

Turbulence at the Top: Antecedents of Key Executive Dismissal

Gay Hatfield*

University of Mississippi

Dan L. Worrell

University of Texas at Arlington

Wallace N. Davidson III*

Southern Illinois University

Eugene Bland

University of Mississippi

This study investigates the influence of prior firm performance, board of director characteristics, stockholder diffusion, firm size, and firm age on key executive dismissals over the 25-year period, 1963-1987. Comparing a sample of 54 firms with publicly announced forced dismissals to a matched set of firms that experienced no turnover, we find that the firings of key executives were preceded by poor prior financial performance as measured by earnings per share. In addition, we find that it was more likely for a firm to fire its key executive when a smaller proportion of directors were officers of the firm and when the board of directors had a large number of members.

Introduction

Because key executive dismissal events are often played out in the media and serve as public signals of major organizational turning points, these events hold a special fascination for practitioners and scholars alike. The GM board coup, in particular, was a major symbolic event in the history of corporate governance. Not only has it precipitated other revolts by boards, but it has also pointed to the need to develop additional theory about what causes boards to wake up and take the hard actions. The stunning shake-up at GM has given a whole new meaning to the famous remark made by the late General Motors chairman, Charles E. Wilson, "what is good for General

* Our thanks to Earl Zeligman and participants at the 1993 FMA session that provided helpful comments.

Motors is good for the country, and what's good for the country is good for General Motors" (Dobrzynski, 1992).

In this study we reexamine the antecedents of key executive dismissal. While this topic has been researched previously, we extend this research by limiting our study to those firms that specifically state that they are firing a key executive. Prior research has not used as specific a definition for executive dismissal. To be included in our sample the story in the press about the executive's departure had to have mentioned the word "fired" or "dismissed." By comparing this sample of firms that fired an executive to a matched sample that did not, we find that a firing generally requires both motive and opportunity. The motive appears to be poor financial performance, and the opportunity is the presence of a large number of outside directors with some potential pressure from debtholders. By using a more strict definition of firing than used previously and by reporting somewhat similar results as in past research, we confirm the findings of these earlier studies and show that they were not the result of misspecifying the definition of key executive dismissal.

Research Issues

Kesner and Sebor (1994, p. 366) in their review of over 30 years of succession research urge researchers to "continue their efforts to identify how the various succession variables fit together and where gaps in the literature exist." Rather than viewing succession in general, we focus on those events where a CEO was specifically dismissed. We pursue this line of research because top management ousters are a unique form of involuntary turnover whose antecedents likely differ from those of other involuntary separations, such as mandatory retirements (Friedman and Singh, 1989) and death (Worrell, Davidson, Chandy, and Garrison, 1986). Most prior research investigating top management change, however, has treated turnover as a general phenomenon, and only some researchers have attempted to model the variety of reasons of key executive change. Separating them should make it easier to develop viable theory and should improve academic understanding of the overall process (Worrell, Davidson, and Glascock, 1993). In the case of key executive dismissals, the board of directors presumably acts to correct a suboptimal match between top management behavior and the needs of the firm (Furtado and Karan, 1990). A dismissal exists when the departure is initiated by the firm, is not part of a formal policy such as in statutory retirement, and is against the executive's will. The principal objective of this study is to provide data concerning the major antecedents of key executive dismissal and to interface prior research in the finance and management literature.

For a key executive to be fired, several underlying conditions may be necessary. It is important to recognize that a firm's board of directors is elected by shareholders to represent the owners of the firm, among other things. The board is generally responsible for promoting or hiring the CEO and other key executives. The board is also responsible for removing a key executive who does not provide the results

expected by shareholders. As long as the board members have the ability to remove the management, they have what Mizruchi (1983) referred to as "bottom line control."

Denis and Denis (1995) compare forced departures to ordinary retirements of top executives and find that, on average, poor performance preceded forced departures but not ordinary retirements. Our study is similar to theirs, but we extend their findings by comparing the performance of firms that fired a CEO to the performance of firms in the same industry that did not experience top management change.

Firm Performance

Boards typically do not simply fire someone based on a whim. Rather, some difficulty exists that causes a board to act and to fire a key executive. This problem provides the motive for the dismissal. Consistent with previous empirical research (Boeker, 1992; Coughlan and Schmidt, 1985; Denis and Denis, 1995; Gilson, 1989; Puffer and Weintrop, 1991; Schwartz and Menon, 1985; Warner, Watts, and Wruck, 1988) we suggest that it is likely that the problem most often relates to poor prior firm financial performance. Denis and Denis (1995), for example, find that forced departures of top executives are generally preceded by deteriorating financial performance as measured by operating income before depreciation return on assets.

This is not to suggest, however, that other types of problems may not occur that also push a board to fire a key executive. Other actionable offenses, however, when coupled with low firm performance, may assume more importance. Such offenses also may be overlooked when prior financial performance is good. Thus, prior financial performance may be the most single important variable that a board considers when deliberating a firing decision, and it is the sole actionable offense that we examine in this study.

When the firm performs poorly, shareholders do not receive the return that is necessary to compensate them for the risk of their investment. That a board would recognize the existence of the performance problem and act to fire a top executive is consistent with both agency theory and the rational adaptation view of organizational change. Under agency theory, dismissals of top managers by boards are crucial internal mechanisms of corporate control (Alchian and Demsetz, 1980; Eisenhardt, 1989; Fama, 1980; Jensen and Meckling, 1976; Manne, 1965; Walsh and Seward, 1990). Weisbach (1988: 431) notes that "the board is the shareholders' first line of defense against incompetent management; in extreme cases, it will replace an errant chief executive officer." Warner, Watts, and Wruck (1988:465) assert that "termination of a top manager's employment is more likely to be a response to poor management performance than are management changes in general."

Under the rational or adaptive view (Pfeffer and Salancik, 1978; Salancik and Pfeffer, 1980) changes in key executives are important adaptation mechanisms that firms employ to better align resources with environmental challenges. By firing a key executive, firms are forcing this realignment on themselves. Friedman and Singh (1989,

p. 720) state that "when a firm's management fails to achieve shareholders' objectives, one board recourse is to replace management, an action signaling that the board is fulfilling its obligation to effect strategic redirection, or adaptation, in the interests of shareholders." Our first hypothesis¹ is:

Hypothesis 1: Poor prior performance increases the probability of key executive firings.

There is considerable recent research that supports hypothesis 1 (e.g., Coughlan and Schmidt, 1985; Furtado and Rozeff, 1987; Warner, Watts and Wruck, 1988; Weisbach, 1988; Denis and Denis, 1995; Denis, Denis and Sarin, 1997; and Parrino, 1997). Much of this research documents the relationship between prior performance and turnover in general. Denis and Denis (1995), however, demonstrate this relationship between prior performance and forced turnover, but they use a broader definition of forced turnover. Our tests examine this relationship for firms that specifically state they fire a CEO.

Board's Power to Act

Although there is substantial evidence that boards do not tolerate poor financial performance, there is not total agreement on a negative relationship between firm performance and key executive turnover. Performance alone often explains only a modest amount of the variance in turnover rates (Denis and Denis, 1995; Gamson and Scotch, 1964; Mizruchi, 1983; Samuelson, Galbraith, and McGuire, 1985; Salancik and Pfeffer, 1980; Warner *et al.*, 1988). These findings may be due in part to the type of performance indicators used (Puffer and Weintrop, 1991). Thus, it may be that forces in addition to performance play important roles in key executive dismissals. Primary among these are a board's power and its ability to act.

Following the recognition of an actionable offense such as low firm performance, a board would also need the willingness to act before a dismissal would occur. For example, a board dominated by insiders (those same insiders who are part of the team that is not performing well) may not be willing to act in the best interests of shareholders. In this case, the poor performance may continue without disciplinary action. When a board is not dominated by the insiders and instead has outsiders that want to represent the shareholders, however, then disciplinary action such as key executive dismissal may follow the poor performance. Here, the board would have greater power to act.² Their willingness to act may also be important. Farrell and Whidbee (1997) show that outside directors that remove poorly performing CEOs incur

¹ In our study we begin with a sample of key executive dismissals that is contrasted with a matching sample of nondismissals. We examine prior firm performance. This differs from the research of others such as Boeker (1992) who began with poor performance and then looked for executive dismissals and other interactions with poor firm performance.

² We examine two board characteristics that may reflect a board's power to act: board composition and board size.

larger increases in compensation than those that do not participate in forced CEO turnover.

Board Composition

When outsiders (non-employees) that have no affiliation with the firm control the board, the board is more likely to be independent of management. Several authors have argued the advantages of outsiders on boards (Schoorman, Bazerman, and Atkin, 1981, Baysinger and Butler, 1985; and Rosenstein and Wyatt, 1990). Lee *et al.* (1992) find that unaffiliated outsiders protect shareholder interests in management buyouts of corporations, and Byrd and Hickman (1992) find that bidding firms in completed tender offers are more likely to have profitable acquisitions when unaffiliated outsiders dominate a board.

Boards also may play a role when a CEO must be fired because the board holds the formal authority to discipline key executives (Fama and Jensen, 1983), and a board's composition may influence the likelihood of dismissal. For example, Weisbach (1988) finds a strong association between prior performance and the likelihood of turnover in firms with outsider-dominated boards, but the relationship is not as strong when insiders dominate the board. Hermalin and Weisbach (1989) maintain that poor performance often necessitates the choosing of outsiders to fill board vacancies. In addition, Boeker (1992), in a study of 67 semiconductor producers in the Silicon Valley area of California, reports that during periods of below-average performance, chief executives were less likely to be replaced in firms whose boards included greater proportions of inside members. On the other hand, Denis and Denis (1995) argue that forced resignations are due more often to external factors "than to normal board monitoring" (p. 1029). Thus, the relationship between board composition and the board's willingness/ability to discipline managers remains an empirical question.

Board Size

The number of directors on a board may influence corporate policy, in general, or the decision to fire a CEO, in particular. With a small board interpersonal ties may be stronger. If these ties include the firm's managers, they may serve to protect a manager, even one performing poorly. With a larger board, there may be less chance that managers can have close, personal ties to all members. This may free the outside members to make decisions in the interests of shareholders. Furthermore, with a large board, there is less chance that a handful of inside members can dominate. Outsiders may be more willing to support an extreme solution such as firing the poorly performing CEO. An individual member of a large board may be willing to resist managerial domination. A large board is more likely to have heterogeneous members that can support different, perhaps even extreme, objectives.

The issue of board size has also received considerable attention. Zahra and Pearce (1989) indicate that large boards are more likely to contain members with expertise

which makes insider domination (particularly that of the CEO) less likely. Zahra and Stanton (1988) find larger boards to be conducive to good performance, and Rosenstein (1987) has similar findings. Chaganti, Manajan, and Sharma (1985) find that failing firms tend to have smaller boards than non-failed firms do. Clendenin (1972) notes that large firms may be “unmanageable” due to lessened cohesiveness, and Helmich (1980) finds that, in unsuccessful firms, increases in board size increase CEO turnover in chemical companies. The results from prior research on board size, however, do not have unanimous agreement. Yermack (1996) finds that firms with smaller boards are valued more highly by the market. This result was robust across industries, firm size, and other controls. These differences in findings make board size a relevant empirical question. We propose the following second hypothesis.

Hypothesis 2: A larger board of directors and a large proportion of outsiders on a board will increase the likelihood of key executive dismissal.

Stakeholder Pressure

Even if a board is aware of an actionable offense such as poor prior performance and has the power to act, it does not guarantee that it will. As noted by Michael Jensen, “these (board members) are highly indulgent, highly professional, well-intentioned people, but they don’t have proper incentives to take hard actions” (Magnet, 1992, p. 86). While this necessary motivation to move the board to act can come from stakeholders other than shareholders (for example, through consumers in the form of boycotts or employees through strikes), we limit our examination of prominent stakeholder group to debt holders.

When the internal control mechanism of the board functions imperfectly, forces outside the firm may be needed to prod necessary changes in management (Coughlan and Schmidt, 1985). In the 1980s, if boards failed to discipline managers, takeovers often did. Jensen and Ruback (1983) show that mergers, regulations, and takeovers often serve as a beneficial management-discipline mechanism providing managers who value their jobs with incentives to increase shareholder wealth. Greenmail and antitakeover devices pushed by executives as takeovers raged, however, may have lessened the disciplining ability of the takeover market. It is into this disciplinary vacuum that the shareholder has stepped.

In the past when investors were upset with the way a firm was performing, they often simply sold their holdings. Institutional investors today, however, often must be more proactive in their relationships with corporations. Pound has asserted that institutions are ideally suited to play this role “because they’re large, they’re diversified, they have pressure to realize returns and yet at the same time, they have an intrinsic level of distance and conservatism” (Pound, 1993, p. 53).

One prominent group of stakeholders that can pressure a firm into a top management change is debt holders. Gilson (1989) finds that lenders often initiate management changes. We argue that when a firm’s debt-to-equity ratio grows (as a

result of either increased debt financing or as a result of losses that reduce net worth), lenders will pressure for top management changes. Thus:

Hypothesis 3: When a firm's debt to equity ratio is large it is more likely that a firing of a key executives will occur

Stockholder Diffusion

In addition to the board members who have direct oversight of top management, it is the owners of the firm who ultimately bear the effects of key executive stewardship. If the ownership of the firm is dispersed, however, the ability of owners to discipline top managers may be limited (Berle and Means, 1932). Dispersed owners, with minimal ownership of shares, may be unwilling and/or unable to monitor managers (Demsetz and Lehn, 1985). A large number of stockholders may indicate a diffusion of power that lessens the owners' ability to align ownership and control. Thus:

Hypothesis 4: When a firm has a small number of stockholders, it is more likely that the firing of key executives will occur.

Contextual Forces

We propose that three primary things are necessary before a CEO is fired. First, there must be a problem with the CEO, and this problem will most likely be related to the financial performance of the firm during the CEO's tenure. Second, the board must have the power and willingness to make a change. Third, the board must have the incentive to force the change. Without these three elements, it will be less likely that a key executive will be dismissed.

In addition, it is also likely that other contextual forces will play a role in the decision to fire a key executive. Fredrickson, Hambrick, and Baumrin (1988), for example, further argue that sociopolitical forces dealing with interpersonal relations, coalitions, and power can moderate the performance-dismissal link. They assert that boards "also act out of self-interests (e.g., concern for friendship, their image, wealth, and reputation) when deciding to dismiss or retain a CEO" (Fredrickson, *et al.*, 1988, pp. 256-257). Because it would be extremely difficult to gain board participation due to the sensitive nature of the data and because of the likelihood of substantial response bias and measurement error, however, they recommend the use of "objective measures from readily available sources" to serve as determinants of the sociopolitical constructs. As suggested by Fredrickson *et al.* (1988), we control for two of these in this study: firm size and firm age.

Firm Size

Large firms may be more "immune" to executive change effects (Reinganum, 1985). They tend to be more formalized (Grusky, 1961), decentralized (Scott, 1981), to have larger replacement pools of talent within the firm from which to draw (Pfeffer and Moore, 1980), and to have greater key executive visibility and competition

(Harrison, Torres, and Kukalis, 1988). These conditions likely combine to make turnover less disruptive. It may be more likely that when key executive dismissals occur, the firm will be larger. To control for this effect, we include firm size in our model.³

Firm Age

Effects attributed to larger firms may also be true for older ones, although firm age may have distinctive effects (Fredrickson, *et al.*, 1988). Available talent pools and work-related experiences tend to accumulate as organizations age (Helmich, 1975). Carroll (1984) reports that after their founders resigned, younger newspaper firms had a higher likelihood of failure. Both the Helmich (1975) and Carroll (1984) studies focus on individual industries, and the results may not be generalizable. Key executives' power and abilities in avoiding dismissals are likely greatest in younger organizations (Fredrickson, *et al.* 1988). It may be more likely that when key executive dismissals occur, the firm will be older. Therefore, we also control for firm age in the analysis.

Methods

Sample

Our sample consists of key executives who were fired between 1963 and 1987 (a period of 25 years). We collected the sample by examining each issue of the *Wall Street Journal* every day over this 25-year period to locate articles that had announcements of key executive firings.⁴ In this study, a *key executive* is defined as either a corporate president or a chief executive officer. We do not include officers of subsidiary firms; therefore, all key executives in our sample belong to the parent firm.

We construct our sample with strict definitions of what constitutes a firing or dismissal. At times, an executive is allowed to save face by announcing that he is retiring or resigning when his departure is forced. Because it can be difficult to document which is a firing or a legitimate resignation (or retirement), we include executives in our sample only when the *Wall Street Journal* announcement contained the words "fired," "asked to resign," or "dismissed." For the 25-year period our overall sample includes 54 firms that fired a key executive. Our sample is not as large as it would be with a looser definition. But with our sample, we do not have to distinguish between firings where the executive is allowed to save face by retiring and true retirements. Denis and Denis (1995) also point out the difficulty in determining whether

³ In our sample, the firms all traded on either NASDAQ, AMEX, or NYSE, and no key executive held a significant ownership position of 5 percent or more of the firm's stock.

⁴ The distribution of the sample across years is as follows: 1963 = 1, 1964 = 1, 1965 to 1969 = 0, 1970 = 6, 1971 = 0, 1972 = 1, 1973 = 2, 1974 = 1, 1975 = 6, 1976 = 2, 1977 = 5, 1978 = 8, 1979 = 3, 1980 = 3, 1981 = 0, 1982 = 4, 1983 = 2, 1984 = 4, 1985 = 1, 1986 = 4.

a CEO was fired or if there was a face-saving retirement. In our sample, the executives were explicitly fired, and no face saving occurred.

The data for the study were obtained from Standard & Poor's Industrial COMPUSTAT tapes, 10K reports, and the annual volumes of *Moody's Industrial Manual* and *Moody's Transportation Manual* between 1963 and 1987.

Our statistical techniques require a matching sample. The control sample includes an equal number of firms that did not fire a key executive for two years on either side of the sample firm's year 0. We examine the key executive positions for each firm in the control sample to verify that there was no executive turnover the year, or for two years before or after, the sample firm's firing date. We match these firms by industry, asset size, and year. Matching to a firm in the same industry is important. Results in Parrino (1997) show that the likelihood of forced turnover is industry dependent. We obtain a list of firms in the same three-digit SIC codes as the sample firms' primary SIC codes. Four-digit SIC codes did not yield a sufficient number of matched firms. From this list we select the firm that had the asset size (book value of assets) that was the closest to the sample firm's asset size in the year that the firing occurred. The average difference in total assets is \$286,593, and no matching firm varies by more than 50 percent from the sample firm. The final sample includes 54 firms who fired a key executive and 54 matching firms that did not.

Measures

Our variable selection and description correspond with the previously detailed hypotheses and the two contextual control variables. Definitions and classifications of all our variables appear in Table 1.

Prior Performance

Our first hypothesis relates the likelihood of poor prior financial performance to the firing sample. We use multiple measures of prior performance in the study. The first measure is return on assets (ROA).⁵ We expect this ratio to be lower for the fired sample for declining ROA is a negative measure. We also use the firm's earnings per share and dividends per share. Earnings per share and dividends per share translate earnings of the firm and dividends paid into per share figures. As a troubled firm may have lower earnings, we expect the earnings ratios to be smaller for the fired sample. Firms with financial difficulties may pay smaller dividends, so we expect the dividends per share ratio to be lower for firms that fired the CEO. In addition, a dividend cut could fuel a CEO dismissal. An alternate choice would be to use the dividend yield.

⁵ We considered using three standard measures of prior performance (return on assets, return on equity, and return on sales). An initial Pearson correlation matrix showed the correlations between the three variables to be .999, which is not surprising because all three have the same numerator. Because our model has other variables representing equity, we use return on assets and eliminate the other two variables.

Table 1—Variable Definitions and Classifications

Prior Performance Variables	
Return on Assets	Net income/total assets
Debt/Equity Ratio	Long-term debt/stockholders' equity
Earnings per Share	Net income/total shares outstanding
Dividends per Share	Dividends/total shares outstanding
Financial Distress	Dummy variable with a value of 1 for four years of declining profits
Board of Director Characteristics	
Size of Board	Number of members of board of directors
Board Insiders	Percent of directors who are officers of the firm
Ownership Dispersion	
Stockholder Dispersion	Number of stockholders
Firm Size	
Number of Employees ^a	
Firm Age	
Age of Firm	Number of years the firm has been in existence (Number of years since the date of incorporation)

This table lists all of our initial variables and the definition for each. This study examines the influence of prior firm performance, board characteristics, ownership diffusion, firm size, and firm age on key executive dismissal; therefore, the variables are classified accordingly

^aWe use number of employees in the model because we match the sample firms to the control sample with book value of assets. Hence, there should be no difference in the two groups. Number of employees is used as an alternate proxy for size. It may also measure one aspect of the CEO's position. The number of employees may relate to the amount of responsibility facing the CEO on a day-to-day basis

This ratio, however, is dependent upon the firm's stock price and would increase if a troubled firm's stock price decreased. Therefore, we measure dividend payments by dividing total dividends by the number of shares of stock outstanding, and this result is termed *dividends per share*. We also include a dummy variable labeled *financial distress*. This variable takes the value 1 if there have been four consecutive years of declining profits.

Board Characteristics

Our second hypothesis concerns board composition and size. We utilize the percentage of the firm's officers who are also members of the board of directors as a measure of insider control. It may have been useful to categorize outsiders who are affiliated with the company in the group with insiders, as in Lee *et al.* (1992) and Rosenstein and Wyatt (1990). To construct a sample in which the companies admit to firing executives, we had to search the *Wall Street Journal* daily since the 1960s. We are unable to consider the degree of outsider affiliation, because the pre-1982 proxy statements that are necessary to do so were unavailable. Nevertheless, as our results will demonstrate, our measure of insider control of the boards (number of insiders divided

by total number of board members) is an effective discriminator. Our other measure concerning boards is the size of the board. Insiders may too easily dominate a small board, so we expect this measure to be larger for the firing group of firms than for the control sample.

Stakeholder Pressure

Our third hypothesis predicts that a higher debt-to-equity ratio would lead to firings. For each firm, we compute the debt-to-equity ratio for the year before the firing occurred and the year before that.

Ownership Dispersion

Our fourth hypothesis predicts that firings are more likely for firms with relatively few stockholders. We measure this using the number of stockholders (as listed in various *Moody's* manuals) as a variable in the model.

Firm Size and Firm Age

Our two contextual forces concern firm size and age. We employ total assets as the measure for firm size when selecting a matching sample so we do not use this measure as a variable in the model. Total assets is the denominator in the return on assets; therefore, to avoid any multicollinearity problems we proxy firm size by the number of employees. In addition, because the sample and control firms are matched on asset size, we do not expect a difference. We believe that larger firms may be more likely to fire key executives and that firings may be more likely in older firms. We measure the number of years the firm has been in existence since its incorporation and include it as a variable in the model.

In addition to classification, we also wish to predict whether a firm would fire a key executive; therefore, we gather data for the above variables for the year before firing (year -1) and the two years before the firing (year -2). If, for example, the key executive were fired in 1986, then the data represent 1984 and 1985.

Data Analysis

A logit model estimates the probability of occurrence of an outcome, in this case, fired or not fired. Multiple procedures exist for a logit model. Guilkey and Schmidt (1979) conclude that, from a statistical point of view, maximum likelihood is the preferred estimator, and this is especially true for small sample sizes. Therefore, we employ a logit model, which is nonlinear, based on the cumulative logistic probability

$$\text{Probability (event)} = \frac{1}{1 + e^x}$$

function.

Table 2—Means, Standard Deviations, and Correlations Among Variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
Panel A: Year -1											
Age of Firm	32.8	23.6	1.0								
Size of Board	10.2	4.0	0.3	1.0							
% of Directors who are Officers	0.398	0.186	-0.1	-0.3	1.0						
Number of Stockholders	2327	11508	-0.1	-0.1	-0.1	1.0					
Number of Employees	1350	2910	0.2	0.5	-0.2	0.3	1.0				
ROA	0.428	4.00	0.0	-0.1	0.2	-0.0	-0.0	1.0			
Debt/Equity Ratio	1.2	4.08	0.1	-0.1	-0.0	-0.0	-0.0	-0.0	1.0		
Dividends Per Share	0.545	0.74	0.2	0.5	-0.2	0.5	0.5	-0.0	-0.1	1.0	
Earnings Per Share	1.392	2.346	0.1	0.4	-0.0	0.3	0.3	-0.0	-0.1	0.5	1.0
Panel B: Year -2											
Age of Firm	31.8	23.6	1.0								
Size of Board	10.0	3.6	0.3	1.0							
% of Directors who are Officers	0.406	0.218	-0.1	-0.4	1.0						
Number of Stockholders	3194	20721	-0.1	0.0	-0.1	1.0					
Number of Employees	1369	2956	0.2	0.5	-0.2	0.2	1.0				
ROA	0.270	2.184	0.0	-0.1	0.2	-0.0	0.0	1.0			
Debt/Equity Ratio	0.065	7.32	-0.2	0.0	0.1	0.0	0.0	0.0	1.0		
Dividends Per Share	0.536	0.787	0.1	0.4	-0.3	0.6	0.5	-0.0	0.0	1.0	
Earnings Per Share	1.548	2.255	0.0	0.3	-0.2	0.3	0.3	-0.0	-0.0	0.5	1.0

Note: The variable for financial distress (four years of declining profits) is not included in this table because it was a dummy variable represented by 0, 1. The variables representing age of firm, size of board, number of stockholders, and number of employees were entered into the model as logarithms. The age of the firm is the log of the number of years since incorporation

where:

e = Base of the natural logarithms;

z = $B_0 + B_1X_1 + \dots + B_nX_n$;

x = The independent variables.

The probability of the event not occurring is estimated as

Probability (no event) = 1 - Probability (event)

To obtain the logit results, the following equation is used:

$$\log \left[\frac{P(\text{event})}{1 - P(\text{event})} \right] = z$$

The dependent variable in this regression equation is the logarithm of the odds that a CEO will be fired.

To test our three hypotheses and our contextual forces, we use the following variables in the logistic regression. The dependent variable is binary (1 = fired, and 2 = not fired). The independent variables are the age of the firm, size of the board, percentage of directors who are officers, number of stockholders, number of employees, return on assets, debt/equity ratio, dividends per share, and earnings per share. The means, standard deviations, and correlations among variables appear in Table 2, Panel A and B (one year before firing and two years before firing, respectively).

Five of the variables are ratios and constructed as follows: 1) percentage of directors who are officers = number of directors who are officers/total number of directors; 2) return on assets = net income/total assets; 3) debt/equity ratio = long-term debt/stockholders' equity; 4) dividends per share = total dividends paid/number of shares outstanding; and 5) earnings per share = net income/total shares outstanding. The variables representing age of firm, size of board, number of stockholders, and number of employees enter the model as logarithms. The variable representing financial distress enters the model as a dummy variable (1 = four prior years of declining net income, 0 = otherwise).

To make sure that there is a difference between the two groups, firms that fired their CEOs and those that did not, we test the data for differences between the group means. The results of a single factor multivariate analysis of variance (MANOVA) produce a calculated value for $F(4.42)$ which is greater than the table value ($F(10,108) = 1.88$). Therefore, we can reject the null hypothesis of no significant difference between the means at the 0.05 level of significance.

Results

Logit-Regression Results

The three hypotheses concerning CEO firings are tested using maximum-likelihood logit regression. The parameter estimates and Wald Statistics⁶ appear in Table 3 for one

⁶ The Wald statistic is calculated by dividing the coefficient by its standard error and squaring the result. Large absolute regression coefficients lead to large estimated standard errors. That

Table 3—Maximum Likelihood Estimates for Logistic Regressions for the Probability of Key Executive Firings One Year Before Firing**Panel A: Logistic Regression Results Year -1**

Variables	Parameter Estimate	Standard Error	Wald χ^2	Probability $\geq \chi^2$
Intercept	2.27	2.63	0.74	0.39
Age of Firm	-0.43	0.26	2.68*	0.10
Size of Board	-0.13	0.84	0.02	0.88
% of Directors Who Are Officers	-4.52	1.77	6.52**	0.01
# of Stockholders	0.46	0.31	2.20*	0.14
# of Employees	-0.28	0.25	1.22	0.27
ROA	0.11	0.48	0.05	0.82
Debt/Equity Ratio	-0.06	0.07	0.88	0.35
Dividends Per Share	0.97	0.62	2.41*	0.12
Earnings Per Share	-0.82	0.24	11.64***	0.00
Financial Distress	2.27	1.73	1.72	0.19

Overall χ^2 - Model's Goodness of Fit = 43.67*****Panel B: Classification Results Year -1**

	Predicted Membership		Total Observations
	Fired	Not Fired	
Fired	39 (72.2%)	15 (27.8%)	54
Not Fired	21 (38.9%)	33 (61.1%)	54
Correctly Classified	39	33	108
Overall Correct Classification Rate			72/108 (66.7%)

This table reports the results from entering 11 independent variables (age of firm, size of board of directors, percent of directors who are officers, number of stockholders, number of employees, ROA, debt/equity ratio, dividends per share, earnings per share, the percentage of institutional ownership, and financial distress) into a logistic regression model. (The dependent variable is binary - FIRED, NOT FIRED.) Firms that fired the key executive are correctly classified 72.2 percent of the time (39/54). The model's overall correct classification rate is 66.7 percent (72/108)

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$

year prior to firing and in Table 4 for two years prior to firing. The model for year -1 that we employ appears to be strong, as it has a chi-square statistic, measuring goodness of fit, of 43.67. This is significant at better than 0.001. This result implies that the variables in the model are highly significant in explaining the difference between the fired and nonfired samples.

Panel A of Table 3, for year -1, reports that two of the variables (earnings per share and percentage of directors who are officers) are significant at the 0.001 level and 0.01 level, respectively while three variables (dividends per share, number of stockholders,

produces a small Wald statistic and leads to failure to reject the null hypothesis that the coefficient is 0. This point might reduce the reliability of the results.

and age of the firm) are significant at the 0.05 level. The negative sign on the variable earnings per share is consistent with our expectations that when firings occur, there will be a greater likelihood of poor prior performance (hypothesis 1). We hypothesize that firings are more likely to occur in firms with low proportions of inside board members [a low percentage of directors who are officers (hypothesis 2)], and our results are consistent with this hypothesis. The positive sign on the variable dividends per share is not consistent with our expectation that firms that fire their CEOs pay smaller dividends. This may reflect a firm's hesitancy to reduce its dividend payout; therefore, a higher dividend per share ratio may be one factor in the firing of the CEO.⁷ The coefficient on the number of stockholders is positive. A larger number of stockholders is associated with a high probability of firing. This result is the opposite of that predicted. Finally, the coefficient for the age of the firm is negatively correlated with the incidence of firing. The other variables, board size, number of employees, ROA, debt-to-equity ratio, and financial distress, are statistically insignificant at conventional cutoff levels. In the classification results reported below, however, the model performs better by having higher classification success when these insignificant variables are included.

The classification results appear in Panel B of Table 3. For the year just prior to the dismissal, the model's overall correct classification rate is 66.7 percent (72 out of 108). Firms that fired the CEO are correctly classified 72.2 (39 out of 54) percent of the time while firms that did not fire are correctly classified 61.1 (33 out of 54) percent of the time. Because we are trying to explain the behavior of firms that fire a key executive, we feel that it is more important to minimize the Type 1 error (classifying a fired CEO as not fired) than the Type 2 error (classifying a not-fired CEO as fired). The above model minimizes the Type 1 error.

The results for two years before firing (see Table 4, Panel A) are slightly different. Even two years before firing, however, the overall explanatory power of the model is strong. The chi-square for this model is 31.46 and is significant at better than 0.001. Once again, the variable representing the number of directors who are officers is significant in the same manner (0.001 level) as in year one. The second statistically significant variable is the debt/equity ratio (significant at the 0.05 level) which suggests that increasing debt begins to be a problem as long as two years before firing. Earnings per share and the number of stockholders are the third and fourth most significant variables (significant at the 0.05 level).

The classification results appear in Panel B of Table 4. The firms that fired their CEO are correctly classified, 59.2 percent (32 out of 54) of the time, while the firms not firing their CEO have a correct classification rate of 63.0 percent (34 of 54). The overall

⁷ We consider the fact that the differences between the data between year -1 and year -2 may be more important than the actual year-end data. Accordingly, we use the differences in the model for all variables including dividend payout, but the results do not improve, so this avenue of research was abandoned.

Table 4—Maximum Likelihood Estimates for Logistic Regressions for the Probability of Key Executive Firings Two Years Before Firing**Panel A: Logistic Regression Results Year -2**

Variables	Parameter Estimate	Standard Error	Wald χ^2	Probability $\geq \chi^2$
Intercept	0.50	2.49	0.04	0.84
Age of Firm	-0.13	0.22	0.33	0.57
Size of Board	-0.59	1.02	0.33	0.56
% of Directors Who Are Officers	-3.59	1.36	6.97***	0.01
# of Stockholders	0.50	0.29	2.99*	0.08
# of Employees	-0.20	0.25	0.68	0.41
ROA	-0.58	1.98	0.09	0.77
Debt/Equity Ratio	0.45	0.26	3.17*	0.08
Dividends Per Share	-0.06	0.48	0.01	0.90
Earnings Per Share	-0.34	0.19	3.17*	0.07
Financial Distress	6.44	3.31	0.10	0.74

Overall χ^2 - Model's Goodness of Fit = 31.46*****Panel B: Classification Results Year -1**

	Predicted Membership		Total Observations
	Fired	Not Fired	
Fired	32 (59.2%)	22 (40.8%)	54
Not Fired	20 (37.0%)	34 (63.0%)	54
Correctly Classified	32	34	108 36
Overall Correct Classification Rate			66/108 (61.1%)

This table reports the results from entering 11 independent variables (age of firm, size of board of directors, percent of directors who are officers, number of stockholders, number of employees, ROA, debt/equity ratio, dividends per share, earnings per share, the percentage of institutional ownership, and financial distress) into a logistic regression model. (The dependent variable is binary - FIRED, NOT FIRED.) Firms that fired the key executive are correctly classified 72.2 percent of the time (39/54). The model's overall correct classification rate is 66.7 percent (72/108)

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$

correct classification rate for two years before firing for the overall model is 61.1 percent (66 out of 108).

Measuring the Strength of the Results

Because only a few of the variables are individually statistically significant, it is tempting to dismiss the economic interpretation and significance of the results. As mentioned earlier, the overall measures of goodness of fit are statistically significant at better than 0.001. As Eisenbeis (1978), Eisenbeis, Gilbert, and Avery (1973), and Altman, Avery, Eisenbeis, and Sinkey (1981) point out, a variable that is insignificant may have an impact on the multivariate results. To measure the strength of a

multivariate model, one must not be excessively concerned about the significance of individual variables, but instead should be concerned with the model's goodness of fit and classification.

For year -1, the model has an overall classification rate of 66.7 percent.⁸ This percentage is similar to results in several of the landmark studies that use this procedure for other predictive purposes [e.g., Horrigan (1966), with a 58 percent classification; Pinches and Mingo (1973), with a 65 percent classification rate; Kaplan and Urwitz (1979), with a 69 percent correct classification rate; Ederington, Yawitz, and Roberts, (1987), with a 66 percent correct classification rate; Cannella, Fredrickson, and Hambrick (1994), with classification rates of 68 percent and 79 percent].

Discussion

Our central argument is that although poor firm performance is usually a critical factor, it may not be sufficient to result in a top management ouster. We argue that a board with the power to act prodded by stakeholder pressure may also be necessary. Together, these three forces can combine into a powerful pattern of governance interdependence that provides necessary discipline to the key executive.

By comparing a sample of firms that publicly announced dismissals of key executives to a matched set of firms that had experienced no turnover, we find that age of the firm, board composition, and prior firm performance differentiate the two samples and allow for a high classification rate of firms into fired and not fired groups. Our overall results are strong and permit us to classify executives into a fired or not fired group with 66.7 percent accuracy.

Our tests demonstrate these variables to be significant, produce strong models, and the results are at least partially consistent with our first two hypotheses. Both the proportion of directors who are officers and earnings per share have negative algebraic signs for both one and two years before firing. We had hypothesized that a lower proportion of directors who are officers would exist in firms firing their CEOs and that these firms would have poor prior financial performance. Board size, however, had no relationship to CEO firings in our sample. Another inconsistent finding is the positive relationship of dividends per share to the firing of the CEO. We hypothesize that firms with financial difficulties may pay smaller dividends, but our results indicate the opposite. Not reducing the dividend in times of financial distress may provide an additional reason for key executive dismissal. When a firm is experiencing financial difficulties, cash flow may be insufficient to maintain the prior dividend level. By cutting dividends, firms may be able to preserve or bolster their liquidity. Yet our

⁸ We also ran the data through a stepwise discriminant procedure and obtained similar results. In the year prior to the firing, the percent of inside directors and earnings per share remain the most significant variables. A jackknife procedure yields a classification rate of 72.2 percent. More details on these tests appear in the appendix and are also available from the authors upon request.

sample of firms with fired top executives kept dividends per share higher than the firms in the control sample. Perhaps this is an attempt at impression management by the soon-to-be-fired management team similar to the findings in Smith (1971). Smith finds that in a sample of firms with earning decreases that dividends increased nearly 20 percent of the time. Alternately, it may just be an example of mismanagement of the firm's resources. We also found a positive relationship between firing and the number of stockholders.

Much of the early turnover research has found only a modest relationship between the incidence of succession and firm performance (Gamson and Scotch, 1964; Mizruchi, 1983; Salancik and Pfeffer, 1980). In addition, some researchers fail to document this relationship. For example, Samuelson, Galbraith, and McGuire (1985) find that poor financial performance did not precede top management change. More recent studies, however, have documented that poor performance generally precedes turnover, in general, and forced turnovers in particular (Coughlin and Schmidt, 1985; Furtado and Rozeff, 1987; Warner, Watts, and Wruck, 1988; Weisbach, 1988; Boefer, 1992; Denis and Denis, 1995; Denis, Denis, and Sarin, 1997; and Parrino, 1997). The results in Boeker (1992) in one industry, the results in Denis and Denis (1995), and the results reported here show that prior firm performance is an important antecedent of turnover and succession when a CEO is fired. Denis and Denis (1995) find that return on assets (as measured by operating income before depreciation over book value of assets) decreases prior to forced CEO departures. While a ROA decrease did not add to the predictive power of our model, we did find that earnings per share were lower for firms that fired their CEOs versus those without a turnover event. The differences in our results and those in Denis and Denis (1995) may be explained by our unique sample, disparate sample time periods, different statistical procedures, and the fact that we compare our fired sample to firms without a turnover while they compare theirs to firms with a retiring CEO. The major similarity in conclusions should be noted; both studies find deteriorating financial performance to precede CEO forced departures. While prior research has not been able to conclusively show that general succession is preceded by poor performance, when executives are explicitly fired, performance is an important variable.

We find modest evidence supporting hypothesis 3. Firms with larger debt-to-equity ratios in year-2 are more likely to fire a key executive. These results are consistent with the hypothesis that debt holders are a group that pressures for management changes, and these findings are consistent with the results in Gilson (1989). Future research should be directed at the impact of other stakeholder groups on forced key executive departures.

We find modest results that are inconsistent with hypothesis 4. We had argued that a dispersion of ownership as measured by the number of shareholders would make a firing less likely. But we document a positive relationship between the number of stockholders and the probability of firing. One possible explanation for this finding may

be the variable that we used, number of stockholders. It may be too crude an estimate for stockholder diffusion. Future research needs to be directed at this issue.

Our sample only includes specific firing announcements. Those fired executives, given the chance to gracefully exit, probably constitute a much larger group. We have no *a priori* reason to believe that this biases our results, yet there is the possibility that our sample may be systematically different than the more common case.

In conclusion, over the 25-year period 1963-1987 we find that the specific announcements of dismissals of key executives were executed by powerful boards and were preceded by poor firm performance. The 1990s, however, have ushered in a historic shift in corporate power, and our findings should direct researchers to the importance of the relationships among key managers, boards, and shareholders.

References

1. Alchian, A.A., and H. Demsetz, "Production, Information Costs, and Economic Organization," *American Economic Review*, 70, no. 3 (June 1980), pp. 777-795.
2. Altman, E.I., R.B. Avery, R.A. Eisenbeis, and J.F. Sinkey Jr., *Application of Classification Technique in Business, Banking and Finance* (Greenwich, CT, JAI Press, 1981).
3. Baysinger, B.D., and H.N. Butler, "Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition," *Journal of Law Economics and Organization*, 1 (1985), pp. 101-124.
4. Berle, A., and G.C. Means, *The Modern Corporation and Private Property* (New York, Macmillan, 1932).
5. Boeker, W., "Power and Managerial Dismissal: Scapegoating at the Top," *Administrative Science Quarterly*, 37, no. 3 (September 1992), pp. 400-421.
6. Byrd, J.W., and K.A. Hickman, "Do Outside Directors Monitor Managers? Evidence From Tender Offer Bids," *Journal of Financial Economics*, 32, no. 2 (October 1992), pp. 195-222.
7. Cannella, A.A., J.W. Fredrickson, and D.C. Hambrick, "Testing a Model of CEO Dismissal," presentation at the 49th Academy of Management meeting (August 1994).
8. Carroll, G.R. "Dynamics of Publisher Succession in the Newspaper Organizations," *Administrative Science Quarterly*, 29, no. 1 (March 1984), pp. 93-113.
9. Chaganti, R.S., V. Mahajan, and S. Sharma, "Corporate Board Size, Composition and Corporate Failures in the Retailing Industry," *Journal of Management Studies*, 22, no. 4 (July 1985), pp. 400-417.
10. Clendenin, W.D., "Company Presidents Look at the Board of Directors," *California Management Review*, 14, no. 3 (Spring 1972), pp. 60-66.
11. Coughlan, A.T., and R.M. Schmidt, "Executive Compensation, Management Turnover, and Firm Performance," *Journal of Accounting and Economics*, 7, nos. 1-3 (April 1985), pp. 43-66.
12. Daily, C.M., and D.R. Dalton, "CEO and Director Turnover in Failing Firms: An Illusion of Change?" *Strategic Management Journal*, 16, no. 5 (June 1995), pp. 393-400.
13. Demsetz, H., and K. Lehn, "The Structure of Corporate Ownership: Causes and Consequences," *Journal of Political Economy*, 93, no. 6 (December 1985), pp. 1155-1177.
14. Denis, D.J., and D.K. Denis, "Performance Changes Following Top Management Dismissals," *Journal of Finance*, 50, no. 4 (September 1995), pp. 1029-1057.
15. Denis, D.J., D.K. Denis, and A. Sarin, "Ownership Structure and Top Executive Turnover," *Journal of Financial Economics*, 45, no. 2 (August 1997), pp. 193-221.

16. Dobrzynski, J.H., "A Wake-Up Call for Corporate Boards," *Business Week* (April 20, 1992), p. 35.
17. Ederington, L.H., J.B. Yawitz, and B.E. Roberts, "The Informational Content of Bond Ratings," *The Journal of Financial Research*, 10, no. 3 (Fall 1987), pp. 211-226.
18. Eisenbeis, R.A., "Pitfalls in the Application of Discriminant Analysis in Business, Finance, and Economics," *Journal of Finance*, 32, no. 3 (June 1977), pp. 875-900.
19. Eisenbeis, R.A., G.G. Gilbert, and R.B. Avery, "Investigating the Relative Importance of Individual Variables and Variable Subsets in Discriminant Analysis," *Communication in Statistics* (September 1973).
20. Eisenhardt, K.M., "Agency Theory: An Assessment and Review," *Academy of Management Review*, 14, no. 1 (January 1989), pp. 57-74.
21. Fama, E.F., "Agency Problems and the Theory of the Firm," *Journal of Political Economy*, 88, no. 2 (April 1980), pp. 288-307.
22. Fama, E.F., and M.C. Jensen, "Separation of Ownership and Control," *Journal of Law and Economics*, 26, no. 2 (June 1983), pp. 301-325.
23. Farrell, K.A., and D.A. Whidbee, "The Consequences of Forced CEO Succession on Directors," working paper, University of Nebraska-Lincoln (1997).
24. Fredrickson, J.W., D.C. Hambrick, and S. Baumrin, "A Model of CEO Dismissal," *Academy of Management Review*, 13, no. 2 (April 1988), pp. 255-270.
25. Friedman, S.D., and H. Singh, "CEO Succession and Stockholder Reaction: The Influence of Organizational Context and Event Content," *Academy of Management Journal*, 32, no. 4 (December 1989), pp. 718-744.
26. Furtado, E.P., and V. Karan, "Causes, Consequences, and Shareholder Wealth Effects of Management Turnover: A Review of the Empirical Evidence," *Financial Management*, 19, no. 2 (Summer 1990), pp. 60-75.
27. Gamson, W.A., and N.A. Scotch, "Scapegoating in Baseball," *American Journal of Sociology*, 70, no. 1 (July 1964), pp. 69-72.
28. Gilson, S.C., "Management Turnover and Financial Distress," *Journal of Financial Economics*, (December 1989), Vol. 25, No. 2: 241-262.
29. Grusky, O., "Corporate Size, Bureaucratization, and Managerial Succession," *American Journal of Sociology*, 67, no. 1 (July 1961), pp. 261-269.
30. Guilkey, D., and P. Schmidt, "Some Small Sample Properties of Estimators and Test Statistics in the Multivariate Logit Model," *Journal of Econometrics*, 10, no. 1 (April 1979), pp. 33-42.
31. Harrison, J.R., D.L. Torres, and S. Kukalis, "The Changing of the Guard: Turnover and Structural Change in the Top-Management Positions," *Administrative Science Quarterly*, 33, no. 2 (June 1988), pp. 211-232.
32. Helmich, D., "Succession: A Longitudinal Look," *Journal of Business Research*, 3, no. 4 (October 1975), pp. 355-364.
33. Helmich, D., "Board Size, Variation, and Rates of Succession in the Corporate Presidency," *Journal of Business Research*, 8, no. 1 (March 1980), pp. 51-63.
34. Hermalin, B., and M.S. Weisbach, "The Determinants of Board Composition," *Rand Journal of Economics*, 19, no. 4 (Winter 1988), pp. 95-112.
35. Horrigan, J.O., "The Determination of Long-Term Credit Standing with Financial Ratios," *Empirical Research in Accounting: Selected Studies*, supplement to volume 4 (1966), pp. 44-62.
36. Jensen, M.C., and W.H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure," *Journal of Financial Economics*, 3, no. 4 (October 1976), pp. 305-360.

37. Jensen, M.C., and R.S. Ruback, "The Market for Corporate Control: The Scientific Evidence," *Journal of Financial Economics*, 11, nos. 1-4 (April 1983), pp. 5-50.
38. Kaplan, R.S., and G. Urwitz, "Statistical Models of Bond Ratings: A Methodological Inquiry," *The Journal of Business*, 52, no. 2 (April), pp. 231-261.
39. Kesner, I.F., and T.C. Sebor, "Executive Succession: Past, Present, and Future," *Journal of Management*, 20, no. 2 (Summer 1994), pp. 327-372.
40. Lee, C.I., S. Rosenstein, N. Rangan, and W.N. Davidson, III, "Board Composition and Shareholder Wealth: The Case of Management Buyouts," *Financial Management*, 21, no. 1 (Spring 1992), pp. 58-72.
41. Magnet, M., "Directors, Wake Up!" *Fortune*, 125, no. 12 (June 1992), pp. 85-92.
42. Manne, H.G., "Mergers and the Market for Corporate Control," *Journal of Political Economy*, 73, no. 2 (April 1965), pp. 110-120.
43. Mizruchi, M.S., "Who Controls Whom? An Examination of the Relationship Between Management and Boards of Directors in Large American Corporations," *Academy of Management Review*, 8, no. 3 (July 1983), pp. 426-435.
44. Parrino, R., "CEO Turnover and Outside Succession: A Cross-Sectional Analysis," *Journal of Financial Economics*, 46, no. 2 (November 1997), pp. 165-197.
45. Pfeffer, J., and W.M. Moore, "Average Tenure of Academic Department Heads: The Effects of Paradigm, Size, and Departmental Demography," *Administrative Science Quarterly*, 25, no. 3 (September 1980), pp. 387-406.
46. Pfeffer, J., and G.R. Salancik, *The External Control of Organizations* (New York, Harper and Row, 1978).
47. Pound, J., "Corporate Governance and Market Forces," in *Corporate Governance: The Need for a Long-Term Perspective: Proceedings of the 1993 Emerson Electric Center for Business Ethics Conference* (Saint Louis University, 1993), pp. 49-56.
48. Puffer, S.M., and J.B. Weintrop, "Corporate Performance and CEO Turnover: The Role of Performance Expectations," *Administrative Science Quarterly*, 36, no. 1 (March 1991), pp. 1-19.
49. Reinganum, M.R., "The Effect of Executive Succession on Stockholder Wealth," *Administrative Science Quarterly*, 30, no. 1 (March 1985), pp. 46-60.
50. Rosenstein, J., "Why Don't U.S. Boards Get More Involved in Strategy?" *Long Range Planning*, 20, no. 3 (June 1987), pp. 30-34.
51. Rosenstein, S., and J.G. Wyatt, "Outside Directors, Board Independence, and Shareholder Wealth," *Journal of Financial Economics*, 26, no. 2 (August 1990), pp. 175-192.
52. Salancik, G.R., and J. Pfeffer, "Effects of Ownership and Performance on Executive Tenure in U.S. Corporations," *Academy of Management Journal*, 23, no. 4 (December 1980), pp. 653-664.
53. Samuelson, B.A., C.S. Galbrath, and J.W. McGuire, "Organizational Performance and Top-Management Turnover," *Organization Studies*, 6, no. 3 (November 1985), pp. 275-291.
54. Schoorman, F.D., M.H. Bazerman, and R.S. Atkin, "Interlocking Directorates: A Strategy for Reducing Environmental Uncertainty," *Academy of Management Review*, 6, no. 2 (April 1981), pp. 243-251.
55. Schwartz, K.B., and K. Menon, "Executive Succession in Failing Firms," *Academy of Management Journal*, 28, no. 3 (September 1985), pp. 680-686.
56. Scott, W.R., *Organizations: Rational, Natural, and Open Systems* (Englewood Cliffs, NJ, Prentice-Hall, 1981).
57. Smith K.F., "Increasing Stream Hypothesis of Corporate Dividend Policy," *California Management Review*, 14, no. 1 (Fall 1971), pp. 56-64.

58. Walsh, J.P., and J.K. Seward, J.K., "On the Efficiency of Internal Control Mechanisms," *Academy of Management Review*, 15, no. 3 (July 1990), pp. 421-458.
59. Warner, J.B., R.L. Watts, and K.H. Wruck, "Stock Price and Top Management Changes," *Journal of Financial Economics*, 20, nos. 1 and 2 (January/March 1988), pp. 461-492.
60. Weisbach, M.S., "Outside Directors and CEO Turnover," *Journal of Financial Economics*, 20, nos. 1 and 2 (January/March 1988), pp. 431-460.
61. Worrell, D.L., W.N. Davidson, and J.L. Glascock, "Stockholder Reactions to Departures and Appointments of Key Executive Attributable to Firings," *Academy of Management Journal*, 36, no. 2 (April 1993), pp. 387-401.
62. Worrell, D.L., W.N. Davidson, P.R. Chandy, and S.H. Garrison, "Management Turnover Through key Executive Death: Its Effects on Investor Wealth," *Academy of Management Journal*, 29, no. 4 (December 1986), pp. 674-694.
63. Yermack, D., "Higher Market Valuation of Companies With A Small Board of Directors," *Journal of Financial Economics*, 40, no 2 (February 1996), pp. 185-211.
64. Zahra, S.A., and J.A. Pearce, "Boards of Directors and Corporate Financial Performance: A Review and Integration Model," *Journal of Management*, 15, no. 2 (June 1989), pp. 291-334.
65. Zahra, S.A., and W.W. Stanton, "The Implications of Boards of Directors Composition for Corporate Strategy and Performance," *International Journal of Management*, 5 (May 1988), pp. 229-236.