
Decoupling Policy from Practice: The Case of Stock Repurchase Programs

Author(s): James D. Westphal and Edward J. Zajac

Source: *Administrative Science Quarterly*, Vol. 46, No. 2 (Jun., 2001), pp. 202-228

Published by: [Sage Publications, Inc.](#) on behalf of the [Johnson Graduate School of Management, Cornell University](#)

Stable URL: <http://www.jstor.org/stable/2667086>

Accessed: 05-03-2015 20:58 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

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.



Sage Publications, Inc. and Johnson Graduate School of Management, Cornell University are collaborating with JSTOR to digitize, preserve and extend access to *Administrative Science Quarterly*.

<http://www.jstor.org>

Decoupling Policy from Practice: The Case of Stock Repurchase Programs

James D. Westphal

University of Texas at Austin

Edward J. Zajac

Northwestern University

This study examines firms' decoupling of informal practices from formally adopted policies through analysis of the implementation of stock repurchase programs by large U.S. corporations in the late 1980s and early 1990s, when firms were experiencing external pressures to adopt policies that demonstrate corporate control over managerial behavior. We develop theory to explain variation in the responses of firms to such pressures, i.e., why some firms acquiesce by actually implementing stock repurchase programs, while others decouple formally adopted repurchase programs from actual corporate investments, so that the plans remain more symbolic than substantive. Results of a longitudinal study of stock repurchase programs over a six-year time period show that decoupling is more likely to occur when top executives have power over boards to avoid institutional pressures for change and when social structural or experiential factors enhance awareness among powerful actors of the potential for organizational decoupling. The study has implications for future research on decoupling, organizational learning, and corporate governance. ●

In one of the earliest contributions to the development of what is now known as institutional theory, Meyer and Rowan (1977) proposed that while organizations often adopt formal policies, plans, and programs that display conformity to socially sanctioned purposes, they may also decouple these formal structures from actual, ongoing practices in the organization to buffer internal routines from external uncertainties, thus enhancing flexibility while still maintaining legitimacy with important external constituents. Given the importance of decoupling to institutional theories, and a considerable body of empirical research over the last two decades that purports to test institutional predictions, it is surprising that relatively little research has been devoted to the phenomenon of organizational decoupling or its specific antecedents (Scott, 1995: 128). One explanation for this relative paucity of research may be the difficulty of observing decoupling of organizational practices across large samples of organizations. In fact, prior research examining organizational decoupling as a response to institutional processes has been primarily qualitative and/or case-based. Meyer and Rowan (1977) developed the decoupling thesis from their qualitative work on educational institutions, which suggested that formally adopted standards and procedures, which appeared to address government mandates and community demands, were decoupled from the on-going routines of teaching and administration. More recently, Edelman et al. (1991) found qualitative evidence of organizational decoupling in a small liberal arts college, where an affirmative action officer who had issued formal policy statements conforming to EEO/AA legal requirements was able to preserve discretion over the actual hiring and promotion process (see also Elsbach and Sutton, 1992; Meyer, 1994). While each of these studies provided valuable insights into the details surrounding decoupling, they do not predict or explain variation in decoupling or when and where decoupling is more or less likely to be found.

Large-sample, quantitative studies of institutional processes have tended to focus on how organizations address institu-

©2001 by Cornell University.
0001-8392/01/4602-0202/\$3.00.

●
Both authors contributed equally. The helpful comments and suggestions of Gautam Ahuja, Randy Beatty, Ranjay Gulati, Matt Kraatz, Mark Mizruchi, William Ocasio, Donald Palmer, three anonymous ASQ reviewers, and seminar participants at the University of Chicago, University of Pennsylvania, Duke University, Columbia University, University of Michigan, Washington University, University of Illinois, York University, and Northwestern University are greatly appreciated.

Decoupling

tional pressures by adopting (and presumably implementing) new programs, policies, or other structures (Oliver, 1991). Mezas (1990) examined the environmental and organizational factors leading firms to adopt and implement new accounting methods, and Haunschild (1993) and Haunschild and Miner (1997) offered evidence that institutional uncertainty may lead firms to imitate the acquisition strategies of other firms to which they have network ties (see also Galaskiewicz and Wasserman, 1989; Davis, 1991; Fligstein, 1991; Burns and Wholey, 1993). Some research has also explored how conflicting institutional demands may lead organizations to adopt conflicting organizational practices (D'Aunno, Sutton, and Price, 1991; Peyrot, 1991). But research on the adoption, diffusion, and institutionalization of formal policies has not addressed whether and why organizations adopting such new practices may decouple those practices from actual activities. Similarly, very little research has sought to explain variation in how firms respond to a given set of institutional pressures. Stated in terms of Oliver's (1991: 152) typology of responses to institutional processes, few studies have developed and tested a theoretical explanation for why some firms that have formally adopted a policy in response to external pressures for change may still act to "avoid" those pressures (e.g., by decoupling), while other firms "acquiesce" to institutional pressures by substantively implementing formal policies that address constituents' demands.

Thus, while we know more about how institutional environments provide the impetus for institutionalization, whereby firms are socially expected to adopt—and presumably implement—various organizational policies (cf. DiMaggio and Powell, 1983), we know relatively little about when and to what extent institutional decoupling is more likely to occur. Westphal and Zajac (1994) conducted perhaps the first large-sample investigation into the determinants of institutional decoupling. In a series of studies on executive incentive programs (Zajac and Westphal, 1995; Westphal and Zajac, 1998), they developed a sociopolitical perspective on decoupling and provided evidence that firms were more likely to decouple incentive programs for chief executive officers (CEOs) from actual practice when CEOs were relatively powerful vis à vis the board of directors. In the present study, we build on their sociopolitical perspective on decoupling by considering how sources of experiential and vicarious learning could combine with internal political factors to influence decoupling of a corporate governance policy and how learning about decoupling in one policy arena through prior experience or network ties could influence the likelihood of decoupling in a different policy arena. We test our theoretical framework in a context heretofore not studied in the organizational literature, namely, the implementation of stock repurchase plans by large U.S. corporations in the late 1980s and early 1990s.

A stock repurchase plan is a non-cash dividend distribution to stockholders that involves an adjustment of the firm's financing mix, ownership structure, and asset composition (Franz, Rao, and Tripathy, 1995). A repurchase plan, often referred to as a buyback program, is a written policy approved by the board of directors (Grullon and Ikenberry, 2000). It is a formal

policy in the institutional sense, in that the elements and structure of the plan, as well as the procedure for adopting it, are relatively standardized across firms (Meyer and Rowan, 1977; Scott, 1992). The plan typically indicates the rationale for repurchasing shares and describes how repurchases will further corporate objectives. It also typically specifies the number of shares authorized for repurchase and indicates how the buybacks will be funded. Moreover, the plan is developed by corporate staff and presented to the board for approval, and segments of the plan are released to the press.

Such policies have become quite popular among major U.S. corporations over the last fifteen years. During this period, institutional investors, other shareholder groups, and even regulatory groups increasingly voiced concern about the accountability of top managers to shareholders. These concerns manifested themselves as pressure for firms to adopt policies, such as repurchase programs, that demonstrate corporate control over managerial behavior on behalf of shareholder interests (Useem, 1993; Westphal and Zajac, 1994; Zajac and Westphal, 1995). Since 1987, U.S. firms announced plans to buy back over \$1 trillion of their stocks, and buyback program adoptions averaged approximately 100 per month in the last two years (source: Securities Data Corporation). The phenomenon has shown no signs of waning, even during bullish periods in the stock market. A large empirical literature in financial economics has examined stock market reactions to repurchase plan adoptions, with most published studies showing (on average) significantly positive and often very large and persistent market reactions to the adoption of these plans (cf. Lee, Mikkelsen, and Partch, 1992; Medury, Bowyer, and Srinivasan, 1992; Raad and Wu, 1995; Ratner, Szewczyk, and Tsetsekos, 1996). In explaining these findings, financial economists have typically provided several related but distinct arguments. The first argument is that repurchase plan adoptions provide investors with positive information about the firm and its management. A firm's willingness to invest in itself by repurchasing a portion of its shares is seen as a declaration of its "bullishness" regarding its future. From this perspective, the adoption of repurchase plans indicates that management has encouraging information about the firm's future prospects, and the announcement essentially discloses the existence of this information (if not the specific content) to the market (Dann, 1981; Ratner, Szewczyk, and Tsetsekos, 1996). This perception is also shared in the business press, which typically notes with enthusiasm that "Wall Street . . . loves [buyback programs]" (*Forbes*, 1997), since they show that "we're standing by our shares, [and] that we hope that the individual and institutional community follows suit" (CNNfn, 1996), and even that buyback programs "can be signs of greatness" (Microsoft Investor Relations, 1997).

A second argument is rooted more in agency theory and the free-cash-flow hypothesis (Jensen, 1989). Markets are seen as reacting favorably to repurchase plan adoptions because such plans effectively represent a distribution of cash to stockholders, when the alternative is to waste cash on empire-building projects or other perks that benefit managers more than owners (e.g., Bagwell and Shoven, 1988; Medury,

Decoupling

Bowyer, and Srinivasan, 1992). Thus, management's willingness to distribute free cash flow to shareholders by investing in the firm itself reveals that agency costs are under control and that the firm must be a good investment. This perspective is found in the business press as well, whereby buybacks are seen as "indicating that management cares about shareholders" (*Wall Street Journal*, 1997) and that good firms "use the tons of cash they throw off to accelerate earnings-per-share growth rather than to blindly diversify through unnecessary acquisitions" (Microsoft Investor Relations, 1997). Not surprisingly, active investors are seen as encouraging or even demanding such actions, as reported in *Forbes* (1997): "'Many institutions push us to buy back stock,' says Kurt Landgrath, DuPont chief financial officer, 'especially since we have a strong balance sheet with \$2 billion in cash.'"

An interesting feature of repurchase plans that is generally neglected in the financial economics literature, however, is that while they specify the number of shares targeted for repurchase, they do not specify exactly when the purchase will occur. In fact, as the media has reported, the adoption of a repurchase plan does not guarantee that it will be implemented: management can formally adopt a program to repurchase a certain number of shares of the firm's common stock and then actually purchase only a small fraction of that amount or none at all (*Wall Street Journal*, 1996; Microsoft Investor Relations, 1997). Stock repurchase plans may therefore be viewed as a formal policy that is partly or even largely symbolic in many cases, representing a possible decoupling of actual financial practices from formally stated plans (Meyer and Rowan, 1977; Pfeffer, 1981b). The formal adoption of a repurchase plan may alleviate or avoid external pressure for other changes in organizational control (e.g., the replacement of top managers or increased board control over managers) that would threaten the discretion and autonomy of top managers even if the plan were not implemented.

Some might question whether decoupling is a viable response to institutional pressures. For example, if the stock market typically "sees through" decoupling efforts, firms would lose any legitimacy benefits from having adopted the program. While a detailed discussion of financial markets is beyond the scope of this study, there are several reasons why decoupling can occur even when the stock market is the target of the decoupling effort. First, the only evidence on the market response to decoupling in the corporate governance domain is provided by Westphal and Zajac (1998), who showed that positive stock market reactions from adopted governance policies can be sustained despite decoupling. Second, an important feature of financial equity markets is that even if investors were to anticipate the potential for decoupling, their response to a particular buyback program would depend on whether they thought that the rest of the market was skeptical as well. This assessment, in turn, is influenced by prior market responses to similar plans, which in this case tend to be persistently positive. This creates some potential for inertia in the market's evaluation of repurchase plans over time, consistent with Jepperson's (1991:

145) observation that institutional effects are maintained by a self-perpetuating social process. Third, during the period of our study, of the many finance studies examining how and why the market would react positively, on average, to stock buyback announcements, none offered theoretical or empirical considerations of the possibility of decoupling. Since financial economic research did not address this issue, emphasizing, instead, the broadly positive features of buyback announcements, there was little impetus for market participants to focus on the likelihood that buyback decoupling might occur or to monitor implementation of adopted programs. Thus, decoupling can be viewed as a viable response to institutional pressures. Accordingly, the critical question becomes, why do many firms elect to implement their adopted repurchase plans while others decouple their plans from practice?

THE DECOUPLING OF STOCK BUYBACK PROGRAMS

CEO Power over the Board

The decoupling of stock buyback plans and subsequent implementation may reflect efforts by organizational leaders to advance their political interests and/or preserve their power and influence over the organization. In general, decoupling can relieve the tension created by the external pressure to change and the desire to avoid disruption to existing relationships in the organization, including power relationships. Oliver (1991: 166) suggested that firms are more likely to avoid institutional pressures using tactics such as decoupling to the extent that external pressures for change are inconsistent with internal goals. When external constituents pressure firms to adopt a policy that threatens the discretion of organizational actors, those actors may favor a symbolic response that involves separating the substantive activities of the organization from the formally adopted policy, thus enabling corporate leaders to preserve their discretion over the allocation of resources (Oliver, 1991; Scott, 1995: 128). As Edelman (1992) noted, organizations are often unwilling to incur costs to managerial control by implementing formally adopted plans.

In the case of buyback programs, top managers may decouple actual financial investments from formally adopted repurchase plans to preserve free cash flow for themselves and thus maintain managerial discretion over the allocation of corporate resources. Jensen (1986, 1989) suggested that managers seek to retain free cash flow in order to increase the size of the companies they run, which in turn leads to higher executive compensation, social prominence, and public prestige (Gomez-Mejia and Wiseman, 1997). Several empirical studies have provided evidence that higher levels of free cash flow are associated with increases in executive compensation and greater perquisite consumption by top executives, as well as acquisition decisions that appear to promote corporate stability at the expense of maximizing shareholder wealth (Lang, Stulz, and Walkling, 1991; Sawyer and Shrieves, 1994; Bathala, 1996). Conversely, when boards exercise more independent influence over top management, directors are more likely to exercise their monitoring and con-

Decoupling

control function on behalf of shareholder interests by ensuring that repurchase programs are faithfully implemented. Empirical research has shown that when boards exercise a relatively high degree of power as an independent governing body in the organization, they are more vigilant in overseeing managerial decision making in order to protect shareholder interests (e.g., Kosnik, 1987; Wade, O'Reilly, and Chandratat, 1990; Westphal and Zajac, 1994; Palmer et al., 1995). Thus, board influence may increase the likelihood of repurchase programs being substantive rather than symbolic. In effect, congruence between the goals of external constituents (i.e., institutional investors) and the goals of powerful actors in the organization (i.e., independent boards) increases the likelihood of acquiescence to external pressures (Oliver, 1991). When boards exercise more independent influence over financial policy, CEOs may be less able to decouple actual investment practices from formally adopted plans, as repurchase programs come to represent a substantive commitment to the firm and its shareholders (i.e., by actually investing in the firm). Moreover, independent boards are more likely to distribute free cash flow to investors, preventing top managers from reserving funds for diversification, higher perquisites, or other actions that do not advance shareholder objectives.

In proposing that relative CEO power over the board can help determine whether firms decouple repurchase plans from practice, our theoretical argument suggests that powerful actors mediate institutional effects. This view is consistent with emerging perspectives in the neo-institutional literature, as several theorists have begun to emphasize the potential role of individual volition in mediating institutional effects. In drawing from Meyer and Rowan's (1977) classic argument, Scott (1987: 498) has suggested that organizations and their leaders "do not necessarily conform to [external pressures to adopt policies or structures] because they are taken-for-granted, but often because they are rewarded for doing so." Moreover, Oliver (1991: 149) noted that "institutional theory can accommodate interest-seeking, active behavior" in explaining responses to institutional pressures and expectations. Westphal and Zajac (1994) and Zajac and Westphal (1995) proposed and found evidence consistent with the idea that powerful corporate actors can stimulate, as well as be influenced by, the development of institutional processes such as decoupling and the use of socially appropriate corporate language. Our theoretical argument builds on their symbolic management perspective in proposing that political differences can help explain differences in how organizations respond to environmental pressures for managerial accountability. Specifically, our theoretical argument regarding the effect of CEO power over the board on the symbolic vs. substantive nature of stock repurchase programs suggests the following hypothesis:

Hypothesis 1 (H1): The greater the CEO's power over the board, the greater the firm's decoupling of its buyback program from practice (i.e., the lower the extent of implementation).

207/ASQ, June 2001

Interlock Ties and Vicarious Learning

External, social structural factors may provide additional insight into explaining institutional decoupling. From an embeddedness perspective, economic action is socially situated and cannot be explained by reference to individual political motives alone (Granovetter, 1985; Oliver, 1996). Similarly, macro-institutional pressures alone do not determine organizational action but are mediated by the organization's immediate social structural context, as determined by social network ties. Thus, in responding to external pressures for greater corporate accountability to shareholders, top managers and directors are influenced by information obtained from their network ties to leaders of other firms.

An important indicator of social network ties between leaders of large firms is the network of overlapping board memberships. A growing body of empirical research has examined the consequences of overlapping board ties for organizational behavior (see Mizruchi, 1996). Studies in this paradigm have viewed board interlock ties as a mechanism for resolving uncertainty about the implications of adopting organizational practices, programs, or other structures (e.g., Galaskiewicz and Wasserman, 1989; Davis, 1991; Mizruchi, 1992; Haunschild, 1993; Palmer, Jennings, and Zhou, 1993; Haunschild and Miner, 1997). In discussing how interlock ties to prior adopters may increase the likelihood of adopting takeover defenses, for example, Davis (1991) emphasized the value of direct communication between managers and directors in raising awareness about the potential benefits of adoption and how to avoid the potential drawbacks from adoption, thus providing a mechanism for vicarious learning. Although prior studies have not directly considered the influence of interorganizational network ties on how and to what extent formally adopted policies are actually implemented, it seems reasonable to expect that the decoupling of a formally adopted policy would be facilitated by network ties to firms that previously engaged in decoupling. In particular, interlock ties to firms that engaged in symbolic decoupling of repurchase plans can raise awareness about the symbolic and political benefits of decoupling governance policies from practice, such that network ties can provide a mechanism for vicarious learning about symbolic action in response to institutional pressures. This suggests the following hypothesis:

Hypothesis 2a (H2a): The extent of decoupling of stock buyback programs from practice at other firms to which the focal firm is connected by an interlock tie will increase the firm's decoupling of its buyback program.

In addition, our theoretical perspective suggests that the relative influence of interlock ties on corporate action depends on whether those ties provide information that can further the interests of powerful actors in the firm. As discussed earlier, powerful top managers are likely to prefer symbolic buyback programs, which enable them to preserve their discretion over corporate resources, and having ties to firms that have decoupled their buyback programs from practice can raise top managers' awareness about the potential to engage in symbolic action. Thus, our framework suggests that while

Decoupling

a CEO's power over the board can be an important predictor of the extent of institutional decoupling, the effect of intra-organizational political interests may be further amplified by external network relations that provide a vehicle for vicarious learning by raising awareness about the potential for symbolic decoupling:

Hypothesis 2b (H2b): The vicarious learning relationship hypothesized in H2a will be greater for firms whose CEOs are powerful relative to the board.

Vicarious learning may also take place as a result of the diffusion of symbolic decoupling across different but related policy domains through social network ties. In terms of the current study, network ties to other companies that have successfully adopted and decoupled a particular corporate governance policy that purports to reduce agency costs may increase the likelihood that the focal firm will adopt and decouple other policies that have similar stated objectives. For example, Westphal and Zajac (1994) showed that from the late 1970s to mid-1980s many firms responded to external pressures for increased managerial accountability by adopting long-term incentive plans (LTIPs) for top managers that purported to align executive compensation with shareholder interests but did not actually implement the plans (i.e., they made no grants under the formally adopted plans). By decoupling the plans from practice, top managers were able to avoid higher compensation risk in their pay packages. Thus, having network ties to firms that have previously adopted and decoupled LTIPs from practice may increase the likelihood that executives will recognize the potential to decouple stock repurchase plans, such that vicarious learning through network ties can extend across related policy domains. Corporate actors who have witnessed or participated in the decoupling of LTIPs on other boards are more likely to conceive governance policies with a similar agency rationale, such as stock repurchase plans, as symbolic acts, thus increasing the likelihood of decoupling:

Hypothesis 3a (H3a): The extent of decoupling of CEO incentive plans (LTIPs) from practice at other firms to which the focal firm is connected by an interlock tie will increase the firm's decoupling of its buyback program.

Moreover, vicarious experience with decoupling LTIPs from practice through interlock ties should have a greater effect on decoupling of repurchase plans from practice when CEOs are relatively powerful. Interlock ties to firms that have decoupled LTIPs from practice in the past can raise CEOs' awareness and appreciation of the potential for symbolic governance policies to enhance the legitimacy of the firm's leadership without interfering with managerial control over the allocation of resources. This suggests the following, additional hypothesis:

Hypothesis 3b (H3b): The vicarious learning relationship hypothesized in H3a will be greater for firms whose CEOs are powerful relative to the board.

Prior Decoupling and Experiential Learning

While network ties provide one opportunity for managers to become aware of the potential for symbolic decoupling, there may also be a more direct form of learning that increases the likelihood of observing a stock buyback program decoupled from practice: a firm's prior experience with decoupling formal adoption of a program from practice may affect the probability of future decoupling. Given the dearth of research on decoupling and its antecedents, it is perhaps not surprising that there is virtually no discussion of decoupling as a repeated practice. Westphal and Zajac (1998) have speculated, however, that firms may engage in symbolic management repeatedly across multiple domains or issues. A central tenet of the organizational learning literature is that actions associated with positive outcomes are more likely to be repeated, even after only one instance of the behavior (Cyert and March, 1963; Huber, 1991; March, Sproull, and Tamuz, 1991). Westphal and Zajac (1998) found strong evidence that firms experienced positive stock market reactions to incentive plans that were adopted and decoupled from actual incentive arrangements, as well as to plans that were actually implemented, and there is also evidence that firms enjoy positive market reactions to decoupled buyback programs (Zajac and Westphal, 2001). Based on such positive reinforcement, experience with decoupling is likely to be encoded into organizational memory and routines and thus be invoked in the process of adopting other governance policies in the future.

Moreover, our overall theoretical perspective suggests that the influence of prior instances of decoupling, which heightens awareness of decoupling as an option, is likely to be moderated by power in the CEO/board relationship. In effect, a firm's prior direct experience with symbolic decoupling serves as a precedent that reduces uncertainty among top managers about the potential for symbolic action to further their political interests. Thus, while prior experience with decoupling is likely to be encoded into organizational memory and routines, corporate leaders have a selective memory and are particularly likely to draw on prior experience with decoupling when it serves their political interests. Such "selective learning" from experience (Ocasio, 1999: 388) dovetails with recent theoretical developments on organizational routines and learning, which suggest that reliance on routines that have been developed from experience is contingent on the political interests and identities of powerful actors or groups in the organization (March and Olsen, 1989; March, Schultz, and Zhou, 2000). This suggests the following, additional hypotheses, which parallel H2a–H3b:

Hypothesis 4a (H4a): Prior decoupling of stock buyback programs from practice will increase a firm's decoupling of its current buyback program.

Hypothesis 4b (H4b): The experiential learning relationship hypothesized in H4a will be greater for firms whose CEOs are powerful relative to the board.

210/ASQ, June 2001

Decoupling

Hypothesis 5a (H5a): Prior decoupling of CEO incentive plans (LTIPs) from practice will increase a firm's decoupling of its buyback program.

Hypothesis 5b (H5b): The experiential learning relationship hypothesized in H5a will be greater for firms whose CEOs are powerful relative to the board.

METHOD

Sample and Data

The sample for this study was drawn from the population of large and medium-sized U.S. industrial and service firms listed in the 1985 Forbes and Fortune 500 indexes. The final sample included all companies for which complete data were available on board structure, ownership, stock repurchases, financial and operating characteristics. This criterion yielded 412 companies. We examined whether firms in this sample were significantly different in size (sales) or performance (market-to-book value and stock market returns) from companies in the larger population. Kolmogorov-Smirnov two-sample tests revealed no significant differences on any of these measures.

Complete data were collected for the period 1985 to 1991. We also collected earlier and later data to measure interlock ties to prior adopters and subsequent implementation by the focal firm and to develop lagged measures of the other independent variables. We chose to examine repurchase adoptions from 1985 to 1991 because a wave of adoptions occurred during this period (Lee, Mikkelson, and Partch, 1992). Between September 1986 and December 1990, firms in our sample adopted 544 repurchase plans; during the previous five-year period, they had adopted only 148. We obtained data on repurchase plan adoption and implementation from an extensive database compiled by the Securities Data Company. We further developed this database, which has been described as "the most complete source of information" regarding stock repurchase programs (Fried, 1998: 22) to reduce missing data and checked the accuracy of these data using the *Wall Street Journal Index*, *Reuters*, and the *Investment Dealers' Digest*.

We obtained data on board structure, interlocks, and ownership from Compact Disclosure, *Standard & Poor's Register of Corporations, Directors, and Executives*, and corporate proxy statements. Data on financial and operating characteristics were obtained from COMPUSTAT. Data on CEO incentive plan adoption and implementation were also obtained from corporate proxy statements.

Independent and Dependent Variables

The primary dependent variable in this study is the extent of *repurchase plan implementation*, calculated as the number of shares repurchased in a given year divided by the total number of shares available for repurchase in that year under the plan.

CEO power over the board. We used four different measures of the CEO's power relative to the board.¹ The first is the CEO's tenure relative to the average tenure of board

1

Westphal (1998) showed that increases in structural sources of board power, including separation of the CEO and board chair positions, can prompt political behavior by the CEO that paradoxically reduces the board's overall power over decision making. This occurred only for *changes* in board structure, however (e.g., separating the CEO and board chair positions when they were previously combined); in this study, we examine indicators of the level of board power.

members. Several studies have hypothesized that longer tenure relative to the average tenure of board members should enhance the CEO's power vis-à-vis the board (e.g., Singh and Harianto, 1989; Wade, O'Reilly, and Chandratat, 1990). High relative tenure confers expert power through a greater familiarity with the organization's distinctive competencies and methods of operation (Zald, 1969). CEOs may also acquire greater social status within the organization over time, as they develop their internal and external social network (Finkelstein and Hambrick, 1989; Pfeffer, 1981a). Conversely, widely held behavioral norms on corporate boards may induce new directors to defer to more experienced top managers in board meetings (Alderfer, 1986). Finally, a CEO's high relative tenure may index cooptation of the board, as CEOs typically determine the selection of new directors (Mace, 1971).

Our second measure of CEO power over the board is the portion of the board appointed after the CEO. In effect, this measure is a relatively direct indicator of board cooptation. Outside appointments confer prestige and status, as well as financial rewards and perquisites (Wade, O'Reilly, and Chandratat, 1990). Thus, as several authors have suggested, norms of reciprocity should lead outside board members to feel socially obligated to support the CEO who was responsible for nominating them to the board and/or approving their appointment (Boeker, 1992; Daily and Dalton, 1995; Wade, O'Reilly, and Chandratat, 1990). Some research has shown that boards comprising largely CEO appointments permit more generous CEO compensation packages (Main, O'Reilly, and Wade, 1995) and that firms were more likely to adopt certain anti-takeover provisions where a relatively large portion of the board was appointed after the CEO (Sundaramurthy, 1996).

Our third measure of relative CEO/board power is board leadership structure. Corporate governance researchers have typically argued that a CEO's joint possession of the CEO and board chair positions reduces board independence from management and enables top managers to quash dissent on the board if it threatens their interests (Rechner and Dalton, 1991). Several studies have provided evidence that separation of the CEO and board chair positions can enhance the tendency for the board's decision making to protect shareholder interests (e.g., Mallette and Fowler, 1992; Westphal and Zajac, 1994). Finally, our fourth measure is director stock ownership, which can provide an important source of influence. Voting rights afford greater power to owner-directors, and higher levels of director stock ownership should increase the tendency for board involvement to reflect shareholder interests (Zald, 1969; Kosnik, 1987; Bergh, 1995). We combine the four measures into a single index of CEO power over the board using principal components analysis (Jackson, 1991). As a data reduction technique, principal components is appropriately applied to causal (vs. reflective) indicators (MacCallum and Browne, 1993). Although causal indicators need not be intercorrelated, a separate factor analysis confirmed that all four indicators loaded on a single factor, with an eigenvalue greater than one.²

2

We also conducted a separate analysis in which the dichotomous measure of board leadership was excluded from the index and entered as a separate variable. The results presented below were substantively unchanged.

Decoupling

Interlock ties. A second set of independent variables assessed the extent of decoupling at other companies to which the focal firm was connected by an interlock tie. In developing this measure, we distinguished between and measured both one-step ties (direct links) and two-step ties (i.e., ties through a common third party). Most recent studies on interlock ties have focused on one-step ties, which include both "directional interlocks" (i.e., ties created by individuals who are owners or officers of one of the two firms) and "non-directional interlocks" (i.e., ties created as a result of individuals serving as outside directors at both firms) (e.g., Davis, 1991; Haunschild, 1993; Palmer, Jennings, and Zhou, 1993). Although directional interlocks may constitute a stronger tie between firms (cf. Haunschild, 1993; Palmer et al., 1995), non-directional interlocks can also clearly provide a conduit for the exchange of information, as outside directors draw on their experience at other boards in contributing to decision making at the focal board. Thus, we included both kinds of interlocks and distinguished between them in measuring one-step ties to other firms that had adopted repurchase plans or LTIPs; we did not distinguish between directional and non-directional two-step ties. Moreover, we included all ties to prior adopters in the larger sample frame for which data were available (i.e., including firms that were excluded from the analyses because data for one or more of the other measures were unavailable).

To test H2a, which predicts that decoupling of buyback programs at tied-to firms will interact with CEO power over the board to increase decoupling at the focal firm, we measured the extent of decoupling at tied-to firms as

$$\frac{\sum_{i=1}^N (1 - P_i)}{N}$$

where P_i is the percentage of shares repurchased at tied-to firm i , and N is the number of tied-to firms that adopted a repurchase plan within the past five years. An analogous variable was created to measure the extent of decoupling of LTIPs at tied-to firms (*decoupling of LTIPs at tied-to firms*). Although LTIPs were adopted between the early 1970s and the early 1990s, ostensibly to improve the relationship between CEO pay and firm performance, Westphal and Zajac (1994, 1998) documented that a large portion of these plans (54 percent) were not actually implemented (i.e., no shares were granted under the plan). We analyzed proxies in detail throughout the diffusion period to confirm the newness of coded LTIP adoptions and to accurately record the number of shares granted under the plans (see Westphal and Zajac, 1994). For this measure, P_i is the percentage of shares reserved for issuance under the LTIP that were actually granted under the plan, and N is the number of tied-to firms that adopted a plan.

We also measured two-step ties to prior adopters. Mizruchi (1992) found that two-step board ties were particularly strong predictors of firm behavior. In particular, the number of ties

that firms shared with the same financial institutions was a consistently strong predictor of similarity in political behavior between firms. This finding is consistent with the view that boards of financial institutions provide a clearinghouse for information on the latest business practices adopted by other companies, so that firms with mutual ties to the same financial institutions are more likely to have exchanged information about policy decisions in their respective firms, while also gaining access to similar information about practices at other firms (Useem, 1984; Palmer, Friedland, and Singh, 1986; Mizruchi, 1992). Moreover, to the extent that firms in structurally equivalent positions are more likely to imitate one another (Burt, 1987), firms may tend to imitate the policies of other organizations in similar structural positions. Common ties to financial institutions may be especially potent in fostering imitation. Mizruchi noted that such ties may lead firms to imitate one another as they compete for capital from the same institutions. Thus, we also created measures indicating the extent of decoupling among firms that are connected by two-step ties to the focal firm through the board of a financial institution: *decoupling of buyback programs at tied-to firms (two-step ties)* and *decoupling of LTIPs at tied-to firms (two-step ties)*.

We tested the hypothesized interaction effects using the product-term approach. To avoid any possible multicollinearity problem, the relevant variables were centered (Jaccard, Turrisi, and Wan, 1990). Although at least one study has suggested that this transformation is unnecessary (Harrison and Mitchell, 1995), there is not yet a consensus on this issue. Thus, it seemed appropriate to use this procedure because, at worst, it has no effect on the results, and, at best, it helps avoid multicollinearity.

Prior experience. We created two independent variables to indicate prior experience with decoupling. These measures parallel the indicators of decoupling at tied-to firms discussed above. The first variable, *prior decoupling of buyback programs*, was calculated by taking the average percentage of shares repurchased under plans that were adopted during the previous ten years (i.e., prior to the current plan) and subtracting this value from one; thus, higher values indicate greater decoupling. Similarly, we calculated *prior decoupling of LTIPs* by taking the percentage of shares reserved for issuance under a previously adopted LTIP that were actually granted under the plan and subtracting this value from one.

Control Variables

In the interest of thoroughness, we controlled for factors that have been shown to influence repurchase plan adoption in models of implementation. Existing research in financial economics on repurchase plans has focused more on the consequences (i.e., stock market reactions) than on the antecedents of adoption. The few studies that have addressed this issue have emphasized financial characteristics. Some finance studies have argued that low cash flow could constrain the firm's ability to make repurchases (Norgaard and Norgaard, 1974; Bagwell and Shoven, 1988; Medury, Bowyer, and Srinivasan, 1992). Others have con-

Decoupling

tended that higher cash flow might raise concerns about agency problems in the firm (Jensen, 1989; Davis and Stout, 1992; Palmer et al., 1995; Lie, 2000), thus influencing the potential benefits from repurchase plan implementation. Thus, we controlled for *cash flow per share* in the analyses (i.e., income before extraordinary items, divided by total common shares). We also controlled for the *quick ratio* as a measure of liquidity. Although the evidence is mixed, some prior research has shown that liquidity is associated with repurchase plan adoption (Young, 1969; Medury, Bowyer, and Srinivasan, 1992). The quick ratio is calculated as total receivables plus cash and all securities readily transferable into cash, divided by total current liabilities.

Some research has also shown a relationship between financial leverage and repurchase plan adoptions, although the direction of causality in these studies is somewhat uncertain (Norgaard and Norgaard, 1974; Medury, Bowyer, and Srinivasan, 1992). As a measure of firm indebtedness, therefore, we included the ratio of *long-term debt to equity*. Moreover, given some evidence for an association between firm size and repurchases (Medury, Bowyer, and Srinivasan, 1992), we controlled for the *log of firm sales* in the analyses. In addition, we controlled for firm performance (*total stock returns* and *market-to-book value*), as poor performance could increase shareholder demands for repurchases. Total stock returns was defined as capital gains plus dividends accrued during the year, divided by share price at the beginning of the year. Market-to-book gauges a firm's effectiveness in creating value for shareholders by comparing a firm's market value with the cost of capital contributed by shareholders (Varaiya, Kerin, and Weeks, 1987).

We controlled for CEO stock ownership in all models, calculated as a percentage of total common equity, given that CEOs who hold significant amounts of stock may have more personal incentive to make stock repurchases. Moreover, large institutional investors may be more likely than other shareholders to scrutinize the implementation of stock repurchase plans, although evidence that institutional owners have a substantive impact on corporate governance is mixed (Useem, 1993; Davis, Diekmann, and Tinsley, 1994; Westphal and Zajac, 1998). Thus, we controlled for *institutional ownership*, measured as the total number of shares held by pension funds, banks and trust companies, savings and loans, mutual fund managers, and labor union funds, divided by total common stock (Hill and Hansen, 1991).

In addition, we also controlled for *board centrality* in the network of interlocking directorates, measured as the natural log of the total number of non-duplicated ties between the focal board and all other boards in the larger sample (Davis, 1991; Haunschild, 1993). Interlock centrality is thought to provide social capital that can perpetuate the control of corporate leaders (Davis and Stout, 1992; Palmer et al., 1995). Thus, centrality could reduce the perceived need to make stock repurchases. Finally, we also controlled for possible industry differences in the stock repurchase activity by including dummy variables for the two-digit Standard Industry Classification codes in the sample, but given the number of different

industries represented in the sample, coefficients for these variables are not reported. All control variables were measured in the prior year (year_{t-1}).³ To address the possibility that our independent variables could change during the implementation window (e.g., power changes resulting from CEO succession or changes in free cash flow or stock performance) and thus affect implementation, our independent variables of theoretical interest and the control variables were updated annually in the analyses.

Analysis

We estimated the decoupling of stock buyback programs using the Heckman selection model, a two-stage procedure that corrects for sample selection bias in regression analysis (Heckman and Borjas, 1980). Given that the hypothesized effects on decoupling are limited to firms that have adopted a repurchase plan, sample selection bias could threaten the generalizability of our results to the larger population of Fortune/Forbes 500 firms: if companies that adopt repurchase plans tend to have more powerful CEOs or more board ties to firms that have decoupled repurchase plans, then OLS results may not generalize to the larger population.

The Heckman model includes two equations: the first (selection) equation estimates the likelihood of adoption with an event history model for the full sample, and the hazard rate from that model is then included in a second-stage regression model to estimate the degree of implementation (i.e., among the reduced sample of firms that have adopted a plan). Thus, parameter estimates from the event history model, which are based on information from all firm-years in the sample, are included in the second-stage models. In the selection model, we treated repurchase plan adoption as a repeatable event (i.e., firms were at risk of adoption throughout the time period). We followed Allison's (1984) suggested approach to repeated-event models by including two additional control variables that tap each firm's prior event history: (1) the length of the prior interval between adoptions, measured in days, and (2) the number of adoptions during the prior ten-year period (see also Mizruchi and Stearns, 1988). The data were arranged by firm-year and updated annually. CEO power over the board and all control variables were lagged by one year. Sixty-eight cases were right-truncated due to mergers, takeovers, or acquisitions during the risk period, leaving a sample of 2,652 firm-years.

In the second-stage model of repurchase activity, repurchases are observed separately for each year in the implementation window following repurchase plan adoption (i.e., five observations per case of adoption). Thus, we applied pooled cross-sectional time series regression (Greene, 1993) to estimate repurchase activity. To correct for heteroskedasticity and autocorrelated error terms, we used the generalized least squares (GLS) estimator. The independent variables were updated in each year. Accordingly, this modeling approach predicts repurchases based on relative CEO/board power, interlocks, and other variables in the prior year. In separate models, we estimated implementation over shorter time periods (e.g., two or three years), and the results pre-

3 Given that high-technology companies sometimes make repurchases to offset large stock option grants, we conducted separate analyses that included a control variable for the number of stock options outstanding (calculated as a percent of total common equity) for those years in which data were available. The hypothesized results were substantively unchanged. Moreover, differences in the motivation for repurchase programs at companies in the high-technology industry vs. other industries are captured by the industry control variables. The results were also robust to the inclusion of year dummy variables.

Decoupling

sented below were substantively robust to these different implementation windows.

Finally, some have argued that tender offers are occasionally used to avoid hostile takeovers, and such plans may not be well received by external stakeholders (cf. Bagnoli, Gordon, and Lipman, 1989; Davidson and Garrison, 1989). Thus, even though tender offers represent only a small portion of all repurchase plans adopted during the period of study (13 percent), and only certain kinds of tender offers (i.e., Dutch auctions) are suitable as takeover deterrents (Persons, 1994), we conducted separate analyses in which these few repurchase plans were excluded from the sample, and the results presented below were substantively unchanged.

RESULTS

Descriptive statistics and bivariate correlations are displayed in table 1. Table 2 shows the results of Heckman selection models of repurchase plan implementation. The first column of table 2 (model 1) includes the main effects model. The estimates for this model support H1. In particular, the CEO's power over the board is negatively related to the extent of repurchase plan implementation during the five-year period following adoption. H2a predicted that the extent of decoupling of stock buyback programs at other firms to which the

Table 1

Descriptive Statistics and Pearson Correlation Coefficients (N = 2,652)

| Variable | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--|------|------|------|------|------|------|------|------|------|------|
| 1. CEO power over the board | .00 | 1.06 | | | | | | | | |
| 2. Decoupling of buyback programs at tied-to firms (one-step ties) | .59 | .32 | .06 | | | | | | | |
| 3. Decoupling of buyback programs at tied-to firms (two-step ties) | .61 | .30 | .02 | .10 | | | | | | |
| 4. Decoupling of LTIPs at tied-to firms (one-step ties) | .54 | .35 | .03 | .07 | .04 | | | | | |
| 5. Decoupling of LTIPs at tied-to firms (two-step ties) | .55 | .32 | .01 | .05 | .11 | .08 | | | | |
| 6. Prior decoupling of buyback programs | .57 | .39 | .02 | .03 | .01 | -.01 | .00 | | | |
| 7. Prior decoupling of LTIPs | .52 | .42 | .04 | .01 | -.02 | .04 | .01 | .04 | | |
| 8. Total stock market returns | .08 | .31 | -.10 | -.01 | .05 | .01 | .00 | .02 | .05 | |
| 9. Market-to-book value | 1.54 | 1.22 | -.05 | .12 | .11 | -.01 | -.02 | .03 | .03 | .17 |
| 10. Cash flow per share | 2.58 | 2.87 | .00 | .18 | .02 | -.03 | .02 | .02 | -.01 | -.06 |
| 11. Quick ratio | 1.24 | 1.88 | .03 | .05 | .06 | .02 | .01 | .04 | .02 | -.02 |
| 12. Long-term debt to equity | .70 | 1.12 | .16 | -.01 | -.09 | .01 | .04 | .01 | -.01 | -.01 |
| 13. Log of firm sales | 8.02 | 1.06 | .12 | .01 | .06 | .04 | .08 | .05 | .10 | .03 |
| 14. Institutional ownership | .32 | .21 | -.04 | .04 | .00 | .02 | .06 | -.03 | -.01 | .04 |
| 15. CEO ownership | .04 | .03 | .18 | .02 | .04 | -.01 | -.01 | -.01 | -.13 | .04 |
| 16. Board centrality | 1.95 | .87 | .07 | .14 | .09 | .06 | .05 | .06 | .10 | .04 |
| 17. Repurchase plan implementation* | .09 | .15 | -.22 | -.36 | -.19 | -.29 | -.13 | -.12 | -.24 | .06 |
| Variable | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | |
| 10. Cash flow per share | .16 | | | | | | | | | |
| 11. Quick ratio | .17 | -.22 | | | | | | | | |
| 12. Long-term debt to equity | -.24 | -.32 | -.17 | | | | | | | |
| 13. Log of firm sales | -.03 | .38 | -.09 | .01 | | | | | | |
| 14. Institutional ownership | .23 | .16 | .10 | -.21 | .09 | | | | | |
| 15. CEO ownership | .02 | .06 | .04 | -.07 | -.15 | -.14 | | | | |
| 16. Board centrality | .10 | -.02 | .01 | -.04 | .09 | .23 | .05 | | | |
| 17. Repurchase plan implementation* | .04 | -.08 | -.09 | .11 | -.13 | -.14 | -.03 | .12 | | |

* Statistics for this variable are calculated for the sample of firm-years in which a repurchase plan is outstanding (N = 2,720).

focal firm is connected by an interlock tie would increase the focal firm's decoupling of its buyback program. Model 1 in table 2 also shows evidence supporting this hypothesis, both for one-step and two-step ties. H2b predicted that the extent of decoupling of stock buyback programs at other firms to which the focal firm is connected by an interlock tie would interact with CEO power over the board to increase the focal firm's decoupling of its buyback program. The results shown in models 2 and 4 support this hypothesis, and the interaction is significant for both one-step and two-step ties.

H3a predicted that the extent of decoupling of LTIPs at tied-to firms would increase the focal firm's decoupling of its buy-

Table 2

Heckman Selection Models of Repurchase Plan Implementation*

| Independent variable | Model 1 | Model 2 | Model 3 | Model 4 |
|--|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| CEO power over the board | -.004 ^{***} (.002) | -.004 ^{**} (.002) | -.004 ^{**} (.002) | -.004 ^{***} (.002) |
| Decoupling of buyback programs at tied-to firms (one-step ties) | -.020 ^{****} (.007) | -.022 ^{****} (.006) | -.020 ^{****} (.006) | -.022 ^{****} (.006) |
| Decoupling of buyback programs at tied-to firms (two-step ties) | -.016 ^{**} (.008) | -.019 ^{**} (.008) | -.015 ^{**} (.008) | -.021 ^{**} (.009) |
| Decoupling of LTIPs at tied-to firms (one-step ties) | -.018 ^{***} (.007) | -.021 ^{***} (.007) | -.019 ^{***} (.007) | -.022 ^{***} (.008) |
| Decoupling of LTIPs at tied-to firms (two-step ties) | -.007 (.006) | -.007 (.006) | -.006 (.006) | -.007 (.006) |
| Prior decoupling of buyback programs | -.008 (.005) | -.010 ^{**} (.005) | -.008 (.005) | -.008 (.005) |
| Prior decoupling of LTIPs | -.010 ^{**} (.005) | -.011 ^{***} (.005) | -.010 ^{**} (.005) | -.010 ^{**} (.005) |
| Decoupling of buyback programs at tied-to firms (one-step ties) × CEO power over the board | | -.013 ^{**} (.006) | | -.012 ^{**} (.006) |
| Decoupling of buyback programs at tied-to firms (two-step ties) × CEO power over the board | | -.018 ^{****} (.006) | | -.016 ^{***} (.006) |
| Decoupling of LTIPs at tied-to firms (one-step ties) × CEO power over the board | | -.015 ^{***} (.006) | | -.015 ^{***} (.006) |
| Decoupling of LTIPs at tied-to firms (two-step ties) × CEO power over the board | | -.004 (.006) | | -.001 (.007) |
| Prior decoupling of buyback prog. × CEO power over the board | | | -.009 ^{**} (.005) | -.010 ^{**} (.005) |
| Prior decoupling of LTIPs × CEO power over the board | | | -.010 ^{***} (.003) | -.011 ^{***} (.004) |
| Total stock market returns | .0001 (.0001) | .0001 (.0001) | .0001 (.0001) | .0001 (.0001) |
| Market-to-book value | .002 (.002) | .002 (.002) | .002 (.002) | .002 (.002) |
| Cash flow per share | -.002 ^{**} (.001) | -.002 ^{**} (.001) | -.002 ^{**} (.001) | -.002 ^{**} (.001) |
| Quick ratio | -.002 [*] (.001) | -.002 (.001) | -.002 (.001) | -.001 (.001) |
| Long-term debt to equity | .0006 ^{***} (.0002) | .0006 ^{***} (.0002) | .0005 ^{***} (.0002) | .0004 ^{**} (.0002) |
| Log of firm sales | -.005 ^{**} (.002) | -.004 ^{**} (.002) | -.003 (.002) | -.002 (.002) |
| Institutional ownership | -.018 ^{**} (.008) | -.017 ^{**} (.008) | -.015 [*] (.008) | -.010 (.009) |
| CEO ownership | -.022 (.054) | -.019 (.054) | -.021 (.053) | -.019 (.055) |
| Board centrality | .004 [*] (.002) | .005 ^{**} (.002) | .005 ^{**} (.002) | .005 ^{**} (.002) |
| Constant | .117 (.073) | .111 (.072) | .130 [*] (.073) | .141 [*] (.074) |
| Chi-square | 121.49 ^{****} | 139.26 ^{****} | 132.78 ^{****} | 144.81 ^{****} |

^{*} $p \leq .10$; ^{**} $p \leq .05$; ^{***} $p \leq .01$; ^{****} $p \leq .001$; significance levels are one-tailed for hypothesized effects.

* Standard errors are in parentheses.

Decoupling

back program. As model 1 shows, this hypothesis is supported for one-step ties but not two-step ties. H3b posited that the relationship predicted in H3a would be stronger for firms with greater CEO power over the board. Models 2 and 4 show that this hypothesis is also supported for one-step ties but not two-step ties.

The results thus show that the extent of decoupling of buyback programs at tied-to firms has a positive effect on the extent of buyback decoupling at the focal firm, for both one-step and two-step ties. Similarly, the extent of LTIP decoupling at firms that are connected to the focal firm by a one-step interlock tie has a positive effect on the extent of decoupling of buyback programs at the focal firm. These effects also hold up in models 2 through 4, indicating that for three of the four network variables, the extent of decoupling at tied-to firms has a positive effect on decoupling at the focal firm at average levels of CEO power over the board. The interaction effects suggest that these network effects are amplified further when CEOs are particularly powerful relative to the board.

H4a posited that a firm's prior decoupling of buyback programs would increase decoupling of the focal buyback program. These results are weaker, with only model 2 showing a significant main effect of prior decoupling of buyback programs. H4b predicted that a firm's prior decoupling of buyback programs would interact with CEO power over the board to increase decoupling of the focal buyback program. This hypothesis is supported, as shown in models 3 and 4: CEO power over the board amplifies the effect of prior decoupling of stock buyback programs on decoupling in the current year.

The results also support H5a, with all models showing that prior decoupling of LTIPs has a significant main effect on subsequent decoupling of buyback programs at the focal firm in the current year. Finally, the results in models 3 and 4 support H5b: the effect of previously decoupled LTIPs on stock buyback decoupling becomes significantly more positive for firms whose CEOs have greater power over the board. The interaction effects again suggest that the effects of prior decoupling experience are amplified further when CEOs are particularly powerful relative to the board. Accordingly, the pattern of results for prior decoupling experience parallels the network effects discussed above.⁴

It might be suggested that prior decoupling experience represents another indicator of CEO power, so that the effect of such experience on decoupling is entirely due to CEO power over the board. But prior decoupling experience is not significantly correlated with current CEO power over the board, as shown in table 1 ($r = .02$ and $.04$ for prior decoupling of buybacks and LTIPs, respectively). The different dimensions of the measure of CEO power that we use in the study have been verified in past studies as valid indicators of this construct (Boyd, 1994); thus, to the extent that our measure of power is valid, prior experience with decoupling cannot be considered an indicator of current CEO power over the board. The reason for the low correlation between prior decoupling

4

In separate analyses, we estimated a separate model for each interaction term. Each interaction that was significant in model 4 of table 2 remained significant in these models.

and current CEO power is that changes in board membership and/or CEO succession in the interim between adoptions lead to changes in CEO power over the board. Thus, previous decoupling events do not, on average, serve as reliable indicators of CEO power at the time of subsequent decoupling events.

In summary, the results show that there is variation in the extent of institutional decoupling among the organizations studied and that (1) intraorganizational political factors predict strongly the extent of this institutional decoupling, (2) greater awareness of the potential for decoupling, as indicated by social ties to prior "decouplers," as well as an organization's own prior experience with decoupling (within and across policy domains), also predict decoupling, and (3) these political interests and social awareness factors interact to add greater explanatory power when predicting institutional decoupling.

DISCUSSION

We began by noting that despite the importance of the concept of institutional decoupling, there is very little theoretical or empirical research that seeks to explain when and where it is more or less likely to be observed. In addition, despite the fact that U.S. firms continue to adopt plans to buy back hundreds of billions of dollars worth of stock each year (according to Securities Data Company), the phenomenon of stock repurchase programs has also not been examined in the organizational literature. Our study has attempted to add to our understanding of both issues. The results strongly suggest that decoupling is both a common and a predictable occurrence in the domain of stock buyback programs. We found that decoupling occurs in a significant portion of buyback adoptions and that our sociopolitical framework (even after controlling for economic factors) provides significant explanatory power in explaining the extent of decoupling. In general, the findings support our theoretical perspective that decoupling is more likely to occur to the extent that (a) actors who hold power in the organization (i.e., CEOs vs. boards) have a political interest in avoiding institutional pressures for change and (b) social structural or experiential factors increase awareness among those actors of the potential for organizational decoupling.

In terms of the antecedents of decoupling, we found that the relative power of the CEO vs. the board of directors is a significant predictor of decoupling of stock buyback programs. The greater the CEO's power over the board, the greater the extent to which firms decouple financial investments from formally adopted repurchase programs, so that the programs remain more symbolic than substantive. This finding is consistent with the view that tensions have arisen between the political interests of top managers, who seek to preserve managerial discretion over the allocation of corporate resources, and external institutional pressure from investors and other constituents to adopt (and presumably implement) policies such as repurchase programs that demonstrate commitment to shareholders by returning free cash flow to investors. It appears that firms are more likely to avoid institutional pressures for change using tactics such as decou-

Decoupling

pling when those institutional pressures conflict with the interests of actors who hold power in the organization. In the absence of such tension between external demands and the interests of powerful actors, the impetus for institutional decoupling would be significantly weaker. Institutional theorists have tended to view decoupling as a buffering mechanism whereby organizations maintain external legitimacy through formal practices that embody socially sanctioned purposes, while still preserving informal routines that have evolved over time (Meyer and Rowan, 1977; Pfeffer, 1981b; Edelman, 1992). Our findings suggest that decoupling occurs not only because it may be effective for the organization but also because it serves the political interests of powerful corporate leaders.

Our sociopolitical framework further addresses how social structural and experiential factors can augment political factors as predictors of institutional decoupling. The results support our theoretical perspective that board network ties to firms that have decoupled their buyback programs can increase managers' awareness of the potential to engage in symbolic action and preserve their discretion over the use of corporate resources. By providing information that reduces uncertainty about the consequences of engaging in symbolic vs. substantive action, network ties function as a vehicle for vicarious learning about avoidance as a response to institutional pressures. Moreover, these network effects generalized across specific policies, such that ties to firms that engaged in decoupling in one policy domain (long-term incentive plans) increased the likelihood that firms would decouple a different but related policy (buyback programs) that had the similar ostensible benefit of reducing agency costs for the benefit of shareholders. Consistent with Mizuchi's (1992) finding that two-step board ties, as well as one-step ties, can lead to similarity in corporate behavior between firms, we found strong evidence that both one-step and two-step board ties to prior decouplers are associated with a greater likelihood of decoupling by the focal firm.⁵

Beyond these main effects, we found evidence supporting our predictions on the interaction of CEO power and network ties, suggesting that the social structural context surrounding corporate leaders can amplify the effect of internal power relationships on organizational action or inaction, and decoupling in particular. The results can also be understood as showing how interorganizational network effects (i.e., the spread of decoupling through interlocks) are moderated by internal power relationships. Our results highlight that the course of network diffusion of organizational activity across firms (in this case, decoupling vs. implementation of governance policies) is not simply a natural contagion but is also affected by the interests of powerful actors. Organizational activity (or inactivity) spreads through network ties to firms with powerful actors who can benefit from it and is deflected away from firms with powerful actors who would not benefit from the activity or whose interests are compromised by it. More generally, these findings lend support to an emerging rapprochement between relatively macro-social, deterministic perspectives on organizational behavior and perspectives that

5

More generally, the significant effects of indirect board ties support the view expressed by Useem (1984) and others (e.g., Palmer, Friedland, and Singh, 1986) that boards of financial institutions can provide a clearinghouse for information on the business practices adopted by other companies.

highlight the role of political interests (Granovetter, 1992; Scott, 1994: 75). In suggesting that networks are not simply conduits for information, our theoretical perspective and findings highlight the potential promise for future research on board networks in devoting greater attention to exploring how network effects on organizational action can be contingent on power relationships within the firm.

One might question whether the influence of board interlock ties would be diminished when CEOs have power over the board, but CEO power does not imply that information from directors is not incorporated into the decision-making process. In a recent study, Westphal (1999) showed that CEO power over the board can change the nature of the relationship between the CEO and the board from independent board monitoring to a more collaborative working relationship in which the CEO seeks and encourages advice and counsel from directors on strategic issues. Thus, there is empirical evidence that CEO power does not decrease the use of information from directors in decision making, so that directors' experience can still be reflected in decision making when CEOs are powerful. At the same time, CEO power does decrease the likelihood that boards will independently take actions that threaten CEOs' interests, such as implementing stock repurchase programs.

Additional findings showed how prior experience with decoupling at the focal firm could influence the likelihood of subsequent decoupling. In effect, just as network ties to firms that have decoupled buyback plans can raise awareness of the feasibility of decoupling and the potential for such symbolic action to serve managers' political interests, prior experience with decoupling at the focal firm can likewise reduce uncertainty about decoupling as a response to institutional pressures. As with the effect of board interlock ties, moreover, the effect of prior experience with decoupling extended across related policies: prior decoupling of LTIPs interacted with CEO power to predict subsequent decoupling of buyback plans, which had a similar stated objective of constraining managerial decision making for the benefit of shareholders.

These findings provide the first evidence for institutional decoupling as a generalized, repeated practice in organizations, such that decoupling may represent a generalizable decision-making routine that is applied to a variety of different policies over time. In addition, these findings may have implications for research on organizational learning and inertia. The interaction between CEO power over the board and prior decoupling experience is consistent with the view that, while prior experience with decoupling is likely to be encoded into organizational memory and routines, corporate leaders may draw on that experience selectively when it serves their political interests. Such selective learning from experience is consistent with recent theorizing that suggests that the selection and retention of routines that have been developed from experience is influenced by the interests and identities of powerful actors in the organization (March and Olsen, 1989; Ocasio, 1999; March, Schultz, and Zhou, 2000).

Decoupling

The results provided some evidence that prior decoupling of LTIPs has a stronger effect on repurchase plan implementation than prior decoupling of repurchase plans. Perhaps some firms are more cautious about repeated decoupling of the same policy, based on a belief that such actions might increase the transparency of the decoupling, thus diminishing its value. In a separate study, however, we found no evidence that the stock market has discounted the value of repurchase plans as evidence of decoupling accumulated over time (Zajac and Westphal, 2001). It is also noteworthy that ownership by institutional investors was negatively related to repurchase plan implementation. Though higher levels of institutional investor ownership are often thought to indicate stronger external pressure for managerial accountability to shareholders (Hill and Hansen, 1991; Kaplan and Harrison, 1993), our results suggest that while firms with large institutional owners may be more likely to adopt such policies, they are also less likely to implement them, so that the policies become more symbolic than substantive. This is consistent with recent research suggesting that institutional investor ownership is not necessarily a strong predictor of actual board influence over management (Westphal and Zajac, 1998) and that institutional investors have not been fully successful in reforming corporate governance (e.g., Sundaramurthy, 1996; Porac, Wade, and Pollock, 1999). The typically large equity stakes that institutional investors hold may represent both a financial and psychological commitment that makes exit more difficult for them. This commitment, when combined with their interest in the formal signs of good corporate governance, may make them more susceptible to symbolic corporate policies.

The significant empirical support for our sociopolitical perspective on the decoupling of stock repurchase programs from practice was obtained after controlling for a large number of financial and economic factors, which enabled us to rule out a number of alternative explanations. While we believe our study represents the most comprehensive study to date on the potential predictors of stock repurchases, one could generate an almost endless list of additional reasons as to why firms might not have implemented an announced buyback (e.g., funds were needed for a new and unexpected internal R&D project, a surprise pricing war, a recently announced lawsuit, a new consulting report, etc.). While not denying the occasional influence of such factors, these types of random events are likely to be orthogonal to, and be thus unlikely to affect, the theoretically motivated and empirically demonstrated relationships between our political and social independent variables and our dependent variables, which were observed over hundreds of firms and across multiple time periods.

This study extends significantly Westphal and Zajac's (1994) early work on the decoupling of long-term incentive plans, which is perhaps the only previous large-sample quantitative study that examines the determinants of institutional decoupling. The current study develops a more complete perspective on decoupling that considers how prior experience with decoupling on other boards or at the focal firm (by enhancing

awareness of the potential for symbolic action) can, along with political factors, predict decoupling. We have also considered how experience with decoupling in one policy domain (LTIPs) can affect decoupling in a different domain (buybacks). Finally, the current study also hypothesizes and tests these determinants of decoupling in a wholly original context (i.e., stock repurchase plans) not previously examined in the organizational literature.

Future research building on the framework and findings of this study could extend our sociopolitical framework on institutional decoupling in several ways. For example, researchers interested in cross-cultural comparisons could examine the recent dramatic growth in stock repurchase programs among firms in European or Asian countries that have historically eschewed or even actively discouraged such programs (*Wall Street Journal*, 1997, 1999b). This has coincided with the rise of the shareholder value orientation in these countries, which has also met with some macro-political (as well as micro-political) resistance abroad (Zajac and Fiss, 2001). Such tensions may well result in an increase in observed decoupling in share repurchase programs for those firms. The assumption that there is a growing international convergence of shareholder-friendly governance practices (Useem, 1993) may benefit from closer scrutiny, since the presumed convergence may be more symbolic than substantive.

In the U.S., one could begin to analyze, from a socio-political perspective, the many ways in which large U.S. corporations actively seek to use symbols to influence the perceptions of an important external constituency, i.e., shareholders. Symbolic action can range from relatively extreme forms of institutional decoupling, such as the non-implementation of formal policies that affect the technical core of the organization (Meyer and Rowan, 1977), to relatively subtle forms of decoupling that involve taking actions that are inconsistent with the spirit of a formal policy, although perhaps still consistent with the letter of the plan. The present study examines a form of decoupling that falls within these extremes: the decoupling of repurchase plans can involve complete non-implementation, but the formal plans do not directly pertain to the technical core of the organization. Even the business media (CNNfn, 1998) has characterized stock buyback announcements as "a potent tranquilizer" in the "remedial arsenal" of U.S. corporations that "can help reassure nervous investors." Future studies could extend our research by examining the determinants and consequences of more extreme forms of decoupling, as well as more subtle forms of symbolic action. For instance, researchers might examine the phenomenon of "earnings management," whereby firms invest considerable effort to smooth the appearance of their profitability over time to placate the investment community (*Wall Street Journal*, 1999a). Given how high the stakes are for large corporations, it seems reasonable to expect that they will continue to develop new forms of symbolic action, including but not limited to institutional decoupling. The degree of the targets' receptivity to these symbolic actions is unknown, of course, but developing frameworks for establishing both the antecedents and consequences of such

Decoupling

actions appears to be an important first step toward gaining a greater understanding of their relevance.

REFERENCES

- Alderfer, C. P.
1986 "The invisible director on corporate boards." *Harvard Business Review*, 64 (6): 38–52.
- Allison, P. D.
1984 *Event History Analysis*. Newbury Park, CA: Sage.
- Bagnoli, M., R. Gordon, and B. L. Lipman
1989 "Stock repurchase as a takeover defense." *Review of Financial Studies*, 2: 423–443.
- Bagwell, L. S., and J. B. Shoven
1988 "Share repurchases and acquisitions: An analysis of which firms participate." In A. J. Auerbach (ed.), *Corporate Takeovers: Causes and Consequences*: 191–220. Chicago: University of Chicago Press.
- Bathala, C.
1996 "Determinants of managerial stock ownership: The case of CEOs." *Financial Review*, 31: 127–147.
- Bergh, D. D.
1995 "Size and relatedness of units sold: An agency theory and resource-based perspective." *Strategic Management Journal*, 16: 221–239.
- Boeker, W.
1992 "Power and managerial dismissal: Scapegoating at the top." *Administrative Science Quarterly*, 37: 400–421.
- Boyd, B. K.
1994 "Board control and CEO compensation." *Strategic Management Journal*, 15: 335–344.
- Burns, L. R., and D. R. Wholey
1993 "Adoption and abandonment of matrix management programs: Effects of organizational characteristics and interorganizational networks." *Academy of Management Journal*, 36: 106–138.
- Burt, R. S.
1987 "Social contagion and innovation: Cohesion versus structural equivalence." *American Journal of Sociology*, 92: 1287–1335.
- CNNfn
1996 "Record year for buybacks." October 28. <<http://www.411web.com/C/CNNFN>>.
- 1998 "The joys of stock buybacks." July 29. <<http://www.411web.com/C/CNNFN>>.
- Cyert, R. M., and J. G. March
1963 *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice-Hall.
- Daily, C. M., and D. R. Dalton
1995 "CEO and director turnover in failing firms: An illusion of change?" *Strategic Management Journal*, 16: 393–400.
- Dann, L. Y.
1981 "Common stock repurchases: An analysis of returns to bondholders and stockholders." *Journal of Financial Economics*, 12: 113–138.
- D'Aunno, T., R. I. Sutton, and R. H. Price
1991 "Isomorphism and external support in conflicting institutional environments: A study of drug abuse treatment clinics." *Academy of Management Journal*, 14: 636–661.
- Davidson, W. N., III, and S. H. Garrison
1989 "The stock market reaction to significant tender offer repurchases of stock: Size and purpose perspective." *Financial Review*, 24: 93–107.
- Davis, G. F.
1991 "Agents without principles? The spread of the poison pill through the intercorporate network." *Administrative Science Quarterly*, 36: 583–613.
- Davis, G. F., K. A. Diekmann, and C. H. Tinsley
1994 "The decline and fall of the conglomerate form in the 1980s: The deinstitutionalization of an organizational form." *American Sociological Review*, 59: 547–570.
- Davis, G. F., and S. K. Stout
1992 "Organization theory and the market for corporate control: A dynamic analysis of the characteristics of large takeover targets, 1980–1990." *Administrative Science Quarterly*, 37: 605–633.
- DiMaggio, P. J., and W. W. Powell
1983 "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields." *American Sociological Review*, 48: 147–160.
- Edelman, L. B.
1992 "Legal ambiguity and symbolic structures: Organizational mediation of civil rights law." *American Journal of Sociology*, 97: 1531–1577.
- Edelman, L. B., S. Petterson, E. Chambliss, and H. S. Erlanger
1991 "Legal ambiguity and the politics of compliance: Affirmative action officers' dilemma." *Law and Policy*, 13: 73–97.
- Elsbach, K. D., and R. I. Sutton
1992 "Acquiring organizational legitimacy through illegitimate actions: A marriage of institutional and impression management theories." *Academy of Management Journal*, 35: 699–738.
- Finkelstein, S., and D. C. Hambrick
1989 "Chief executive compensation: A study of the intersection of markets and political processes." *Strategic Management Journal*, 10: 121–134.
- Fligstein, N.
1991 "The structural transformation of American industry: An institutional account of the causes of diversification in the largest firms, 1919–1979." In W. W. Powell and P. J. DiMaggio (eds.), *The New Institutionalism in Organizational Analysis*: 311–336. Chicago: University of Chicago Press.
- Forbes Magazine*
1997 "The buyback monster." November 17.
- Franz, D. R., R. P. Rao, and N. Tripathy
1995 "Informed trading risk and bid-ask spread changes around open market stock repurchases in the NASDAQ market." *Journal of Financial Research*, 18: 311–327.

- Fried, D. R.**
1998 "What to look for in a stock repurchase program." *AAll [American Association of Individual Investors] Journal*, 20: 21–24.
- Galaskiewicz, J., and S. Wasserman**
1989 "Mimetic processes within an interorganizational field: An empirical test." *Administrative Science Quarterly*, 34: 454–479.
- Gomez-Mejia, L. R., and R. M. Wiseman**
1997 "Reframing executive compensation: An assessment and outlook." *Journal of Management*, 23: 291–374.
- Granovetter, M.**
1985 "Economic action and social structure: A theory of embeddedness." *American Journal of Sociology*, 91: 481–510.
1992 "Problems of explanation in economic sociology." In N. Nohria and R. Eccles (eds.), *Networks and Organizations: Structure, Form and Action*: 25–56. Boston: Harvard Business School Press.
- Greene, W. H.**
1993 *Econometric Analysis*. New York: Macmillan.
- Grullon, G., and D. L. Ikenberry**
2000 "What do we know about stock repurchases?" *Journal of Applied Corporate Finance*, 13 (1): 31–51.
- Harrison, J. R., and L. Mitchell**
1995 "Interaction effects in quasi-linear models." Working paper, Department of Management, University of Texas at Dallas.
- Haunschild, P. R.**
1993 "Interorganizational imitation: The impact of interlocks on corporate acquisition activity." *Administrative Science Quarterly*, 38: 564–592.
- Haunschild, P. R., and A. S. Miner**
1997 "Modes of interorganizational imitation: The effects of outcome salience and uncertainty." *Administrative Science Quarterly*, 42: 472–500.
- Heckman, J., and G. J. Borjas**
1980 "Does unemployment cause future unemployment: Definitions, questions, and answers from a continuous time model of heterogeneity and state dependence." *Econometrica*, 47: 247–283.
- Hill, C. W. L., and G. Hansen**
1991 "A longitudinal study of the causes and consequences of changes in diversification in the U.S. pharmaceutical industry 1977–1986." *Strategic Management Journal*, 12: 187–199.
- Huber, G. P.**
1991 "Organizational learning: The contributing processes and the literatures." *Organization Science*, 2: 88–115.
- Jaccard, J., R. Turrisi, and C. K. Wan**
1990 *Interaction Effects in Multiple Regression*. London: Sage.
- Jackson, J. E.**
1991 *A User's Guide to Principal Components*. New York: Wiley.
- Jensen, M. C.**
1986 "Agency costs of free cash flow, corporate finance, and takeovers." *American Economic Review*, 76: 323–329.
1989 "The eclipse of the public corporation." *Harvard Business Review*, 67 (5): 61–74.
- Jepperson, R. L.**
1991 "Institutions, institutional effects, and institutionalization." In W. W. Powell and P. J. DiMaggio (eds.), *The New Institutionalism in Organizational Analysis*: 143–163. Chicago: University of Chicago Press.
- Kaplan, M. R., and J. R. Harrison**
1993 "Defusing the director liability crisis: The strategic management of legal threats." *Organization Science*, 4: 412–432.
- Kosnik, R. D.**
1987 "Greenmail: A study of board performance in corporate governance." *Administrative Science Quarterly*, 32: 163–185.
- Lang, L. H., R. M. Stulz, and R. A. Walkling**
1991 "A test of the free cash flow hypothesis: The case of bidder returns." *Journal of Financial Economics*, 29: 315–335.
- Lee, D. S., W. H. Mikkelsen, and H. M. Partch**
1992 "Managers' trading around stock repurchases." *Journal of Finance*, 47: 1947–1961.
- Lie, E.**
2000 "Excess funds and agency problems: An empirical study of incremental cash disbursements." *Review of Financial Studies*, 13 (1): 219–247.
- MacCallum, R. C., and M. W. Browne**
1993 "The use of causal indicators in covariance structure models: Some practical issues." *Psychological Bulletin*, 114: 533–541.
- Mace, M. L.**
1971 *Directors: Myth and Reality*. Boston: Harvard Business School Press.
- Main, B. G. M., C. A. O'Reilly III, and J. Wade**
1995 "The CEO, the board of directors and executive compensation: Economic and psychological perspectives." *Industrial and Corporate Change*, 4: 293–332.
- Mallette, P., and K. L. Fowler**
1992 "Effects of board composition and stock ownership on the adoption of 'poison pills'." *Academy of Management Journal*, 35: 1010–1035.
- March, J. G., and J. P. Olsen**
1989 *Rediscovering Institutions: The Organizational Basis of Politics*. New York: Free Press.
- March, J. G., M. Schultz, and X. Zhou**
2000 *The Dynamics of Rules*. Stanford, CA: Stanford University Press.
- March, J. G., L. S. Sproull, and M. Tamuz**
1991 "Learning from samples of one or fewer." *Organization Science*, 2: 1–13.
- Medury, P. V., L. E. Bowyer, and V. Srinivasan**
1992 "Stock repurchases: A multivariate analysis of repurchasing firms." *Quarterly Journal of Business and Economics*, 31: 21–44.
- Meyer, J. W.**
1994 "Social environments and organizational accounting." In W. R. Scott and J. W. Meyer (eds.), *Institutional Environments and Organizations: Structural Complexity and Individualism*: 121–136. Thousand Oaks, CA: Sage.
- Meyer, J. W., and B. Rowan**
1977 "Institutional organizations: Formal structure as myth and ceremony." *American Journal of Sociology*, 83: 340–363.

Decoupling

- Mezias, S. J.**
1990 "An institutional model of organizational practice: Financial reporting at the Fortune 200." *Administrative Science Quarterly*, 35: 431–457.
- Microsoft Investor Relations**
1997 "The beauty of buybacks." March 18. <<http://www.microsoft.com/msft>>.
- Mizruchi, M. S.**
1992 *The Structure of Corporate Political Action: Interfirm Relations and Their Consequences*. Cambridge, MA: Harvard University Press.
1996 "What do interlocks do? An analysis, critique, and assessment of research on interlocking directorates." *Annual Review of Sociology*, 22: 271–298. Palo Alto, CA: Annual Reviews.
- Mizruchi, M. S., and L. B. Stearns**
1988 "A longitudinal study of the formation of interlocking directorates." *Administrative Science Quarterly*, 33: 194–210.
- Norgaard, R., and C. Norgaard**
1974 "A critical examination of share repurchase." *Financial Management*, Spring: 44–50.
- Ocasio, W.**
1999 "Institutionalized action and corporate governance: The reliance on rules of CEO succession." *Administrative Science Quarterly*, 44: 384–416.
- Oliver, C.**
1991 "Strategic responses to institutional processes." *Academy of Management Journal*, 16: 145–179.
1996 "The institutional embeddedness of economic activity." In P. Shrivastava, A. S. Huff, and J. E. Dutton (eds.), *Advances in Strategic Management*, 13: 163–186. Greenwich, CT: JAI Press.
- Palmer, D. A., R. Friedland, and J. V. Singh**
1986 "The ties that bind: Organizational and class bases of stability in a corporate interlock network." *American Sociological Review*, 51: 781–796.
- Palmer, D. A., B. M. Barber, X. Zhou, and Y. Soysal**
1995 "The friendly and predatory acquisition of large U.S. corporations in the 1960s: The other contested terrain." *American Sociological Review*, 60: 469–499.
- Palmer, D. A., P. D. Jennings, and X. Zhou**
1993 "Late adoption of the multidivisional form by large U.S. corporations: Institutional, political, and economic accounts." *Administrative Science Quarterly*, 38: 100–131.
- Persons, J. C.**
1994 "Signaling and takeover deterrence with stock repurchases: Dutch auctions versus fixed price tender offers." *Journal of Finance*, 49: 1373–1402.
- Peyrot, M.**
1991 "Institutional and organizational dynamics in community-based drug abuse treatment." *Social Problems*, 38: 1–14.
- Pfeffer, J.**
1981a *Power in Organizations*. New York: Harper and Row.
1981b "Management as symbolic action: The creation and maintenance of organizational paradigms." In L. L. Cummings and B. M. Staw (eds.), *Research in Organizational Behavior*, 3: 1–52. Greenwich, CT: JAI Press.
- Porac, J. F., J. B. Wade, and T. G. Pollock**
1999 "Industry categories and the politics of the comparable firm in CEO compensation." *Administrative Science Quarterly*, 44: 112–144.
- Raad, E., and H. K. Wu**
1995 "Insider trading effects on stock returns around open-market stock repurchase announcements: An empirical study." *Journal of Financial Research*, 18: 45–57.
- Ratner, M., S. H. Szewczyk, and G. P. Tsetsekos**
1996 "The information role of tender offer stock repurchases: Evidence from institutional ownership." *Journal of Business Finance and Accounting*, 23: 869–880.
- Rechner, P. L., and D. R. Dalton**
1991 "CEO duality and organizational performance: A longitudinal analysis." *Strategic Management Journal*, 12: 155–160.
- Sawyer, G. M., Jr., and R. E. Shrieves**
1994 "Stockholder returns among homogenous groups of mergers." *Journal of Financial Research*, 17: 45–63.
- Scott, W. R.**
1987 "The adolescence of institutional theory." *Administrative Science Quarterly*, 32: 493–511.
1992 *Organizations: Rational, Natural, and Open Systems*, 3rd ed. Englewood Cliffs, NJ: Prentice-Hall.
1994 "Institutions and organizations: Toward a theoretical synthesis." In W. R. Scott and J. W. Meyer (eds.), *Institutional Environments and Organizations: Structural Complexity and Individualism*: 121–136. Thousand Oaks, CA: Sage.
1995 *Institutions and Organizations*. Thousand Oaks, CA: Sage.
- Singh, H., and F. Harianto**
1989 "Management board relationships, takeover risk, and the adoption of golden parachutes." *Academy of Management Journal*, 32: 7–24.
- Sundaramurthy, C.**
1996 "Corporate governance within the context of antitakeover provisions." *Strategic Management Journal*, 17: 377–394.
- Useem, M.**
1984 *The Inner Circle*. Oxford: Oxford University Press.
1993 *Executive Defense: Shareholder Power and Corporate Reorganization*. Cambridge, MA: Harvard University Press.
- Varaiya, N., R. A. Kerin, and D. Weeks**
1987 "The relationship between growth, profitability and firm value." *Strategic Management Journal*, 8: 487–497.
- Wade, J. B., C. A. O'Reilly, III, and I. Chandratat**
1990 "Golden parachutes: CEOs and the exercise of social influence." *Administrative Science Quarterly*, 35: 587–603.
- Wall Street Journal**
1996 "Buybacks: When the cereal doesn't sizzle." September 26: C1.
1997 "Germany takes a new look at buybacks." January 10: A8.
1999a "Executive critical of 'managed' earnings doesn't mind if The Street criticizes him." April 16.
1999b "As more Polish companies buy back shares, analysts are wondering why." April 27: C3D.

- Westphal, J. D.**
 1998 "Board games: How CEOs adapt to increases in structural board independence from management." *Administrative Science Quarterly*, 43: 511–537.
- 1999 "Collaboration in the boardroom: The consequences of social ties in the CEO/board relationship." *Academy of Management Journal*, 42: 7–24.
- Westphal, J. D., and E. J. Zajac**
 1994 "Substance and symbolism in CEOs' long-term incentive plans." *Administrative Science Quarterly*, 39: 367–390.
- 1998 "The symbolic management of stockholders: Corporate governance reforms and shareholder reactions." *Administrative Science Quarterly*, 43: 127–153.
- Young, A.**
 1969 "Financial operating and security market parameters of repurchasing." *Financial Analysts Journal*, July/August: 123–128.
- Zajac, E. J., and P. Fiss**
 2001 "Corporate governance and contested terrain: The rise of a shareholder-value orientation in Germany." Working paper, Kellogg Graduate School of Management, Northwestern University.
- Zajac, E. J., and J. D. Westphal**
 1995 "Accounting for the explanations of CEO compensation: Substance and symbolism." *Administrative Science Quarterly*, 40: 283–308.
- 2001 "Do markets learn? The institutionalization of stock buybacks." Working paper, Kellogg Graduate School of Management, Northwestern University.
- Zald, M. N.**
 1969 "The power and functions of boards of directors: A theoretical synthesis." *American Journal of Sociology*, 75: 97–111.