Strategic Management Journal
Strat. Mgmt. J., **38**: 2285–2297 (2017)
Published online EarlyView 28 March 2017 in Wiley Online Library (wileyonlinelibrary.com) DOI: 10.1002/smj.2648
Received 27 July 2012; *Final revision received 17 January 2017*

Is there a "Dark Side" to Monitoring? Board and Shareholder Monitoring Effects on M&A Performance Extremeness

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Research summary: *We investigate the effects of monitoring by boards of directors and institutional shareholders on merger and acquisition (M&A) performance extremeness using a sample of M&A deals from 1997 to 2006. Both governance research and legal reforms generally have espoused a "raise all boats" view of monitoring. We instead investigate whether monitoring may serve as a double-edged sword that limits CEO discretion to undertake* both *value-destroying M&A deals* and *value-creating ones. Our findings indicate that the relationship between monitoring and M&A performance is more complex than previously believed. Rather than "raising all boats" in a shift towards better M&A outcomes, monitoring instead is associated with lower M&A losses, but also with lower M&A gains.*

Managerial summary: *Mergers and acquisitions (M&As) are a quintessential corporate activity. There were $3.8 trillion worth of M&A deals in 2015, despite scholars and practitioners reporting that M&As often perform poorly. We question the widespread belief that more vigilant monitoring by boards of directors and large shareholders will raise M&A performance, overall. Put differently, does monitoring constrain CEOs' discretion to pursue bad deals, while simultaneously encouraging them to pursue good ones? We find that monitoring limits* both *large M&A losses* and *large M&A gains. Contrary to widely held beliefs, our results indicate that constraining executives' ability to pursue value-destroying M&A deals does not simultaneously encourage or enable CEOs to pursue value-creating deals.*

Introduction

After more than two decades of governance reforms addressing questionable corporate practices and shareholder discontent (Stout, 2012), scholars and practitioners continue to call for greater accountability of CEOs to firm shareholders (Bebchuk, 2005, 2013). Nowhere is the need for accountability more evident than in the context of mergers and acquisitions (M&As), as extensive prior research reports that M&As fail to create shareholder value and often destroy it (Datta, Pinches, & Narayanan, 1992; King, Dalton, Daily, & Covin, 2004). Moeller, Schlingemann, and Stulz (2005) estimate that acquiring firms' shareholders lost twelve cents for each dollar spent on M&As. Such losses, however, do not prevent executives from personally benefiting from acquisitions (Harford & Li, 2007). Moreover, M&As often

Keywords: corporate governance; M&A performance extremeness; monitoring; board of directors; institutional shareholders
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herald long-term performance declines (Healy, Palepu, & Ruback, 1992; Sirower, 1997), result in subsequent divestitures (Kaplan & Weisbach, 1992), and are increasingly likely to attract shareholder lawsuits (Daines & Koumrian, 2012). Despite negative empirical evidence, M&As remain popular with executives (Haleblian, Devers, McNamara, Carpenter, & Davison, 2009), and in 2015 the "urge to merge" led to a record $3.8 trillion worth of M&As (Baigorri, 2016).

Would more accountability of CEOs to their boards of directors and shareholders resolve these issues with M&A performance? The evidence on the effectiveness of monitoring by directors and institutional shareholders is at best mixed (e.g., Dalton & Dalton, 2011). We argue that the failure to substantiate a systematic relationship between monitoring and firm performance is largely due to the conflation of two separate assumptions: (a) that monitoring will restrain managerial actions that lead to firm losses; and (b) that monitoring will encourage managerial actions that lead to firm gains. Given these assumptions, the governance literature has largely adopted a "*raise all boats*" view of monitoring, positing that it will improve the odds of good outcomes and reduce the odds of bad ones (Dalton, Daily, Ellstrand, & Johnson, 1998, Dalton, Daily, Certo, & Roengpitya, 2003). Paul (2007, p. 760) states, for example, that: "independent boards are perceived to be effective monitors in that they increase (decrease) the likelihood of good (bad) corporate decisions."

We examine these two assumptions separately in the M&A context by investigating whether monitoring constrains CEOs' discretion to pursue M&A deals leading to big losses *without* constraining their discretion to pursue deals that lead to big gains. We question the assumption that vigilant monitoring will raise all boats and, instead, develop theoretical arguments that monitoring by directors and shareholders is more likely to ensure that managers do not destroy shareholder value than it is to ensure value creation.

Our contribution to prior research is twofold. First, despite the strategic importance of M&As and their crucial impact on firm performance (Harford & Li, 2007), knowledge remains limited regarding the drivers of good-versus-bad M&A performance (King et al., 2004; Kroll, Walters, & Wright, 2008). We address this by examining the effects of monitoring by boards of directors and large shareholders on M&A performance extremeness: i.e., big gains and big losses. Second, M&As failure to create value for acquiring firms' shareholders (King et al., 2004) has been attributed to self-serving or over-confident executives. The corporate governance literature, however, has been inconclusive about the effects of monitoring by boards of directors and institutional shareholders on firm performance (Bergh et al., 2016; Dalton & Dalton, 2011). We shed light on these equivocal results by distinguishing the effect of monitoring on preventing the squandering of firms' resources from its effect on the pursuit of value-creating strategies. For instance, while agency theory emphasizes boards of directors as vigilant monitors who constrain CEOs' ability to pursue self-serving or hubris-driven strategies (Eisenhardt, 1989; Fama & Jensen, 1983), resource dependence theory depicts directors as active participants in strategic decision-making who contribute counsel, advice, and expertise to the firm (Hillman, 2005). By exploring whether these different roles support the prevention of value-destroying and/or promotion of value-creating strategies, we contribute to a small but growing research stream that questions the "one-size-fits-all" approach to corporate governance (Dowell, Shackell, & Stuart, 2011; Shi, Connelly, & Hoskisson, 2016).

Failures of compensation-alignment mechanisms have spurred renewed interest in monitoring by boards of directors and large shareholders (J. T. Campbell, Campbell, Sirmon, Bierman, & Tuggle, 2012; Desender, Aguilera, Crespi, & Garcia-Cestona, 2013). Our approach harkens back to Jensen and Meckling's (1976, p. 335) warning that solutions to agency problems, which reduce CEOs' opportunities to maximize their own utility at the expense of firm shareholders, can have a downside for firm performance by affecting whether managers undertake high- or low-variance projects. Our findings indicate that monitoring oversight indeed constrains big M&A losses, but also constrains big gains. We therefore provide preliminary evidence that vigilant monitoring by boards of directors and institutional shareholders has salutatory effects on M&A losses, but corresponding "dark side" effects that limit M&A gains.

Hypotheses

Boards of Directors

The boards' oversight role has dominated governance research (Tuggle, Sirmon, Reutzel, &

DOI: 10.1002/smj

Bierman, 2010). Still, "there is no evidence of systematic relationship between board composition and corporate financial performance" (Dalton, Hitt, Certo, & Dalton, 2007, p. 11). Bergh et al. (2016) meta-analysis finds that board independence and leadership are not related to firm performance, yet these are two key factors underlying institutional pressures for improving board oversight by increasing independence (Krause & Semadeni, 2014). Independent (outside) directors are more likely to provide objective and vigilant monitoring, ensuring that managers do not pursue their self-interests at the expense of corporate shareholders (Fama & Jensen, 1983; Jensen & Meckling, 1976). On the other hand, such independent directors have limited time and resources to devote to the firm (McNulty, Florackis, & Ormrod, 2013), and are likely to be less knowledgeable about the firm's operations and strategic challenges than insiders (Dalton et al., 2007; Desender et al., 2013). Moreover, outside directors, with more limited familiarity with firm operations, may emphasize short-term financial metrics (Shen, 2003) and could contribute to corporate myopia (Sundaramurthy & Lewis, 2003).

CEO duality, another closely investigated board construct (Krause & Semadeni, 2014), has also received limited empirical support; "there is no evidence of substantive, systematic relationships between corporate financial performance and board leadership structure" (Dalton & Dalton, 2011, p. 408). Agency theorists argue that CEOs who serve as board chair weaken their boards' monitoring and control (Morck, Shleifer, & Vishny, 1989). Others, however, caution that a unified leadership structure could promote decision accountability (Sundaramurthy & Lewis, 2003), forestall organizational inertia (Donaldson & Davis, 1991), and enable CEOs to respond more promptly to external events (Boyd, 1995).

The complexity of a board's roles (McNulty et al., 2013; Westphal, 1999) becomes apparent in the M&A context. While vigilant boards should constrain CEOs' ability to pursue disastrous deals, the board's effect on value-creating strategies is less clear. On one hand, vigilant boards should serve as a brake on managers' opportunities to pursue self-serving strategies (Stiles, 2001). When the board faces a decision to accept, reject, or refer an M&A proposal, boards exercising their oversight function should be able to "ensure that something stupid is not being done, for example, somebody pursuing a major investment which clearly does not have a sensible financial return" (McNulty & Pettigrew, 1999, p. 61). On the other hand, however, a board's focus on vigilant monitoring may constrain the board's ability to effectively contribute to value-creating strategies, due to the inherent challenges of combining supervisory and control roles with advisory and collaborative roles (Baldenius, Melamud, & Meng, 2014; Sundaramurthy & Lewis, 2003). Westphal (1999), for example, argues that friendship ties between directors and executives promote advice-seeking and could improve the quality of a firm's strategic decision making. Friendship ties also could undermine board's supervisory function, however, and specifically its objective monitoring of the CEO.

More time devoted by the board to supervisory activities may come at the expense of its advisory service (Baldenius et al., 2014). For instance, Schwartz-Ziv and Weisbach (2013) find that the majority of a board's time is spent on supervisory issues rather than on strategic ones. Faleye, Hoitash, and Hoitash (2011) also report that an emphasis on monitoring by independent boards comes at the price of a weakened strategic advisory function, especially as it relates to acquisitions. Furthermore, directors whose abilities and dispositions are honed for objective monitoring may not possess the abilities required for effective contributions to the firm's value-creating strategies. In order to contribute to strategic decision-making, directors need a familiarity with the company's operations and an in-depth understanding of its strategies and challenges (Stiles, 2001). Outside directors' ability to contribute to the value-creation function of the firm could thus be constrained by information asymmetries relative to corporate insiders (Desender et al., 2013; Duchin, Matsusaka, & Ozbas, 2010) and by the higher information costs these directors face in understanding the implications of strategic decisions for the firm (Dalton et al., 2007; Westphal, 1999). In addition to firm-specific knowledge, board effectiveness in decision-making requires collaboration (McNulty et al., 2013). Directors may rationally seek to distance themselves from corporate managers, however, in order to enhance their ability to provide objective oversight (Faleye et al., 2011). Finally, directors' participation in strategic decision-making blurs the boundaries between decision-making and decision-control, by requiring directors to provide objective oversight of the decisions they help to shape. This could also compromise decision

DOI: 10.1002/smj

accountability by shifting responsibility from the CEO to the board.

Rather than decrease the likelihood of value-destroying M&A deals directly, vigorous board oversight may reduce managerial willingness to take on those particularly risky deals that may have very good or very bad outcomes. From a managerial perspective, a strong focus on monitoring may intensify executives' defensiveness (Westphal, 1999) and create friction between the board and the CEO (Roberts, 2001). CEOs may interpret vigilant monitoring as distrust, "second-guessing" their decisions, or a "lack of respect for the position of the CEO" (McDonald & Westphal, 2010, p. 347). CEOs could resist by controlling information flows (De Villiers, Naiker, & van Staden, 2011) or using impression management tactics (Westphal & Bednar, 2008). Controls that constrain CEO discretion may not only shift the locus of control from executives to the board, but could also affect CEO motivation (Sundaramurthy & Lewis, 2003, p. 405). In an experimental study, Falk and Kosfeld (2006) find that monitoring decreases the performance of intrinsically motivated agents, with agents penalizing controlling principals when they perceive monitoring as a sign of distrust, lack of autonomy, or greed. Research also warns that tight financial controls could result in shortened time horizons and risk-avoidance behavior (Hoskisson, Hitt, & Hill, 1991). Finally, CEOs may become unwilling to discuss the firm's problems freely, so as not to admit their own limitations in solving them (Westphal, 1999). Although friendship ties between executives and directors could enhance CEOs' trust in their boards' support and thus encourage advice-seeking (Westphal, 1999), a focus on monitoring could exacerbate CEOs "fears of appearing uncertain or incompetent, or acknowledging dependence" (Roberts, 2001, p. 1560). CEOs thus may be less willing to seek board's advice when facing vigilant monitoring.

To summarize, board monitoring will affect M&A performance extremeness by reducing both bad deals and good ones. Although board monitoring should constrain value-destroying deals, monitoring is also likely to decrease the odds for big gains due to the inherent tensions between the board's oversight and advisory roles. Contributing to good corporate decisions requires *less* separation between management and board, with directors actively providing counsel, advice, and expertise in strategic decision-making and managers sharing information with the board and seeking directors' input (Hillman, 2005; Westphal, 1999). Vigilant monitoring, on the other hand, requires separation of decision making and control, and an impartial, more socially distant relationship between the board and the CEO (Westphal, 1999), so as to constrain managerial influence and power over the board and to promote board's independence and objectivity in exercising oversight over managerial decisions (Eisenhardt, 1989; Fama, 1980). Consequently, we expect that board monitoring will act as a double-edged sword, limiting the pursuit of both bad and good M&A deals.

Hypothesis 1: Board monitoring will be associated with less-extreme M&A returns, due to fewer big losses and fewer big gains.

Institutional Shareholders

Institutional shareholders have a vested interest in monitoring M&A deals because M&As affect shareholder value. Large institutional shareholders, due to the size of their holdings, have more to lose and thus greater incentives to monitor, but they also are more likely to gain access to and receive special attention from management (Useem, 1996). Schnatterly, Shaw, and Jennings (2008), for instance, theorize and find that the largest institutional shareholder holds an information advantage and is better positioned to monitor the firm. Agency theory prescriptions are unclear, however, as to whether large shareholders' influence on corporate outcomes would constrain value-destroying deals and promote value-creating ones, or whether their influence is more limited to the prevention of disastrous deals. On one hand, large, powerful, and better-informed institutional investors are well positioned to monitor corporate executives (e.g., Schnatterly et al., 2008) and to prevent value-destroying M&A deals, and they are motivated because they stand to lose more if an acquisition destroys shareholder value (e.g., King et al., 2004; Moeller et al., 2005). Luo (2005), for instance, reports that companies are more likely to backtrack and withdraw from proposed M&A deals when they are met with negative stock market reaction. On the other hand, increased accountability to the firm's shareholders may prompt corporate executives to engage in more conservative strategies, thus constraining not only big losses stemming

DOI: 10.1002/smj

from M&As, but also potentially constraining big gains. Although some scholars argue that increased accountability of corporate chiefs to their shareholders should encourage them to undertake more value-creating strategies that lead to overall improvements in firm performance (Bebchuk, 2005), Jensen and Meckling (1976, p. 335) warn that solutions to agency problems could affect whether managers undertake high- or-low variance projects. If shareholder monitoring constrains a CEO's propensity to engage in high-variance projects, its success at preventing self-serving strategies that destroy value could come at the price of missing out on value-creating opportunities, for several reasons.

First, CEOs facing vigilant shareholder monitoring may prefer to avoid risky strategies if they believe that such actions increase their likelihood of dismissal. Research finds, for example, that executives are more likely to lose their jobs following an underperforming acquisition (Lehn & Zhao, 2006). Second, CEOs may seek to minimize the risk of attracting shareholder wrath, because concentration of stock ownership (Davis, 2013) could affect not only a CEO's career prospects at the current firm, but also limit their potential for leading another firm or serving on corporate boards. Finally, constraining managerial discretion in order to minimize agency costs may also constrain the upside potential that firms could realize from their executives' professional expertise, strategies, and firm-specific knowledge. The "delegation, or empowering one to act on behalf of another, is a sine qua non of the modern firm" (Sengul, Gimeno, & Dial, 2012, p .376). Falk and Kosfeld (2006) note, however, that agents exhibit control-averse behavior, and therefore that principal control negatively affects agent performance. They find that while monitoring constrains "bad apples," and thus improves the lower bounds of agent performance, it also imposes costs on the "good apples" that bring down the upper bounds of performance. In the M&A context, CEOs who jump on the M&A bandwagon later in the M&A wave (e.g., McNamara, Haleblian, & Dykes, 2008) may find it easier to justify their actions to the firm's shareholders. External legitimacy could come at a cost, however, if later movers face a more restricted set of potential partners (Carow, Heron, & Saxton, 2004).

To summarize, vigilant monitoring by institutional shareholders should constrain the pursuit of value-destroying deals, but could also narrow the set of strategic actions considered by a CEO. Institutional shareholders are likely to feel changes in shareholder wealth most acutely, and are also best positioned to monitor and discipline corporate executives. CEOs may prefer to tread lightly and favor strategies that are easy to justify to influential shareholders. Monitoring by large shareholders, therefore, could not only limit CEOs' ability to engage in value-destroying M&As, but it could also limit executives' risk-taking for value-creating M&As. Thus:

> *Hypothesis 2: Monitoring by institutional investors will be associated with less-extreme M&A returns, due to fewer big losses and fewer big gains.*

Methods

Sample

We extracted all M&A deals by publicly traded U.S. firms from the SDC Platinum database for the period 1997–2006, for which the value of the deal was disclosed. We matched these data with stock prices from the Center for Research on Security Prices (CRSP), accounting and financial data from Compustat, institutional ownership data from Thomson Financial 13F database, data on executive compensation and ownership from Execucomp, and data on boards of directors and antitakeover provisions from IRRC. To control for M&A experience in the prior 3 years (e.g., Laamanen & Keil, 2008), we extracted Mergerstat data for 1995–2006. Complete data were available for 1451 M&A deals.

Dependent Variable

Event study methodology has become the dominant method for measuring the impact of M&As on firm performance (Haleblian et al., 2009; King et al., 2004). We calculate cumulative abnormal returns (CARs) by following the Brown and Warner (1985) procedure[1] and aggregating ARs for the period of 3 days surrounding the announcement of the deal

[1] $AR_{jt} = R_{ji} - \hat{\alpha}_j - \hat{\beta}_j R_{mt}$, where we estimated the parameters $\hat{\alpha}_j$, $\hat{\beta}_j$ by regressing the firm's returns on market returns for a period of 240 to 40 days preceding the announcement of the M&A event (Mueller & Sirower, 2003).

DOI: 10.1002/smj

(Moeller et al., 2005). While longer periods would ensure that all effects are captured, the estimates would be noisier (Weston, Siu, & Johnson, 2001).

Although widely used, cumulative abnormal returns (CARs) have been criticized for failing to fully capture the wealth effect for acquiring firm shareholders (Malatesta, 1983; Moeller et al., 2005). Moeller et al. (2005) find that although CARs estimated as percentage returns were not significantly different from zero, this number fails to reflect the extensive losses borne by acquiring firms' shareholders. As we are interested in the overall impact on shareholder wealth, we use abnormal dollar returns; we weight the percentage CARs with the firm's market value two days prior to the M&A announcement in order to estimate how much shareholders lose or gain overall as a result of the deal (e.g., Malatesta, 1983; Moeller et al., 2005). Our dependent variable measures how extensively the particular M&A deal affects shareholder wealth. We took a logarithmic transformation of the dependent variable to correct for skewness and kurtosis. Because this treatment estimates CEO propensity to "swing for the fences" without regard whether it leads to shareholder losses or gains, in supplementary analyses we also split the sample into M&A losses and M&As gains.

Independent Variables

The ability of boards of directors to perform their monitoring duties has been a focal point in corporate governance research (Bergh et al., 2016; Dalton et al., 2007; Tuggle et al., 2010). We measure board monitoring in two ways. First, we examine board characteristics such as *board independence and size, CEO duality*--the absence of a separate (non-executive) chairperson of the board, directors' *ownership* in the focal firm, directors' *equity-based pay, prior experience with M&As*, and how busy directors were with *appointments on other boards (Appendix S4)*. Second, in order to account for board variables acting as a bundle, and thus the potential substitute or complementary impact of various board measures (i.e., Dalton et al., 2003), we conducted a factor analysis, and include an aggregate measure of board monitoring. *Institutional ownership concentration* is measured as the percentage of total year-end shares owned by the top five institutional investors (Hartzell & Starks, 2003; Sauerwald, Lin, & Peng, 2016). These data came from the Thomson Reuters Institutional Holdings (13F) Database.

Controls

We control for number of factors that could affect either M&A propensity or returns: *firm size*, measured as the natural logarithm of firm assets; *growth opportunities*--market value/book value of equity (Wright, Ferris, Sarin, & Awasthi, 1996); *prior performance*--ROA; *related acquisitions* in the same two-digit SIC industry (King et al., 2004); *deal value* logarithmically transformed to correct for skewness and kurtosis; *M&A experience* of the acquiring firm in the prior 3 years (Laamanen & Keil, 2008); *free cash flows*--operating cash flows scaled by assets (Carow et al., 2004); *corporate diversification*--Herfindahl index, *leverage*--long-term debt divided by total assets (e.g., Sauerwald et al., 2016); and *relative size of the deal*. Furthermore, we control for CEO characteristics and governance environment, such as the *CEO career horizon*--the number of years the CEO has until reaching the age of 70 (Matta & Beamish, 2008); *CEO gender*, as it could affect risk-taking (Byrnes, Miller, & Schafer, 1999); *CEO stock options*--Black-Scholes value of the options granted to the CEO, divided by the total compensation for a 3-year period (Sanders & Hambrick, 2007); *CEO ownership*--percentage of outstanding shares owned by the CEO at the end of each year; *CEO confidence* in the firm--CEOs' pattern of holding and exercising their stock options (T. C. Campbell, Gallmeyer, Johnson, Rutherford, & Stanley, 2011); and *antitakeover provisions*--an indicator variable if GIM index is equal to or higher than 10, as takeover provisions could protect entrenched CEOs (Harford, Humphery-Jenner, & Powell, 2012). Finally, as CEO's latitude of action could be affected by the firm's industry or macro environment, we include year and industry effects, and control for industry munificence, dynamism, and complexity (Boyd, 1995) at the 4-digit SIC level. We measure all explanatory and control variables, other than the focal deal traits, at the end of the year preceding the M&A event. Variance inflation factors revealed that multicolinearity is not problematic.

Below we report the results using three different methodologies. First, as recommended by Certo, Busenbark, Woo, and Semadeni (2016), we report OLS with robust standard errors. Second, to account for potential endogeneity, we run a

DOI: 10.1002/smj

2SLS (ivregress) model. We matched each firm with another S&P 1,500 firm in the same Metropolitan Statistical Area (MSA)--a population nucleus with high social and economic integration (Stuart & Sorenson, 2003), and the same sector as the focal firm. Although relevant and valid exogenous monitoring instruments are hard to find, a neighboring firm's governance characteristics can represent a good proxy for a focal firm's governance--firms could mimic the attributes of other firms in their locality, but the attributes of other local firms do not influence the M&A performance of a focal firm.[2] We collected data on board independence, CEO duality, board attendance, service on other boards, and board ownership for the matches and used as instruments for board governance. The F statistics for the first stage analysis is 28.1 and significant, greater than the customary 10 threshold. Finally, in order to account for potential self-selection, because common/overlapping ownership by institutional investors in the industry may affect M&A odds (e.g., Goranova, Dharwadkar, & Brandes, 2010), we utilize Bushee's (1998) classification and include industry-level transient, dedicated, and quasi-indexing ownership as exclusion variables in the first equation of the Heckman selection procedure (Appendix S5).

Results

Summary statistics and correlations are provided in Table 1. Consistent with prior research (e.g., Moeller et al., 2005), we find that CARs by themselves do not reflect M&As' impact on shareholder wealth. By taking the absolute values of the dollar-adjusted abnormal returns, we measure how extreme the effect of the M&A deal is on shareholder wealth, irrespective of whether the effect is value-creating or value-destroying.

In Table 2, we present the multivariate analyses of M&A performance extremeness. Model 1 includes all control variables, Model 2 reports the monitoring variables, 2SLS results are presented in Model 3, and Model 4 reports the Heckman maximum likelihood findings. Hypothesis 1 predicted that more vigilant monitoring by boards of directors would lead to less extreme M&A performance. Our overall results in Models 2–4 provide support for this hypothesis. Interpreting from Model 2, the coefficient for board monitoring is negative and significant (-0.167, $p < .001$), signifying a one standard deviation increase in board monitoring reduces the stock market swing (positive or negative) to deal announcement by $158.6 million. Hypothesis 2 predicted that monitoring by institutional shareholders would lead to less extreme M&A performance. Models 2–4 provide support for this hypothesis. The institutional ownership concentration coefficient is negative and significant (-0.022, $p < .001$), providing support for Hypothesis 2. The result is consistent across all models. Interpreting from OLS Model 2, a one percent increase in institutional ownership concentration, leads to a $22 million reduction in the stock market swing (positive or negative) to the deal announcement. Bushee (1998) argued that interest in monitoring by institutional investors varied by type of manager, thus we calculated firm ownership by each class of institutional owner using his classification. In supplementary analyses, we replaced institutional ownership concentration with percent of firm holding by each type of manager. The results (available in Appendix S1) were consistent with dedicated institutional ownership negatively influencing performance extremeness across all models. Furthermore, we also examine the effects of monitoring separately for M&A deals that destroy shareholder wealth (Appendix S2) and deals that create value for shareholders (Appendix S3). These results indicate that the impact of monitoring on extreme performance is not due solely to constraining shareholder losses.

Discussion

This study contributes to the literature on corporate governance by explicitly considering both the benefits and costs of monitoring mechanisms. We find that monitoring by boards of directors and institutional shareholders is associated with lower M&A losses, but also with lower M&A gains – that is, board monitoring does *not* promote a universal, "raising all boats" shift towards better performance. Although monitoring reduces executives' propensities to make excessively risky M&A investments, it also serves as a double-edged sword. On one hand, monitoring can eliminate behaviors that should not occur, such as self-interested CEOs destroying or expropriating shareholder value. On the

[2] We thank an anonymous reviewer for this insight.

DOI: 10.1002/smj

Table 1
Descriptive Statistics

#	Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1	M&A extremeness |$M|	998.65	3176.39	1											
2	Firm size (sales $B)	10.72	19.60	*0.45*	1										
3	Growth	2.71	1.94	*0.37*	0.00	1									
4	Profitability	0.06	0.09	*0.17*	*0.06*	*0.27*	1								
5	Same industry deal	0.55	0.50	−0.02	*−0.05*	−0.04	−0.01	1							
6	Deal value	594.87	3472.35	*0.24*	*0.18*	−0.01	0.04	*0.12*	1						
7	M&A experience	4.94	7.32	*0.29*	*0.23*	*0.10*	*0.05*	*−0.09*	0.05	1					
8	Cash flows	0.12	0.08	*0.14*	0.01	*0.36*	*0.59*	0.01	−0.05	−0.01	1				
9	Diversification	0.32	0.29	0.00	*0.07*	*−0.20*	−0.03	−0.04	*0.08*	*0.26*	*−0.16*	1			
10	Career horizon	14.70	6.91	−0.03	*−0.05*	*0.12*	−0.04	0.03	*−0.08*	*−0.06*	0.03	*−0.14*	1		
11	CEO gender	0.01	0.11	*−0.06*	*−0.05*	*0.08*	*0.05*	*0.08*	*−0.07*	*−0.07*	*0.14*	−0.04	0.02	1	
12	CEO stock options	44.59	24.66	*0.25*	0.02	*0.24*	0.00	−0.02	*−0.07*	−0.03	*0.17*	*−0.17*	*0.14*	0.04	1
13	CEO ownership	0.74	2.79	*−0.21*	*−0.20*	*−0.10*	*0.10*	−0.01	−0.04	*−0.08*	*−0.07*	*0.09*	*−0.16*	0.04	*−0.17*
14	Leverage	0.18	0.15	*−0.16*	*−0.08*	*−0.26*	*−0.06*	*0.05*	*0.08*	*−0.07*	*−0.19*	*0.11*	*−0.15*	*−0.09*	*−0.25*
15	Relative size	0.10	0.26	0.00	*−0.10*	*0.07*	0.01	*0.09*	*0.46*	*−0.10*	−0.01	*−0.06*	0.00	0.00	−0.04
16	Nonconfident CEO	0.28	0.45	*−0.21*	*−0.07*	*−0.25*	*−0.23*	0.04	−0.02	*−0.13*	*−0.14*	*0.09*	*0.07*	0.02	*−0.10*
17	Antitakeover provisions	0.53	0.50	*−0.14*	*−0.16*	*−0.11*	−0.04	−0.03	0.00	−0.06	0.00	*0.13*	−0.01	*0.07*	*−0.16*
18	Industry munificence	0.05	0.05	*0.07*	*0.10*	0.02	*0.13*	0.00	*0.05*	*−0.12*	0.00	−0.02	*0.06*	0.05	−0.02
19	Industry dynamism	0.04	0.02	0.04	−0.03	0.00	*−0.07*	*0.05*	−0.04	*0.14*	−0.03	−0.03	0.04	−0.02	0.03
20	Industry complexity	0.05	0.03	−0.03	*0.17*	*−0.11*	0.02	*−0.12*	0.01	*−0.06*	−0.03	*−0.07*	−0.02	−0.03	*−0.13*
21	Board monitoring	−0.07	0.95	*−0.41*	*−0.42*	*0.06*	*−0.07*	*0.05*	*−0.21*	*−0.32*	0.04	*−0.18*	*0.23*	*0.05*	0.02
22	Ownership concentration	24.58	8.74	*−0.38*	*−0.31*	*−0.22*	*−0.15*	*0.07*	*−0.11*	*−0.22*	*−0.14*	*−0.06*	0.03	0.05	*−0.10*

#	Variable	13	14	15	16	17	18	19	20	21
13	CEO ownership	1								
14	Leverage	*0.26*	1							
15	Relative size	0.03	0.02	1						
16	Nonconfident CEO	−0.02	*0.07*	0.01	1					
17	Antitakeover provisions	*0.07*	*0.07*	0.03	*0.09*	1				
18	Industry munificence	0.02	−0.03	−0.01	*−0.08*	0.01	1			
19	Industry dynamism	0.01	*0.09*	−0.04	−0.03	*−0.08*	*−0.55*	1		
20	Industry complexity	−0.03	−0.04	−0.01	0.07	0.02	0.04	*−0.07*	1	
21	Board monitoring	*0.12*	−0.01	*0.06*	*−0.07*	*−0.11*	*−0.07*	*0.07*	−0.03	1
22	Ownership concentration	*0.09*	*0.15*	0.05	*0.15*	*0.10*	*−0.06*	0.00	*0.07*	*0.21*

Notes. N = 1,451. Italicized correlations are statistically significant at $p < .05$.

Table 2
Monitoring and M&A Extremeness

Variable	Model 1 (OLS)			Model 2 (OLS)			Model 3 (2SLS)			Model 4 (Heckman)		
	β	*SE*	$P > t$	β	*SE*	$P > t$	β	*SE*	$P > z$	β	*SE*	$P > z$
Intercept	2.533	*0.35*	0.00	3.818	*0.39*	0.00	8.968	*2.96*	0.00	4.496	*0.54*	0.00
Firm size	0.856	*0.03*	0.00	0.771	*0.04*	0.00	0.183	*0.33*	0.58	0.742	*0.04*	0.00
Growth	0.326	*0.03*	0.00	0.315	*0.03*	0.00	0.346	*0.07*	0.00	0.302	*0.03*	0.00
Profitability	−0.159	*0.49*	0.75	−0.243	*0.48*	0.61	−1.076	*0.56*	0.05	−0.346	*0.48*	0.47
Same industry deal	0.099	*0.08*	0.21	0.131	*0.08*	0.09	0.151	*0.14*	0.28	0.149	*0.08*	0.06
Deal value	0.061	*0.02*	0.01	0.054	*0.02*	0.02	0.050	*0.04*	0.26	0.059	*0.02*	0.01
M&A experience	0.010	*0.01*	0.09	0.004	*0.01*	0.56	−0.046	*0.03*	0.09	−0.014	*0.01*	0.21
Cash flows	−1.212	*0.63*	0.06	−1.135	*0.61*	0.06	−0.561	*1.17*	0.63	−1.267	*0.61*	0.04
Diversification	−0.024	*0.14*	0.86	−0.043	*0.14*	0.76	0.300	*0.27*	0.27	−0.102	*0.14*	0.48
Career horizon	0.006	*0.01*	0.33	0.009	*0.01*	0.15	0.044	*0.02*	0.06	0.013	*0.01*	0.06
CEO gender	−0.197	*0.40*	0.62	−0.179	*0.37*	0.63	−0.287	*0.41*	0.48	−0.141	*0.36*	0.70
CEO stock options	0.011	*0.00*	0.00	0.011	*0.00*	0.00	0.007	*0.00*	0.05	0.010	*0.00*	0.00
CEO ownership	−0.018	*0.02*	0.35	−0.016	*0.02*	0.38	0.021	*0.05*	0.68	−0.018	*0.02*	0.34
Leverage	−0.767	*0.32*	0.02	−0.563	*0.32*	0.08	−0.074	*0.59*	0.90	−0.446	*0.32*	0.17
Relative size	0.527	*0.15*	0.00	0.529	*0.15*	0.00	0.487	*0.35*	0.17	0.536	*0.15*	0.00
Nonconfident CEO	−0.248	*0.09*	0.01	−0.264	*0.09*	0.00	−0.915	*0.38*	0.02	−0.257	*0.09*	0.00
Antitakeover provisions	−0.109	*0.08*	0.16	−0.131	*0.08*	0.09	−0.923	*0.37*	0.01	−0.133	*0.08*	0.08
Industry munificence	3.241	*1.07*	0.00	2.952	*1.07*	0.01	4.309	*2.12*	0.04	2.976	*1.06*	0.01
Industry dynamism	7.415	*2.33*	0.00	7.110	*2.28*	0.00	4.454	*3.58*	0.21	5.264	*2.35*	0.03
Industry complexity	−0.784	*1.14*	0.49	−0.428	*1.16*	0.71	0.399	*2.39*	0.87	−0.416	*1.18*	0.72
Board monitoring				−0.167	*0.06*	0.00	−1.783	*1.00*	0.07	−0.184	*0.06*	0.00
Ownership concentration				−0.022	*0.00*	0.00	−0.030	*0.01*	0.00	−0.023	*0.00*	0.00
Industry		Yes			Yes			Yes			Yes	
Year		Yes			Yes			Yes			Yes	
Mills lambda										−0.367	0.18	
F-test		78.2	0.00		76.5	0.00						
Wald χ^2								668.6	0.00		1695.7	0.00
R square		0.597			0.605							
Joint F-test (OLS) or χ2-test					15.57	0.00		16.04	0.00		34.31	0.00
Observations		1,451			1,451			729			1,418	

Note. Robust standard errors, two-tailed tests are reported for all models.

other hand, monitoring also can constrain behaviors that shareholders favor--those that could create shareholder value. Therefore, rather than constraining loss-inducing risks and promoting gain-worthy ones, monitoring seems to constrain the investment options considered by the CEOs, thereby eliminating both very good and very bad "apples."

Our study is not without limitations. Despite attempts to be comprehensive in our selection of board variables, including robustness checks with additional board-related measures, our use of archival data limits our ability to capture the effectiveness of board monitoring and the social, political, and psychological dynamics of the relationships between executives and directors. Opening the black box of boards' functioning by analyzing the board's minutes (e.g., Tuggle et al., 2010) may be illuminating regarding the roles of directors in M&As. Although the relationship between the CEO and the board of directors is of central importance in corporate governance (Shen, 2003), we have limited understanding of how directors juggle the roles of control, strategy, and service (McNulty et al., 2013). We also need to learn how directors from different backgrounds prioritize monitoring vs. their strategic advisory function, and how these affect the quality of board-management interactions.

Jensen and Meckling (1976) warned that solutions to agency problems come at a cost. Our findings – that board and shareholder monitoring constrains both big losses *and* big gains--indicates one such cost. Given these findings, is the pursuit of a direct link between monitoring and firm performance a "false grail?"[3] Or, might the equivocal relationships between corporate governance mechanisms and firm performance reported by prior research (Dalton & Dalton, 2011; Dalton et al., 2003, 2007) be driven by inappropriate, "one-size-fits-all" approaches to corporate governance (Wowak & Hambrick, 2010) that fail to account for factors like CEOs' values, capabilities, and intrinsic motivation? Although agency theory is the dominant perspective in corporate governance research (Dalton et al., 2007), it is inherently a financial, and not a strategic, theory (Bettis, 1983). In its preoccupation with the redistribution of firm value between managers and shareholders, agency theory fails to offer principle-based propositions for creating sustainable corporate value. On one hand, vigilant monitoring by boards of directors and institutional shareholders could help companies avoid situations such as HP's acquisition of Autonomy, where four-fifths of the M&A price was subsequently written down. On the other hand, the prevention of value destruction should not come at the cost of limiting M&As and other strategic undertakings that could build and strengthen the firm's competitive position (e.g., Chatterjee, 1986). Contrary to widely held beliefs, our results indicate that constraining executives' ability to pursue value-destroying M&A deals does not simultaneously encourage or enable CEOs to pursue value-creating deals. No single study, however, can provide conclusive evidence. Future research investigating how governance could limit the potential for bad or self-serving managerial decisions, while encouraging strategies that create long-term shareholder value would be of great value.

[3] We are indebted to an anonymous reviewer for this insight.

Acknowledgements

We are grateful to Associate Editor Robert Hoskisson and three anonymous reviewers for their insights. We also thank Ravi Dharwadkar, Stanislav Dobrev, Ed Levitas, Paul Nystrom, Karen Schnatterly, Ehsan Soofi, and participants at Academy of Management Conference, Syracuse University, University of Wisconsin-Milwaukee, and the Corporate Governance Symposium: New Theories, Trends and Evidence, Houston, for helpful suggestions and comments. Goranova's research is supported in part by Dean's Fellowship Awards.

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Supporting Information

Additional supporting information may be found in the online version of this article:

Appendix S1. Monitoring and M&A Extremeness: Robustness Checks with Dedicated Institutional Ownership and Top Institutional Investor.

Appendix S2. Monitoring and Absolute Shareholder Losses from M&As.

Appendix S3. Monitoring and Shareholder Gains from M&As.

Appendix S4. Monitoring and M&A Extremeness: Board Variables.

Appendix S5. Heckman M&A Selection Model.

DOI: 10.1002/smj