

## THE GOVERNANCE AND CONTROL OF VOLUNTARY CORPORATE SPIN-OFFS

JAMES K. SEWARD

*Amos Tuck School of Business Administration, Dartmouth College, Hanover, New Hampshire, U.S.A.*

JAMES P. WALSH

*School of Business Administration, University of Michigan, Ann Arbor, Michigan, U.S.A.*

*We investigate the role that a voluntary corporate restructuring can play in the design of efficient internal corporate control mechanisms. To this end, we examine the post-restructuring internal control practices in 78 voluntary corporate spin-offs that were completed between 1972 and 1987. We find that the selection of the new CEOs, the design of their compensation contracts, and the staffing of the boards of directors and their compensation committees in the spun-off firms can be seen as ex ante efficient. These governance and control practices, however, are not strongly related to the observed positive market reactions to the spin-off announcements. The results indicate that equity reorganizations facilitate the implementation of efficient internal governance and control practices, but that other factors must influence the share price reactions to the announcement of such voluntary corporate restructurings.*

Scholars in the areas of strategic management, organization theory, and financial economics all share an interest in understanding the governance and control of the modern corporation (Bowman and Singh, 1993). While a well-functioning system of corporate governance and control should contribute to the development of competitive advantage, internal control practices may not always operate effectively. The restructuring of the U.S. economy that followed this century's fourth merger wave can be seen as an awareness by the capital and product markets of the inefficiencies associated with firms' pursuit of financial self-sufficiency and conglomerate diversification (Donaldson, 1994). The motives behind the financial and product-market strategies of the 1960s can be attributed rather benignly to the then CEOs' experiences of growing up in the Depression and their accompanying quest

for self-reliance (Donaldson, 1994) or more insidiously, to such self-serving motives as the consumption of free cash flow (Jensen, 1986), empire building (Amihud and Lev, 1981) or top management featherbedding (Myers, 1983). Business scholars have investigated whether the external corporate control market can identify and redress the inefficient practices of incumbent management. Consequently, research examines the disciplinary nature of top management turnover following external control contests (Martin and McConnell, 1991; Walsh and Ellwood, 1991; Walsh and Kosnik, 1993) and patterns of deconglomeration following such control contests (Bhagat, Shleifer, and Vishny, 1990; Mitchell and Lehn, 1990). Of course, this focus on external control presupposes a breakdown in a firm's capacity to exercise effective internal control. Our interest is in better understanding the nature of internal corporate control. Given that the external control market is no longer as active as it was in the 1980s, this

Key words: corporate governance; corporate restructuring; CEO compensation; spin-offs

focus on internal corporate control practices is particularly timely (Jensen, 1993).

Our interest in internal control asks us typically to consider the efficacy of director oversight. More specifically, internal control is usually manifest in both the directors' design of senior managers' incentive contracts and in their dismissal of a CEO for poor performance (Walsh and Seward, 1990). Each activity has been a frequent focus of empirical inquiry. While Jensen and Murphy's (1990) study of the relationship between CEO pay and performance may be definitive, there are tens if not hundreds of other studies on the topic. Similarly, the study of CEO turnover and succession practices has received widespread attention over the years in strategic management (Fredrickson, Hambrick, and Baumrin, 1988), organization theory (Thomas, 1988), and financial economics (Warner, Watts, and Wruck, 1988). The study of board effectiveness has been the subject of both qualitative (Mace, 1971; Lorsch and MacIver, 1989) and quantitative analyses (Baysinger and Butler, 1985; Hermalin and Weisbach, 1991). Having said this, the work on internal control is limited in two ways. First, there have been few studies that consider director attributes, as well as the identity and compensation of CEOs simultaneously. Most work considers each as a topic worthy of its own investigation. Of course, these CEO and director attributes all comprise interrelated aspects of internal corporate control. And second, while Walsh and Seward (1990) acknowledged that a voluntary corporate restructuring can be seen as an attribute of internal control, relatively little empirical work has been done on the topic within a governance and control framework. Our goal is to examine the relationship between a voluntary corporate restructuring and the more traditional internal corporate control mechanisms identified by Walsh and Seward (1990).

Donaldson's (1990) analysis of General Mills' continuing efforts to discipline itself illustrates the importance of considering voluntary corporate restructuring as a central aspect of internal corporate control. More recently, Donaldson (1994: 163) points out that the lesson of the 1980s' restructuring wave is that 'discipline is reimposed when the internal capital market is broken up, peripheral business entities are sold or spun off, and the company returns to its tradition of redefined core business'. His key

point about the General Mills experience is that this can happen voluntarily. While he does not deny that restructurings can also happen involuntarily, his work asks us to examine the role of voluntary corporate restructuring as a central feature of the internal corporate control process.

Donaldson's (1994) focus is on what might be called the parent firm and how it refocuses itself on its core business(es). He pays little attention to the businesses that are spun-off in the aftermath of this streamlining. Our primary concern in this paper is with those spun-off companies. We know something about what happens to *independent* companies as they are acquired (Haspeslagh and Jemison, 1991; Holland, 1989); we know little, however, about what happens when *new* companies are created from the existing subsidiaries of a parent firm. We are interested in examining the internal governance and control mechanisms that are put in place in these newly created spun-off companies. Unlike the losses that often accompany acquisitions (Holland, 1989), we have reason to believe that there may be a more positive story to tell here. We will simultaneously examine issues of director oversight, as well as the selection and compensation of CEOs in companies created by voluntary corporate spin-offs.

## VOLUNTARY CORPORATE SPIN-OFFS

A spin-off divides the existing asset base of a corporation into two (or more) separate parts. The current shareholders receive a *pro rata* distribution of separate equity claims on the assets of each new corporate entity. Thus, there is no exchange of cash or financial securities for assets in this transaction. Rather, the existing corporate asset base is legally allocated to at least two separate organizations with no change in the proportional equity ownership claims of the existing shareholders. Thus, the basic principal-agent relationship remains unchanged. By focusing on voluntary spin-offs, we examine the governance role of corporate restructuring absent any challenge from the external control market.

The existing empirical studies of corporate spin-offs tend to focus on the shareholder wealth effects of these transactions. In general, these

studies document statistically significant positive abnormal share price performance around the announcement of a spin-off. For example, Miles and Rosenfeld (1983) and Hite and Owers (1983) both reported 2-day excess returns of 3.3 percent around the announcement of a corporate spin-off. Copeland, Lemgruber, and Mayers (1987) recorded an announcement effect of 3.0 percent. Schipper and Smith (1983) documented a 2-day excess return of 2.8 percent. More recently, Cusatis, Miles, and Woolridge (1993) reported a 2-day excess return of 2.1 percent, while Slovin, Sushka, and Ferraro (1995) reported a 1.3 percent announcement effect.

The sources of the increase in shareholder wealth accompanying the announcement of a corporate spin-off, however, are not apparent. Hite and Owers (1983) and Schipper and Smith (1983) document that shareholder gains are related to neither wealth transfers from other financial claimants (e.g., bondholders) nor to the beneficial resolution of inefficient legal or regulatory contractual relationships. Rather, Hite and Owers (1983) suggested that a number of firms in their sample engage in spin-offs in order to separate diverse operating or financing activities. Similarly, Schipper and Smith (1983) noted that productivity increases can occur due to a reduction in the number and diversity of transactions under a single management team. Both arguments foreshadow Donaldson's (1994) analysis of voluntary corporate restructuring. Therefore, our first goal is to identify the specific sources of managerial improvement that occur in conjunction with corporate spin-offs. Our second goal is to investigate the extent to which these CEO and board of director characteristics are systematically related to any observed shareholder wealth effects.

## **HYPOTHESES**

Our basic presumption is that we expect to see effective internal controls put in place in the newly created spun-off firm. This prediction is based on the idea that real improvements in managerial decision-making can lead to an increase in aggregate firm value. Corporate restructurings may provide the motivation and rewards to implement improved internal corporate governance and control practices. For exam-

ple, changes in the nature of a firm's operating environment and financial structure may prompt changes in the contracting relationships that comprise a firm's internal control mechanisms. At some point, it may be more efficient to separate an existing organization into independent corporate entities so as to enable new internal control mechanisms to be designed for each. In particular, the creation of separately traded equity claims allows for the opportunity to design more efficient market-based incentive compensation contracts.

Board members and top management teams that have the inclination to engage in a voluntary act of corporate downscoping that is in absolute contradiction to a self-serving empire-building motive should have the ability to design and implement effective governance arrangements in the spun-off firm.<sup>1</sup> As we will see, a number of enabling conditions might conspire to make this so. In addition to the factors that may facilitate the initiation of effective internal controls, the visibility of the newly created firm does allow for easier external scrutiny and a 'pure play' acquisition scenario. Therefore, the firm may be easily disciplined in the external control market if it does not seize the opportunities presented to it. The opportunities we will examine include the selection and compensation of a CEO, as well as the staffing of the new company's board of directors. We will also link each of these practices to the capital market's reaction to the spin-off announcement in the hope of resolving the shareholder wealth effects puzzle that finance scholars have documented, but not fully answered for over a decade.

### **CEO identity**

An invariant attribute of a corporate spin-off is that it narrows the asset base under the parent company CEO's control and simplifies the resource allocation process for the spun-off entity's managers. What does vary is the identity of the person selected to be the CEO of the newly created firm. There are two alternative views about who might be chosen to lead this spun-off firm.

Aron (1991) argued that a spin-off represents

---

<sup>1</sup> While our interest is in the spun-off firm, we will also track the internal control practices in the parent firm.

a powerful promotion-based motivation for the incumbent divisional or subsidiary managers. That is, the former SBU or division manager may have been implicitly or explicitly promised that he or she might be the CEO of a free-standing company one day. A corporate spin-off allows the managers of the formerly combined entity to fulfill that promise and install an insider as the CEO of the new firm. Alternatively, the creation of a CEO position, as opposed to a division manager position, allows the firm to compete in the external CEO labor market for talent that would have been unwilling to lead a division of a diversified company. This logic suggests that the CEO of the new firm will be an outsider. Given the completely voluntary nature of the spin-offs we will examine, we are drawn to Aron's (1991) logic. We see little reason why an insider would not be given a chance to succeed in these circumstances. Therefore:

*Hypothesis 1a: The CEO of the spun-off company will be an insider from the formerly combined company.*

*Hypothesis 1b: The market's reaction to the spin-off announcement will be positively associated with the selection of an insider to be the CEO of the spun-off company.*

## CEO compensation

In addition to being able to reward the manager of these assets with CEO status, the spin-off creates an opportunity to write a strong, market-based incentive compensation contract for the new CEO. While it was always possible to write market-based contracts for the division manager of what became the spun-off company, the motivational property of such a contract is suspect since too many factors beyond the manager's control are responsible for the firm's performance (Hill, Hiitt, and Hoskisson, 1992). Such a market-based compensation contract in the pre-restructured firm would be based upon the relative financial performance of all of the parent's operations. As such, it would be a noisy indicator of the divisional manager's performance. A spin-off, however, creates separately traded equity claims. This allows the spun-off company's directors to design market-based performance

assessment of company performance. Following Finkelstein and Hambrick (1988), we will consider both the form and the amount of a CEO's compensation. That is, we will consider both the existence and the extent of the use of performance-contingent incentive contracts. Therefore:

*Hypothesis 2a: The CEO of the spun-off company will have a compensation plan that includes stock options.*

*Hypothesis 2b: The market's reaction to the spin-off announcement will be positively associated with the presence of stock options in the CEO's compensation plan.*

Westphal and Zajac (1994) pointed out that it is important to look beyond the mere existence of performance-contingent compensation plans to consider if they are actually used. Toward this end, we will consider the amount of compensation derived from both nonperformance-contingent compensation (e.g., salary) and performance-contingent compensation (e.g., various equity-linked financial rewards). We expect that performance-contingent compensation will comprise the majority of income earned by the CEO of a spun-off company. Therefore:

*Hypothesis 3a: The CEO of a spun-off company will earn the majority of his or her income in the form of performance-contingent compensation.*

*Hypothesis 3b: The market's reaction to the spin-off announcement will be positively associated with the relative amount of performance-contingent compensation the CEO receives.*

## Board of directors

Given that the board of directors is charged with acting in the owners' interests to formally monitor and control the senior management of a firm, it is critically important to consider the board's composition. There are three different kinds of directors and two different kinds of board attributes to consider here. Baysinger and Butler (1985), Hermalin and Weisbach (1988), and Walsh and Kosnik (1993) all employed a tripartite

classification scheme to categorize the different types of directors on a board. While their actual labels varied, they all distinguished between insiders who are active senior managers of the company, related outsiders, who while not involved in the day-to-day operation of the company, have contractual or other relationships with the company that render their independence questionable, and outsiders, who are typically executives from other firms that are on the board in the hope of providing independent counsel to the firm. We will consider all three in this research. Following Kesner (1988), we will also consider the composition of the board's compensation committee.

While insiders deserve a spot on the board both because they are a source of information about the day-to-day operation of the firm (Baysinger and Hoskisson, 1990) and because such membership is a part of a future CEO's education (Hermalin and Weisbach, 1988), it is also clear that the board cannot provide independent oversight unless outsiders hold a majority of seats on the board. The utility of outside directors is now a well-established empirical fact (Johnson, Hoskisson, and Hitt, 1993; Kosnik, 1987; Weisbach, 1988). Interestingly, it is only recently that we have seen outsiders comprise a majority of a board. Baysinger and Butler (1985) revealed that as recently as 1970 (a time that roughly coincides with the beginning of our empirical observations in this research), insiders comprised an average of 54 percent of a board. Our hypothesis is that a company that voluntarily restructures itself will take the opportunity to do right by its owners and staff a board with a sufficient number of outsiders to deny the insiders a majority control of the board. Therefore:

*Hypothesis 4a: Insider directors will comprise a minority of the directors on the spun-off company's board of directors.*

*Hypothesis 4b: The market's reaction to the spin-off announcement will be negatively associated with the percentage of insiders on the spun-off company's board of directors.*

Kesner (1988) argued that it is inappropriate to ignore the composition and activities of corporate board committees. She points out that most

board decisions are made in the confines of its smaller committees. Given our interest in CEO compensation, we want to follow her advice (and O'Reilly, Main, and Crystal's, 1988, precedent) and examine the composition of the spun-off company's compensation committee. In this case, it is not enough to staff the committee with outsiders; the type of outsider matters. Kesner (1988) reports that the Securities Exchange Commission, the New York Stock Exchange (NYSE), the American Stock Exchange (ASE), the National Association of Securities Dealers and the National Association of Corporate Directors all recommend that the compensation committee be comprised of unaffiliated outside directors. Consistent with the logic that companies engaged in a voluntary restructuring will try to set up efficient internal controls in its spun-off firms, we predict that the compensation committees will be staffed with a controlling number of such independent executive outside directors. Therefore:

*Hypothesis 5a: Executive outside directors will comprise a majority of the members on the spun-off company's compensation committee.*

*Hypothesis 5b: The market's reaction to the spin-off announcement will be positively associated with the percentage of executive outsiders on the spun-off company's compensation committee.*

## METHODS

### Sample

We initially identified 194 company spin-off announcements between 1972 and 1987 by searching the Dow Jones News Retrieval Service. We then applied the following filters to the initial sample: (1) the parent company (pre-spin-off) is listed on the CRSP Daily Master File of NYSE and ASE firms; (2) we could identify an announcement date (i.e., the first mention of a spin-off plan) and a completion date (i.e., the date of actual stock distribution) for each spin-off using the *Wall Street Journal Index*; (3) the spin-off is voluntary (i.e., no bidder expressed any interest in the company in the year preceding the spin-off announcement) and represents a 100 percent stock distribution; and (4) proxy

statements are available for the pre-spin-off entity as well as both the parent and subsidiary in the year after the spin-off is completed. Table 1 summarizes our sampling procedure and the number of spin-offs eliminated by each requirement. Our final sample consists of 78 completed spin-offs by 74 different companies.

The average market capitalization of the pre-spin-off firms' common equity (measured as of December 31 in the year preceding the spin-off announcement) is \$999,773,192 with a standard deviation of \$2,033,348,577 (expressed in 1987 dollars). The median value is \$222 million. The smallest spin-off in our sample represents a distribution of less than 1 percent of the pre-spin-off firm's assets (Teledyne's spin-off of American Ecology Corp.), while the largest represents a distribution of over 91 percent (Philadelphia Suburban's spin-off of Enterra Corp.). The mean asset size of the spin-off is 22.1 percent with a standard deviation of 23.7 percent; the median size is 12.3 percent. Hite and Owers (1983) report a median size of 6.6 percent in their sample of corporate spin-offs from the 1963-81 time period. Although this comparison might suggest that the average size of the corporate assets spun off in these restructuring transactions is increasing through time, the correlation between spin-off size and calendar time is not statistically significant ( $r = -0.02$ ). There is, however, a significant negative correlation between the market capitalization of the pre-spin-off firm and the percentage

of the assets spun-off ( $r = -0.22, p < 0.05$ ) and a positive correlation between the market capitalization statistic and the date of the announcement ( $r = 0.32, p < 0.01$ ). Thus, the larger firms in our sample spun off a smaller percentage of their assets, and did so more recently in calendar time.

## Variables

### *CEO and director identity*

We read the proxy statements for the formerly combined firms in the year prior to the spin-off and the proxy statements for the parent companies (i.e., the organizations that retain the original corporate charter) and the spun-off companies (i.e., the newly created organizations) in the first year after the spin-off. We coded the CEO of the spun-off firm as an insider if he or she was employed in the combined firm in the prior year (we also noted whether or not this person was the combined firm's CEO) and an outsider if he or she was not. Following the tripartite logic we mentioned earlier, we classified the members of the board of directors and the board's compensation committee as either corporate insiders, related outsiders or executive outsiders. Insiders are those members of the board whose full-time employment is with the corporation. Related outsiders are individuals such as consultants, lawyers, investment bankers, and retired insiders. This group is characterized by having some relationship with the firm, financial or otherwise, that renders their independence from top management questionable. Finally, executive outsiders are top-level executives of other companies.

### *CEO compensation*

In order to investigate the impact of corporate spin-offs on CEO compensation, we reviewed proxy materials and 10-K reports for each firm in our sample. We constructed our estimates of CEO annual compensation by determining each of the following pay components: (1) salary and bonus; (2) thrift plan contributions; (3) insurance payments; (4) other fringe benefits; (5) changes in the value of stock ownership; (6) executive stock options; (7) contingent pay plan awards; (8) changes in the value of restricted stock; (9)

Table 1. Sample selection procedure

<i>Initial sample</i>	194
<i>Reason for elimination</i>	
Pre-spin-off combined firm does not trade on NYSE or ASE	44
Unable to confirm spin-off announcement and completion dates	42
Spin-off is neither voluntary nor a 100% stock distribution	23
Full set of proxy materials unavailable	7
Total number eliminated	116
<i>Final sample</i>	78

changes in the value of employee stock ownership plan (ESOP) shares. We refer to the first four measures as nonperformance-contingent compensation, and the latter five measures as performance-contingent compensation. All of our compensation variables are expressed in 1987 dollars.

The estimation of nonperformance-contingent compensation is relatively straightforward since the dollar value of each component is reported directly in each company's proxy materials. Note that we report a CEO's annual bonus as a nonperformance-contingent form of compensation in our estimate of pay despite the fact that it clearly depends on some measure(s) of performance. We adopt this convention because the majority of our source materials report salary and bonus as a single item. Hence, we are unable to disaggregate the salary and bonus components of CEO compensation. As a result, our estimate of total compensation overstates the nonperformance-contingent component and understates the performance-contingent component.

In general, the performance-contingent compensation components must be estimated. The exception is 'contingent pay plans'; proxy statements report the dollar value of the CEO pay that is derived from this component. We estimate the value of stock ownership, restricted stock, and ESOPs by multiplying the number of shares or units in each component by the change in the value of the firm's common equity during the 1-year period that corresponds to the firm's fiscal year. Hence, for the pre-spin-off organization, we determine the change in the value of the firm's common stock for the fiscal year immediately prior to the announcement of the spin-off. For the post-spin-off organizations (i.e., the spun-off company and the surviving parent company), we calculate the change in the value of the firm's common stock for the first full fiscal year subsequent to the completion of the spin-off. This return measure is then multiplied by the appropriate number of shares or units to estimate the change in the value of share ownership, restricted stock, and ESOP shares.

Top managers also receive compensation in the form of executive stock options. Our estimate of the value of stock options is constructed by aggregating the following three measures: (1) dollar value of options exercised during the year; (2) value of new options granted during the year;

(3) changes in the value of the outstanding options net of the first two option contract measures. Since the dollar value of options exercised during the year is contained directly in the company materials that we examined, we simply recorded this number as reported. The other two measures are a bit more complicated to compute. In order to estimate the value of new options granted during the year, we utilize the dividend-adjusted version of the Black-Scholes option pricing model:

$$\text{Option value} = S \cdot e^{-dT} \Phi(Z) - Ke^{-rT} \Phi(Z - \sigma\sqrt{T}) \quad (1)$$

where  $S$  is the stock price at the end of the firm's fiscal year,  $K$  is the option's exercise price,  $d$  is the dividend yield,  $r$  is the yield on a default-free U.S. Treasury security with a maturity that matches the time until expiration of the option,  $T$  is the amount of time until the option expires,  $\sigma$  is the estimated annual standard deviation of daily stock returns,  $Z = \{\ln(S/K) + [r - d + (\sigma^2/2)]T\} / \sigma\sqrt{T}$  and  $\Phi(\cdot)$  is the cumulative standard normal distribution function.

In the case of the valuation of new executive stock options, the principal problem in applying the Black-Scholes formula is the estimation of the standard deviation of the return on the separate equity claims for the post-spin-off organizations. The volatility estimate generated by the price history of the pre-spin-off organization is generally not equal to the volatility of either the spun-off company or the surviving parent company. Of course, no price history for either the spun-off company or the surviving parent company is available on the announcement date. Thus, in order to estimate the volatility parameter for the valuation of executive stock options, one of two assumptions can be made: (1) assume the market has perfect foresight, and value the stock options utilizing the actual post-spin-off volatilities for each separate equity claim; or (2) naively assume that the market utilizes the pre-spin-off volatility estimate for the combined company to value the stock options. We chose to employ the latter assumption. As such, the values for new options granted during the year for the post-spin-off organizations are based in part upon the volatility estimate for the pre-spin-off organization.

The other estimation problem is that the

company materials report only the total number of outstanding options that have been previously granted. Since these options are granted at different times with different exercise prices, we are unable to value the change in the outstanding options with the Black-Scholes framework. As a result, we made the simplifying assumption that, during the year, the value of these outstanding options changes dollar for dollar with the underlying stock price. Since this relationship represents an upper bound on the impact that changes in the underlying stock price have on stock options, this assumption overestimates the change in the value of outstanding stock options.

#### *Shareholder wealth effects of voluntary corporate spin-off announcements*

We conducted our empirical analysis of the shareholder wealth effects of voluntary corporate spin-offs by utilizing the market model to compute abnormal returns. We estimated the intercept term and slope coefficients over the 150-day interval beginning at day -200 and ending at day -51, where day 0 represents the *Wall Street Journal* announcement date. We then utilized these estimated parameters to calculate daily prediction errors and cumulative prediction errors for our sample of company spin-offs for the interval beginning with day -50 and ending with day +20.<sup>2</sup> The test statistic for our abnormal returns is the mean standardized cumulative prediction error described by Dodd and Warner (1983). The 2-day announcement period (i.e., days -1 and 0) average prediction error of 2.6 percent (with a standard deviation of 5.4 percent) is positive and statistically significant ( $t = 8.5, p < 0.01$ ). Sixty-eight percent of the abnormal returns are positive. Thus, consistent with all of the previous studies, the announcement of a voluntary corporate spin-off produces a statistically significant positive abnormal return for shareholders. There is no statistically significant correlation between the 2-day abnormal return and the market capitalization of the combined firm ( $r = 0.04$ ), the percentage of the assets spun-off ( $r = 0.09$ ), nor the calendar date of the spin-off announcement ( $r = 0.07$ ).

<sup>2</sup> These results are available from the authors upon request.

## RESULTS

Table 2 presents the descriptive statistics and the intercorrelation matrix for all of the variables in this study. Recall that H1a predicted that the CEO of the spun-off company would be a former inside manager. Given that 48 of the 76 CEOs that we can identify (we are missing CEO data on two companies) were such insiders, H1a received support in this research. However, the fact that 16 of the CEOs were the former CEOs of the combined firm and 12 of the new CEOs were drawn from the external CEO labor market does contradict Aron's (1991) logic to some degree.<sup>3</sup> The correlations reported in Table 2 between the abnormal return and the inside CEO variable ( $r = -0.24, p < 0.05$ ) and the former CEO variable ( $r = 0.29, p < 0.01$ ) suggest that the logic behind H1b is somewhat contradicted. Indeed, an analysis of variance that tested the effect of the three types of CEO origin on the abnormal return was statistically significant ( $F(2, 73) = 3.576, p < 0.05$ ). A simple effects test employing the least-squared difference procedure revealed that the abnormal return associated with the former CEO becoming the new CEO ( $\bar{x} = 0.0597$ ) was significantly higher than the abnormal return associated with an insider becoming the new CEO ( $\bar{x} = 0.0173$ ) at the 0.01 level of significance (the abnormal return associated with an outsider becoming the new CEO was 0.0269). These variables explained 6.4 percent of the adjusted  $R^2$  variance in the 2-day abnormal return in a regression equation using the three CEO identity dummy variables as predictors. As such, H1b received support in the sense that the market reaction was positive in the case of an insider becoming the CEO. The surprise is that the market reaction is even more positive when the new CEO of the spun-off entity is the old CEO of the parent organization.<sup>4</sup>

H2a predicted that we would see the spun-off

<sup>3</sup> Perhaps not surprisingly, we discovered that the former CEO goes to the spun-off company when the percentage of assets that were spun-off is 32 percent, as opposed to 13 percent when the spun-off firm is led by an outside CEO. The new outside CEOs may not have been attracted to the idea of managing a small subsidiary of a diversified firm.

<sup>4</sup> The CEO identity in the remaining parent firms is as follows: 62 companies are led by the former combined firm's CEO; 8 are led by another insider from the combined firm; and 3 are new outsiders. There is no relationship between this profile and the announcement effect.

Table 2. Descriptive statistics and correlations among the variables

	Mean	Standard deviation	1	2	3	4	5	6	7	8	9	10	11	12
(1) Outside CEO (1 = yes)	0.158	0.367	-											
(2) Inside CEO (1 = yes)	0.632	0.486	-0.57***	-										
(3) Former CEO (1 = yes)	0.211	0.410	-0.22*	-0.68***	-									
(4) Options (1 = yes)	0.636	0.484	0.04	-0.06	0.04	-								
(5) Salary and bonus	289,728	183,832	0.01	0.26*	-0.32**	0.18†	-							
(6) Thrift	2,871	7,587	0.14	0.06	-0.19*	0.17†	0.27**	-						
(7) Insurance	776	5,056	-0.05	0.11	-0.08	0.12	0.03	0.52***	-					
(8) Fringes	26,207	101,109	-0.07	0.16	-0.12	-0.18†	0.23*	-0.04	-0.02	-				
(9) Share ownership	3,336,608	11,387,167	-0.11	-0.20	0.37**	-0.20†	-0.13	-0.10	0.00	-0.03	-			
(10) Outstanding options	345,519	1,761,717	0.23*	-0.09	-0.10	-0.16†	0.08	-0.05	0.01	0.00	-0.05	-		
(11) Exercised options	21,216	113,289	-0.03	0.10	-0.10	0.15	0.20*	0.13	-0.03	-0.04	-0.03	-0.02	-	
(12) New options	531,621	913,058	0.01	0.13	-0.17†	0.47***	0.29**	-0.08	-0.04	-0.10	-0.09	-0.06	0.10	-
(13) Contingent pay plan	54,179	261,777	-0.09	0.11	-0.05	0.15†	0.42***	0.02	-0.03	0.05	-0.03	-0.04	-0.03	0.34**
(14) Restricted stock	43,403	287,327	-0.02	0.09	-0.10	0.12	0.36**	0.06	-0.03	0.07	-0.04	-0.04	-0.04	0.26*
(15) ESOP	3,878	18,114	0.21*	-0.15	-0.01	0.12	0.39***	0.02	-0.02	-0.06	-0.04	-0.04	0.25*	0.31**
(16) Σ: Non-contingent pay	319,582	231,269	-0.02	0.28**	-0.32**	0.07	0.91***	0.24	0.05	0.62***	-0.12	0.06	0.15	0.17†
(17) Σ: Contingent pay	4,472,700	11,393,931	-0.08	-0.21†	0.34**	-0.19†	-0.08	-0.12	-0.03	-0.04	0.98***	0.11	-0.02	-0.00
(18) Total compensation	4,821,233	11,376,495	-0.08	-0.20†	0.33**	-0.19†	-0.06	-0.12	-0.03	-0.03	0.98***	0.11	-0.02	-0.00
(19) Percent contingent pay	77.4	18.8	-0.08	-0.14	0.25*	-0.08	-0.20†	-0.33**	-0.09	-0.25*	0.29**	0.18†	0.05	0.34**
(20) Board: % insiders	41.2	19.5	-0.20*	-0.05	0.23*	-0.26*	-0.33**	-0.20*	0.01	-0.05	-0.01	-0.11	-0.13	-0.10
(21) Board: % related	21.5	16.7	-0.08	0.04	0.03	0.21*	0.05	0.09	0.10	0.00	-0.01	-0.15†	0.13	0.24*
(22) Board: % executives	36.7	23.1	0.23*	0.01	-0.22*	0.05	0.27**	0.12	-0.08	0.05	0.02	0.21*	0.02	-0.07
(23) Committee: % insiders	6.5	14.3	-0.13	0.09	0.02	-0.01	0.22†	0.27*	0.60***	0.11	-0.06	-0.07	-0.07	-0.11
(24) Committee: % related	29.3	28.5	-0.14	0.08	0.05	0.31	-0.01	-0.04	0.02	0.24*	0.02	-0.13	-0.12	0.02
(25) Committee: % executives	60.4	31.0	0.18	-0.08	-0.09	-0.08	0.01	-0.10	-0.28*	-0.23†	0.04	0.17	-0.05	0.08
(26) Abnormal return	0.026	0.054	-0.01	-0.24*	0.29**	0.07	0.03	0.03	0.01	-0.08	-0.02	0.00	-0.00	0.06

Table 2. Continued

	Mean	Standard deviation	13	14	15	16	17	18	19	20	21	22	23	24	25
(1) Outside CEO (1 = yes)	0.158	0.367													
(2) Inside CEO (1 = yes)	0.632	0.486													
(3) Former CEO (1 = yes)	0.211	0.410													
(4) Options (1 = yes)	0.636	0.484													
(5) Salary and bonus	289,728	183,832													
(6) Thrift	2,871	7,587													
(7) Insurance	776	5,056													
(8) Fringes	26,207	101,109													
(9) Share ownership	3,336,608	11,387,167													
(10) Outstanding options	345,519	1,761,717													
(11) Exercised options	21,216	113,289													
(12) New options	531,621	913,058													
(13) Contingent pay plan	54,179	261,777													
(14) Restricted stock	43,403	287,327													
(15) ESOP	3,878	18,114													
(16) $\Sigma$ : Non-contingent pay	319,582	231,269	0.36**	-0.04	-0.04	-0.09	-0.09	-0.04	-0.01	-0.07	-0.19*	-0.68***	-0.55***	-0.09	-0.13
(17) $\Sigma$ : Contingent pay	4,472,700	11,393,931	0.03	0.01	-0.03	-0.07	0.99**	-	-	-	-	-	-	-	-
(18) Total compensation	4,821,233	11,376,495	0.04	0.02	-0.02	-0.07	0.99**	-	-	-	-	-	-	-	-
(19) Percent contingent pay	77.4	18.8	0.11	0.06	0.04	-0.29*	-0.36**	0.35**	-	-	-	-	-	-	-
(20) Board: % insiders	41.2	19.5	-0.18†	-0.23*	-0.05	-0.29**	-0.04	-0.04	0.14	0.14	-	-	-	-	-
(21) Board: % related	21.5	16.7	-0.07	0.04	-0.12	0.04	-0.01	-0.01	-0.07	-0.19*	-	-	-	-	-
(22) Board: % executives	36.7	23.1	-0.21*	0.17†	-0.04	0.24*	0.05	0.05	0.01	-0.68***	-0.55***	-	-	-	-
(23) Committee: % insiders	6.5	14.3	-0.06	-0.10	0.14	0.26*	-0.08	-0.08	-0.12	0.23†	0.14	-0.26*	-	-	-
(24) Committee: % related	29.3	28.5	-0.07	0.10	-0.09	0.07	0.00	0.01	-0.10	-0.03	0.62***	-0.43**	-0.18	-	-
(25) Committee: % executives	60.4	31.0	0.2	-0.02	0.04	-0.09	0.07	0.07	0.28*	-0.07	-0.62***	0.65**	-0.25**	-0.78***	-
(26) Abnormal return	0.026	0.054	0.15	0.18†	-0.07	-0.01	0.01	0.01	-0.02	-0.00	-0.09	0.05	0.11	-0.02	-0.13

†p &lt; 0.10; \*p &lt; 0.05; \*\*p &lt; 0.01; \*\*\*p &lt; 0.001

companies take the opportunity presented by their separately traded equity claims to write performance-contingent options contracts for their new CEOs. Table 3 illustrates the presence or absence of options contracts in the formerly combined firms and in the newly spun-off companies. (The rows only sum to 77 companies because options contract data were unavailable for one company.) The  $\chi^2$  was 8.421 and statistically significant at the 0.01 level. Thus, H2a received support here. Table 3 also reveals the abnormal returns (CARs) associated with this presence or absence of options contracts in the spun-off companies. In either case, the market reaction was positive. A *t*-test of their difference did not reach statistical significance ( $t(1, 75) = 0.58$ ). As such, we cannot say that the market was sensitive to options contract changes.<sup>5</sup>

H3a went a step further than H2a and predicted that not only would we see performance-contingent compensation plans, but that the CEOs would receive a majority of their compensation in the form of such plans. As Table 2 indicates, H3a is supported with these data. The CEOs of the spun-off companies received 77.4 percent of their compensation from performance-contingent sources. In absolute dollars, these CEOs received, on average, \$4,472,700 from the seven types of performance-contingent compensation and 'only' \$319,582 from the four sources of nonperformance-contingent sources that we tracked. Having said all of this, H3b received no support in

this research. The correlation between percent contingent pay and the abnormal return was not statistically significant ( $r = -0.02$ ). Moreover, when we regressed the abnormal return on the two summary measures of performance-contingent and nonperformance-contingent compensation, as well as on the 11 discrete pay components, the results were not statistically significant.<sup>6</sup>

H4a and H5a ask us to examine the composition of the board of directors and its compensation committee in the newly created spun-off companies. Consistent with the logic of H4a, Table 2 reveals that insiders comprise a minority on these 7.2 person boards ( $\bar{x} = 41.2$  percent). H5a also received support in this research. Executive outside directors account for 60.4 percent of the membership on the board's 2.1-person compensation committee. Neither H4b nor H5b received any support here, however. The correlation between the abnormal return and the percentage of insiders on board was not statistically significant ( $r = -0.00$ ), nor was the correlation with the percentage of executive outsiders on the compensation committee ( $r = -0.13$ ). Moreover, when we regressed the abnormal return on the three types of board members, as well as on the three types of compensation committee members, the results did not reach statistical significance.<sup>7</sup>

## DISCUSSION

The benefits of corporate spin-offs have been widely celebrated in recent years. Glassman (1988), for example, tried to convince managers that spin-offs represent a sure-fire way to 'beat the bureaucracy'. His list of benefits included the ability to improve managers' incentives,

Table 3. Market reactions associated with options contract changes around corporate spin-offs

	Options contracts	
	No	Yes
Combined company <i>N</i> = 47		<i>N</i> = 30
	<i>N</i> = 28	<i>N</i> = 49
Spun-off company	CAR = 0.0238	CAR = 0.0317

<sup>5</sup> Thirty-six of the parent firms' CEOs received options contracts, while 37 did not. The chi-square analysis of the change in options contracts (compared to the combined firms' contract profile) was not statistically significant, nor was there any association between the presence or absence of these contracts in the parent firms and the announcement effect.

<sup>6</sup> Given the losses in performance-contingent compensation that many of the parent firms' CEOs sustained, the percent contingent pay variable is difficult to interpret. In the aggregate, these CEOs earn \$1,226,188 in performance-contingent pay and \$593,446 in nonperformance-contingent pay. There is no statistically significant relationship between the announcement effect and either the two summary measures of the pay components or the 11 discrete pay components.

<sup>7</sup> Insiders comprise 40.3 percent of the 10.5-person parent company boards and executive outsiders comprise 59.2 percent of their 2.9-person compensation committees. There is no statistically significant relationship between the composition of the parent company's board, its compensation committee, and the announcement effect.

sharpen their focus, decentralize their decision processes, eliminate wasteful cross-subsidies, provide an independent financial structure, and improve the visibility of the firm's performance in the investment community. His last five points are all defining attributes of a separation between the parent firm and the spun-off firm. We investigated the logic of his first point and other issues related to the governance and control of these new firms. The design of efficient internal controls in these newly created firms is by no means a certainty.

Our basic research hypothesis was that we expected to see efficient internal controls put in place in these spun-off companies. Our empirical evidence clearly supports this prediction. Hypotheses 1a-5a all received support in this research. These new companies are typically led by an inside CEO from the formerly combined company who, by virtue of the spun-off firm's visibility in the equity market, has the opportunity to receive a market-based performance-contingent incentive contract. These CEOs not only have such contracts, but the vast majority of their income can be traced to them. In addition, the boards of directors that monitor and control these new CEOs are comprised of a majority of outsiders. Moreover, the compensation committee that designs their incentive contracts is comprised of a majority of executive outside directors. Scholars have argued that the corporate restructuring of the past decade that was recently portrayed by Davis, Diekmann, and Tinsley (1994) has been good for the economy (Shleifer and Vishny, 1991) and the firms that have deconglomerated (Donaldson, 1994). We can now add that corporate restructurings that take the form of voluntary corporate spin-offs appear to be good for the governance and control of these spun-off firms as well.

The one strong market announcement result in this research is that the market appears to welcome the news that the formerly combined firm's CEO will lead the newly spun-off company. The pattern of bivariate correlations pictured in Table 2 reveals that this choice carries some rather puzzling governance implications. Indeed, such individuals tend to receive performance-contingent ( $r = 0.34, p < 0.01$ ), as opposed to nonperformances-contingent ( $r = -0.32, p < 0.01$ ) compensation. Interestingly, their boards are more likely to be comprised of insiders

( $r = 0.23, p < 0.05$ ) than executive outsiders ( $r = -0.22, p < 0.05$ ). The conundrum here is that the board results are consistent with a managerial hegemony view of CEO power, while the compensation results are consistent with an efficient contracting perspective. That is, the firm's owners may be well served by incentives that align their interests with the CEO's interest, yet bear the risk that their directors may not operate on their behalf. It would be interesting to track these board and compensation attributes over time to discover if this conundrum is resolved one way or another. If it is not, we will need to rethink the role of board composition in the monitoring and control of CEOs. Inside directors may not be as detrimental to a firm's governance as many believe.

Table 2 reveals another surprise about the role of inside directors. Many people will be startled to learn that there are indeed inside directors on a board's compensation committee ( $\bar{x} = 6.5$  percent). Their presence may conjure up images of a flagrant abuse of compensation policy. Indeed, we might expect to see a strong correlation between their presence and self-serving nonperformance-contingent compensation. And while there was such a modest association ( $r = 0.26, p < 0.05$ ), the strongest association by far was with the magnitude of insurance contributions ( $r = 0.60, p < 0.001$ ). Given that the mean insurance contribution is only \$776 (as compared to a total compensation package of \$4,821,233), we wonder just how self-serving the CEO's interests may really be.

Consistent with past research, we found that the market reacts favorably to the announcement of a voluntary corporate spin-off ( $\bar{x} = 2.6$  percent). Nevertheless, our focus on the efficiency of the governance and control of these spin-offs did not particularly explain this announcement effect. We found no support for the logic of H1b-H5b in this research. Only the CEO identity variable explained any variance in the announcement effort (and it was a modest adjusted  $R^2$  of 0.064). Indeed, the willingness of the former CEO to lead the spun-off company may be interpreted by the market as a kind of certification of this new firm's promise. Clearly, the market is not particularly prescient about the kinds of governance and control issues we examined in this research. This is not to say, however, that the positive market reaction does

not anticipate the improved management of these corporate assets. Indeed, it may be the invariant improvements that Glassman (1988) identified that prompt the market to respond so favorably to these announcements. Alternatively, the market might be anticipating the subsequent takeover of these firms (Cusatis *et al.*, 1993).

### Future research implications

This research raises a number of interesting issues that should be addressed with continuing research effort. We are particularly drawn to consider how and why the decision to engage in a voluntary corporate restructuring is made, as well as to consider the longer-term implications of the decision. Following Donaldson's (1990) work, we are interested in learning more about decision making in this arena. While John, Lang, and Netter (1992) explored the effects of negative earnings on a variety of restructuring options, we are intrigued by the role that a CEO's incentives might play in the decision to engage in this voluntary activity. After all, there is a well-documented correlation between firm size and the amount of CEO compensation (Murphy, 1985). Nevertheless, some CEOs willingly preside over the downsizing of their firms. What role do monetary incentives play in this decision?

Monetary rewards for restructuring via a corporate spin-off can be overt, as in the case of Squibb Corporation's spin-off of its Westmark International subsidiary. Squibb's proxy statement reports that the CEO received a special one-time award in the amount of \$750,000 related to the sale of some corporate assets and the spin-off of Westmark during 1986. Thus, the most direct way to reward an observable transaction such as a corporate spin-off is to design a compensation contract that specifies the action to be taken, and the amount of pay to be received upon the completion of the action. In contrast to the difficulty of observing other types of managerial actions, the observability of this type of decision makes a forcing contract feasible. However, we found no other explicit mention of managerial rewards directly tied to the successful completion of any other spin-off in our sample. Rather, we discovered that in the year after the spin-off the CEO of the surviving parent firm received nonperformance-contingent compensation in the amount of \$593,446. This is a 7

percent increase over the previous year's income of \$554,983. Recall that the average size of the spin-offs was 22 percent of the combined firm's assets. Thus, despite the fact that the amount of corporate assets under the CEO's control decreases by 22 percent, the CEO receives a nonperformance-contingent raise of 7 percent.

This result suggests that the relationship between firm size and CEO pay may not be symmetric—while past research suggests that increases in firm size typically increase executive pay, a decrease in firm size does not appear to diminish pay in this instance. Perhaps this is not a particularly surprising effect—CEOs may be quite hesitant to implement a corporate restructuring if their own wealth is diminished by such a transaction. One interesting, yet admittedly speculative conclusion from this result is that a business strategy of continual corporate acquisitions and divestitures (i.e., asset churning) may be particularly lucrative for CEOs. This emergent hypothesis is worthy of a systematic investigation.

Finally, we need to know more about how the design of the governance and control mechanisms of a spun-off firm affects its future. Other research tells us that the future of corporate spin-offs is far from certain. Cusatis *et al.* (1993), for example, pointed out that the 'pure play' attribute of a spin-off makes it susceptible to an external control contest. Indeed, 21 of their sample of 46 spin-offs were acquired in a subsequent 3-year period. Following Brickley and Van Drunen's (1990) finding of equivocal and even negative performance in what they called 'internal restructurings' (i.e., restructurings that do not involve or create more than one firm), Woo, Willard, and Daellenbach (1992) studied the 3-year post-restructuring performance of 51 spin-offs. They found that one half of the companies reported performance gains, while the other half did not. Clearly, we need to understand the relationship between the governance and control of a voluntary corporate spin-off, its performance and, indeed, its subsequent status as an independent company. Some might even see performance-contingent compensation serving as an incentive for CEOs to put their company in play and so reap the rewards of the acquisition premium. While Seward and Walsh (1994) investigated the relationship between the design of post-restructuring internal controls and subsequent external control contests, the link to

performance in this relationship is still unexamined.

As we begin to consider the origins of post-restructuring performance, we will need to be sensitive to what we earlier referred to as the 'defining aspects' of a spin-off that Glassman (1988) heralded. In short, a spin-off enables the managers in the newly created firms to focus on their firms' core businesses. As Hoskisson and Hitt (1994) recently affirmed, we need to be alert to how restructurings may facilitate the day-to-day strategic management of a firm. Interestingly, Slovin *et al.* (1995) did not find that spin-off announcements precipitated any negative market reaction among their competitors' share prices. Such evidence could have been interpreted as a sign of the competitive threat embodied by these better-managed, newly independent firms. Of course, just because the market does not anticipate such enhanced competition does not mean that it does not happen. Any consideration of the effects of internal or external corporate control would not be complete without a consideration of how these control mechanisms prompt potential improvements in the actual management of a firm.

We began this paper by observing that organization theorists, financial economists, and strategic management scholars alike all share an interest in understanding corporate governance and control. Our study of voluntary corporate spin-offs embodies a rare synthesis of these different perspectives. While our results hold clear implications for scholars working in each of these areas, we believe that the kinds of interdisciplinary questions that emerge from this research effort suggest that a partnership across these research paradigms may hold the most promise for answering them. There is no reason why scholars in these three areas need to work alone together.

## ACKNOWLEDGEMENTS

The authors would like to thank Joan Goldstein and Kay Romeyn for their assistance in collecting these data, Dot Bower and John Roback for their computer programming assistance, Katherine Schipper and Abbie Smith for providing us with their list of voluntary corporate spin-off announcements, and both Tuck Associates Program and the Michigan Business School for their financial

assistance. David Blackwell, Michael Bradley, Cliff Holderness, John McConnell, Harold Mulherin, Dennis Logue, Rich Rogalski, Katherine Schipper, Dennis Sheehan, Anant Sundaram, Marc Zenner, the anonymous reviewers, and the seminar participants at Carnegie Mellon University, Purdue University, Texas A&M University, and the University of Michigan provided valuable comments on earlier versions of this paper.

## REFERENCES

- Amihud, Y. and B. Lev (1981). 'Risk reduction as a managerial motive for conglomerate mergers', *Bell Journal of Economics*, 12, pp. 605-617.
- Aron, D. (1991). 'Using the capital market as a monitor: Corporate spinoffs in an agency framework', *RAND Journal of Economics*, 22, pp. 505-518.
- Baysinger, B. D. and H. N. Butler (1985). 'Corporate governance and the board of directors: Performance effects of changes in board composition', *Journal of Law, Economics, and Organization*, 1, pp. 101-124.
- Baysinger, B. D. and R. E. Hoskisson (1990). 'The composition of boards of directors and strategic control: Effects on corporate strategy', *Academy of Management Review*, 15, pp. 72-87.
- Bhagat, S., A. Shleifer and R. W. Vishny (1990). 'Hostile takeovers in the 1980s: The return to corporate specialization', *Brookings Papers on Economic Activity: Microeconomics*, pp. 1-72.
- Bowman, E. H. and H. Singh (1993). 'Corporate restructuring: Reconfiguring the firm', *Strategic Management Journal*, Summer Special Issue, 14, pp. 5-14.
- Brickley, J. A. and L. D. Van Druen (1990). 'Internal corporate restructuring: An empirical analysis', *Journal of Accounting and Economics*, 12, pp. 251-280.
- Copeland, T., E. Lemgruber and D. Mayers (1987). 'Corporate spinoffs: Multiple announcement and ex-date abnormal performance'. In J. Copeland (ed.), *Modern Finance and Industrial Economics*. Basil Blackwell, New York, pp. 114-137.
- Cusatis, P. J., J. A. Miles and J. R. Woolridge (1993). 'Restructuring through spinoffs: The stock market evidence', *Journal of Financial Economics*, 33, pp. 293-311.
- Davis, G. F., K. A. Diekmann and C. H. Tinsley (1994). 'The decline and fall of the conglomerate firm in the 1980s: The deinstitutionalization of an organizational form', *American Sociological Review*, 59, pp. 547-570.
- Dodd, P. and J. Warner (1983). 'On corporate governance: A study of proxy contests', *Journal of Financial Economics*, 11, pp. 401-438.
- Donaldson, G. (1990). 'Voluntary restructuring: The case of General Mills', *Journal of Financial Economics*, 27, pp. 117-141.

- Donaldson, G. (1994). *Corporate Restructuring*. Harvard University Press, Boston, MA.
- Finkelstein, S. and D. C. Hambrick (1988). 'Chief executive compensation: A synthesis and reconciliation', *Strategic Management Journal*, 9(6), pp. 543-558.
- Fredrickson, J. W., D. C. Hambrick and S. Baumrin (1988). 'A model of CEO dismissal', *Academy of Management Review*, 13, pp. 255-270.
- Glassman, D. M. (1988). 'Spin-offs and spin-outs: Using "securitization" to beat the bureaucracy', *Journal of Applied Corporate Finance*, 1, pp. 82-89.
- Haspeslagh, P. C. and D. B. Jemison (1991). *Managing Acquisitions*. Free Press, New York.
- Hermalin, B. and M. Weisbach (1988). 'The determinants of board composition', *RAND Journal of Economics*, 19, pp. 589-606.
- Hermalin, B. E. and M. S. Weisbach (1991). 'The effects of board composition and direct incentives on firm performance', *Financial Management*, 20, pp. 101-112.
- Hill, C. W. L., M. A. Hitt and R. E. Hoskisson (1992). 'Cooperative versus competitive structures in related and unrelated firms', *Organization Science*, 3, pp. 501-521.
- Hite, G. and J. Owers (1983). 'Security price reactions around corporate spin-off announcements', *Journal of Financial Economics*, 12, pp. 409-436.
- Holland, M. (1989). *When the Machine Stopped*. Harvard Business School Press, Boston, MA.
- Hoskisson, R. E. and M. A. Hitt (1994). *Downscoping*. Oxford University Press, New York.
- Jensen, M. C. (1993). 'The modern industrial revolution, exit, and the failure of internal control systems', *Journal of Finance*, 48, pp. 831-880.
- Jensen, M. C. (1986). 'Agency costs of free cash flow, corporate finance, and takeovers', *American Economic Review*, 76, pp. 323-329.
- Jensen, M. and K. Murphy (1990). 'Performance pay and top-management incentives', *Journal of Political Economy*, 98, pp. 225-264.
- John, K., L. H. P. Lang and J. Netter (1992). 'The voluntary restructuring of large firms in response to performance decline', *Journal of Finance*, 47, pp. 891-917.
- Johnson, R. A., R. E. Hoskisson and M. A. Hitt (1993). 'Board of director involvement in restructuring: The effects of board versus managerial controls and characteristics', *Strategic Management Journal*, Summer Special Issue, 14, pp. 33-50.
- Kesner, I. F. (1988). 'Directors' characteristics and committee membership: An investigation of type, occupation, tenure, and gender', *Academy of Management Journal*, 31, pp. 66-84.
- Kosnik, R. D. (1987). 'Greenmail: A study of board performance in corporate governance', *Administrative Science Quarterly*, 32, pp. 163-185.
- Lorsch, J. W. and E. MacIver (1989). *Pawns or Potentates: The Reality of America's Corporate Boards*. Harvard Business School Press, Boston, MA.
- Mace, M. L. (1971). *Directors: Myth and Reality*. Harvard University Press, Boston, MA.
- Martin, K. J. and J. J. McConnell (1991). 'Corporate performance, corporate takeovers, and management turnover', *Journal of Finance*, 46, pp. 671-688.
- Miles, J. and J. Rosenfeld (1983). 'The effect of voluntary spin-off announcements on shareholder wealth', *Journal of Finance*, 38, pp. 1597-1606.
- Mitchell, M. L. and K. Lehn (1990). 'Do bad bidders become good targets?', *Journal of Political Economy*, 98, pp. 372-398.
- Murphy, K. (1985). 'Corporate performance and managerial remuneration: An empirical analysis', *Journal of Accounting and Economics*, 7, pp. 11-42.
- Myers, C. A. (1983). 'Top management featherbedding?', *Sloan Management Review*, 24, pp. 55-58.
- O'Reilly, C. A., B. G. Main and G. S. Crystal (1988). 'CEO compensation as tournament and social comparison: A tale of two theories', *Administrative Science Quarterly*, pp. 257-274.
- Seward, J. K. and J. P. Walsh (1994). 'The acquisition of restructured firms: An illustration of market discipline?', *Journal of Economics and Management Strategy*, 3, pp. 585-603.
- Schipper, K. and A. Smith (1983). 'Effects of recontracting on shareholder wealth: The case of voluntary spin-offs', *Journal of Financial Economics*, 12, pp. 437-467.
- Shleifer, A. and R. W. Vishny (1991). 'Takeovers in the '60s and '80s: Evidence and implications', *Strategic Management Journal*, Winter Special Issue, 12, pp. 51-60.
- Slovin, M. B., M. E. Sushka and S. R. Ferraro (1995). 'A comparison of the information conveyed by equity carve-outs, spin-offs, and asset sell-offs', *Journal of Financial Economics*, 37, pp. 89-104.
- Thomas, A. B. (1988). 'Does leadership make a difference to organizational performance?', *Administrative Science Quarterly*, 33, pp. 388-400.
- Walsh, J. P. and J. W. Ellwood (1991). 'Mergers, acquisitions and the pruning of managerial deadwood', *Strategic Management Journal*, 12(3), pp. 201-217.
- Walsh, J. P. and R. D. Kosnik (1993). 'Corporate raiders and their disciplinary role in the market for corporate control', *Academy of Management Journal*, 36, pp. 671-700.
- Walsh, J. P. and J. K. Seward (1990). 'On the efficiency of internal and external corporate control mechanisms', *Academy of Management Review*, 15, pp. 421-458.
- Warner, J. B., R. L. Watts and K. H. Wruck (1988). 'Stock prices and top management changes', *Journal of Financial Economics*, 20, pp. 461-492.
- Weisbach, M. (1988). 'Outside directors and CEO turnover', *Journal of Financial Economics*, 20, pp. 431-460.
- Westphal, J. D. and E. J. Zajac (1994). 'Substance and symbolism in CEO's long-term incentive plans', *Administrative Science Quarterly*, 39, pp. 367-390.
- Woo, C. Y., G. E. Willard and U. S. Daellenbach (1992). 'Spin-off performance: A case of overstated expectations?', *Strategic Management Journal*, 13(6), pp. 433-447.