



American Finance Association

CEO Involvement in the Selection of New Board Members: An Empirical Analysis

Author(s): Anil Shivdasani and David Yermack

Source: *The Journal of Finance*, Vol. 54, No. 5 (Oct., 1999), pp. 1829-1853

Published by: Blackwell Publishing for the American Finance Association

Stable URL: <http://www.jstor.org/stable/222505>

Accessed: 24/11/2009 12:40

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=black>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Blackwell Publishing and American Finance Association are collaborating with JSTOR to digitize, preserve and extend access to *The Journal of Finance*.

<http://www.jstor.org>

CEO Involvement in the Selection of New Board Members: An Empirical Analysis

ANIL SHIVDASANI and DAVID YERMACK*

ABSTRACT

We study whether CEO involvement in the selection of new directors influences the nature of appointments to the board. When the CEO serves on the nominating committee or no nominating committee exists, firms appoint fewer independent outside directors and more gray outsiders with conflicts of interest. Stock price reactions to independent director appointments are significantly lower when the CEO is involved in director selection. Our evidence may illuminate a mechanism used by CEOs to reduce pressure from active monitoring, and we find a recent trend of companies removing CEOs from involvement in director selection.

A BOARD OF DIRECTORS SERVES AS THE PIVOTAL mechanism for monitoring the managers of a public corporation. Directors are voted into office by stockholders and have a fiduciary responsibility to protect stockholders' interests. Along with their legal duties of reviewing the corporation's major plans and actions, directors are charged with selecting, compensating, evaluating, and, when appropriate, dismissing top managers.

A long-standing criticism of this process is that, in practice, directors are not selected by stockholders but rather by the very managers they are supposed to oversee. Mace (1971) discusses anecdotal evidence of CEOs exercising authority in selecting candidates for the board, in effect hand-picking nominees. Similarly, Lorsch and MacIver (1989) report survey evidence indicating that CEOs wield major influence in selecting new board members. Tejada (1997) presents a recent news account of an outside director of a prominent company being denied nomination for reelection after criticizing management. Such allegations have led to proposals that boards choose directors through nominating committees composed only of independent members of the board (see, e.g., The Working Group on Corporate Governance (1991)).

* Shivdasani is at the Kenan-Flagler Business School, University of North Carolina, Chapel Hill, and Yermack is at the Stern School of Business, New York University. We appreciate helpful comments from David Denis, Scott Harrington, Greg Niehaus, Tod Perry, Henri Servaes, Clifford Smith, René Stulz, Sunil Wahal, Marc Zenner, an anonymous referee, and seminar participants at the University of North Carolina, the University of South Carolina, the University of Oregon, Virginia Polytechnic Institute, and the American Finance Association annual meeting, 1999. We thank Urs Peyer for capable research assistance. An earlier version of this paper was titled "The Hand-Picked Board."

Despite such views, prior research has not developed systematic evidence on the extent to which CEOs are directly involved in selecting new directors and whether such involvement affects the nature of directors elected to the board. In this paper, we provide evidence on whether CEOs exert influence on the selection of new directors and we test the hypothesis that when CEOs are involved in this process, directors predisposed to monitor the CEO are less likely to be appointed. We use a simple procedure to indicate CEO involvement in selecting new directors, defining a CEO as “involved” (i) if the board has a separate nominating committee and the CEO serves as a member or (ii) if such a committee does not exist and directors are selected by the entire board including the CEO.

We examine the likelihood that appointees are independent outsiders, “gray” outsiders who have conflicts of interest, or corporate insiders. Based on results from numerous recent studies, we expect independent outside directors to be most predisposed to monitoring the CEO. Consistent with the hypothesis that nominees less likely to monitor are chosen when CEOs are involved in the selection, we find that when the CEO is involved, firms appoint fewer independent outside directors and more gray outsiders.

We study investor reactions to announcements of director appointments. We find that the market reaction to independent director appointments is significantly negative when the CEO is involved in director selection, and we find weak evidence of a positive reaction when CEOs are not involved. Cumulative abnormal stock returns for independent director appointments are significantly lower when the CEO is involved in director selection. These patterns persist when we examine abnormal returns in a two-stage framework that accounts for the prior anticipation of such appointments.

Our research extends a growing empirical literature examining patterns of director appointments. Hermalin and Weisbach (1988) study companies’ decisions to appoint inside and outside directors and find that inside appointments occur with greater frequency when CEOs approach expected retirement age and that outside appointments are more likely following poor firm performance. Gilson (1990) finds more appointments of bankers and major outside stockholders when firms experience financial distress. Similarly, Kaplan and Minton (1994) study Japanese companies and find a greater intensity of outside appointments when those firms perform poorly. Rosenstein and Wyatt (1990) find that stockholder reactions to announcements of independent director appointments are significantly positive. These studies provide some evidence of the factors that influence appointments of independent directors, but the role of the CEO in this process remains unexplored.

In addition to this empirical research, Hermalin and Weisbach (1998) present a model of the balance of power between the CEO and other directors. They model the control of the firm as a bargaining game in which the CEO negotiates with the board over the board’s degree of independence, among other variables. The authors argue that such a framework can help explain certain observed regularities about the composition and monitoring capabilities

of many boards. Our paper seeks to assess empirically their underlying assumptions that CEOs seek to acquire influence over the selection of new directors, and that directors chosen under these conditions contribute to deterioration in the board's monitoring of the CEO. Our results are consistent with such a characterization of how board composition is determined.

Finally, we examine whether CEO involvement in the director selection process is a persistent phenomenon over our sample period. We document an overall trend away from CEO involvement in director selection in recent years.

The paper proceeds as follows. Section I describes our sample selection and variable definitions. Section II analyses patterns of director appointments, and Section III studies market reactions to appointments. Section IV describes other attributes of independent director appointees. Section V discusses recent patterns in changes in CEO involvement status. Section VI concludes.

I. Data Description and Sample Selection

We study director appointments during the three-year 1994 to 1996 period by companies in the 1995 *Fortune 500*. We exclude private firms as well as financial and utility companies because firms in these industries typically have very large boards that tend to be drawn from specific constituencies, especially major customers and local business leaders.¹ We track appointments over three years because many companies have classified boards on which directors serve staggered three-year terms, and we want to ensure that during our sample period every board member's candidacy is reviewed at least once. We read proxy statements filed by each firm in 1994, 1995, and 1996 in order to identify director appointments, a process that yields a sample of 1,012 first-time appointments or nominations at 341 companies during 1,015 company-years (a few firms contribute fewer than three years of data due to acquisitions in 1996 or initial public offerings in 1994).

For each appointment, we classify the new director into one of the three categories widely used in prior studies of boards. Inside directors (246 appointments, or 24 percent of our sample) are current employees of the firm. Outside directors fall into two categories. Gray outsiders (107 appointments, 11 percent) include retired employees, relatives of the CEO, and persons with disclosed conflicts of interest such as outside business dealings with the company or interlocking director relationships with the CEO. Independent outsiders (659 appointments, 65 percent) include all other nonemployee director appointees. We gather data about each new director's age, occupation, other directorships, stock ownership, any family relationships or interlocked directorships with the CEO, and whether the appointment represents a board expansion or the replacement of an inside, gray, or independent retiring director. When two or more replacement appointments occur in a

¹ We drop one other firm (Nordstrom) because of a unique governance structure that includes four co-CEOs, none of whom is a member of the board.

Table I
Characteristics of Board Appointees

Characteristics of directors appointed to the boards of *Fortune 500* firms. The sample, which excludes private, utility, and financial companies, consists of 341 firms during the three-year 1994–1996 period. Inside directors are current employees of the firm. Nonemployee directors who are retired employees, are relatives of the CEO, have business ties to the firm, or have interlocking directorships with the CEO are classified as gray. All other appointees are classified as independent. Data on director characteristics are obtained from proxy statements.

	Inside Appointments	Gray Outside Appointments	Independent Outside Appointments
Number of appointments	246	107	659
Median age of appointees	52	54	55
Median equity ownership of appointees (percentage of shares outstanding)	0.07	0.001	0.0004
Median number of additional outside directorships held by appointees	0	2	2
Fraction of appointees that share an outside directorship with the CEO	0	0.243	—
Fraction of appointees on whose board the CEO is an outside director	—	0.131	—
Fraction of appointees with business ties to the firm	—	0.692	—
Fraction of appointees that represent an expansion of the board	0.406	0.336	0.327
Fraction of appointees that replace an inside director	0.374	0.075	0.105
Fraction of appointees that replace a gray outside director	0.073	0.290	0.062
Fraction of appointees that replace an independent outside director	0.146	0.299	0.507

single year, we assume that each new director takes the seat of the exiting director who has the same or, alternatively, the most similar classification in the inside/gray/outside taxonomy.

Table I presents summary statistics about our sample of appointees. The typical new outside director of a *Fortune 500* firm is in his or her mid-50s, owns little stock, and already sits on two other public company boards. New inside directors are slightly younger and own more stock but do not ordinarily have other board seats. Of all new appointments, 30 to 40 percent represent board expansions, and in cases that are not expansions, appointees are likely to replace exiting directors of the same class. Of the 107 gray outside appointees in our sample, 69 percent have disclosed business dealings with the firm either personally or through their principal employers, 13 percent have direct interlocking relationships with the CEO (i.e., service on each other's boards), and 24 percent have interlocking relationships on the board of a third company. (Note that some appointees qualify for gray status according to more than one criterion.)

We merge our data for director appointments with a range of control variables gathered from proxy statements and Standard and Poor's COMPUSTAT. Certain variables describing the board of directors, including board size, the fraction of outside directors, board stock ownership, the fraction of outside directors appointed during the tenure of the current CEO, and the number of directorships held by all outside directors, are cumulated from director-by-director data transcribed from proxy statements. Because of the effort required to compile this information for approximately 4,000 individual directors, we collect these variables for each company in 1994 and repeat the variable values for appointments in 1995 and 1996. Variables relating directly to each company's CEO, including whether the CEO also serves as chairman of the board, the presence of a nominating committee, the CEO's membership on the nominating committee, the CEO's tenure in office, and the CEO's stock ownership, are gathered every year.

Table II presents mean and median values for important characteristics of our companies, their boards, and their CEOs. The typical board has approximately 11 directors, 46 percent of whom are independent outsiders and an additional 26 percent of whom belong to the gray outsider category. Several potential explanations exist for why the percentage of independent directors in the appointments sample is higher than the cross-sectional percentage of independent directors in our companies as of 1994. The difference could reflect more frequent turnover among independent directors or a recent tendency of boards to appoint more independent and fewer gray directors than in the past. Alternatively, some independent outside directors may acquire conflicts of interest over time and move to gray status.

Among both groups of outside directors, stock ownership is quite small, and slightly less than half of all outside directors joined their boards during the tenure of the current CEO. More than three-fourths of the boards have nominating committees or similar groups charged with the selection of new directors. When a nominating committee exists, it includes the CEO about one-third of the time. Among other variables that might indicate strong CEO influence in corporate governance, Table II shows that CEOs own a mean of 2.7 percent of their firms' stock, though the median is much smaller, at 0.4 percent. In a large majority of firms, representing 84 percent of the sample, the CEO also serves as chairman of the board. Of the CEOs in our *Fortune 500* sample, 18 percent either founded the company or belong to the founding family. The table further shows that CEOs have an average tenure of more than eight years. We define an indicator variable for independent boards and set it equal to one if independent outside directors comprise the majority of the board. Table II shows that 40 percent of our sample firms have independent boards according to this definition.

To identify whether the CEO has influence in the selection of new directors, we create an indicator variable labeled "CEO involvement." CEO involvement equals one in two situations: (i) if the board has a nominating committee and the committee includes the CEO, which occurs for 25 percent of our companies, or (ii) if the board does not have a nominating committee

Table II
Summary Statistics for Firm Characteristics
and Board Composition

The sample consists of 341 publicly traded *Fortune 500* firms, excluding those in the financial and utility industries, as of 1994. Inside directors are current employees of the firm. Nonemployee directors who are retired employees, are relatives of the CEO, have business ties to the firm, or have interlocking directorships with the CEO are classified as gray. All other appointees are classified as independent. Boards are classified as independent if independent directors constitute a majority on the board. Data on ownership structure and board composition are obtained from proxy statements, and financial data are from COMPUSTAT. ROA is computed as the ratio of earnings before interest and taxes to total assets net of the median for all firms in the same two-digit SIC code.

Variable	Mean	Median	Standard Deviation
Total assets (\$ million)	8,884.43	3,599.60	20,223.39
Sales (\$ million)	8,830.57	4,332.35	13,959.85
EBIT/total assets	0.170	0.156	0.123
CEO tenure (years)	8.22	6.00	8.12
CEO ownership (percentage of shares outstanding)	2.70	0.40	7.57
Firms with non-CEO chairman of the board	0.164	—	—
CEOs who belong to firm's founding family	0.184	—	—
Outside directors appointed during current CEO's tenure	0.472	0.429	0.337
Boards of directors that have a nominating committee	0.775	—	—
Nominating committees with CEO as member	0.325	—	—
Board size	11.43	11.00	3.03
Firms with an independent board	0.40	—	—
Fraction of the board that are gray outside directors	0.258	0.250	0.158
Fraction of the board that are independent outside directors	0.456	0.462	0.190
Ownership by gray outside directors (percentage of shares)	1.03	0.01	7.12
Ownership by independent outside directors (percentage of shares)	0.01	0.0003	3.98
Boards with a 5 percent blockholder who is an independent outside director	0.047	—	—
Additional directorships held by gray outside directors	2.14	2.00	1.829
Additional directorships held by independent outside directors	1.81	1.75	1.06

(22 percent of our firms), in which case the entire board including the CEO nominates new directors. Thus, we consider the CEO to be uninvolved if the board has a nominating committee that excludes the CEO, which is the case for 53 percent of the companies in our sample.

We suspect our variable indicating CEO involvement in director selection is underinclusive, because many board nominating committees may solicit advice from or simply ratify choices suggested by a CEO who is not a committee member. Along these lines, the General Motors Board Guidelines on Significant Corporate Governance Issues (1994), widely praised by shareholder activists, recommends that new directors be chosen by a committee of outside directors but “with the direct input from . . . the chief executive officer.” If the CEO involvement variable is a conservative measure of the CEO’s role, our analysis may understate the influence of CEOs on the characteristics of new board members.

Table III presents a correlation matrix showing how CEO involvement is related to other important characteristics of the CEO, the board, and the company. The table highlights the importance of controlling for other variables when analyzing the association between CEO involvement and characteristics of new directors. A CEO is more likely to be involved in director appointments if he has several common indicators of power, including long tenure in office, high stock ownership, or membership in the company’s founding family, though this pattern fails to hold for the variable indicating the presence of a non-CEO chairman of the board. Small boards, boards without a majority of independent outside directors, and boards where no independent director is a major stockholder also have greater CEO involvement in director selection. When company size is large, the CEO is also less likely to be involved in nominating directors.

II. Board Composition and Director Status

We investigate whether CEO involvement affects the likelihood that new directors have independent outsider status. Numerous recent studies suggest that boards composed of a large fraction of independent outsiders monitor managers more effectively. Weisbach (1988) shows outside-dominated boards are more likely to remove poorly performing CEOs; Byrd and Hickman (1992) find higher bidder returns from tender offers when the board has a majority of independent directors; Brickley, Coles, and Terry (1994) find more favorable announcement returns to poison pill adoptions; and Cotter, Shivdasani, and Zenner (1997) find that acquisition targets realize larger shareholder returns when they have independent boards. Although evidence of the effect of independent directors on firm performance has been harder to detect (see, e.g., Hermalin and Weisbach (1991), and Bhagat and Black (1996)), Brickley and James (1987) in a study of banking firms and Mayers, Shivdasani, and Smith (1997) in a study of insurance firms document managerial perquisite consumption to be inversely related to the fraction of outside directors on the board.

We consider directors to be independent if they are neither insiders (corporate officers) nor gray outsiders (those who are retired insiders, relatives of the CEO, interlocked with the CEO on another board, or have other disclosed conflicts of interest). We study both the cross-sectional association between CEO

Table III
Correlation Matrix for Financial and Corporate Governance Variables

The sample consists of 341 publicly traded *Fortune 500* firms, excluding those in the financial and utility industries, as of 1994. The CEO involvement variable equals one if the CEO is a member of the board of directors nominating committee, or if no nominating committee exists and new directors are nominated by the entire board. Boards are classified as independent if independent directors constitute a majority of the board. Data on ownership structure and board composition are obtained from proxy statements, and financial data are from COMPUSTAT. ROA is computed as the ratio of earnings before interest and taxes to total assets net of the median for all firms in the same two-digit SIC code.

	Firm Size	ROA	CEO Tenure	CEO in Founding Family	Equity Ownership of CEO	Non-CEO Chairman of Board	Independent Board	Independent Stockholder—Director	Board Size
CEO involved in director appointments (indicator variable)	-0.31***	0.07	0.22***	0.29**	0.25**	-0.04	-0.27***	-0.09*	-0.20***
Firm size (log of assets)		-0.20***	-0.19***	-0.31***	-0.28***	-0.10*	0.09*	-0.04	0.45***
ROA			0.07	0.10*	0.08	0.06	0.04	0.01	0.02
CEO tenure (log of years in office)				0.48***	0.33***	-0.23***	-0.08	0.04	-0.03
CEO as member of founding family (indicator variable)					0.56***	-0.07	-0.18***	-0.07	-0.24***
Equity ownership of CEO (percentage of shares outstanding)						-0.07	-0.12**	-0.04	-0.17***
Non-CEO chairman of board (indicator variable)							0.03	-0.07	-0.08
Independent board (indicator variable)								0.08	0.08
5 percent stockholder serving as independent outside director (indicator variable)									0.04

*, **, *** indicate significance at the 10-, 5-, and 1-percent levels, respectively.

involvement and the fraction of directors in different categories, as well as the probability that a new director has independent or gray status. We expect our analysis of new appointments to have greater statistical power than the cross-sectional model because cross-sectional patterns of board composition result from the cumulation of many prior years of appointments. However, we still expect the cross-sectional model to provide insights into CEO influence, in part as a consistency check on our results for appointments, but also because data in Tables I and II raise the possibility that some directors change their status after being appointed. For example, an independent director might shift to the gray category as a result of being co-opted by a CEO who offers personal consulting fees or diverts company business to the outsider's principal employer or because an interlocking directorship emerges from the CEO joining the board of the independent director's company.

A. Cross-Sectional Analysis of Board Composition

Table IV presents cross-sectional ordinary least squares models of the fraction of directors who have independent and gray status, using data for 1994. As an alternative specification, we also estimate a logit model for whether the board is independent.

We control for a number of factors, including firm size (log of total assets) and the pretax return on assets over the prior year, measured as the ratio of earnings before interest and taxes over assets, minus the median for all COMPUSTAT firms in the same two-digit SIC code. We include controls for board size (in a log specification, following Yermack (1996)), the fraction of outside directors appointed during the tenure of the current CEO, an indicator variable for a non-CEO chairman of the board, and an indicator for the presence of an independent director who is also a five percent stockholder. We also control for several CEO characteristics, including the CEO's fractional equity ownership, the CEO's tenure, an indicator for whether the CEO is near expected retirement age (between 62 and 66, following Hermalin and Weisbach (1988)), and an indicator for CEOs who belong to the company's founding family.

Consistent with the hypothesis that involved CEOs select directors less likely to monitor them, the CEO involvement indicator in Table IV has a negative estimated coefficient in the regression model for the fraction of the board that is independent, a positive estimate in the model for gray directors, and a negative estimate in the logit model for the probability that the board is independent. All three estimates are statistically significant, and all have large economic significance. The fraction of independent directors is estimated to be 13 percentage points lower than the mean of 46 percent if the CEO is involved in director selection, and the fraction of gray directors on the board is estimated to be five percentage points higher than the mean of 26 percent. The probability that a board is independent, based on an evaluation of the partial derivatives of the logit likelihood function, increases from 28 percent when the CEO is involved in the nomination process to 55 percent if the CEO is not involved.

Table IV
Cross-Sectional Estimates of Board Composition

Regression estimates of the fraction of independent directors and gray directors on the board. The sample includes all *Fortune 500* firms, except for private, financial, and utility companies, during 1994. The involved CEO variable equals one if the CEO is a member of the board of directors nominating committee, or if no nominating committee exists and new directors are nominated by the entire board. Inside directors are current employees of the firm. Nonemployee directors who are retired employees, are relatives of the CEO, have business ties to the firm, or have interlocking directorships with the CEO are classified as gray. All other appointees are classified as independent. Boards are classified as independent if independent directors constitute a majority of the board. Data on ownership structure and board composition is obtained from proxy statements, and financial data are from COMPUSTAT. ROA is computed as the ratio of earnings before interest and taxes to total assets net of the median for all firms in the same two-digit SIC code. *p*-values appear in parentheses below each estimate.

Explanatory Variables	Dependent Variable		
	Fraction of Independent Outside Directors (OLS)	Fraction of Gray Outside Directors (OLS)	Probability that Board Is Independent (Logit)
Intercept	0.36 (0.00)	0.02 (0.86)	0.66 (0.59)
Involved CEO	-0.13 (0.00)	0.05 (0.01)	-1.16 (0.00)
CEO tenure (log, years in office)	-0.03 (0.10)	0.02 (0.38)	-0.14 (0.59)
Equity ownership of CEO (fraction of outstanding shares)	-0.23 (0.12)	0.05 (0.74)	0.66 (0.77)
Non-CEO chairman of board (indicator variable)	-0.05 (0.07)	-0.03 (0.25)	-0.39 (0.28)
CEO as member of founding family (indicator variable)	-0.03 (0.30)	-0.00 (0.95)	-0.99 (0.03)
CEO at retirement age (indicator variable, CEO between 62 and 66)	-0.02 (0.37)	0.02 (0.47)	-0.47 (0.15)
5 percent blockholder who is an independent director (indicator variable)	0.11 (0.01)	-0.08 (0.06)	0.89 (0.12)
Fraction of outside directors appointed during tenure of current CEO	0.09 (0.05)	-0.04 (0.40)	0.38 (0.55)
Log of board size	0.10 (0.00)	0.07 (0.00)	-0.03 (0.93)
Firm size (log of total assets)	-0.01 (0.59)	0.00 (0.59)	-0.03 (0.79)
ROA	0.03 (0.67)	-0.01 (0.89)	1.13 (0.21)
R^2 (pseudo R^2 for logit models)	0.23	0.04	0.09
Number of observations	336	336	336

Among the control variables included in the OLS models in Table IV, the presence on the board of an independent five percent stockholder-director appears especially important. When such a director is present, board composition seems predisposed to stronger monitoring, with a higher fraction of independent outside directors and a lower fraction of gray outsiders.

B. Analysis of Board Appointments

Having studied the association between CEO involvement in director selection and cross-sectional patterns of board composition, we next analyze how CEO involvement impacts changes in the board. We begin by simply comparing the proportions of independent, gray, and outside appointments made when the CEO is involved and is not involved. Our sample includes 434 appointments made when the CEO is involved, including 253 independent outside directors (58 percent), 60 gray outsiders (14 percent), and 121 insiders (28 percent). For boards with uninvolved CEOs, the 578 total appointments include 406 independent outsiders (70 percent), 47 gray outsiders (8 percent), and 125 insiders (22 percent). The differences in proportions are significant at the 0.1 percent, 2 percent, and 7 percent levels, respectively. This simple evidence is consistent with the idea that independent directors, who are more likely to monitor the CEO, are appointed less frequently when the CEO is involved in director selection.

Table V presents logit analyses of appointments of independent and gray directors. The first column of estimates is for a logit model with the dependent variable set equal to one if the appointee is an independent outside director. The second column contains a similar model for the probability that an appointee is a gray outsider. These two models are estimated over our entire sample of appointments. As control variables, we include an indicator variable for whether the CEO is near retirement age, an indicator for whether the board is independent, indicators for the type of director replaced (these indicators equal zero for board expansions), and controls for firm size and performance. Although not included in the reported results, our inferences are robust to inclusion of the full range of regressors from Table IV.

Consistent with the cross-sectional results, Table V indicates that CEO involvement is significantly associated with a greater incidence of gray appointments and a lower incidence of independent appointments. Confirming the evidence in Table I, the estimates also indicate that appointees are substantially more likely to replace retiring directors of the same category than directors from other categories. When the CEO is near retirement age, fewer appointees are independent or gray, reflecting the tendency documented by Hermalin and Weisbach (1988) of these firms to appoint inside directors as a prelude to CEO succession.

Conditional on the board replacing a retiring independent outside director, we study the likelihood that the new appointee is a gray outsider, a pattern that should imply deterioration in the board's monitoring capacity. A logit model of this choice appears in the third column of Table V, and the estimates exhibit a strong positive association between CEO involvement and the probability that an independent director is replaced by a gray director.

The final column of Table V presents logit estimates for whether a new director appointment shifts the composition of the board from one that is not independent to one that is. There are 58 such instances in our sample, 20 of which occur when the CEO is involved. Consistent with the previous results,

Table V

Logit Estimates of the Likelihood of Director Appointments

Logit regression estimates of the probability that a board appointee is an independent or a gray director. The sample includes all director appointments by *Fortune 500* firms, except for private, financial, and utility companies, during the 1994–1996 period. Inside directors are current employees of the firm. Nonemployee directors who are retired employees, are relatives of the CEO, have business ties to the firm, or have interlocking directorships with the CEO are classified as gray. All other appointees are classified as independent. Boards are classified as independent if independent directors constitute a majority of the board. The involved CEO variable equals one if the CEO is a member of the board of directors nominating committee, or if no nominating committee exists and new directors are nominated by the entire board. Data on ownership structure, board composition, and director characteristics are obtained from proxy statements, and financial data are from COMPUSTAT. ROA is computed as the ratio of earnings before interest and taxes to total assets net of the median for all firms in the same two-digit SIC code. *p*-values appear in parentheses below each coefficient estimate.

Explanatory Variables	Appointee Is an Independent Outsider (entire sample)	Appointee Is a Gray Outsider (entire sample)	Independent Outsider Replaced by Gray (exiting indeps.)	Appointee Moves Board to Independent (entire sample)
Intercept	1.47 (0.01)	−2.98 (0.00)	−3.32 (0.04)	−0.48 (0.69)
Involved CEO	−0.36 (0.02)	0.56 (0.01)	0.98 (0.01)	−0.48 (0.10)
CEO at retirement age (indicator variable, CEO aged 62 to 66)	−0.27 (0.17)	−0.16 (0.62)	0.24 (0.65)	0.24 (0.50)
Independent board (indicator variable)	0.27 (0.08)	−0.17 (0.47)	−0.13 (0.73)	
Inside director replaced (indicator variable)	−0.81 (0.00)	−0.87 (0.03)		
Gray outside director replaced (indicator variable)	−0.68 (0.00)	1.50 (0.00)		
Independent outside director replaced (indicator variable)	1.08 (0.00)	−0.23 (0.39)		
Firm size (log of total assets)	−0.11 (0.11)	0.07 (0.47)	0.05 (0.79)	−0.27 (0.05)
ROA	0.61 (0.40)	0.12 (0.91)	1.23 (0.49)	1.36 (0.28)
Pseudo R^2	0.11	0.08	0.04	0.02
Number of observations	992	992	399	992

our regression model indicates that boards are less likely to make a pivotal addition of this type if the CEO is involved in director selection. The estimate for CEO involvement is negative and significant at the 10 percent level in this model. Our sample also consists of 16 appointments of the opposite type, where the appointee shifts the composition of the board away from one that is independent. Of these 16 appointments, 11 occur when the CEO is involved. However, the small frequency of such observations precludes a logit estimation similar to that in Table V.

To understand the economic significance of the effect of CEO involvement, we compute estimated probabilities by evaluating partial derivatives of the logit models of Table V at the means for all variables. According to our estimates, CEO involvement lowers the probability of an independent appointment from 71 percent to 63 percent and raises the probability of a gray appointment from 7 percent to 12 percent. The likelihood that a gray outsider replaces a departing independent rises from 5 percent to 13 percent. Finally, the probability that an appointee shifts the board's composition to independent drops from seven percent to four percent when the CEO is involved. The economic magnitude of these estimates implies that the effects of CEO involvement on board composition are nontrivial.

Our analysis to this point has treated CEOs as involved in director selection both when they serve on the nominating committee and when the firm has no separate nominating committee. However, the relative degree of CEO influence may vary across these subgroups. For example, CEOs sitting on a nominating committee may find it easier to wield influence over the smaller number of individuals participating in director selection. It is equally possible, however, that the presence of a separate committee indicates boards that attach special importance to director selection, in which cases CEO influence over appointments may be lower. To evaluate these possibilities, we reestimate our results including an interaction term that takes the value one if the CEO is involved but the firm does not have a nominating committee. Coefficient estimates for this interaction term indicate that in firms with no separate committee, independent outside directors are less likely and gray directors are more likely to be appointed (both significant at the 10 percent level). However, such firms do not differ in the likelihood of gray appointees replacing independent incumbents, or the likelihood of appointments that shift the composition of the board to a majority of independent directors.

A limitation of our analysis is the implicit assumption that CEO involvement is exogenous. In practice, the CEO's power to select new directors may emerge endogenously from negotiations with other board members over the balance of power, as suggested by Hermalin and Weisbach (1998). In untabulated tests, we attempt to control for the endogeneity of CEO involvement with a two-stage model in which the indicator for CEO involvement is replaced by its predicted value. We follow the methodology of Kovenock and Phillips (1997), who estimate a similar two-stage model of plant closings that includes a first-stage logit estimation of the probability that a firm alters its capital structure.

We estimate a first-stage logit model of the likelihood of CEO involvement as a function of firm size and performance, CEO tenure, CEO stock ownership, CEO status as a chairman or firm founder, an indicator for expected retirement age, board size, and the presence of an independent five percent stockholder-director. To account for the possibility that CEOs are more likely to be involved when it is important to recruit gray or inside directors, we also include as first-stage variables the average fraction of gray and independent directors on boards of firms in each two-digit SIC code using our

sample firms. Finally, we include in the first-stage logit model an indicator that equals one if the CEO had been hired from outside the firm within the prior three years. New outside CEOs may receive authority to oversee director selection as part of a mandate to “clean house” while restructuring the firm, and outside CEOs may also be more likely to recruit gray directors with whom they have had prior business relations.

Results from the first-stage model indicate that CEO involvement is negatively related to firm size and performance, and positively related to CEO tenure, CEO equity ownership, founder status, and the presence of a five percent independent director blockholder. CEOs hired from outside the firm within the prior three years are also more likely to have involvement status. Finally, CEO involvement is negatively related to the average fractions of gray and independent directors for firms in the same industry.

Replicating the analysis of appointments in the two-stage framework, we find the same sign and significance for the CEO involvement variable for the first three models reported in Table V. For the probability that a new director represents a “pivotal” appointment that moves the board to become more than 50 percent independent, however, the estimate on CEO involvement, which was previously marginally significant, loses significance. The basic finding that involved CEOs are likely to appoint fewer independent and more gray directors thus appears to hold in a framework where CEO involvement is treated as endogenous.²

III. Investor Reactions to Appointments

The preceding tests indicate that involved CEOs are less likely to nominate independent directors, but the tests do not tell us whether the attributes of independent nominees vary with CEO involvement. To assess differences in the quality of independent director appointees, we study investor reactions to the announcement of each appointment. We compute cumulative abnormal stock returns (CARs) over a three-day period running from the day before the announcement until the day after, using standard event-study methodology (Dodd and Warner (1983)). Market model parameters are estimated from one year of trading data preceding the event window.³ We identify announcement events by searching the LEXIS/NEXIS data retrieval system for newspaper stories and press releases. We exclude announcements where multiple directors are appointed on the same day in order to construct mutually exclusive categories of independent, gray, and inside appointments. We also restrict the analysis to those appointments

² In additional tests, we also explore whether outside CEOs are more likely than other CEOs to appoint fewer independent and more gray directors to the board. Estimating the models reported with an interaction term between CEO involvement and an indicator for outside CEOs, we are unable to find such a pattern.

³ If appointments are made following periods of poor performance, the market model parameters may be biased. We repeat our analysis by using simple net-of-market stock returns instead of market model abnormal returns and find virtually no differences.

that were not first announced in the company's proxy statement, a qualification met by about 76 percent of all appointments, in order to obtain distinct announcement dates for appointments.

A. Univariate Analysis

Panel A of Table VI presents mean and median CARs for the 626 announcements of director appointments for which announcement dates and usable stock market data are available. For the set of all independent outside appointments, we find that neither the mean nor median CAR is significantly different from zero. This result is similar to that in Rosenstein and Wyatt (1990) who document a small and statistically insignificant stock-price reaction for outside director appointments in large firms. Given the evidence on active monitoring by outside directors documented in prior studies, this suggests that the decision to appoint an outside director may convey adverse information that offsets the positive effects of such appointments. For example, Hermalin and Weisbach (1988) show that inside appointments tend to precede CEO retirements. The appointment of an outside director may signal a diminished likelihood that the CEO plans to retire, news that might meet with unfavorable reactions in circumstances when the CEO is entrenched or underperforming. Alternatively, since a large fraction of independent appointees in the sample replace a departing incumbent who was also independent, such appointments may not be expected to generate enhanced monitoring benefits. Accordingly, it appears important to control for the information content and the type of director replaced when studying the market reaction to director announcements.

With these caveats in mind, we compare the CARs across subsamples of CEO involvement before proceeding to a multivariate analysis. The CARs are significantly negative with magnitudes of -0.92 percent (mean) and -0.71 percent (median) for independent appointments where the CEO is involved. In contrast, there is weak evidence of a positive CAR when the CEO is uninvolved in nominations. The mean CAR is 0.34 percent and significant at the 8 percent level using a t -test, but this pattern fails to hold for the median. Both t -tests and Wilcoxon rank-sum tests indicate that the CARs are significantly lower for appointments where the CEO is involved compared to appointments without CEO involvement. One interpretation is that independent outsiders perceived to be of lower quality are chosen for board seats if the CEO is involved in their selection. Alternatively, it is possible that these appointments convey a diminished likelihood of CEO turnover, which may be more disappointing news for firms with involved CEOs.

We study CARs for appointments of gray outside directors with results reported in the center of Table VI. Overall, we find that appointments of gray directors lead to a significant negative stock price reaction. Across subsamples of CEO involvement, however, no significant difference in CARs for gray appointments exists. The negative average market reaction to gray appointees is consistent with several explanations. Such appointees could be

Table VI
Cumulative Abnormal Returns for Announcements of Director Appointments

Three-day cumulative abnormal returns (CARs) associated with announcements of appointments of directors by *Fortune* 500 companies during the 1994–1996 period. Observations are excluded from the analysis if multiple appointments are announced on the same day. Inside directors are current employees of the firm. Nonemployee directors who are retired employees, are relatives of the CEO, have business ties to the firm, or have interlocking directorships with the CEO are classified as gray. All other appointees are classified as independent. The involved CEO variable equals 1 if the CEO is a member of the board of directors nominating committee, or if no nominating committee exists and new directors are nominated by the entire board. Data on director characteristics and board composition are obtained from proxy statements. Two-stage CARs are computed by weighting the market model CARs by the reciprocal of $(1 - p)$, where p is the probability of director appointments of a given type, estimated as a function of CEO involvement, indicator variables for CEO retirement age, independent board, type of director replacement, firm size, and industry-adjusted return of assets (ROA). Numbers in parentheses represent p -values from two-tailed tests using a t -test for means, and a Wilcoxon signed-rank test for medians.

	Independent Appointees			Gray Appointees			Inside Appointees		
	Mean	Median	Number of	Mean	Median	Number of	Mean	Median	Number of
	CAR	CAR	Observations	CAR	CAR	Observations	CAR	CAR	Observations
Panel A: Market Model CARs									
All appointments	-0.0011 (0.53)	-0.0010 (0.30)	373	-0.0091 (0.05)	-0.0056 (0.06)	40	-0.0031 (0.55)	0.0002 (0.53)	82
Appointments where CEO is involved	-0.0092 (0.00)	-0.0071 (0.00)	133	-0.0095 (0.30)	0.0041 (0.64)	18	0.0000 (0.99)	0.0018 (0.99)	40
Appointments where CEO is not involved	0.0034 (0.08)	0.0006 (0.32)	240	-0.0088 (0.03)	-0.0092 (0.05)	22	-0.0060 (0.28)	-0.0014 (0.34)	42
t -statistic for difference in CARs	3.42 (0.00)			0.07 (0.95)			0.58 (0.56)		
Wilcoxon Z statistic for difference in CARs		3.12 (0.00)			0.86 (0.39)			0.45 (0.65)	
Panel B: Two-Stage CARs									
All appointments	0.0013 (0.88)	-0.0035 (0.49)	370	-0.0095 (0.08)	-0.0059 (0.12)	40	-0.0022 (0.84)	0.0000 (0.54)	80
Appointments where CEO is involved	-0.0380 (0.00)	-0.0186 (0.00)	131	-0.0103 (0.34)	0.0055 (0.73)	18	0.0005 (0.98)	0.0042 (0.80)	38
Appointments where CEO is not involved	0.0229 (0.05)	0.0028 (0.20)	239	-0.0089 (0.05)	-0.0099 (0.09)	22	-0.0047 (0.56)	-0.0034 (0.51)	42
t -statistic for difference in CARs	3.51 (0.00)			0.12 (0.90)			0.22 (0.83)		
Wilcoxon Z statistic for difference in CARs		3.02 (0.00)			0.69 (0.49)			0.04 (0.97)	

viewed as less likely monitors, could signal that the CEO is less likely to retire, or could signal adverse information about the state of the firm if gray appointments often occur around periods of financial distress (Gilson (1990)). The right columns of Table VI present results about investor reactions to inside director appointments. We find no significant reaction to these appointments for the entire sample of 82 events, nor for either of the two subsamples sorted by CEO involvement status.

A potential problem with our comparisons of CARs across subgroups defined by CEO involvement is that the CEO's role in director selection is public information. In an informationally efficient market, one would expect investors' expectations of low quality among future directors to be capitalized in stock prices once they know whether the board has a nominating committee and, if so, whether the CEO is a member. The negative CARs that we nevertheless observe when new independent directors are appointed with CEO involvement may be attributable to the resolution of uncertainty about the timing or frequency of these appointments, and the data also seem consistent with a conjecture that involved CEOs appoint even lower quality independent directors than investors anticipate. Alternatively, independent appointments by involved CEOs may represent a larger surprise to the market, given its advance knowledge that such directors are less likely to be appointed when the CEO is involved.

In an attempt to evaluate the importance of prior anticipation across the two subsamples, we conduct a two-stage CAR analysis similar to that in Kang and Shivdasani (1996).⁴ In the first stage, we estimate the likelihood of an independent, gray, or inside director appointment for each firm-year in the sample. These probabilities are estimated using the first two models in Table V and an equivalent model for inside appointments. We use the forecast probabilities of appointments from this procedure to adjust the market model CARs by a factor of $1/(1 - p)$, where p is the estimated probability of each type of appointment. Each adjusted CAR therefore represents an estimate of what the stock price reaction to the director appointment would have been if the event were unanticipated. Comparison of such CARs across subsamples by CEO involvement status should therefore be purged of bias arising from anticipation of appointments by investors.

The two-stage CARs, reported in Panel B of Table VI, provide strong support for the proposition that differences in market model CARs across subsamples sorted by CEO involvement are not caused by anticipation bias. The magnitude and significance of the results for independent appointees widens for the two-stage CARs compared to their market model counterparts. The inferences for appointments of gray and inside directors from market model CARs are similarly robust to the two-stage procedure. We recognize potential limitations of the two-stage CAR analysis. To the extent that the

⁴ A similar approach to account for prior anticipation appears in Bhagat and Jeffries (1991) in the context of antitakeover amendments and in Chaplinsky and Hansen (1993), who examine debt issues.

first-stage models of board appointments are incorrectly specified, the probabilities of various types of appointments will be measured with error, reducing the precision of our second-stage tests. Though we have no reason to expect that the first-stage models are biased, we experiment with numerous alternative specifications and obtain very similar results. Nonetheless, the two-stage CARs need to be interpreted with caution, and we report them primarily as a robustness check.

B. Multivariate Analysis

We conduct a multivariate analysis of market model CARs for announcements of independent appointments in Table VII. The regressions control for CEOs near retirement age to proxy for the market's prior anticipation of CEO retirement. Additional control variables include indicators for the type of director replaced (if any), firm size, performance, indicator variables for appointees' regular occupations, the number of other directorships held, and its square. Consistent with the univariate results, the CEO involvement indicator has a negative and statistically significant estimated association with investor reactions to independent board appointments. The coefficient estimate indicates that CARs are approximately 1.2 percent lower in these cases.

As discussed above, the CARs for independent outside appointments may be confounded by the additional news conveyed about the likelihood of CEO turnover, which may be viewed particularly negatively when the CEO is involved. To evaluate this possibility, we include interaction terms with CEO involvement and two variables that proxy for the market's prior anticipation of CEO retirement: the indicator for CEOs at expected retirement age and the ROA variable for prior performance. As shown in the second column of Table VII, interactions between these variables and CEO involvement are not significantly related to CARs, and the coefficient on the CEO involvement variable is robust to their inclusion in the model. Thus, the association between CEO involvement and the stock-price reaction to independent director appointments does not appear to be driven by investors' expectations regarding CEO turnover.

In the third and fourth columns of Table VII, we present regression analysis of two-stage CARs calculated as described in the univariate analysis above. As was the case in Table VI, our results appear to strengthen after applying this adjustment to control for the *ex ante* expectation of an independent director appointment.

IV. Other Directorships and Stock Ownership of Independent Appointees

Independent directors who have reputations as effective monitors might be recruited to serve on many boards, and researchers have therefore used the number of additional board seats as a measure of an individual director's quality. Kaplan and Reishus (1990), Gilson (1990), and Shivdasani (1993)

present evidence supporting the idea that the number of directorships may serve as an indicator of director reputation. However, institutional investors and shareholder activists have recently questioned the effectiveness of directors who serve on many boards. According to such criticisms, additional directorships may reduce an individual's monitoring capability as their available time is spread thin. Some support for this view is found by Core, Holthausen, and Larcker (1999), who define directors to be "busy" if they serve on three or more other boards if they are employed, and six or more boards if they are retired. Core et al. find that the presence of busy directors is positively associated with measures of excess CEO compensation, suggesting that such directors are less likely to engage in significant managerial monitoring than other directors who serve on fewer boards.

We investigate potential differences in the reputation of appointees by studying the number of additional directorships held. Estimates of the association between CEO involvement and independent appointees' other board seats appear in the first two columns of Table VIII. Control variables are similar to those used in our other models. We also include indicator variables for whether the new appointee is a current or former CEO of another firm, because such persons are often in high demand as outside board members. The first column of Table VIII presents a Poisson maximum likelihood model of the number of other board seats held by independent appointees. The model estimates indicate that involved CEOs are more likely to appoint directors who serve on a large number of other boards. The second column presents a logit model of whether a new independent director fits the "busy" definition of Core et al. (1999). We find a positive association between "busy" appointments and CEO involvement, significant at the 5 percent level. If one believes that too many board seats indicate a director who is an indifferent or overtaxed monitor of top management, as suggested by investor activists, then the data are consistent with an association between less valuable appointments and CEO involvement. Given that the optimal number of directorships is an unresolved issue, however, such an interpretation should be viewed with caution.

We study the stock ownership of new independent directors, with the premise that appointees with high stock ownership have stronger incentives to monitor the CEO. However, appointments of directors with large stock ownership may also indicate external control pressures. If CEO involvement is positively associated with poor corporate governance or CEO entrenchment, outside investors may have incentives to purchase large amounts of stock and seek board representation with the hope of instituting reforms (Shleifer and Vishny (1986)).

The right column of Table VIII presents Tobit estimates for a model with the dependent variable equal to the fraction of outstanding shares held by new independent directors. According to the first proxy statement filed after their election or nomination, new independent outside directors generally own very little stock, with 68 percent of our sample holding 1,000 shares or fewer and 25 percent owning no shares at all; the Tobit specification accommodates this high incidence of zero ownership. The coefficient estimate for

Table VII

Multivariate Analysis of Cumulative Abnormal Returns for Independent Appointments

Ordinary least squares regression estimates of the three-day cumulative return (CAR) associated with announcements of independent director appointments to the board. The sample includes independent director appointments by *Fortune 500* firms, except for private, financial, and utility companies, during the 1994–1996 period. Observations are excluded from the analysis if multiple appointments are announced on the same day. Inside directors are current employees of the firm. Nonemployee directors who are retired employees, are relatives of the CEO, have business ties to the firm, or have interlocking directorships with the CEO are classified as gray. All other appointees are classified as independent. Boards are classified as independent if independent directors constitute a majority of the board. The involved CEO variable equals one if the CEO is a member of the board of directors nominating committee, or if no nominating committee exists and new directors are nominated by the entire board. Two-stage CARs are computed by weighting the market model CARs by the reciprocal of $(1 - p)$, where p is the probability of director appointments of a given type, estimated as a function of CEO involvement, indicator variables for CEO retirement age, independent board, type of director replacement, firm size, and industry-adjusted return of assets (ROA). Data on ownership structure, board composition, and director characteristics are obtained from proxy statements, and financial data are from COMPUSTAT. ROA is computed as the ratio of earnings before interest and taxes to total assets net of the median for all firms in the same two-digit SIC code.

Explanatory Variables	Market Model CARs			Two-Stage CARs		
	Estimate	p-value	Estimate	p-value	Estimate	p-value
Intercept	-0.010	0.54	-0.012	0.46	-0.003	0.97
Involved CEO	-0.0122	0.00	-0.010	0.04	-0.060	0.00
Involved CEO $\times$ ROA			-0.045	0.18	-0.174	0.32
CEO at retirement age (age 62 to 66)	-0.009	0.08	-0.010	0.11	-0.031	0.23
CEO at retirement age and CEO involved			0.002	0.82	0.045	0.42
Independent board	-0.002	0.66	-0.002	0.58	-0.006	0.76
Inside director replaced	0.004	0.50	0.004	0.53	0.013	0.69
Gray outside director replaced	0.013	0.09	0.013	0.07	0.032	0.36
Independent outside director replaced	0.004	0.27	0.004	0.28	0.016	0.45
Executive	-0.003	0.61	-0.003	0.68	0.012	0.74
Academic	-0.006	0.48	-0.005	0.56	-0.019	0.67
Lawyer	0.001	0.89	0.002	0.84	0.040	0.47
Commercial banker	-0.005	0.70	-0.003	0.80	0.017	0.80
Investment banker	-0.004	0.74	-0.003	0.80	0.002	0.97
Retired professional	-0.001	0.87	0.000	0.98	0.007	0.87
Consultant	-0.006	0.64	-0.006	0.63	0.004	0.95
Additional outside directorships	0.001	0.52	0.001	0.62	0.010	0.42
Additional outside directorships squared	-0.000	0.59	-0.000	0.75	-0.001	0.63
Equity ownership of appointee (%)	0.014	0.88	0.026	0.77	0.316	0.50
Firm size (log of total assets)	0.002	0.35	0.002	0.32	0.000	0.97
ROA	-0.011	0.52	0.007	0.75	-0.088	0.31
R^2	0.07		0.07		0.05	
Number of observations	370		370		370	

Table VIII
**Multivariate Analysis of Ownership and Directorships
of Independent Appointees**

Regression estimates of the number of additional outside directorships held and the equity ownership of independent director appointees. The sample includes all independent director appointments by *Fortune 500* firms, except for private, financial, and utility companies, during the 1994–1996 period. Inside directors are current employees of the firm. Nonemployee directors who are retired employees, are relatives of the CEO, have business ties to the firm, or have interlocking directorships with the CEO are classified as gray. All other appointees are classified as independent. Boards are classified as independent if independent directors constitute a majority of the board. Appointees are considered to be “busy” if they are employed and serve on three or more boards, or if they are retired and serve on six or more boards. The involved CEO variable equals 1 if the CEO is a member of the board of directors nominating committee, or if no nominating committee exists and new directors are nominated by the entire board. Data on ownership structure, board composition, and director characteristics are obtained from proxy statements, and financial data are from COMPUSTAT. ROA is computed as the ratio of earnings before interest and taxes to total assets net of the median for all firms in the same two-digit SIC code. *p*-values appear below each estimate in parentheses.

Explanatory Variables	Number of Outside Directorships (Poisson)	Appointee Is a “Busy” Director (Logit)	Appointee’s Ownership (%) (Tobit)
Intercept	–0.20 (0.40)	–3.04 (0.00)	0.12 (0.80)
Involved CEO	0.13 (0.03)	0.39 (0.05)	0.02 (0.13)
CEO at retirement age (indicator variable, CEO aged 62 to 66)	–0.08 (0.36)	–0.22 (0.43)	–0.01 (0.46)
Independent board (indicator variable)	0.00 (0.95)	0.11 (0.57)	–0.01 (0.52)
Inside director replaced (indicator variable)	–0.05 (0.65)	–0.47 (0.17)	0.00 (0.83)
Gray outside director replaced (indicator variable)	0.17 (0.14)	–0.01 (0.98)	0.00 (0.93)
Independent outside director replaced (indicator variable)	0.17 (0.01)	–0.07 (0.73)	0.03 (0.01)
Firm size (log of total assets)	0.09 (0.00)	0.20 (0.02)	–0.00 (0.37)
ROA	0.04 (0.89)	0.09 (0.92)	–0.04 (0.40)
Appointee is CEO in another firm	0.17 (0.00)	0.85 (0.00)	–0.01 (0.20)
Appointee is a former CEO in another firm	0.55 (0.00)	2.19 (0.00)	–0.02 (0.45)
Pseudo R^2	0.02	0.07	0.04
Number of observations	650	650	650

the CEO involvement variable in this model is positive but lacks statistical significance. In unreported tests, we also estimate logit models of the probability that appointees have ownership stakes of 0.1 percent, one percent, and five percent, under the premise that such major stockholder-director

appointments are more likely to represent external control pressures. These tests also do not suggest significant differences in equity ownership by appointees across CEO involvement status.

V. Changes in CEO Involvement Status

Evidence presented above suggests that when CEOs are involved in director selection, companies choose new directors who are less likely to monitor aggressively. This raises the question of why such involvement is widely observed. The evident importance of board characteristics in determining whether the CEO is involved suggests that it is not a straightforward device for CEO entrenchment. Rather, involved CEOs' recruitment of more gray and fewer independent directors might be expected by the board but still tolerated if some CEOs "earn" the right to choose their own monitors due to superior long-term performance, high personal stock ownership, membership in the company's founding family, or other personal or company attributes. We find that CEOs hired from outside the firm are also more likely to have influence over director selection, an outcome probably anticipated by the boards who elect those CEOs. A question that deserves further attention is under what circumstances CEO influence over director selection represents an optimal governance arrangement.

If those instances of CEO involvement that we observe in our sample represent optimal governance arrangements for certain classes of companies, we might expect them to persist in those firms over time. The overall trend for our sample is clearly toward less CEO involvement. Of our 341 companies, 39 changed the CEO's involvement status during our three-year sample period, and a large majority (32 of the 39) shifted an involved CEO to uninvolved status. Changes in CEO status from involved to uninvolved occurred contemporaneously with episodes of CEO turnover in 11 of the 32 cases. The 34.4 percent frequency of CEO turnover in this subsample is significantly greater than the 6.8 percent rate of CEO turnover for the remaining firms where CEO involvement does not change. This supports arguments advanced by Hermalin and Weisbach (1998) that CEOs acquire power in director selection over time. Thus, newly appointed CEOs should be less likely to have involvement status. However, a large fraction of changes in involvement status also occurs in the absence of CEO turnover. We read news stories and proxy statements to understand other reasons for changes in CEO involvement. Public disclosures of such changes are rare, and only one company, the scandal-plagued Archer Daniels Midland, made a public announcement of the shift of its CEO's involvement status. In four other instances, proxy statements around the time of the change contained shareholder resolutions expressing dissatisfaction with the quality or composition of the board but not directly addressing the issue of the CEO's power to select new directors. Thus, for some firms, changes in CEO involvement status appear to be the result of control changes or external pressure, but such forces do not appear to account for all changes.

VI. Conclusions

This paper investigates the role of the CEO in the director selection process. Our study is motivated by growing interest in director selection among institutional investors and other corporate governance activists, as well as recent theoretical work modeling the balance of power between the CEO and the rest of the board (Hermalin and Weisbach (1998)).

We find evidence consistent with the proposition that firms select directors less likely to monitor aggressively when CEOs are involved in the process. Companies are more likely to appoint gray outside directors who have conflicts of interest and less likely to appoint independent outsiders under these conditions, and also are less likely to make pivotal appointments that give the board a majority of independent outsiders. Stock price reactions to independent director appointments are significantly lower when the CEO is involved in director selection, and independent appointees are more likely to fit the “busy” definition of Core et al. (1999). A possible interpretation of this evidence is that influence in the director selection process is a mechanism used by powerful CEOs to curb the performance pressures that arise from monitoring by the board. More broadly, our results illuminate how the influence of the CEO serves as an important determinant of the governance structure of firms.

REFERENCES

- Bhagat, Sanjai, and Bernard Black, 1996, Do independent directors matter? Unpublished manuscript, University of Colorado.
- Bhagat, Sanjai, and Richard H. Jeffries, 1991, Voting power in the proxy process: The case of antitakeover charter amendments, *Journal of Financial Economics* 30, 193–225.
- Brickley, James A., Jeffrey L. Coles, and Rory L. Terry, 1994, The board of directors and the enactment of poison pills, *Journal of Financial Economics* 35, 371–390.
- Brickley, James A., and Christopher James, 1987, The takeover market, corporate board composition and ownership structure: The case of banking, *Journal of Law and Economics* 30, 161–180.
- Byrd, John, and Kent Hickman, 1992, Do outside directors monitor managers? Evidence from tender offer bids, *Journal of Financial Economics* 32, 195–221.
- Chaplinsky, Susan, and Robert W. Hansen, 1993, Partial anticipation, the flow of information, and the economic impact of debt sales, *Review of Financial Studies* 6, 709–732.
- Core, John E., Robert W. Holthausen, and David F. Larcker, 1999, Corporate governance, CEO compensation, and firm performance, *Journal of Financial Economics* 51, 371–406.
- Cotter, James F., Anil Shivdasani, and Marc Zenner, 1997, Do independent directors enhance target shareholder wealth during tender offers? *Journal of Financial Economics* 43, 195–218.
- Dodd, Peter, and Jerold B. Warner, 1983, On corporate governance, *Journal of Financial Economics* 11, 401–438.
- General Motors Corp., 1994, Board guidelines on significant corporate governance issues; reprinted in Robert A. G. Monks and Nell Minow, eds.: *Corporate Governance* (Basil Blackwell, Cambridge, 1995).
- Gilson, Stuart, 1990, Bankruptcy, boards, banks and blockholders: Evidence on changes in corporate ownership and control when firms default, *Journal of Financial Economics* 27, 355–387.
- Hermalin, Benjamin E., and Michael S. Weisbach, 1988, The determinants of board composition, *RAND Journal of Economics* 19, 589–606.
- Hermalin, Benjamin E., and Michael S. Weisbach, 1991, The effects of board composition and direct incentives on firm performance, *Financial Management* 20, no. 4, 101–112.

- Hermalin, Benjamin E., and Michael S. Weisbach, 1997, Endogenously chosen boards of directors and their monitoring of the CEO, *American Economic Review* 88, 96–118.
- Kang, Jun-Koo, and Anil Shivdasani, 1996, Does the Japanese governance system enhance shareholder wealth? Evidence from stock-price effects of top management turnover, *Review of Financial Studies* 9, 1061–1095.
- Kaplan, Steven N., and Bernadette A. Minton, 1994, Appointments of outsiders to Japanese boards: Determinants and implications for managers, *Journal of Financial Economics* 36, 225–258.
- Kaplan, Steven N., and David Reishus, 1990, Outside directorships and corporate performance, *Journal of Financial Economics* 27, 389–410.
- Kovenock, Dan, and Gordon M. Phillips, 1997, Capital structure and product market behavior: An examination of plant exit and investment decisions, *Review of Financial Studies* 10, 767–803.
- Lorsch, Jay L., and Elizabeth M. MacIver, 1989, *Pawns or Potentates? The Reality of America's Corporate Boards* (Harvard Business School Press, Boston).
- Mace, Myles L., 1971, *Directors: Myth and Reality* (Harvard Business School Press, Boston).
- Mayers, David, Anil Shivdasani, and Clifford W. Smith Jr., 1997, Board composition and corporate control, *Journal of Business* 70, 33–62.
- Rosenstein, Stuart, and Jeffrey G. Wyatt, 1990, Outside directors, board independence, and shareholder wealth, *Journal of Financial Economics* 26, 175–191.
- Shivdasani, Anil, 1993, Board composition, ownership structure and hostile takeovers, *Journal of Accounting and Economics* 16, 167–198.
- Shleifer, Andrei, and Robert W. Vishny, 1986, Large shareholders and corporate control, *Journal of Political Economy* 94, 461–488.
- Tejada, Carlos, 1997, Longtime Tandy director quits board, says he was punished for faulting CEO, *Wall Street Journal*, January 16.
- Weisbach, Michael, 1988, Outside directors and CEO turnover, *Journal of Financial Economics* 20, 431–460.
- The Working Group on Corporate Governance, 1991, A new compact for owners and directors; reprinted in Robert A. G. Monks and Nell Minow, eds.: *Corporate Governance* (Basil Blackwell, Cambridge, 1995).
- Yermack, David, 1996, Higher market valuation of companies with a small board of directors, *Journal of Financial Economics* 40, 185–211.