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## Do independent directors enhance target shareholder wealth during tender offers?

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### Abstract

We examine the role of the target firm's independent outside directors during takeover attempts by tender offer. We find that when the target's board is independent, the initial tender offer premium, the bid premium revision, and the target shareholder gains over the entire tender offer period are higher, and that the presence of a poison pill and takeover resistance lead to greater premiums and shareholder gains. We conclude that independent outside directors enhance target shareholder gains from tender offers, and that boards with a majority of independent directors are more likely to use resistance strategies to enhance shareholder wealth.

**Key words:** Corporate governance; Board of directors; Tender offers; Takeovers; Board monitoring

**JEL classification:** G32; G34; J33; L14

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## 1. Introduction

Corporate boards are charged with overseeing and rewarding managers. Several authors have suggested that outside directors, particularly those with no ties to the company other than their directorship, play an important role in corporate governance.<sup>1</sup> When certain events, such as a firm's response to a tender offer, create a conflict of interest between shareholders and managers, the oversight provided by outside directors assumes paramount importance for shareholders.

We examine the role played by independent outside directors when firms become the target of tender offers. Tender offers can have very different effects on the wealth of shareholders and managers. While target shareholder gains are usually large in successful tender offers, target firm managers can suffer significant losses in compensation and other control benefits and thus often try to defeat such takeovers.<sup>2</sup> Tender offers are also one of the few corporate events that threaten the tenure of outside directors. Outside directors might be reluctant to accept a tender offer if its success would jeopardize their position on the board.<sup>3</sup> Thus, examining tender offers can provide evidence on whether outside directors enhance shareholder gains even when their directorship is threatened. Finally, by examining the tender offer process, we can provide direct evidence on the shareholder-wealth consequences of takeover resistance, and can evaluate whether the value of those resistance strategies varies according to the composition of the target's board of directors.

Our analysis focuses on independent outside directors, whom we define as nonemployee directors without existing or potential ties to the firm other than their directorship. We consider a board to be independent when independent directors occupy at least one-half of the board seats. If independent outside directors perform a monitoring role, as argued by Fama (1980) and Fama and Jensen (1983), independent boards are more likely to make decisions consistent with shareholder-wealth maximization. Thus, we expect that shareholder gains from tender offers will be greater for targets with independent boards than for other targets.

<sup>1</sup>See Brickley and James (1987), Weisbach (1988), Byrd and Hickman (1992), Shivdasani (1993), and Brickley, Coles, and Terry (1994).

<sup>2</sup>Jensen and Ruback (1983) and Jarrell, Brickley, and Netter (1988) provide an overview of the evidence on shareholder gains in successful tender offers. Evidence on shareholder losses in unsuccessful offers is provided by Bradley, Desai, and Kim (1983), Mikkelsen and Ruback (1985), Dann and DeAngelo (1988), Ruback (1988), and Coughlan and Zenner (1994). Walkling and Long (1984), Martin and McConnell (1991), Coughlan and Zenner (1994), and Agrawal and Walkling (1994) document managerial losses in takeover contests.

<sup>3</sup>Kini, Kracaw, and Mian (1995) document that successful takeovers typically result in the elimination of the target board or in the reduction of the number of outside directors.

We study 169 tender offers over 1989 through 1992. Controlling for target firm and tender offer characteristics, we find that targets with independent boards experience higher shareholder gains from the inception of the offer to its resolution than do other targets. The regression estimates indicate that the target shareholder gains from tender offers are about 20 percentage points greater when the board is independent, suggesting that independent outside directors perform a statistically and economically significant value-enhancing role during tender offers. Further, our results suggest that these higher target shareholder gains come at the expense of the returns to bidder shareholders.

We further document that the larger target shareholder returns associated with independent boards are a result of both higher initial tender offer premiums and greater revisions in the initial bid premium. We also find that target shareholder returns in resisted offers are greater when the board is independent than when it is not. In addition, offers to targets that have both poison pills and independent boards lead to substantially higher shareholder gains than offers to targets with poison pills but without independent boards. These results corroborate evidence presented by Brickley, Coles, and Terry (1994) who find that poison pills adopted by independent boards are associated with a more favorable stock-price reaction than are poison pills adopted by nonindependent boards. Collectively, our results indicate that when the board is independent, takeover resistance and poison pills are likely to be used to enhance shareholder returns, rather than to entrench target managers.

The paper is organized as follows. We discuss our data collection procedure and variable selection in Section 2. We present results on the relation between board composition and shareholder gains in Section 3. Section 4 examines the relation between tender offer characteristics and board composition, and Section 5 concludes.

## 2. Data collection and variables

### 2.1. Sample construction

We search the Dow Jones News Retrieval database of Wall Street Journal (WSJ) abstracts during 1989–1992 for articles on tender offers. Our search yields a sample of 229 tender offers, some of which are reported as early as 1988 or completed as late as 1993. Certain observations are eliminated. We eliminate observations in which data on tender offer characteristics or the target are unavailable from the WSJ or proxy statements. We eliminate utilities because their board composition, ownership structure, and other aspects of the tender offer process are affected by regulation. Thus takeovers of utilities are not comparable to takeovers of industrial firms. We eliminate foreign firms because information on the target firm is usually lacking and firms in financial distress because directors,

managers, and other stockholders have less influence on the tender offer process when the target is in financial distress. We also eliminate firms that announce publicly that they are for sale because the role of their outside directors during tender offers may not be comparable to directors' role in tender offers that are not initiated by the target firm. This selection procedure yields a sample of 169 tender offer targets that are traded on the NYSE, AMEX, or NASDAQ.

We use the WSJ to determine the first report of any takeover activity related to the tender offer (the rumor date), the first announcement of the offer, the resolution date, and other tender offer characteristics. We consider that a tender offer is resisted if the WSJ reports that the target firm will resist the offer. We consider that an offer is successful if the WSJ reports that it has been completed or if the target is subsequently delisted. Most of the tender offers in our sample are for 100% of the target's outstanding shares.

### *2.2. Tender offer premiums and shareholder gains*

We compute three different tender offer premiums. First, the initial tender offer premium is computed as the initial tender offer price minus the pre-tender offer stock price divided by the pre-tender offer stock price. The pre-tender offer stock price is the target's price 30 calendar days prior to the rumor date if a rumor is present, or 30 calendar days prior to the first day of the tender offer announcement if there is no rumor. The choice of a 30-day pre-tender offer period attempts to account for the market anticipation of the tender offer that has been documented in previous studies (e.g., Jarrell and Poulsen, 1989). In three cases, we use a procedure outlined by Walkling (1985) to adjust the premium to reflect the fact that the bidder is not seeking all of the target's shares outstanding. Second, we compute the premium revision as the tender offer price at the resolution of the contest minus the offer price at the initial announcement, divided by the offer price at the initial announcement.

Finally, we compute the target shareholder gain over the entire contest period. For successful tender offers, the target shareholder gain is the final tender offer price minus the pre-tender offer stock price, divided by the pre-tender offer stock price. For unsuccessful offers, the shareholder gain is the stock price, 90 days after the announcement that the offer has been withdrawn minus the pre-tender offer stock price, divided by the pre-tender offer stock price. We also calculate the target shareholder gain for unsuccessful offers by using the stock price 180 days, 270 days, and 360 days after the resolution of the offer. These tests yield qualitatively similar results and are not reported.

### *2.3. Measures of board composition*

Our analysis focuses on the role of independent outside directors. We define independent outside directors as directors who are not current or past

employees of the corporation, do not have substantial business or family ties with management (as indicated in the proxy statement), nor have potential business ties with the firm. The last criterion excludes directors who are employees of banks, law, and consulting firms. Following Brickley, Coles, and Terry (1994), we consider boards to be independent if independent directors comprise at least 50% of the board. We define inside directors to include all directors who are full-time employees of the firm. Finally, we define as 'gray' all directors who are either former employees of the firm or are affiliated with managers, because of current or potential future business or family ties.

We also measure the financial incentives of independent outside directors by using their percentage of equity ownership. We expect higher independent outside director equity ownership to enhance shareholder wealth during tender offers. Shivdasani (1993), for example, documents that increased ownership by outside directors reduces the likelihood of becoming the target of a disciplinary takeover.

Fama (1980), Fama and Jensen (1983), and Milgrom and Roberts (1992) argue that reputation effects can provide outside directors with incentives to monitor managers. Kaplan and Reishus (1990) and Gilson (1990) provide evidence on the importance of reputation capital in the directorship market. Thus, we expect that directors who have reputation capital at stake will be better monitors. We use the number of additional outside directorships held in other corporations as a proxy for the reputation capital of independent outside directors. We exclude directorships in the target firm's subsidiaries, in firms in which the independent outside director is also a full-time employee, and in professional associations.

We also determine if any of the bidder's directors serve on the target's board. The presence of such interlocking directorships can affect target shareholder gains for at least two reasons. First, such directors have a fiduciary duty to both the shareholders of the target and the bidder thus creating a conflict of interest. Second, interlocking directorships can reduce the information asymmetry between the bidder and target and discourage other potential bidders from making a bid. We collect all data on board composition from the proxy statement immediately preceding the first tender offer announcement.

#### *2.4. Control variables*

To evaluate the impact of independent outside directors on target shareholder wealth, we estimate regressions with the target shareholder gain as the dependent variable and the board composition measures as explanatory variables. In each of these regressions, we include seven control variables that can influence shareholder gains regardless of board composition. The first control variable is the logarithm of the equity market value of the target firm 30 days prior to the initial tender offer. This variable is included because larger firms tend to have larger boards, lower managerial ownership, and lower fractions of inside

directors on the board. Larger firms can also have access to more resources to thwart takeover attempts.

We control for the presence of poison pills because Malatesta and Walkling (1988) and Ryngaert (1988) show that these can increase the board's ability to defeat a tender offer, resulting in lower shareholder gains. Alternatively, as suggested by Comment and Schwert (1995), poison pills can enhance the board's bargaining power and increase the gains to target shareholders. We also control for the presence of golden parachutes, because they can reduce managerial compensation losses from takeovers and can affect managerial incentives to resist an offer and bargain for premium revisions. Data on the presence of golden parachutes and poison pills are collected from the proxy statements preceding the tender offer, the WSJ, Lexis/Nexis, and Corporate Control Alert.

We control for managerial stock ownership because it may affect managers' incentives to resist a tender offer. Mikkelsen and Partch (1989) and Cotter and Zenner (1994) show that, with greater share ownership, managerial gains from a tender offer are larger and managerial resistance less likely. We collect data on ownership of inside directors, including options exercisable within 60 days, from the proxy statement prior to the tender offer.

Shleifer and Vishny (1986) and Barclay and Holderness (1991) show that affiliated blockholders typically side with top management in corporate control contests, whereas ownership by unaffiliated blockholders can facilitate changes in control. Accordingly, we control for the ownership of both affiliated and unaffiliated blockholders. We define affiliated block ownership to include ownership by family trusts, company stock ownership plans, and retirement plans. If an officer of the firm is described in the proxy statement as being an officer or trustee of a block, then the block is also included in the affiliated blockholder category. Because block and nonblock ownership by inside directors is considered separately, this category does not include inside director ownership. All remaining blockholders are classified as unaffiliated blockholders. We collect blockholder ownership data from the proxy statement prior to the tender offer.

Hermalin and Weisbach (1988, 1995) argue that poorly performing firms are more likely to nominate outside directors to the board. If takeovers of poor performers generate higher shareholder gains, then failing to control for performance can create a deceptive relation between shareholder gains and board independence. Alternatively, Byrd and Hickman (1992) and Brickley, Coles, and Terry (1994) suggest that better managers may form boards with more outsiders. If better managers also generate higher takeover gains, then using firm performance as a measure of managerial quality can help assure that the relation between takeover gains and board independence does not reflect an omitted managerial quality effect. To control for these possible effects, we include the target's industry-adjusted operating return on assets over the three years prior to the offer as an independent variable. We obtain similar results if we use operating returns on assets unadjusted for industry performance, compute

performance over one year prior to the offer, or use the market to book ratio of equity as a measure of performance. Performance data are obtained from Compustat.

### 2.5. Descriptive statistics

Table 1 reports summary statistics for the 169 tender offers in our sample, and compares the 47 targets with independent boards to the 122 targets without independent boards. As shown in panel A, the sample contains 79 (47%) tender offers that are initially resisted by the target, 47 (28%) offers with multiple bidders, and 127 (75%) offers that eventually succeed. Of the targets with an independent board 60% resist the tender offer, compared to only 42% of the targets without an independent board.

Statistics on the tender offer premiums are reported in panel B, Table 1. While the initial premium is 53.7% for targets with an independent board and 44.8% for targets without an independent board, the difference between the two subsets is not statistically significant. Targets with an independent board experience higher premium revisions, however, than targets without an independent board (12.9% versus 6.4%, with a  $p$ -value of 0.02). Finally, the shareholder gain from the inception of the offer to its resolution is 62.3% for targets with an independent board compared to 40.9% for targets without an independent board. This difference is also statistically significant, with a  $p$ -value of 0.02. Thus, targets with an independent board obtain higher premium revisions and experience larger shareholder gains than targets without an independent board.

Panel C, Table 1 reports that the average equity market value of the target firms is \$602 million. The median market value of equity of firms with an independent board is slightly larger (\$168 million) than other sample firms (\$124 million). Furthermore, the presence of poison pills and golden parachutes differs significantly between targets with and without an independent board. Of the targets without an independent board, 48% have poison pills and 57% have golden parachutes, versus 68% and 77%, respectively, for the targets with an independent board.

Inside directors of targeted firms own 12.9% of outstanding shares in the full sample. However, in targets with independent boards they own only 4.7% compared to 16.0% in targets without an independent board. Both  $t$ -tests and Wilcoxon tests indicate that this difference is highly significant. We do not find a significant difference in block ownership and bidder toeholds between firms with and without independent boards.

Board characteristics are reported in panel D, Table 1. The average (median) board size for the whole sample is 8.8 (8.0). Targets with an independent board have larger boards with a mean (median) of 9.6 (9.0) directors compared to 8.4 (7.5) for firms without an independent board. Independent outside directors have a larger equity stake in the target when the board is independent than when it is not (3.6% versus 0.7%). In addition, the median number of additional

Table 1

Characteristics of the tender offer sample: and comparison of targets with and without an independent board

Characteristics of the tender offer sample and comparison of targets with and without an independent board. Panel A presents general characteristics of the tender offers. Panels B and C provide descriptive statistics on target firm characteristics. Panel D provides information on board composition and ownership of the target firms. The sample consists of 169 tender offers announced in the Wall Street Journal over the 1988-1992 period with 122 targets without an independent board and 47 targets with an independent board.<sup>a</sup>

*Panel A: Tender offer characteristics*

	Full sample		Independent outside directors (n = 122)		Independent outside directors ≥ 50% (n = 47)		t-test p-value	Wilcoxon p-value
	No.	%	No.	%	No.	%		
Multiple bidders	47	28	32	26	15	32	0.48	0.46
Resisted offers	79	47	51	42	28	60	0.04	0.04
Successful tender offer	127	75	90	74	37	79	0.50	0.50

*Panel B: Tender offer premiums and shareholder wealth effects*

	Mean	Median	Mean	Median	Mean	Median	t-test p-value	Wilcoxon p-value
Initial bid premium <sup>b</sup> (%)	47.3	41.6	44.8	39.7	53.7	48.5	0.15	0.20
Revision of initial premium <sup>c</sup> (%)	8.2	0.0	6.4	0.0	12.9	0.1	0.02	0.01
Target shareholder gain <sup>d</sup> (%)	46.9	43.9	40.9	38.1	62.3	63.6	0.02	0.03

*Panel C: Ownership structure and other firm characteristics*

	Mean	Median	Mean	Median	Mean	Median	t-test p-value	Wilcoxon p-value
Market value of common equity <sup>e</sup> (\$M)	601.9	145.4	551.2	173.8	733.6	167.8	0.42	0.06
Target firm has a poison pill in place (%)	53.3		47.5		68.1		0.01	0.02
Target firm executives have a golden parachute (%)	62.7		57.4		76.6		0.01	0.02
Ownership of inside directors <sup>f</sup> (%)	12.9	5.3	16.0	7.7	4.7	1.9	0.00	0.00
Ownership of affiliated blockholders <sup>g</sup> (%)	2.0	0.0	2.1	0.0	1.8	0.0	0.76	0.46
Ownership of unaffiliated blockholders <sup>h</sup> (%)	14.1	10.3	14.4	11.9	13.3	9.7	0.65	0.76
Prior ownership of bidder <sup>i</sup> (%)	11.0	0.0	11.9	0.0	8.7	0.0	0.31	0.50



Panel D: Board characteristics

	Mean	Median	Mean	Median	Mean	Median	t-test p-value	Wilcoxon p-value
Number of directors on the target firm's board	8.8	8.0	8.4	7.5	9.6	9.0	0.01	0.01
Interlocking directorship (%) <sup>a</sup>	12.4		13.1		10.6		0.65	0.67
Percentage of outside directors (%) <sup>b</sup>	69.6	71.4	65.7	66.7	79.8	80.0	0.00	0.00
Percentage of independent outside directors (%) <sup>c</sup>	36.0	33.3	26.8	28.6	60.0	58.3	0.00	0.00
Ownership of independent outside directors (%)	1.5	0.1	0.7	0.1	3.6	0.2	0.11	0.00
Number of additional outside directorships <sup>d</sup>	1.2	1.0	1.2	1.0	1.3	1.3	0.39	0.09

<sup>a</sup>The sample excludes utilities, foreign firms, firms in financial distress, those that publicly announce they are for sale, and firms for which data are unavailable.

<sup>b</sup>The initial bid premium is computed as the percentage increase in the stock price of the target firm for the period from 30 days before the first tender offer rumor or, if no rumor is present, 30 days before the initial announcement of the tender offer, to the initial tender offer bid price. All premium calculations are adjusted for the percentage of shares sought by the bidder (see Walking, 1985).

<sup>c</sup>The revision of the initial bid premium is equal to the tender offer price at the resolution of the contest minus the tender offer price at the initial announcement, divided by the tender offer price at the announcement.

<sup>d</sup>The target shareholder gain over the entire tender offer contest is the percentage price change from 30 days before the first tender offer rumor to the final tender offer bid price if the bid is successful, or to the stock price 90 days after the resolution of the tender offer if the bid is not successful.

<sup>e</sup>The market value of common equity is equal to the number of shares outstanding times the stock price 30 days before the first rumor of the tender offer or 30 days before the initial announcement of the tender offer if no rumor is present.

<sup>f</sup>This variable consists of the ownership of inside directors. Inside directors are currently employed by the target firm. Options exercisable within 60 days are included in this percentage.

<sup>g</sup>Affiliated blockholders are individuals or corporations who own more than 5% of the common stock of the target firm and are affiliated with target manager through family or business relations. This variable does not include insider ownership defined in footnote e.

<sup>h</sup>Unaffiliated blockholders own more than 5% of the common stock of the target firm and are not currently affiliated with target managers.

<sup>i</sup>Prior ownership of the bidding firm is from the proxy statement prior to the tender offer, or from the Wall Street Journal announcements about the tender offer.

<sup>j</sup>Indicator variable equal to 1 if at least one director of the target firm is an insider (director or manager) of the bidder, and equal to 0 otherwise.

<sup>k</sup>Percentage of directors who are not full-time employees of the target firm.

<sup>l</sup>Percentage of directors who are not full-time employees of the target firm and have no family relationships with the management or former or potential future business ties with the firm according to this proxy statement.

<sup>m</sup>The number of additional outside directorships is the average number of additional corporate directorships held by each independent outside director.

directorships is marginally higher for targets with independent boards than for targets without an independent board (1.3 compared to 1.0). Thus, independent boards are larger and have independent directors with more reputation capital and larger equity stakes.

Twenty-one (12.4%) of the targets have an outside director who is also a director of the bidding firm. In most of these cases, the bidder's toehold in the target firm is substantial. The mean (median) toehold is 56.6% (57%) when the bidder is represented on the target board, compared to only 4.5% (0%) for the remainder of the sample. In 17 of the 21 cases the bidder's toehold exceeds 50%, whereas in another three cases it exceeds 20%. Thus, interlocking directorships appear to be the result of substantial bidder toeholds in the target firm.

### 3. The relation between board composition and shareholder gains

We examine the effect of board composition on shareholder wealth by using two main model specifications. In the first specification, we include two indicator variables for the presence of an independent board and an interlocking directorship. In the second specification, we include the equity ownership and the number of additional directorships of independent outside directors.

To assure that our results are not driven by model specification errors, we conduct a series of specification checks. First, we test for the presence of heteroskedasticity. Chi-square tests do not, however, reject the assumption of homoskedastic error terms throughout our regression specifications. Second, to examine whether our results are driven by influential observations, we conduct the diagnostics outlined in Belsley, Kuh, and Welsch (1980). These tests do not reveal the presence of significant outliers. Third, to investigate whether collinearity affects our results, we examine correlation coefficients among independent variables. While these coefficients are generally not large, the correlation of 0.46 between firm size and the number of outside directorships held by independent outside directors is an exception. We estimate our results excluding these variables, and obtain results similar to those reported. Further, inspection of variance inflation factors suggests that multicollinearity is unlikely to inflate the standard errors.

#### 3.1. Multivariate analysis of target shareholder wealth gains

We estimate the following multivariate regression:

*Target shareholder gains*

=  $f$  (board composition and directors' incentives, logarithm of equity market value, poison pill and golden parachute dummies, ownership structure, firm performance).

We report the results in Table 2. The most striking result in model (i) is that the coefficient on the independent board variable is positive and highly

significant. The point estimate suggests that shareholder gains are approximately 20 percentage points higher for targets with an independent board than they are for other targets. Thus, board independence leads to statistically significant and economically higher shareholder gains from tender offers. For all models, we find that the coefficient on the interlocking directorship variable is negative and marginally significant, suggesting that target shareholder gains are lower when an insider of the bidder serves on the target's board. While the coefficient on the poison pill indicator is consistently positive, its statistical significance is weak. None of the other variables significantly affects shareholder gains.

In model (ii) we include the equity ownership and the additional directorships of independent directors as explanatory variables. Neither variable is significantly related to shareholder gains. The independent board variable remains, however, positive and statistically significant.

Using data on stock-price reactions of poison pill adoptions, Brickley, Coles, and Terry (1994) argue that independent boards are more likely to use poison pills to enhance shareholder wealth from takeovers. To test this hypothesis directly, we include in model (iii) an interaction variable between the independent board and poison pill variables. With this specification, the coefficient on the poison pill dummy is insignificant. However, the interaction between the poison pill and independent board dummies is positive and significant, suggesting that independent boards are more likely to use poison pills than non-independent boards to enhance shareholder gains from tender offers.

To see if the results on poison pills can be generalized to takeover resistance strategies, we include in model (iv) a dummy variable that is equal to one if the offer is resisted, and an interaction variable between the resisted offer dummy and the independent board dummy. The marginally significant negative coefficient for resisted offers and the positive coefficient on the interaction variable suggest that if the board is not independent, resisted offers result in lower target shareholder gains. However, if the target's board is independent, the shareholder gains in resisted offers are larger than for resisted offers where the target's board is not independent. We provide additional evidence on gains in resisted offers in Section 4.2.

In model (v) we estimate the regression by using a dummy that is equal to one if the tender offer is successful, and an interaction variable between the successful offer dummy and the independent board dummy. Consistent with prior studies (e.g., Bradley, Desai, and Kim, 1983), successful offers are associated with target gains that are 55 percentage points higher than unsuccessful offers. More interestingly, however, for targets with independent boards, the shareholder gains in successful tender offers are an additional 22 percentage points higher.

Overall, the positive and significant coefficient on the independent board dummy variable and on the interactions between this variable and board resistance, the presence of a poison pill, and tender offer success indicate that independent boards enhance shareholder wealth during tender offers.

Table 2

## Analysis of the target shareholder gains

Regression of the target shareholder gains on the tender offer characteristics, the target firm and board. The target shareholder gain is the percentage price change from 30 days before the first tender offer rumor to the final tender offer bid price if the bid is successful, or to the stock price 90 days after the resolution of the tender offer if the bid is not successful. The sample consists of 169 tender offers announced in the Wall Street Journal over the 1988-1992 period. The *p*-values are in parentheses and the variable definitions are contained in the footnotes to this table.

Model: *Target shareholder gain* = *f*(*board characteristics, ownership structure, firm and tender offer characteristics*)

Explanatory variables	Model (i)	Model (ii)	Model (iii)	Model (iv)	Model (v)
Intercept	0.58 (0.09)	0.66 (0.07)	0.67 (0.06)	0.76 (0.04)	0.36 (0.22)
Interlocking directorship <sup>a</sup>	-0.19 (0.12)	0.18 (0.15)	-0.11 (0.16)	-0.20 (0.11)	-0.27 (0.07)
Independent board <sup>b</sup>	0.20 (0.02)	0.19 (0.03)			
Independent board × Resisted offer <sup>c</sup>				0.22 (0.06)	
Resisted offer <sup>d</sup>				-0.15 (0.09)	
Independent board × Successful offer <sup>e</sup>					0.22 (0.01)
Successful offer <sup>f</sup>					0.55 (0.00)
Independent board × Poison pill <sup>g</sup>			0.24 (0.02)		
Number of additional outside directorships per independent director <sup>h</sup>		(0.03) (0.44)			
Ownership of independent outside directors <sup>i</sup>		0.35 (0.53)			
Logarithm of market value of equity <sup>j</sup>	-0.015 (0.58)	-0.02 (0.42)	-0.02 (0.45)	-0.03 (0.40)	-0.03 (0.18)
Poison pill <sup>k</sup>	0.13 (0.14)	0.13 (0.13)	0.07 (0.43)	0.16 (0.09)	0.12 (0.10)
Golden parachute <sup>l</sup>	0.001 (0.99)	-0.01 (0.87)	0.001 (0.95)	-0.001 (0.99)	0.004 (0.95)
Ownership of affiliated blockholders <sup>m</sup>	-0.04 (0.95)	-0.04 (0.95)	-0.08 (0.89)	-0.02 (0.97)	0.04 (0.94)
Ownership of unaffiliated blockholders <sup>n</sup>	-0.15 (0.59)	-0.17 (0.55)	-0.10 (0.71)	-0.20 (0.49)	-0.25 (0.27)

Ownership of inside directors<sup>a</sup> 0.13 (0.65) 0.17 (0.55) 0.13 (0.65) 0.07 (0.80) 0.13 (0.57)

Industry adjusted operating return on assets<sup>b</sup> - 0.16 (0.36) - 0.18 (0.29) - 0.19 (0.27) - 0.22 (0.22) - 0.23 (0.11)

Adjusted R-square 0.04

Regression p-value 0.06

0.03

0.15

0.35

0.00

<sup>a</sup>Indicator variable equal to 1 if at least one director of the target firm is an insider (director or manager) of the bidder, and 0 otherwise.

<sup>b</sup>Targets with an independent board have at least 50% independent outside directors on the board. Independent directors are not currently employed by the target firm and do not have current or potential future business ties with the target firm.

<sup>c</sup>Interaction variable between two indicator variables: targets with an independent board and resisted offers.

<sup>d</sup>Indicator variable equal to 1 if the target firms resists the offer, and 0 otherwise.

<sup>e</sup>Interaction variable between two indicator variables: targets with an independent board and tender offer is successful.

<sup>f</sup>Indicator variable equal to 1 if the tender offer is successful, that is, the target firm is successfully taken over, and 0 otherwise.

<sup>g</sup>Interaction variable between two indicator variables: targets with an independent board and targets with a poison pill in place.

<sup>h</sup>The number of additional outside directorships is the average number of additional corporate directorships held by each independent outside director.

<sup>i</sup>Percentage share ownership of independent outside directors. Options exercisable within 60 days are included in this percentage.

<sup>j</sup>The logarithm of the market value of common equity. The market value of common equity is equal to the number of shares outstanding times the stock price 30 days before the first rumor of the tender offer or 30 days before the initial announcement of the tender offer if no rumor is present.

<sup>k</sup>Indicator variable equal to 1 if the target firm has a poison pill defense in place, and 0 otherwise.

<sup>l</sup>Indicator variable equal to 1 if the target firm managers have a golden parachute in place, and 0 otherwise.

<sup>m</sup>Affiliated blockholders are individuals or corporations who own more than 5% of the common stock of the target firm and are affiliated with target managers through family or business relations. This variable does not include insider ownership defined in footnote o.

<sup>n</sup>Unaffiliated blockholders own more than 5% of the common stock of the target firm and are not currently affiliated with target managers.

<sup>o</sup>Percentage share ownership of inside directors. Inside directors are currently employed by the target firm. Options exercisable within 60 days are included in this percentage.

<sup>p</sup>Average industry-adjusted operating return on assets for the three years preceding the tender offer.

### 3.2. *The source of target shareholder gains and the combined bidder and target takeover gains*

To evaluate whether the gains to shareholders of target firms with independent boards result from higher total takeover gains, we compute the combined gains to shareholders of both target and bidding firms for 48 successful transactions for which stock price data are available on both firms. We follow Bradley, Desai, and Kim (1988) computing the total takeover gain as the market-adjusted return to the value-weighted portfolio of the target and the bidder from 30 days prior to the first takeover announcement to the final offer date. The mean (median) total takeover gain is 6.57% (3.59%). For 11 of these 48 transactions, the target's board is independent. These takeovers result in a mean (median) combined takeover gain of 2.48% (– 0.75%). This return is not significantly different from the mean (median) takeover gain of 7.78% (3.89%) for the 37 takeovers in which the target's board is not independent.

We use the same window to compute the market-adjusted returns for the 48 successful bidders. For these bidders, the mean (median) bidder return is – 5.18% (– 5.22%). Bidder returns are – 18.65% (– 15.39%) for the 11 transactions in which the target's board is independent, compared to – 1.17% (– 4.0%) for the 37 cases in which the target's board is not independent. Using both *t*-tests and Wilcoxon tests, these returns are significantly different at the 5% level. Overall, these results suggest that the higher returns to target shareholders with independent boards do not result from higher total takeover gains, but in fact come at the expense of the bidder's returns.

### 3.3. *Specification checks*

#### 3.3.1. *Alternative measures of board composition*

Our definition of independent outside directors does not include directors from banks, consulting firms, or law firms, because such directors are likely to have potential business ties with the firm. This classification scheme is consistent with Brickley, Lease, and Smith (1988) and Van Nuys (1993), who find that banks, insurance firms, and nonbank trusts tend to support managers during antitakeover amendment proposals. When we classify such directors as independent outsiders, it reduces the significance of the independent board variable. Brickley, Coles, and Terry (1994) also report that their results are sensitive to the way in which independent outside directors with potential business ties are classified.

We also estimate our tests using alternative specifications to measure board composition. First, we replace the independent board variable with the percentages of independent outside and gray directors on the board. We find that the percentage of gray directors is unrelated, while the percentage of independent outside directors is positively related to shareholder gains, though its statistical

significance is weaker than the independent board dummy. Second, we follow Weisbach (1988) and classify our sample into three categories: Firms with an outsider-dominated board (i.e., independent outsiders constitute more than 60% of the board), firms with a mixed board (i.e., independent outsiders constitute between 40% and 60% of the board), and firms with an insider-dominated board (i.e., insiders constitute more than 60% of the board). With this specification, we obtain qualitatively similar results for the outsider-dominated board variable, whereas the mixed board variable fails to enter our models significantly. In all tests, the significance of the other variables in the regression is unaltered.

Brickley, Coles, and Terry (1994) suggest that among all independent outside directors, directors who are retired decision makers or who list 'director' as their occupation are associated with higher abnormal returns at the announcement of poison pill adoptions. To examine whether such directors drive our results on independent boards, we add four variables to measure the fraction of the board members who are (i) decision makers in firms other than banks, consulting, or law firms, (ii) private investors in the firm, (iii) educators, government officials, or clergy, and (iv) who list 'director' as their occupation or who are retired decision makers.<sup>4</sup> We find that none of these measures are related to the target shareholder return, and that the inclusion of these variables does not alter the statistical or economic significance of the independent board variable.

### 3.3.2. *Toeholds*

Bidder toeholds can facilitate the tender offer and reduce the effectiveness of managerial resistance. Conversely, Holderness and Sheehan (1985) show that the accumulation of a toehold in a potential target is often the first step in an unsolicited bid and can trigger resistance by the target board. Because of the high correlation between bidder toeholds and interlocking directorships, we do not include the toehold in our basic models. To evaluate the effect of toeholds on shareholder gains, we estimate our regressions by replacing the interlocking directorships with the bidder toehold. The coefficients on toehold are similar to those on the interlocking directorships variable, but they are generally not statistically significant. When both variables are included in the regressions, neither is significant, whereas the coefficients on other variables remain qualitatively unchanged. We also estimate our results for the subsample of firms with no

<sup>4</sup>Board members who are decision makers in firms that are not banks, law firms, or consulting firms constitute about 19% of the board for the full sample. Other occupational categories constitute 2.3% (private investors), 4.5% (educators, clergy, and government officials), and 7.2% (retired executives or directors who list 'director' as their occupation) of the board. Because these categories represent independent outside directors, these percentages are higher for target firms with independent boards.

bidder toeholds and obtain results similar to those reported. Thus, our results are not driven by firms with large bidder toeholds.

### *3.3.3. Alternative measures of directors' financial incentives*

Instead of the percentage share ownership by independent outside directors, we use a wealth-gain variable similar to that used by Cotter and Zenner (1994) as a proxy for the financial incentives of directors. This variable is the gain on the equity ownership from the tender offer (number of shares times the dollar premium offered) minus the present value of the potential losses in compensation (the annual director retainer and eight times the meeting fees). Using this measure yields results that are qualitatively similar to using the percentage of independent outside director equity ownership. Thus, the results appear robust to the measurement of directors' financial incentives.

### *3.4. The components of target shareholder gains*

Our results suggest that independent boards lead to higher target shareholder gains from tender offers. In this section, we investigate the source of these gains by examining how board independence affects the initial tender offer premium and the bargaining process after the initial bid. For targets that are successfully acquired, the initial premium and the subsequent revisions constitute returns earned by shareholders. Shareholders of targets that are not successfully acquired typically experience negative returns at the offer's withdrawal. They may also experience negative returns subsequent to the offer's resolution. Thus, we examine target shareholder returns for failed offers over longer post-takeover event windows.

#### *3.4.1. The initial tender offer premium*

An important decision facing potential bidders is the choice of the initial tender offer premium. Fishman (1988) shows that, if revisions are costly, bidders will structure the initial bid to reflect expected bargaining by the board and the likelihood of competing bids. Thus, if independent outside directors are more likely to maximize shareholder value, we expect initial bid premiums to be higher for independent boards. The initial bid premium can also be the result of intensive bargaining by the target firm's board preceding the first official tender offer announcement. Accordingly, if independent boards engage in more intensive or more effective pre-bid bargaining, then the initial bid premium can be larger for targets with independent boards.

We estimate regressions similar to those in Table 2 and report the results in models (i) and (ii) of Table 3. In both models the initial bid premium is positively and significantly related to board independence, and negatively and significantly related to the presence of a bidder's director on the target's board. The point estimates suggest that the presence of an independent board increases the initial



Table 3

Analysis of the initial tender offer premium and of the post-bid premium revision

Regression of the initial tender offer premium and the post-bid premium revision on the tender offer characteristics, the target firm and its board. The initial tender offer premium is the percentage price change from 30 days before the first tender offer rumor to the first tender offer bid price. The post-bid premium revision is the percentage price change from the first tender offer bid price to the bid price offered at the end of the contest. The sample consists of 169 tender offers announced in the Wall Street Journal over the 1988-1992 period. The *p*-values are in parentheses and the variable definitions are contained in the footnotes to Table 2.

Model: Initial or post-bid tender offer premium

= *f* (board characteristics, size, firm characteristics, ownership structure)

Independent variable	Initial tender offer premium		Post-bid premium revision	
Explanatory variables	Model (i)	Model (ii)	Model (iii)	Model (iv)
Intercept	0.49 (0.03)	0.58 (0.01)	0.07 (0.48)	0.09 (0.39)
Interlocking directorship	- 0.21 (0.01)	- 0.20 (0.02)	0.002 (0.95)	0.002 (0.97)
Independent board	0.10 (0.06)	0.10 (0.08)	0.05 (0.05)	0.05 (0.04)
Number of additional outside directorships per independent director		0.03 (0.22)		0.01 (0.57)
Ownership of independent outside directors		0.29 (0.43)		- 0.06 (0.73)
Logarithm of market value of equity	- 0.006 (0.75)	- 0.02 (0.42)	- 0.001 (0.89)	- 0.003 (0.72)
Poison pill	0.06 (0.30)	0.06 (0.29)	0.07 (0.00)	0.07 (0.01)
Golden parachute	- 0.01 (0.78)	- 0.03 (0.61)	- 0.004 (0.85)	- 0.01 (0.78)
Ownership of affiliated blockholders	- 0.38 (0.34)	- 0.39 (0.34)	- 0.02 (0.91)	- 0.03 (0.85)
Ownership of unaffiliated blockholders	0.15 (0.40)	0.12 (0.50)	- 0.11 (0.18)	- 0.12 (0.15)
Ownership of inside directors	0.32 (0.09)	0.36 (0.06)	- 0.03 (0.70)	- 0.02 (0.77)
Industry adjusted operating return on assets	- 0.12 (0.26)	- 0.15 (0.20)	- 0.04 (0.45)	- 0.03 (0.52)
Adjusted <i>R</i> -square	0.08	0.10	0.08	0.07
Regression <i>p</i> -value	0.01	0.01	0.01	0.01

premium by 10 percentage points, whereas interlocking directorships reduce it by about 20 percentage points. In addition, the initial bid premium increases with the ownership of the target's inside directors. Variables representing ownership stakes and reputation incentives of independent outside directors are, however, unrelated to the initial bid premium. Overall, these results suggest that target firms with independent boards receive higher initial premiums.

#### *3.4.2. The revision of the tender offer premium*

We estimate the same multivariate regression models as in our previous analyses to examine the additional premium that is obtained from the bidder(s) during the bargaining process using the revision in the bid premium as the dependent variable. These results are reported in models (iii) and (iv), Table 3. In both models the coefficient on the independent board variable is positive and statistically significant. The point estimates suggest that the revision in the initial premium is five percentage points larger when the board is independent. In addition, the presence of a poison pill increases the bid premium revision by seven percentage points. In unreported tests, we also estimate models with interaction variables between poison pills (or resisted offers) and an independent board. We find that the premium revision is higher when the target has a poison pill (or resists the offer) and has an independent board than when its board is not independent. None of the other variables are related to the premium revision. Thus, controlling for other factors, independent boards enhance target shareholder gains over the entire tender offer contest, through a higher initial premium and a higher bid premium revision.

#### *3.4.3. Shareholder returns and target firm actions following unsuccessful offers*

We also evaluate whether the returns experienced by targets of unsuccessful offers depend on board composition. Of the 42 tender offers that fail, 10 have an independent board and 32 do not. On average, target shareholder gains (based on the price 90 days after the failure of the offer) are 6.0% for firms with independent boards and 3.3% for firms without an independent board. These gains are not significantly different from zero, or from each other. We also examine cumulative stock returns from 30 days prior to the initial announcement (or the rumor date) to 180, 270, 360, and 720 trading days after the resolution of the offer, and do not find differences between targets with and without independent boards. Thus, shareholder returns in unsuccessful offers are not related to board composition.

We also follow the unsuccessful targets for three years after the resolution of the offer. Of the 42 targets, 37 are still traded three years later, while four have merged or been taken over, and one is delisted after bankruptcy. Of the 32 targets without an independent board, two are eventually taken over, four engage in asset sales, four make acquisitions, six experience CEO turnover, four make seasoned equity offerings, and five repurchase their own shares. Of the ten

targets with an independent board, two are eventually taken over, three engage in asset sales, and two make seasoned equity offerings; none make acquisitions, experience CEO turnover, or repurchase their own shares. These results suggest that unsuccessful targets with independent boards are more likely to sell assets or be acquired later, and less likely to make acquisitions or replace managers. The small size of the unsuccessful tender offer sample, however, precludes a statistical analysis of the differences in subsequent actions between targets with and without independent boards.

We conclude that the difference in shareholder gains between targets with and without independent boards are driven by the higher initial premiums and premium revisions for targets with independent boards, and not by differences in returns for targets of unsuccessful tender offers.

#### **4. Other tender offer characteristics**

Once a firm receives a tender offer, its board can resist or accept the offer, seek additional suitors, and attempt to influence the outcome of the offer. In this section, we discuss regression results that examine whether board composition affects the initial target reaction to the tender offer, the likelihood of multiple bidders for the target, and the ultimate outcome of the offer. We also compare the shareholder wealth effects of resistance by independent and nonindependent boards. For brevity, we do not tabulate the regression results.

##### *4.1. The target firm's initial reaction to the tender offer bid*

The decision by the target firm's board to resist the initial tender offer is an important characteristic of a tender offer. Takeover resistance can reduce the likelihood that the offer will succeed, but can also increase the final takeover premium for successful offers. Using regression models similar to those in previous tests, we estimate the relation between board composition and the probability that the target resists an offer. We do not find a significant relation between board independence and the likelihood of target resistance.

However, we find that resistance is significantly less likely in the presence of interlocking directorships. Perhaps in these cases close relations between bidder and target have already been established, paving the way for a friendly takeover. Even though a lower initial premium is offered in the presence of interlocking directorships, these targets are less likely to resist.

The regressions also show that targets with poison pills are more likely to resist an offer. It is possible that targets with poison pills are entrenched and that their boards value the benefits of control more than other targets, or that targets with a poison pill are better equipped to bargain with the bidder. The latter hypothesis is consistent with the results in Tables 2 and 3, which suggest that

targets with a poison pill and an independent board obtain higher shareholder gains, and that targets with a poison pill extract higher bid premium revisions.

#### *4.2. Comparing resistance by independent and nonindependent boards*

We find that independent and nonindependent boards are equally likely to resist an offer. Given the positive relation between board independence and shareholder wealth, it is possible that targets with independent boards are more effective in using resistance strategies. This interpretation is supported by the results in Table 4, in which we compare the premiums and eventual outcomes of resisted offers. For the 79 resisted offers in the sample, the average initial premium is 50% and the premium revision is 12%. Fifty-four percent of the offers are eventually successful. The target shareholder gain for all resisted offers is 48%.

Consistent with the results in Table 3, we find significant differences between firms with and without independent boards. On average, the premium revision for resisted offers is 16.6% for independent boards compared to 9.4% when the board is not independent ( $p$ -value is 0.04 with  $t$ -tests and Wilcoxon tests). The target shareholder gains are on average 63% for independent boards but only 40% for nonindependent boards; this difference is significant using a  $t$ -test. Finally, resisted offers are more likely to succeed if the board is independent (64%) than if the board is not independent (49%), but this difference is not significant. Overall, these results suggest that resistance by independent boards benefits shareholder wealth more than resistance by nonindependent boards.

#### *4.3. The likelihood of multiple bidders*

Another aspect of the tender offer process that can impact shareholder gains during tender offers is the presence of multiple bidders. Although the presence of multiple bidders depends in part on industry characteristics that are beyond the control of the board, directors can actively seek other bidders. We evaluate the impact of board composition on the likelihood of multiple bidders and find that the coefficient on the independent board dummy is insignificant. We do, however, find that interlocking directorships significantly decrease the likelihood of multiple bidders. Since the presence of an interlocking directorship reduces the probability that the bid will be resisted, this result can reflect the friendly, negotiated nature of these transactions. Alternatively, an interlocking directorship, combined with a high bidder toehold can be a deterrent to other potential bidders.

#### *4.4. The final outcome of the tender offer*

To examine the effect of independent directors on tender offer outcome, we estimate logistic regression results in which the dependent variable equals one if

**Table 4**  
**Board independence, resistance, and tender offer premiums**  
 Means and medians of the initial premium, bid revision, target shareholder gain from the inception to the resolution of the offer and successful outcome for resisted tender offer, classified by independent and non-independent target boards

	All resisted tender offers ( <i>n</i> = 79)		Independent outside directors < 50% ( <i>n</i> = 51)		Independent outside directors ≥ 50% ( <i>n</i> = 28)		t-test p-value	Wilcoxon p-value
	Mean	Median	Mean	Median	Mean	Median		
Initial premium	50.3%	44.2%	48.3%	41.6%	53.8%	49.9%	0.50	0.51
Bid revision	12.0%	9.7%	9.4%	1.1%	16.6%	14.0%	0.04	0.04
Target shareholder gain	48.0%	38.0%	39.7%	34.8%	61.1%	75.2%	0.09	0.15
Tender offer succeeds	54.4%		49%		64%		0.19	0.20

the target is successfully acquired, and zero otherwise. Across all models, neither the board composition and incentives variables nor any of the other control variables are statistically significant. We also estimate these regressions controlling for the final tender offer premium and for resistance by the board, and obtain similar results. Thus, independent directors enhance shareholder wealth from tender offers by obtaining higher premiums, not by affecting the likelihood of success.

## 5. Conclusion

Tender offers can result in important conflicts of interest between the managers and shareholders of target firms. We examine whether independent outside directors perform an important role in controlling these conflicts and enhance shareholder wealth during tender offers. We document that the target shareholder gains over the entire contest period are higher when the target's board is independent. In evaluating the source of these gains, we find that targets with independent boards extract both higher initial tender offer premiums and higher bid premium revisions than do targets without independent boards. We find that targets with independent boards are not more likely to be successfully taken over and that the target shareholder returns of unsuccessful tender offers do not differ between targets with and without independent boards. These results suggest that the higher shareholder gains for targets with independent boards are driven by higher initial premiums and bid premium revisions. We also find that in resisted offers and offers to targets with poison pills, target shareholder gains are higher when the board is independent than when it is not.

Our evidence adds to the literature documenting the importance of outside directors during specific corporate events. Weisbach (1988) reports that boards dominated by outsiders are more likely to force resignation of poorly performing CEOs. In the same vein, Byrd and Hickman (1992) find that bidding firms with a majority of independent outside directors earn higher announcement abnormal returns than do firms without a majority of independent directors. Brickley, Coles, and Terry (1994) suggest that the proportion of outside board members relates positively to the abnormal returns at the announcement of poison pill adoptions. Rosenstein and Wyatt (1990) report that the market reacts positively to the announcement of outside director appointments.

We conclude that independent outside directors play an important role during tender offers and that they enhance shareholder wealth during tender offers. Our evidence also suggests that bid premium revisions and target shareholder gains are higher in resisted offers when the target's board is independent than when it is not. This suggests that targets with independent boards are likely to resist so that they can extract a higher premium for target shareholders, not to entrench incumbent managers.

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