baysinger and Hoskisson, 1988; Baysinger, Kosnik, and Turk, 1991). The present study suggests that such findings may result, in part, from the role of interpersonal influence behavior as an alternative source of CEO power.

It is important to note, however, that the total effects of the level of structural board independence on indicators of CEO power (i.e., compensation and diversification) were different from the effects of change in independence. While both independence variables were mediated by interpersonal influence behavior as hypothesized, the total effects of the level of independence on indicators of board power were positive for two of the three outcomes. This further suggests that it is the loss of independence that prompts ingratiation and persuasion. CEOs who never had high levels of structural power engage in significantly less interpersonal influence than CEOs who have recently lost such power.

The results also support the view that increased structural board independence can impede certain CEO entrenchedness behaviors (Walsh and Seward, 1990; Abrahamson and Park, 1994) but without typically reducing the CEO’s overall power. The significant direct effects of changes in board structure on organizational outcomes (i.e., when ingratiation
and persuasion are held constant may result from the inability of CEOs to rely on relatively coercive or blatant forms of influence with structurally independent boards, such as forcing difficult directors to resign (Mace, 1971). The literature on power and influence suggests that coercive forms of influence are less viable from a structurally disadvantaged position (Porter, Allen, and Angle, 1981); accordingly, the findings support the view that structural board independence can enhance the board’s overall power by impeding coercive or “hard” forms of influence if CEOs fail to adapt by using “softer” forms of influence such as ingratiation and persuasion (Barry and Shapiro, 1992). The direct effects are also consistent with prior research suggesting that structural advantages can enhance power directly without intervening behaviors (Astley and Zajac, 1991; Brass and Burkhardt, 1990). For instance, given that structural advantages held by the CEO are visible to members of the board, outside directors may quit without a fight. Conversely, in the absence of manifest sources of structural power, CEOs must rely on interpersonal influence processes to maintain support.

It is interesting to note that change in board ownership, included as a control variable in the model, was positively related to CEO ingratiation and persuasion, and the overall effects of ownership on diversification and compensation closely parallel the effects of structural board independence. Thus, while stock ownership has also been viewed as a potentially important source of power (Finkelstein, 1992), the results provide some evidence that increased stock ownership by board members may also prompt interpersonal influence behavior that effectively reduces the board’s power over organizational outcomes. In separate analyses, I also explored whether other possible sources of board power could have similar effects on interpersonal influence behavior. I developed measures of (change in) board expert power and prestige, using measures adapted from Finkelstein’s (1992) work on top management team power. These variables were generally unrelated to interpersonal influence behavior, diversification, or compensation.

The findings appear to have important normative implications for corporate governance. Institutional investors, management consultants, and corporate governance observers have all strongly advocated changes in board structure that increase the board’s independence from management, including the various structural changes examined here (Council of Institutional Investors, 1989; Lorsch and Maclver, 1989; Economist, 1994). These advocates of governance reform have tended to assume that structurally independent boards would better protect shareholder interests, without considering the potential for CEO behavior to blunt the effects of structural change. The findings of this study suggest that more attention might be devoted to reforming the processes of CEO-board interaction rather than for in addition to board structure.

The findings may indicate inherent limitations to the corporate board as a control mechanism. All supervisors face some ambiguity in evaluating the decision making and performance of their subordinates, especially at higher levels of the organization, making upward influence behaviors such as
ingratiation and persuasion more effective (Pfeffer, 1981; Liden and Mitchell, 1988; Ferris and King, 1992). As many observers have noted, however, such ambiguity is particularly great for outside directors (e.g., Mace, 1971; Mueller, 1974; Geneen, 1984). Not only do they have limited (if any) exposure to the day-to-day decision making of managers, but they also typically lack the firm-specific knowledge and/or industry knowledge possessed by insiders. Such extreme information and knowledge asymmetries provide fertile ground for interpersonal influence behavior. Differences in knowledge bases prevent effective supervision across levels of the organization (Parsons, 1960). In this case, board control of the CEO requires individuals at the institutional level of the organization (i.e., board members) to supervise individuals at the managerial level. It may be unrealistic to expect many board members to bridge this divide successfully in their monitoring activities.

More generally, process theorists have emphasized the value of developing and testing theories about the actions and interactions that link structure with strategy and performance (e.g., Fredrickson, 1983), while advocates of meso-level or macro-psychological research similarly emphasize the need for theoretical models addressing how micro-level, interpersonal behavior and other social psychological factors mediate macro-level relationships (e.g., Slav and Sutton, 1986). The present study illustrates how modeling the role of interpersonal behavior can actually change our understanding of macro-level relationships in a substantive and perhaps unexpected way. The findings suggest that theories of macro-level phenomena that incorporate micro-influence processes may lead to important contributions in future organizational research.

Several limitations of this study may also provide opportunities for future research. First, while the use of change measures for the exogenous and ultimate endogenous variables permitted relatively strong causal inference, influence tactics were measured at only one point in time. A valuable extension to this study would be to examine the effect of changes in board structure on subsequent changes in interpersonal influence processes. This may not require measuring process variables at two points in time; instead, respondents might be asked to assess change in influence processes over a recent time period. An alternative approach would involve participant observation of change in managers’ and directors’ behavior over an extended period of time following structural changes.

A second question that emerges from this study is whether board members could learn to detect and avoid biases in their monitoring behavior resulting from managerial influence tactics. While very few field studies of political influence processes have examined the potential for such learning, it might be possible to address this issue in the context of CEO-board relationships by exploring whether the effects on influence processes observed in this study are moderated by the length of time since structural board independence increased. The effectiveness of CEOs’ influence tactics might also be reduced when directors have more experience on relatively independent boards of other companies. At the
same time, it seems plausible that top managers have learned over time how to cope with increased board independence (e.g., from their experience on other boards), such that the effectiveness of greater independence as a source of board power may have diminished in recent years. If this supposition were supported by future research, it would help reconcile the findings of this study with prior research suggesting that boards did place some limits on managerial control in the 1980s (e.g., Ocasio, 1994).

While this study has examined interpersonal influence processes in boards of large and medium-sized U.S. firms, the findings may not necessarily generalize to smaller companies or firms headquartered in foreign countries. In particular, much more research is needed on how political influence styles of top managers differ across national cultures. One approach to examining cross-cultural differences in political influence behavior might involve assessing whether the growing presence of international directors on boards of U.S. companies has begun to change the norms of directors' conduct. Future research might also examine other ways in which CEOs adapt to the loss of structural sources of power. Although many power-seeking tactics can be imagined, relatively few responses have the flexibility of ingratiating and persuasion behaviors, while also remaining under the “radar screen” of external constituents. For instance, while one might suggest that another response to the loss of structural sources of power could involve attempts to build friendship ties with the board, this approach may be less viable given that external constituents have focused explicitly on decreasing friendship ties as a way to enhance the board’s independence (e.g., Council of Institutional Investors, 1989; Pozen, 1994).

Research is also needed on behavioral processes that enhance board effectiveness and the structural context in which effective processes can develop. For instance, while attempts to increase board control through increases in structural board independence can encourage political behavior, lower board independence may foster cooperation between CEOs and outside directors, as CEOs view the board as an ally and trusted consultant in the strategic decision-making process, rather than as a group of outsiders who threaten managerial control (Westphal, 1999). Increased board independence may have a variety of negative effects on strategic decision making by reducing positive, cooperative interactions between top managers and outside directors. For instance, cooperation between CEOs and outside directors who serve as top managers of other firms may provide an important means of identifying opportunities for strategic collaboration, while also developing the trust between leaders necessary for the formation of alliances, so that greater board independence may reduce the likelihood of identifying and pursuing opportunities for successful strategic alliances with other firms. Thus, the greater board independence advocated by institutional investors and other critics of corporate governance may have unexpected, adverse effects not only on diversification strategy and compensation policy, but also on the development of successful cooperative strategies. Models of corporate governance must be ex-
REFERENCES

Abrahamson, Eric, and Choielen
Park
1994 "Consequentialism of negative or-
ganizational outcomes: An agency theory perspective." Academy of Management

Amihud, Yakov, and Baruch Lev
1981 "Risk reduction as a manage-
ment motive for conglomerate mergers." Bell Journal of Eco-
nomics, 12: 605–617.

Amit, Raphael, and Joshua Livnat
1988 "Diversification and the in-
herent trade-off." Academy of

Anderson, James, and David W.
Gerbing
1984 "The effects of sampling error
on convergence, misper sol-
tions and goodness-of-fit
in confirmatory factor analy-

Astley, W. Graham, and Edward J.
Zajen
1991 "Intraorganizational power and
organizational design: Recon-
ciling rational and coalitional
models of organization." Orga-
nization Science, 4: 399–411.

Belga, R.A., R. Charles Moyer,
and Rameesh S. Rao
1995 "CEO duality and firm perfor-
mance: What’s the fuss?" Strategic Management
Journ-
al, 17: 41–63.

Barry, Bruce, and Debra L.
Shapiro
1994 "Influence tactics in combina-
tion: The interactive effects of soft
versus hard tactics and rela-

Beysinger, Barry, and Robert E.
Hoskisson
1990 "The composition of boards of
directors and strategic control
Effects on corporate strat-
egy." Academy of Manage-

Beysinger, Barry D., Rita D.
Kosnick, and Thomas A. Turk
1991 "Effects of board and owner-
ship structure on corporate R&D strategy." Academy of Management

Birch, David, and Joseph Veroff

Black, Fischer, and Myron Scholes
1973 "The pricing of options and
corporate liabilities." Journal of
Political Economy, 81: 637–
659.

Boeker, Warren
1992 "Power and managerial dis-
misal: Scapegoating at the top." Administrative Science
Quarterly, 37: 400–421.

Bollen, Kenneth A.
1989 Structural Equations with Lat-
tent Variables. New York:
Wiley.

Brass, Daniel J.
1984 "Being in the right place: A
structural analysis of individual
influence in an organization." Administrative Science

Brezis, Daniel J., and Marlene E.
Burkhardt
1990 "Potential power and power
use: An investigation of struc-
ture and behavior." Academy of

Breton, Jack W., and Sharon S.
Brahm
1981 Psychological Reseaon. New
York: Wiley.

Brokner, Joel, and Melissa Eldri
1989 "Self-esteem and reactance:
Further evidence of attitudinal
and motivational conse-
quences." Journal of Experi-

Brown, Jacqueline Johnson, and
Peter H. Reingen
1987 "Social ties and word-of-
mouth referral behavior." Journal of Consumer Re-
search, 14: 350–362.

Brudney, Victor
1982 "The independent director—
Newbury city at Potemkin vil-

Buchholz, Ann K., and Barbara A.
Ribbens
1994 "Role of chief executive offic-
ers in takeover resistance:
Effects of CEO incentives and individual characteristics." Academy of Management

Byrne, Donn, Gerald L. Clore, and
Philip Worcel
1966 "The effect of economic sim-
ilarity-dissimilarity as determi-
nants of attraction." Journal of Personality and Social Psy-
chology, 4: 220–224.

Cannella, Albert A., Jr., and
Michael Lubasen
1993 "Succession as a sociopolitical
process: Internal impediments to

Chaganti, Rajeswarara, and
Raksh Sambharya
1987 "Strategic orientation and
characteristics of upper man-
gerdom." Strategic Manage-
ment Journal, 8: 553–561.

Coffee, John C.
1986 "Shareholders versus manag-
ers: The strain in the corpo-
rate web." In John C. Coffee, Louis Lowenstein, and Susan Rose-Ackerman (eds.),
Oxford University Press.

Council of Institutional Investors
1989 Shareholder Bill of Rights.

Crystal, Geof S.
1984 Questions and Answers on
Executive Compensation. Englewood Cliffs, N.J.: Prent-
iss

Davis, Gerald F.
1991 "Agents without principles? The spread of the poison pill
through the intercorporate
network." Administrative Scien
tce Quarterly, 36: 583–613.

Davies, K. E., and C. O. Florent
1965 "Perceived threat and depen-
dence as determinants of tac-
tical usage of opinion con-
formity." Journal of Experi-

Demb, Aida, and F. Friedrich Neubauer
1996 The Corporate Board: Con-
fronting the Paradigm. Ox-
ford University Press.

Del Ventis, Robert F.
1991 Scale Development: Theory
and Applications. Nabrury
Board Games

Poe, Robert C.

Schweiz, Norbert

Siegel, Sidney, and N. John Castellan, Jr.

Staw, Barry M., Pamela J. McKeechien, and Sheila M. Puffer

Staw, Barry M., and Robert I. Sutton

Sutton, Robert I., and Anita L. Cadwallader

Tedeschi, James T., and Valerie Heffner

Tisak, John, and Carla S. Smith

Tosi, Henry L., and Luis R. Gomez-Mejia

Tsui, Anne S., and Bruce Barry

Tsui, Anne S., and Charles A. O'Reilly, III

Tushman, Michael L., and Elaine Romanelli

Vanbe, Stanley C.

Wade, James B., Charles A. O'Reilly, III, and Ike Chandrasekhar

Wall Street Journal
1995a "Despite poor returns, Champion's chairman hangs on for 21 years." October 31: A1, A5.


"Corporate governance's sorry history." April 18, C1.

Walsh, James P., and James K. Seward

Wayne, Sandy J., and Gerald R. Ferris

Wayne, Sandy J., and Robert C. Liden

Westphal, James D.

Westphal, James D., and Edward J. Zajac


Wiersma, Margarethe F., and Karen A. Baintel

Wright, Rex A., Virginia G. Wadley, Maria Danner, and Priscilla N. Phillips

Yuki, Gary, and Cecelia M. Faltbe

Yuki, Gary, and J. Bruce Tracey

Zahra, Shaker A., and John A. Patel

Zajac, Edward J., and James D. Westphal
1996 "Who is the winner? How CEO board preferences and power affect the choice of new CEOs." Academy of Management Journal, 39: 64-90.