

# Proxy contests and corporate change: implications for shareholder wealth<sup>1</sup>

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## Abstract

We study the shareholder wealth effects of 270 proxy contests for board seats in the 1979–1994 period. We find that proxy contests create value, with the bulk of the wealth gains stemming from firms that are acquired. Restricting analysis to firms listed on Compustat imparts a downward bias on estimated wealth effects because such a restriction excludes a sizable fraction of the firms acquired during the proxy contest. For firms that are not acquired, the occurrence of management turnover has a significant, positive effect on shareholder wealth because firms replacing management are more likely to restructure following the contest. © 1998 Elsevier Science S.A. All rights reserved.

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## 1. Introduction

The theory of the firm attributes the survival of the corporate form to devices such as proxy contests that constrain the potential incentive problems created

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by the separation of ownership and control. Alchian and Demsetz (1972, p. 97) state that ‘... the transfer of proxies enhances the probability of decisive action in the event current stockholders or any outsider believes that management is not doing a good job with the corporation’. In this paper, we examine whether proxy contests do indeed facilitate change at target corporations and whether any such changes benefit shareholders.

Extant empirical research indicates that shareholder wealth increases at the announcement of proxy contests (see, e.g., Dodd and Warner, 1983), with one plausible source of the positive announcement effect being that proxy contests sometimes lead to liquidation or sale of the target firm (DeAngelo and DeAngelo, 1989). But there is evidence of a negative change in shareholder wealth between contest announcement and resolution (Dodd and Warner, 1983). Moreover, the decline in shareholder wealth appears to persist following the contest, with the worst equity performance occurring when dissidents win control of the board (Ikenberry and Lakonishok, 1993). These latter results are puzzling and suggest that proxy contests do not perform the function proposed in the theory of the firm. The initial appreciation and subsequent reversal in stock returns also raise disconcerting questions of market inefficiency and investor overreaction surrounding proxy contests.

The central goal of our paper is to clarify and extend the somewhat diametric findings regarding the shareholder wealth gains associated with proxy contests. We employ a comprehensive sample of 270 proxy contests from the 1979–1994 time period. The questions we address include whether proxy contests benefit shareholders, how shareholder wealth gains are tied to outright takeovers, and whether the impact of proxy contests has changed over time.

In addition to resolving ambiguities in prior research, answers to these questions have significant policy implications. Many observers (e.g., Jarrell, 1987; Pound, 1992; Roe, 1993) predict that proxy contests will become an increasingly important means of monitoring corporate management due to the growing hurdles to tender offers raised by shark repellents, poison pills, state antitakeover laws, and the judicial deference to incumbent management. This anticipation of a heightened role for the proxy mechanism has led the U.S. Securities and Exchange Commission to promulgate the first major changes in the federal proxy rules in 40 years (Sharara and Hoke-Witherspoon, 1993).

Our data do reveal a changing role for proxy contests. Indeed, proxy contests are playing an increasingly complementary role in outright takeover bids by removing incumbent management who might otherwise use the terms of poison pills or the provisions in state laws to block an acquisition. Moreover, we find that the shareholder wealth gains associated with proxy contests are driven primarily by firms that are acquired in the period proximate to the contests.

In documenting the important interaction of proxy contests and outright acquisitions, we also address methodological issues related to sampling

techniques and the estimation of shareholder wealth effects. Consistent with recent analysis by Barber and Lyon (1997) and Kothari and Warner (1997), we find that minimum data requirements can affect the inferences taken from the measurement of equity performance. In particular, our sensitivity analysis indicates that the requirement that a firm be listed on Compustat in the period proximate to the proxy contest excludes a large fraction of the firms acquired during proxy contests and thereby imparts a downward bias in the estimated effect of proxy contests on shareholder wealth.

The following section provides a more detailed review of the results from prior research and outlines our analysis. Section 3 describes our sample. Section 4 reports the overall shareholder wealth effects of proxy contests and Section 5 performs cross-sectional analysis of the sources of wealth creation in proxy contests. Section 6 analyzes the relation between management turnover and the corporate restructuring associated with proxy contests. The final section summarizes the results, relates our findings to ongoing issues in corporate governance, and notes some implications of our specific research for the general empirical analysis of corporate events.

## 2. Prior research and proposed analysis

A number of papers analyze the performance of target firms in the period preceding proxy contests. Most of these papers focus on accounting performance and, as a rule, find that target firms perform poorly prior to board contests. For example, in a study of 64 contests from the 1956–1960 time period, Duvall and Austin (1965) find that firms experiencing proxy contests have profit margins and a return on equity that are low relative to industry peers. Similar evidence of subpar pre-contest performance is provided in DeAngelo's (1988) analysis of 86 contests from the 1970–1983 time period, Mukherjee and Varela's (1993) analysis of 37 contests from the 1968–1983 time period, Ikenberry and Lakonishok's (1993) analysis of 97 contests from the 1968–1987 time period, and Sridharan and Reinganum's (1995) analysis of 38 contests from the 1978–1985 period. This poor performance prior to proxy contests fits the depiction of target firms in the theory of the firm.

Prior research has also estimated the effect of proxy contests on shareholder wealth. Table 1 summarizes the findings of several key studies. The table reports the time period covered by each study, the sample size, and the cumulative abnormal returns found for several event windows: (i) the period around contest announcement, (ii) the period between contest announcement and contest resolution, (iii) the full-contest period from announcement to resolution, and (iv) the period following the contest. As noted in the table, the studies differ in the definition of event windows, although these differences do not affect qualitative comparisons.

Table 1  
Prior research on the shareholder wealth effects of proxy contests.

Study [source]	Sample	Sample size	Cumulative abnormal returns			
			Initiation or announcement	Post-announcement	Full contest	Post-contest
<i>Panel A. Full sample results</i>						
Dodd and Warner (1983)	1962–1978	96	11.9% (5.09)	– 4.3% (– 2.63)	8.2% (2.78)	n.a.
[Table 3]			[– 60.0]	[+ 1.resolution]	[– 60.resolution]	
DeAngelo and DeAngelo (1989)	1978–1985	60	18.76% (9.44)	– 12.47% (– 0.77)	6.02% (4.32)	n.a.
[Table 6 and text]			[– 40.0]	[+ 1.resolution]	[– 40.resolution]	
Borstadt and Zvirlein (1992)	1962–1986	142	n.a.	n.a.	11.4% (5.83)	– 4.5% (– 1.02)
[Exhibit 4]					[– 60.resolution]	[+ 12 months]
Ikenberry and Lakonishok (1993)	1968–1987	95	4.27% ( $p = 0.05$ )	n.a.	n.a.	– 17.24% ( $p = 0.05$ )
[Table 5]			[month 0]			[months 5 to 24]
<i>Panel B. Results partitioned by whether dissidents win seats</i>						
Dodd and Warner (1983)	Win seats	56	14.1% (4.76)	– 5.9% (– 2.36)	8.1% (2.05)	n.a.
[Table 3]			[– 60.0]	[+ 1.resolution]	[– 60.resolution]	

Ikenberry and Lakonishok (1993) [Table 5]	Do not win seats	40	8.6% (2.23) [ - 60.0]	- 1.8% (- 1.26) [ + 1.resolution]	8.2% (1.89) [ - 60.resolution]	n.a.
	Win seats	50	3.43% ( $p > 0.10$ ) [month 0]	n.a.	n.a.	- 28.57% (- 2.92) [months 5 to 24]
	Do not win seats	45	5.21% ( $p = 0.05$ ) [month 0]	n.a.	n.a.	- 3.90% ( $p > 0.10$ ) [months 5 to 24]
<i>Panel C. Results partitioned by whether sale of firm is linked to dissident activity</i>						
DeAngelo and DeAngelo (1989) [Table 6]	Sale of target linked to dissidents	15	22.36% (5.90) [ - 40.0]	n.a.	15.16% (4.21) [ - 40.resolution]	n.a.
	No evidence of dissident-linked sale of target	45	17.56% (7.49) [ - 40.0]	n.a.	2.90% (2.54) [ - 40.resolution]	n.a.

Note: *t*-Statistic or *p*-value in parentheses; [event interval in brackets].

As reported in Panel A of Table 1, the prior research consistently finds a positive appreciation in shareholder wealth at contest announcement. For example, in their study of 96 contests from the 1962–1978 period, Dodd and Warner (1983) find that in the period from 60 days prior to announcement through the day of announcement, the cumulative abnormal return for the sample firms is 11.9%. Dodd and Warner (1983, pp. 422 and 423) note that the formal date of contest announcement is often preceded by substantial dissident activity, suggesting that the appropriate event date is actually earlier than the formal announcement date. DeAngelo and DeAngelo (1989, p. 40) confirm this point by finding a cumulative abnormal return of 18.76% in the period from 40 days prior to through the date of *initial dissident activity* and smaller abnormal returns around the date of the actual contest announcement.

For the full-contest period, prior research has also found a positive and significant appreciation in shareholder wealth. For example, Dodd and Warner report a cumulative abnormal return of 8.2% in the period from 60 days prior to contest announcement to the resolution of the contest. Research by DeAngelo and DeAngelo (1989) as well as Borstadt and Zwirlein (1992) report similar findings for samples with data extending into the 1980s.

Although the results for contest announcement and the full-contest period suggest that proxy contests benefit shareholders, the reported behavior of stock returns following contest announcement tempers such conclusions. Dodd and Warner report a significantly negative cumulative abnormal return of  $-4.3\%$  ( $t = -2.63$ ) in the period between contest announcement and contest resolution. Ikenberry and Lakonishok (1993) report an even larger decline in shareholder wealth of  $-17.24\%$  in the period from five months to 24 months following contest announcement. Borstadt and Zwirlein also report a negative drift in abnormal returns following proxy contests.

One plausible source of the post-announcement reversal in stock returns is the subset of contests in which dissidents do not attain seats. However, as reported in Panel B of Table 1, Dodd and Warner find (1983) that the post-announcement decline in shareholder wealth is more severe for contests in which dissidents gain seats. Moreover, Ikenberry and Lakonishok (1993) report a post-contest cumulative abnormal return of  $-28.57\%$  for the 50 firms in their sample in which dissidents attain seats, as compared to an insignificant change in shareholder wealth following contests in which incumbents retain all seats. The significantly negative change in shareholder wealth for the subsamples in which dissidents gain seats questions the depiction of proxy contests presented by the theory of the firm.

Dividing the data according to whether dissidents attain seats does not directly address whether proxy contests ferret out poorly performing managers. As posed by Alchian and Demsetz (1972, p. 96, emphasis added), ‘The question is the probability of the *replacement of management* if it behaves in ways not

acceptable to the majority of shareholders'. Hence, an alternative gauge of success is whether senior management is replaced following a proxy contest. Consistent with the importance of management turnover, Ikenberry and Lakonishok (1993) report that their confounding finding of negative post-contest abnormal returns for the subsample of contests where dissidents attain seats is driven by the cases in which incumbent management remains in place following the contest. However, Ikenberry and Lakonishok (1993) report no effect of management turnover on post-contest abnormal returns for the subsample where dissidents fail to win seats. This latter result is surprising, as DeAngelo and DeAngelo (1989) note that senior management is often replaced even when incumbent directors retain all seats in a proxy contest.

Duvall and Austin (1965), (fn. 5) elaborate on the point that attaining seats is an arbitrary measure of contest success and note that the central issue is whether the contest spurs major changes at the target firm. They relate the case of a 1957 contest involving General Realty and Utilities Corporation in which the dissidents argued that the firm should be liquidated. Although the dissidents were unsuccessful in gaining control of the board, the incumbent management itself liquidated the firm a year later.

DeAngelo and DeAngelo (1989) more systematically investigate the liquidation and sale of firms experiencing proxy contests. As reported in Panel C of Table 1, they find that the 15 firms for which subsequent sale of the firm could be linked to dissident activity had a cumulative abnormal return of 15.16% for the full-contest period, compared to a cumulative abnormal return of only 2.90% for the 45 firms with no record of a dissident-linked sale of the firm. Borstadt and Zwirlein (1992) show that the post-contest equity performance of their sample firms is also affected by whether the firms are subsequently acquired, although they differ from DeAngelo and DeAngelo (1989) by arguing that the shareholder wealth appreciation that is associated with proxy contests is not solely driven by the contests in which the target firms are acquired.

### *2.1. Proposed analysis*

Taken as a whole, the prior empirical research on proxy contests has produced ambiguous results. As predicted by the theory of the firm, proxy contests occur at poorly performing firms and the announcement of contests is associated with shareholder wealth appreciation. However, in results that contradict theory, past research finds that shareholder wealth declines following contest announcement, with the largest declines occurring when dissidents gain seats. Some evidence suggests that contest success should be gauged not by whether dissidents attain seats but by specific corporate changes such as management turnover or sale of the target firm, but the past research is inconclusive as to whether shareholders benefit in proxy contests that are not accompanied by

outright takeovers or when dissidents do not attain seats but senior management is replaced. Finally, the results of past research may be moot and not applicable to current policy issues, given the changes in the corporate governance environment in recent years (Pound, 1992; Sharara and Hoke-Witherspoon, 1993).

We clarify and extend the prior empirical research with a sample of 270 contests for board seats from the 1979–1994 period. The bulk of our analysis revisits the shareholder wealth effects of proxy contests. Our sample is twice as large as any prior study, an aspect that is important for statistical tests, especially because we wish to examine differences between sub-samples based on factors such as whether dissidents attain seats and whether senior management is replaced. Moreover, a majority of the contests in our sample comes from a period not previously studied in past research, thus mitigating concerns about data snooping. The lengthy time period of our sample also allows us to address whether the impact of proxy contests has changed over time in response to the changing corporate governance environment.

One specific focus of our analysis is the interaction between proxy contests and outright takeover bids. We document a growing complementarity of proxy contests and takeover bids in the latter half of the 1980s and find that the greatest appreciation in shareholder wealth occurs at target firms that are acquired in the period proximate to the proxy contest. We further show that this interaction between proxy contests and takeover bids raises issues of selection bias for studies that fail to account for takeover attrition.

Our analysis also extends the prior research on the link between management turnover and shareholder wealth gains in proxy contests by delving into reasons why management turnover is a beneficial outcome of proxy contests. In particular, we examine the degree to which management turnover is associated with corporate change such as asset sales, restructuring, and downsizing.

### 3. The proxy contest sample

Our sample comprises 270 proxy contests for board seats in the 1979–1994 period. We use two data sources to create the sample: contests in the 1979–1989 period are derived from the list of proxy solicitations (Schedule 14b) filed with the Securities and Exchange Commission (SEC) while contests in the 1990–1994 period are taken from the Proxy Fight Database of the Securities Data Company (SDC). For each of these data sources, we exclude firms not having stock returns on the Center for Research in Security Prices (CRSP) files on NYSE/Amex or Nasdaq firms. We also drop proxy solicitations that are not for board seats and firms with no mention of the occurrence of a contest in the *Wall Street Journal* or on the *Dow Jones News Retrieval Service*. The Appendix provides more detail on our sample formation procedure.



Table 2  
Annual occurrence of sample contests

This table reports the annual incidence of the sample contests. The year for each contest is based on the initiation date of the contest. Equity Value is the mean value per year in millions of 1983 dollars and is computed from closing prices and the number of shares outstanding reported on CRSP 40 days prior to the initiation of the contest. Contests are classified as being accompanied by a takeover bid if the target firm was the object of an ongoing tender offer, merger, or leveraged buyout by the dissident or a third party in the period from 20 days prior to the initiation of the contest through one year following the resolution of the contest.

Year	Full sample		No takeover bid		Accompanying takeover bid	
	# Contests	Equity Value	# Contests	Equity Value	# Contests	Equity Value
1979	10	72.8	8	83.4	2	30.3
1980	12	86.0	9	72.7	3	125.8
1981	11	58.0	7	56.8	4	60.1
1982	13	74.9	11	84.6	2	22.0
1983	13	144.4	7	198.5	6	81.3
1984	13	359.6	6	487.5	7	249.9
1985	19	199.2	10	123.2	9	283.5
1986	16	155.9	6	126.9	10	173.3
1987	20	598.4	9	323.4	11	823.4
1988	28	676.6	14	804.1	14	549.2
1989	37	492.0	19	288.2	18	707.1
1990	25	465.4	13	177.3	12	777.5
1991	12	669.2	9	789.1	3	309.5
1992	17	282.9	13	353.3	4	54.3
1993	10	131.4	7	54.2	3	311.5
1994	14	326.2	6	58.5	8	526.9
All	270	354.3	154	281.3	116	451.2

Table 2 reports the annual occurrence of the sample contests. The 270 contests in the 16-year sample period imply an average of 17 contests per year. For the first five years of the sample, 1979 to 1983, the annual number of contests is below this average, ranging from ten to 13. The annual number of contests increases in the second half of the 1980s and peaks at 37 contests in 1989. From this level, the rate of contests declines in the 1990s, averaging 16 contests per year in the 1990–1994 period.

Our sample size of 270 contests for board seats is larger than that in prior studies. This stems in part from the inclusion of more recent years in our analysis. The most recent year covered in past analysis is 1987 by the Ikenberry and Lakonishok (1993) study. For the years 1988–1994, we have a total of 143

contests. Hence, a majority (53%) of our sample comes from years not previously analyzed.

Moreover, even in years that overlap with prior research, our sampling procedure derives a larger number of contests. Consider the data below:

Prior study	Period of overlap	# Contests in prior study	# Contests in current study
DeAngelo and DeAngelo (1989)	1979–1985	55	91
Borstadt and Zwirlein (1992)	1979–1986	63	107
Ikenberry and Lakonishok (1993)	1980–1987	54	117

One reason for the greater number of contests in our sample is that we employ the complete Schedule 14b list from the SEC. Another reason is that we supplement the NYSE/Amex listings used by DeAngelo and DeAngelo (1989) and Borstadt and Zwirlein (1992) with Nasdaq listings that are now more readily available on CRSP. A further reason that we have more contests than Ikenberry and Lakonishok (1993) is that our sampling procedure only requires that the firm be listed on CRSP while Ikenberry and Lakonishok (1993) impose the additional requirement that the firm be listed on Compustat.

### 3.1. Attributes of the sample contests

Table 3 reports descriptive statistics of the proxy contest sample. This information allows us to benchmark the characteristics of the contests in our sample relative to prior research and to determine the extent to which the underlying attributes of the sample firms change over time. Details regarding the material used to determine the attributes of the sample contests are reported in the Appendix.

To study proxy contests over time, Table 3 also reports data for three subperiods: 1979–1983, 1984–1989, and 1990–1994. The analysis of separate time periods addresses whether the nature of proxy contests has changed in response to alterations in the underlying corporate governance environment as evidenced by judicial decisions such as the validation of poison pills [*Moran v. Household International, Inc.*, 500 A.2d 1346 (Del. 1985)] and second-generation control share statutes [*CTS Corporation v. Dynamics Corporation of America*, 481 U.S. 69 (1987)]. The specific years for the subperiod analysis are motivated by the fact that 1984 marks the first occurrence of a poison pill at a sample firm and 1989 spells the decline of an active market for corporate control documented by Comment and Schwert (1995). The separate analysis of the

Table 3  
Summary statistics for the proxy contest sample

This table reports descriptive statistics for the 270 contests for board seats comprising our sample and for three sub-samples partitioned by time period. Section 2 of the Appendix provides definitions of the variables reported in Panels B and C.

	Full sample	Subsamples by time period			
		1979–1983	1984–1989	1990–1994	
<i>Panel A. The sample</i>					
# of Contests	270	59	133	78	
Mean equity value (\$1983)	\$354 mil	\$89 mil	\$452 mil	\$389 mil	
<i>Panel B. Attributes of the sample contests</i>					
Steady dividend	35%	36%	35%	33%	
Median dissident stake	9.1%	9.8%	9.6%	7.6%	
Contest type:					
Full control	68%	64%	70%	67%	
Partial control	32%	36%	30%	33%	
Accompanying takeover Bid					
Yes	43%	29%	52%	38%	
No	57%	71%	48%	62%	
Poison pill	39%	0%	42%	62%	
<i>Panel C. Governance results of the contests</i>					
Dissidents attain seats					
Yes	52%	56%	50%	51%	
No	48%	44%	50%	49%	
Management turnover					
Yes	61%	61%	62%	58%	
No	39%	39%	38%	42%	
Acquired					
Yes	23%	19%	27%	21%	
No	77%	81%	73%	79%	

1990–1994 period also controls for the use of two different source materials, the SEC and SDC.

Prior research finds that firms experiencing proxy contests exhibit poor performance. Consistent with these findings, the firms in our sample have a poor

record of paying dividends. As reported in Panel B of Table 3, only 35% of the sample firms pay a steady dividend in the period from three years prior to two years following the contest. Thirty-nine percent of the sample firms pay no dividend at all during the period surrounding the contest, 20% omit a dividend in the three years prior to the contest, and 6% omit a dividend within the two years following the contest. The dividend record of the sample firms is similar across the three subperiods reported in Table 3. DeAngelo and DeAngelo (1990, pp. 1417 and 1418) cite evidence that 'annual dividend decreases are uncommon, with increases surpassing decreases by a factor of 15 or 20 to one'. The fact that only one-third of our sample firms pay a steady dividend indicates substandard performance.

In our sample, dissidents accumulate a sizable fraction of the common stock of the target firms, with a median dissident stake (reported in Table 3) of 9.1%. This stake ranges between 7.6% and 9.8% across time periods. The dissident stake is comparable to the 10% figure reported in prior studies such as Borstadt and Zwirlein (1992) and Ikenberry and Lakonishok (1993).

Proxy contests are routinely classified according to the fraction of seats sought by the dissidents. As reported for our sample in Table 3, dissidents seek to attain a majority or more of the total board seats of the target firm roughly two-thirds of the time. The fraction of contests for full control is similar across time periods and resembles the rate reported in prior research.

Table 3 also indicates that 43% of the sample contests are accompanied by an outright takeover bid. This fraction varies across time periods, ranging from 29% in the 1979–1983 period to 52% in the 1984–1989 period. This variation is consistent with the view that the changing corporate governance environment has induced a growing complementarity between proxy contests and outright takeover bids. As further evidence of an alteration in the underlying governance environment, Table 3 reports an increase over time in the fraction of firms having a poison pill from zero in the 1979–1983 period to 42% in the 1984–1989 period. By the 1990s, 62% of the firms in the sample employ a poison pill at the time of the contest.

### *3.2. Governance results of the contests*

Panel C of Table 3 reports information on the governance results of the sample contests. A commonly reported statistic is the fraction of cases in which dissidents attain seats. In our sample, dissidents gain seats roughly half of the time. This rate is similar across time periods and resembles that reported in prior research.

We also examine actual changes at target firms by measuring the rate at which the most senior officer, normally the CEO, is replaced and the fraction of cases in which the target firm is acquired proximate to the proxy contest. We find that the senior officer is replaced 61% of the time, with similar rates of

management turnover in the three subperiods. For the full sample, 23% of the firms are acquired, with the greatest rate of acquisition, 27%, occurring in the 1984–1989 period.

#### 4. Shareholder wealth effects of proxy contests

In this section, we address the question of whether proxy contests create value. We employ event-study analysis to measure the effect of the proxy contests in our sample on shareholder wealth. In the event analysis, Day 0 is the date of contest initiation as determined by the earlier of (i) the date of the report of initial dissident activity in the *Wall Street Journal* or on the *Dow Jones News Retrieval Service* or (ii) the filing date of a Schedule 14b proxy solicitation at the SEC (or the filing date reported by SDC for the 1990–1994 contests).

Following conventional procedures, our basic empirical analysis estimates the market model over the period from 170 to 21 days prior to contest initiation and then uses the parameters from the estimated model to calculate cumulative abnormal returns (CARs) for several periods surrounding the proxy contest. The event windows include the *initiation period* from 20 days prior through five days following the initiation of dissident activity, the *post-initiation period* of six days following initiation through contest resolution, the *full-contest period* encompassing 20 days prior to initiation through contest resolution, and the *post-contest period* of one year following the contest. To measure statistical significance, *z*-statistics are computed from standardized prediction errors. We also report the percentage of negative CARs and the average number of days in each event window.

Recent research by Barber and Lyon (1997) and Kothari and Warner (1997) poses concerns regarding the application of conventional event-study procedures to the analysis of lengthy event windows. Since our analysis includes the estimation of shareholder wealth effects in the one year following proxy contests, we examine the sensitivity of our results to different estimation procedures. For example, we compare results employing continuous compounding with simple compounding. We also compare the use of a market index with a size-based index. Finally, we follow Barber and Lyon (1997) by also measuring post-contest abnormal performance using a matched-firm, buy-and-hold analysis.

Barber and Lyon (1997, pp. 356 and 357) and Kothari and Warner (1997, pp. 304 and 305) also caution that performance measurement can be sensitive to the survivorship bias that arises from minimum data requirements such as the imposition that the sample firms be listed on Compustat. The extent of the problem and the direction of the bias are functions of the distribution of the firms in the database used to generate the sample (e.g., Compustat data

availability) and the distribution of the firms in the comparison index (e.g., a CRSP-based index). To examine the sensitivity of our results to minimum data requirements, we also estimate shareholder wealth effects for subsamples of firms listed on Compustat in various years proximate to the proxy contest.

#### 4.1. Wealth effects for the full sample

Panel A of Table 4 reports the shareholder wealth effects for the full sample of 270 proxy contests when stock returns are computed from continuous compounding and the market index is the CRSP equally weighted index. On

Table 4  
Shareholder wealth effects around proxy contests: full sample analysis

This table reports cumulative abnormal returns (CARs) for the full sample of 270 proxy contests. Day 0 is the date of contest initiation as determined by the earlier of (i) the date of the report of initial dissident activity in the *Wall Street Journal* or on the *Dow Jones News Retrieval Service* or (ii) the filing date of a Schedule 14b proxy solicitation at the Securities and Exchange Commission (or the filing date reported by the Securities Data Company for the 1990–1994 contests). The resolution date is the conclusion of the contest as determined from media sources. Because four firms do not trade following contest resolution, the number of observations in the post-contest period is 266. Panel A reports CARs determined from continuous compounding using the CRSP equally weighted index as the market index. Panel B reports CARs determined from simple compounding rather than continuous compounding. Panel C reports CARs with the index based on similar-sized firms rather than the CRSP equally weighted index. *z*-Statistics are computed from standardized prediction errors. Each cell also reports the fraction of negative CARs and the average number of days in the event window.

Sample [ # contests]	Mean CAR (%), <i>z</i> -statistic, % negative, average days in window			
	Initiation ( – 20, + 5)	Post-initiation ( + 6,resolution)	Full contest ( – 20,resolution)	Post-contest (1 y post resolution)
A. Continuous compounding	8.04	– 2.82	5.35	– 3.43
	10.7	– 0.87	5.80	– 1.93
	34.4	50.7	40.7	52.2
	26	66	91	225
B. Simple compounding	8.42	– 2.94	5.60	– 1.65
	11.6	– 0.08	7.04	– 0.82
	35.5	50.7	40.0	54.1
	26	66	91	225
C. Size index	8.55	– 2.56	6.11	– 0.71
	11.6	– 0.21	6.94	– 0.25
	31.8	50.0	38.9	50.3
	26	66	91	221

average, the market responds favorably to the initiation of the contests in our sample – the average abnormal return in the initiation period is 8.04% ( $z = 10.7$ ). Between initiation and resolution of the contest, there is a negative, but insignificant, abnormal return of  $-2.82\%$  ( $z = -0.87$ ), reducing the average abnormal return to 5.35% ( $z = 5.80$ ) for the full-contest period. In the year following the contest, the abnormal return is  $-3.43\%$  but is less than two standard deviations from zero.

To examine the sensitivity of the results to the estimation model, Panel B of Table 4 reports the results employing simple compounding rather than continuous compounding. For the initiation period and the full-contest period, the CARs are slightly greater under simple compounding than under continuous compounding, which is consistent with analysis of event-study methodology by Seyhun (1993) showing cases in which continuous compounding generates less positive CARs relative to those estimated using simple compounding. The post-contest CAR estimated under simple compounding is half the magnitude of the post-contest CAR estimated employing continuous compounding, which is consistent with comparisons made by Barber and Lyon (1997), (p. 350). But while the differences between simple and continuous compounding are qualitatively consistent with recent methodological research, the statistical significance of the estimates and the inferences to be garnered from the two estimation procedures are not appreciably different for our sample of proxy contests.

As a further sensitivity check, we follow Dimson and Marsh (1986) and estimate CARs with a model using a size-based index from CRSP rather than the CRSP equally weighted index. The results are reported in Panel C of Table 4. As with the prior two estimation methods, the CARs at contest initiation and for the full-contest period are positive and significant while the CARs between contest initiation and resolution and in the one year following the contest are negative but less than two standard deviations from zero. In Section 4.4, we perform additional sensitivity analysis by using a matched-firm, buy-and-hold analysis.

In summary, regardless of estimation method, the initiation of proxy contests is accompanied by a positive and significant increase in shareholder wealth that remains positive for the full-contest period. Moreover, we find no evidence of any significant decline in shareholder wealth in the one year following the contest. From the evidence reported in Table 4, we conclude that, on average, proxy contests create value.

#### 4.2. *Subsamples based on Compustat*

As a further sensitivity check of the robustness of the results, we study the shareholder wealth effects of subsamples of firms listed on Compustat in the period proximate to the proxy contest. This analysis is motivated by the recent

work of Barber and Lyon (1997) and Kothari and Warner (1997) which raises concerns that minimum data requirements can significantly affect performance measurement. One standard concern is that the requirement that a sample firm be listed on Compustat over a particular time period imparts a positive survivorship bias on performance measurement. In our analysis of proxy contests, however, there is reason to believe that the requirement that a firm be listed on Compustat leads to a *downward* bias in estimated wealth changes. This downward bias occurs because the Compustat requirement excludes many firms that are acquired in the period surrounding the proxy contest and thereby do not 'survive' to report accounting data for the year of or the year following the contest.

To illustrate the potential bias, we first compare the size of our full sample with subsamples based on Compustat data availability, with data availability determined by a nonzero value for assets. Our full sample has 270 contests. Imposing the restriction that the firm have data available on Compustat in the year prior to and the year of contest initiation reduces the sample size to 208 contests. The additional restriction that the firm have data available on Compustat in the year following contest initiation further reduces the sample size to 186 contests, a loss of nearly one-third of the original size.

While the loss of observations is not necessarily a source of bias, in our sample the reduction in sample size is nonrandom, being weighted toward acquired firms. For the full sample and the two subsamples based on Compustat restrictions, we compare the fraction of firms that were the object of a takeover bid and further partition the takeover-bid subsample according to whether the firm was acquired:

	Full sample	Compustat [ – 1,0]	Compustat [ – 1,0, + 1]
% With no takeover bid	57	63	69
% With takeover bid	43	37	31
% Acquired	23	15	6
% Not acquired	20	22	25

These data confirm that the restriction that a firm be listed on Compustat in the period proximate to the proxy contest has a nonrandom effect on the makeup of sample contests. In particular, the Compustat restriction reduces the fraction of sample firms that are acquired in the period surrounding the proxy contest. For example, while 23% of the firms in the full sample are acquired in the period surrounding the proxy contest, only 6% of the firms are acquired in the subsample restricted to firms listed on Compustat in the year prior to, the year of, and the year following contest initiation.

To examine the effects that the Compustat minimum data requirements actually have on performance measurement, Table 5 reports the shareholder



Table 5

Shareholder wealth effects around proxy contests: samples based on Compustat

This table reports cumulative abnormal returns (CARs) for samples of proxy contests taken from firms with data available on Compustat, with data availability determined by a nonzero value for assets in particular years surrounding the proxy contest. Event windows are defined in Table 4. Panel A reports CARs determined from continuous compounding and simple compounding for the 208 sample firms with Compustat data available in the year before and the year of contest initiation. Panel B reports CARs determined from continuous compounding and simple compounding for the 186 sample firms with Compustat data available in the year before, the year of, and the year following contest initiation. *z*-Statistics are computed from standardized prediction errors. Each cell also reports the fraction of negative CARs and the average number of days in the event window.

Sample [ # contests]	Mean CAR (%), <i>z</i> -statistic, % negative, average days in window			
	Initiation ( – 20, + 5)	Post-initiation ( + 6, resolution)	Full contest ( – 20, resolution)	Post-contest (1 y post resolution)
<i>Panel A. Firms on Compustat in years – 1, 0 [N = 208]</i>				
A.1. Continuous compounding	7.18	– 4.32	2.93	– 4.78
	8.61	– 1.82	3.60	– 1.84
	35.6	52.2	42.3	53.6
	26	71	96	238
A.2. Simple compounding	7.36	– 4.65	2.79	– 3.17
	9.29	– 1.12	4.56	– 0.89
	37.0	51.7	41.8	56.0
	26	71	96	238
<i>Panel B. Firms on Compustat in years – 1, 0, + 1 [N = 186]</i>				
B.1. Continuous compounding	6.00	– 6.00	0.11	– 8.74
	6.21	– 2.62	1.67	– 2.65
	38.2	55.2	45.2	54.0
	26	73	97	245
B.2. Simple compounding	6.04	– 6.04	– 0.25	– 6.97
	6.64	– 1.87	2.53	– 1.65
	39.2	54.6	44.6	56.7
	26	72	97	245

wealth effects for the subsamples based on Compustat data availability. For the purpose of sensitivity analysis, we report CARs estimated from both continuous and simple compounding.

Panel A of Table 5 reports the results for the 208 firms with Compustat data available in the year prior to and the year of contest initiation. Under both

continuous compounding and simple compounding, the CAR averages 7%, which is one percentage point less than that for the full sample. Between contest initiation and resolution, the CAR is more negative than for the full sample. Hence, the CAR for the full-contest period is less than 3%, roughly half the magnitude of that for the full sample. The post-contest CAR for the sample of 208 firms is negative but less than two standard deviations from zero.

Panel B of Table 5 reports the results for the sample of 186 firms with Compustat data available in the year prior to, the year of, and the year following contest initiation. As one might expect, the performance of this subsample is measurably worse than for the full sample. The increase in shareholder wealth of 6% at contest initiation is matched by a comparable 6% decline between contest initiation and contest resolution. Hence, the CAR for the full-contest period is effectively zero. The CAR in the post-contest period is negative and large in absolute terms, with the CAR measured from continuous compounding being more than two standard deviations from zero.

These results confirm that minimum data requirements can affect the inferences taken from performance measurement. Because of the exclusion of a sizable number of firms acquired in the period proximate to the proxy contest, the Compustat subsamples experience a reversal in abnormal returns between contest initiation and contest resolution. Moreover, the Compustat subsamples, especially the subsample requiring data in the year following contest initiation, show evidence of a further post-contest decline in shareholder wealth.

This evidence may explain why we fail to find, in our full sample, the significant post-contest decline in shareholder wealth previously reported by Ikenberry and Lakonishok (1993). Because they also wished to analyze accounting performance surrounding proxy contests, Ikenberry and Lakonishok (1993, p. 408) imposed the requirement that ‘Companies not followed by Compustat were removed from the sample’. At a minimum, this data requirement reduces the available sample size (as noted above, for the years in which we can compare samples, our sample size is more than twice as large as that of Ikenberry and Lakonishok). Further, at least for our sample, the effects of the reduction in sample size are nonrandom and disproportionately remove firms that are acquired in the period surrounding the proxy contest. Finally, the results in Table 5 suggests that the minimum data requirements have a measurable effect on the estimates of the performance of proxy contests.

#### *4.3. Further analysis of post-contest wealth effects*

As a further sensitivity check and to provide additional evidence on the effect of minimum data requirements, we estimate post-contest performance by employing a matched-firm, buy-and-hold analysis. Matching follows Barber and

Lyon (1997). The CRSP NYSE/Amex/Nasdaq tape is first scanned for every firm that is between 80% and 120% of each sample firm's equity value as of 40 days prior to each firm's event date. The market-to-book ratio of each of these potential matching firms is then taken from Compustat as of the year prior to the initiation of the contest. The actual match is the firm with the ratio closest to the sample firm.

The market-to-book ratio is measured as the ratio of market value of equity to book value of equity. When book equity for sample firms is missing from Compustat, values are taken from *Moody's Manuals* and *S&P Stock Reports* (when available). From the full sample of 270 contests, 11 firms cannot be included in the matched-firm analysis because seven have missing or non-positive book equity values and four do not trade in the post-contest period.

Estimates from the matched-firm, buy-and-hold analysis of the post-contest change in shareholder wealth are reported in Table 6. Panel A reports the results for all 259 firms having book equity data as well as returns data in the post-contest period. The abnormal wealth change is  $-7.45\%$ , although the estimate is less than two standard deviations from zero. These results resemble the estimates reported in Table 4 that employed conventional analyses of post-contest performance.

To assess the effect of Compustat data requirements on the analysis, Panel B of Table 6 partitions the results according to Compustat data availability in the year following the contest (i.e., the period being analyzed by the returns data). For the 181 firms with Compustat data available in the year following the contest, the abnormal wealth change is  $-9.38\%$  ( $z = -1.70$ ). By comparison, the results for the firms without Compustat data available in the year following the contest are smaller in magnitude, with an abnormal wealth change of  $-2.99\%$  ( $z = -0.53$ ).

Although neither estimate in Panel B is more than two standard deviations from zero, the results resemble those reported in Table 5; the requirement that the firms be listed on Compustat imparts a downward bias on the estimation of shareholder wealth effects, arguably because of the exclusion of acquired firms. In the particular implementation of matched-firm analysis that employs book equity values, these results indicate that the researcher should take care to supplement data from Compustat with data available in sources such as *Moody's* and *Standard & Poor's*, or else the analysis can exclude firms acquired in the period surrounding the event under question. More generally, these results further point to successful acquisitions as a source of wealth gains in proxy contests, an issue to which we now turn.

## 5. Sources of wealth changes in proxy contests

In this section, we look for the sources of value creation in proxy contests. We analyze subsamples of the 270 proxy contests according to whether the

Table 6

Post-contest shareholder wealth effects: matched-firm, buy-and-hold analysis

This table reports a matched-firm, buy-and-hold analysis of the shareholder wealth effects of a sample of proxy contests in the one year following contest resolution. Matched firms are found by first identifying all firms with a market equity value between 80% and 120% of the sample firm and then choosing from these potential matches the firm with the closest market-to-book ratio in the year prior to the contest. When book equity is missing from Compustat, values are taken from Moody's Manuals and S&P Stock Reports. From the full sample of 270 contests, 11 firms cannot be included in the matched-firm analysis because seven have missing or nonpositive book equity values and four do not trade in the post-contest period. Panel A reports results for the 259 sample firms with available data. Panel B reports results for subsamples based on whether the firm had nonzero asset value data on Compustat in the year prior to, the year of, and the year following the contest. *z*-Statistics are computed from standardized prediction errors. Each cell also reports the fraction of negative CARs and the average number of days in the event window.

Mean CAR (%), *z*-Statistic, % negative, average days in window

Sample [ # contests]	Post-contest (1 y post resolution)
<i>Panel A. Complete Sample of 259 Firms</i>	
	– 7.45
	– 1.78
	52.1
	226
<i>Panel B. Subsamples based on Compustat data availability in year -1, 0, + 1</i>	
B.1. Compustat in years	– 9.38
– 1, 0, + 1	– 1.70
[ <i>N</i> = 181]	51.9
	247
B.2. No Compustat in years	– 2.99
– 1, 0, + 1	– 0.53
[ <i>N</i> = 78]	52.6
	177

firm is a takeover target, whether dissidents attain seats, and whether the senior officer of the target firm is replaced. This analysis addresses whether the positive wealth effects in proxy contests reported in Section 4 emanate from all types of contests or instead are driven by contests that facilitate major changes such as an acquisition or a change in leadership. For comparisons across particular subsamples, such as acquired versus nonacquired takeover targets, the null hypothesis of equal mean CARs is tested with conventional *t*-tests.

In the cross-sectional analysis, we report results that employ simple compounding with the CRSP equally weighted index as the market index.

Alternative estimation procedures such as continuous compounding or size-based portfolio indexes provide similar results and are not reported in the text. For proxy contests in which a takeover bid commences prior to the initiation of an actual contest, we reestimate results using the takeover announcement as the initiation date; because the results from this procedure do not differ materially from our basic specification, they are not reported in the text.

### *5.1. Wealth effects for the contests with an accompanying takeover bid*

Panel A of Table 7 reports evidence on the wealth effects of the 116 proxy contests accompanied by a takeover bid. The shareholder wealth gain at contest announcement is 9.93% ( $z = 10.7$ ). There is an insignificant decline of 1.39% ( $z = 1.02$ ) in the period between contest initiation and resolution. Hence, the wealth appreciation for the full-contest period is positive and significant, averaging 8.71% ( $z = 7.54$ ). In the year following the contest, the average abnormal return for the takeover subsample is less than two standard deviations from zero.

Partitioning the data according to whether the acquisition attempt was successful reveals interesting, albeit understandable, differences in shareholder wealth gains. For the 63 firms that are acquired, the abnormal returns both at contest initiation and in the post-initiation period are positive and significant, resulting in an abnormal return of 20.1% ( $z = 9.49$ ) for the full-contest period. The abnormal return in the year following the resolution of the contest is 12.4% ( $z = 1.83$ ).

For the 53 firms for which the acquisition attempt is not completed, the abnormal return at contest initiation is positive and significant. However, the nonacquired targets experience an abnormal return of  $-10.81\%$  ( $z = -2.37$ ) in the post-initiation period, which is significantly less than the abnormal return for the acquired firms over the same event window ( $t = 3.30$ ). Hence, the nonacquired firms have an insignificant abnormal return for the full-contest period. The nonacquired takeover targets suffer a further decline of 23.7% ( $z = -4.18$ ) in the year following the resolution of the contest, which again is significantly less than the post-contest return of the acquired firms ( $t = 2.96$ ). The contrasting results for the acquired and nonacquired firms in the takeover-bid subsample resemble prior research on proxy contests by DeAngelo and DeAngelo (1989) as well as research on tender offers by Bradley et al. (1983). (See also Choi, 1991; Malatesta and Thompson, 1985; Marais et al., 1989; Ruback, 1988.)

### *5.2. Wealth effects for contests with no accompanying takeover bid*

Panel B of Table 7 reports the shareholder wealth effects for the 154 contests not accompanied by a takeover bid. There is a positive and significant increase

Table 7

Cross-sectional analysis of shareholder wealth effects

This table reports cumulative abnormal returns (CARs) for subsamples of proxy contests based on whether the firm was the object of a takeover bid, whether dissidents attain seats, and whether senior management is replaced. Information on the classification of contests is provided in the Appendix. Definition of the event windows is provided in Table 4. CARs are determined from simple compounding using the CRSP equally weighted index as the market index. *z*-Statistics are computed from standardized prediction errors.

Sample [ # contests]	Mean CAR (%), <i>z</i> -Statistic, % negative, average days in window			
	Initiation ( – 20, + 5)	Post-initiation ( + 6,resolution)	Full contest ( – 20,resolution)	Post-contest (1 y post resolution)
<i>Panel A. Contests with a takeover bid</i>				
Firms with an accom- panying takeover bid	9.93 10.7 31.0	– 1.39 1.02 46.0	8.71 7.54 37.1	– 4.66 – 1.54 52.7
[ <i>N</i> = 116]	26	68	92	200
Target is acquired	13.5 10.5	6.65 3.58	20.1 9.49	12.4 1.83
[ <i>N</i> = 63]	23.8 26	34.4 56	27.0 80	49.1 161
Target is not acquired	5.66 4.42	– 10.81 – 2.37	– 4.88 0.83	– 23.7 – 4.18
[ <i>N</i> = 53]	39.6 26	59.6 82	49.0 106	56.6 243
Equality of means: <i>t</i> -test of acquired vs. not acquired	1.87	3.30	3.56	2.96
<i>Panel B. Contests with no takeover bid</i>				
Firms with no accom- panying takeover bid	7.28 6.14 39.0	– 4.11 – 0.98 54.3	3.27 2.77 42.2	0.54 0.24 55.1
[ <i>N</i> = 154]	26	65	90	243
Dissidents win seats	7.99 5.16	– 3.24 – 0.36	4.88 2.60	– 1.66 – 0.72
[ <i>N</i> = 85]	36.5 26	52.4 66	36.5 89	60.0 240
Dissidents do not win seats	6.42 3.44	– 5.14 – 1.06	1.28 1.25	3.25 1.15
[ <i>N</i> = 69]	42.0 26	56.5 65	49.3 91	49.3 247

Table 7. Continued.

Sample [ # contests]	Mean CAR (%), z-Statistic, % negative, average days in window			
	Initiation (- 20, + 5)	Post-initiation (+ 6, resolution)	Full contest (- 20, resolution)	Post-contest (1 y post resolution)
Equality of means: t-test of seats vs. no seats	0.50	0.37	0.59	0.38
<i>Panel C. The interaction of management turnover and obtaining seats in contests with no takeover bid</i>				
<i>C.1. Dissidents win seats</i>				
Management turnover	7.62	1.93	9.56	2.55
	4.67	1.02	3.69	0.34
[N = 68]	35.3	48.5	30.9	55.9
	26	61	85	239
No management turnover	9.43	- 24.6	- 13.8	- 18.5
	2.20	- 2.91	- 1.56	- 2.29
[N = 17]	41.2	68.7	58.8	76.5
	26	86	107	243
Equality of means: t-test of turnover vs. no turnover	0.35	2.98	2.46	1.09
<i>C.2. Dissidents do not win seats</i>				
Management turnover	9.12	- 4.04	5.07	31.3
	2.32	- 1.34	0.67	2.88
[N = 25]	32.0	60.0	48.0	36.0
	26	45	71	248
No management turnover	4.89	- 5.76	- 0.87	- 12.7
	2.56	- 0.32	1.06	- 0.72
[N = 44]	47.7	54.5	50.0	56.8
	26	76	102	246
Equality of means: t-test of turnover vs. no turnover	0.88	0.23	0.61	2.06

of 7.28% ( $z = 5.79$ ) at contest initiation. For the full-contest period, the wealth change is also positive and significant; the CAR is 3.27% ( $z = 2.77$ ). In the year following the contest, the abnormal return is effectively zero.

A noticeable aspect of the results for the subsample without an accompanying takeover bid is that the shareholder wealth gains are not greater when dissidents attain seats. As reported in the last row of Panel B, the CARs for the 85 contests in which dissidents attain seats and the 69 contests in which dissidents do not attain seats are not significantly different in any of the four event windows. Although possibly surprising, the result that shareholder wealth gains are not distinguished by whether dissidents attain seats has been reported in prior research by Dodd and Warner (1983). These results suggest that the success of a proxy contest is not determined by the mere results of the voting but instead by whether the target firm undergoes specific changes such as the replacement of the senior officer.

To pursue the importance of management turnover, Panel C of Table 7 more closely studies the wealth effects of the 154 proxy contests not accompanied by a takeover bid. In particular, Panel C details the interaction between whether dissidents attain seats and whether the senior officer is replaced within three years of the contest.

Of the 85 contests in which dissidents win seats, reported in Panel C.1 of Table 7, management is replaced in 68 cases and is not replaced in 17 cases. For both sets of firms, the market responds favorably to the initiation of the contest. But following contest initiation, the changes in shareholder wealth differ between the two subsamples: the set of firms in which management is replaced experiences a sustained increase in shareholder wealth while the set of firms that retain incumbent management suffers a significant decline in shareholder wealth. This evidence indicates that investors anticipate that contests in which dissidents win seats will be followed by management turnover. In the minority of cases in which this expectation is not fulfilled, investors later revise their estimates of firm value downward.

Similar inferences can be taken from the 69 contests in which dissidents do not win seats, reported in Panel C.2 of Table 7. Through the full-contest period, there is no significant difference between the shareholder wealth gains of the firms that ultimately replace senior management and the firms in which incumbent management is retained. But in the one year following the contest, the 25 firms that replace senior management experience an average shareholder wealth increase of 31.3% ( $z = 2.88$ ) that is significantly greater than the wealth decline of 12.7% ( $z = -0.72$ ) of the 44 firms that do not replace senior management.

These results clarify some puzzling findings of post-contest stock return reversals reported in period research. Borstadt and Zwirlein (1992) report wealth declines following contests in which dissidents win seats, but the authors do not condition their findings on whether senior management is replaced. Our results indicate that accounting for management turnover is integral to understanding the post-contest changes in shareholder wealth. Ikenberry and Lakonishok (1993) report a wealth decline when dissidents



attain seats but note that the result is driven by contests with no management turnover. However, possibly due to a small subsample size, these authors do not find any appreciation in shareholder wealth for the contests in which the incumbent board weathers the proxy contest but the senior officer is later replaced. Hence, they fail to observe that, whether or not dissidents gain seats, wealth changes following proxy contests are greater when the senior officer is deposed.

### 5.3. *Summary of the wealth effects of proxy contests*

Our cross-sectional analysis of proxy contests reveals a straightforward chain of events. The initiation of a proxy contest is viewed favorably by the market. When the target firm is acquired, the firm experiences sustained wealth appreciation. By contrast, firms that repel a takeover bid experience a post-contest decline in value. For proxy contests not accompanied by a takeover bid, the key measure of success is whether the senior officer is replaced. In particular, regardless of whether dissidents attain seats, shareholder wealth appreciation is measurably greater when senior management is replaced. As a whole, the results indicate that proxy contests that induce corporate change are a source of gains to shareholders.

To summarize the source of wealth gains, we partition the data in a  $2 \times 2$  framework according to whether the firm is acquired and whether senior management is replaced. For each of the four possible categories, we report CARs for the full sample of contests for the period from 20 days prior to contest initiation to contest resolution and for the one year following the contest. CARs are estimated using simple compounding and the CRSP equally weighted index, although similar results obtain using other estimation procedures.

The results of this analysis are presented in Table 8. The data indicate that corporate acquisitions are the driving force behind shareholder wealth gains in proxy contests. As reported in Panel A, regardless of whether senior management is replaced, the 63 contests that induce an acquisition of the target firm are associated with a large positive increase in shareholder wealth during the full contest period. As reported in Panel B, this gain is sustained following the contest with a nonnegative post-contest change in shareholder wealth for the firms that are acquired.

For the 197 firms that are not acquired, the change in shareholder wealth is a function of whether or not senior management is replaced. As reported in Panel A of Table 8, the 122 firms that are not acquired but that replace senior management experience an abnormal wealth increase of 6.96% ( $z = 3.57$ ) in the full-contest period. By contrast, the firms that retain senior management experience a negative, insignificant change in shareholder wealth over the full-contest period. As reported in Panel B of Table 8, the firms with management

Table 8  
Summary of shareholder wealth effects

This table reports data on CARs for the full-contest period from 20 days prior to contest initiation through contest resolution and for the post-contest period of one year following the contest. The 270 proxy contests are partitioned by whether the firm is acquired and by whether the senior officer is replaced. Information on the classification of contests is provided in the Appendix. CARs are estimated using simple compounding and the CRSP equally weighted index. *z*-Statistics are computed from standardized prediction errors.

	Mean CAR (%), <i>z</i> -Statistic, % negative, average days in window	
	Management turnover	No turnover
<i>Panel A. The full-contest period [–20, resolution], Full sample [N = 270]</i>		
<i>Firm acquired</i>	18.7	23.3
	7.67	5.57
	27.9	25.0
	84	70
	[N = 43]	[N = 20]
<i>Firm not acquired</i>	6.96	– 6.96
	3.57	0.12
	37.2	53.5
	86	105
	[N = 122]	[N = 85]
<i>Panel B. The post-contest period [1 y post resolution], Full sample [N = 270]</i>		
<i>Firm acquired</i>	9.63	17.9
	1.53	1.05
	46.1	55.0
	157	170
	[N = 43]	[N = 20]
<i>Firm not acquired</i>	4.61	– 20.1
	0.35	– 3.38
	50.4	62.8
	241	246
	[N = 122]	[N = 85]

turnover have an insignificant wealth change in the year following the contest. By contrast, the firms that do not replace management experience a negative and significant wealth change of – 20.1% ( $z = -3.38$ ) in the post-contest period.

To determine the robustness of our findings, we repeat the analysis for three different time periods: 1979–1983, 1984–1989, and 1990–1994. As reported

earlier in Table 3, the primary distinguishing feature across these time periods is the rate of accompanying takeover bids, which varies from 29% in the 1979–1983 period to 52% in the 1984–1989 period.

The results of this subperiod analysis are reported in Table 9. The CARs are for the period from 20 days prior to contest initiation through one year following the contest. In all sub-periods, the qualitative ordering across the partitions resembles that of the full sample. The bulk of shareholder wealth gains stems from the target firms that are acquired. Moreover, the worst performance obtains in the firms that are neither acquired nor replace senior management.

As a whole, these results support the view that proxy contests play an active role in monitoring the performance of US corporations by complementing outright takeover bids and by removing poorly performing managers. The following section further develops the role of proxy contests by examining why management turnover is an important outcome.

## 6. The interaction of management turnover and corporate restructuring

The analysis of shareholder wealth confirms the inferences of DeAngelo and DeAngelo (1989) that replacement of senior management is an important feature of proxy contests. To further pursue why management turnover is an important outcome, we gather information on the restructuring activity in the three years following the contest of the sample of 207 firms that were not acquired in the period proximate to the proxy contest and cross-tabulate the restructuring results with management turnover. To measure corporate restructuring, we assess whether the firm liquidates, sells a major division(s), sells assets representing 10% or more of asset value, or otherwise downsizes as evidenced by plant closings or a substantial write-down of assets. The classification of corporate restructuring relies on information from a variety of sources including annual reports (especially the president's letter), stories in the *Wall Street Journal* and other financial media, and *Moody's* and *Standard & Poor's* publications.

The results of the analysis of the interaction between management turnover and corporate restructuring are presented in Table 10. As reported in Panel A for the full sample, there is a direct relation between management turnover and corporate restructuring. Seventy-one percent of the 122 firms with management turnover engage in corporate restructuring, compared to only 45% of the 85 firms that do not replace senior management. A chi-square test rejects the null of no association between management turnover and corporate restructuring.

Our results on the interaction of management turnover and corporate restructuring are consistent with Boot's (1992) model in which the replacement of management enforces optimal divestiture decisions. The results also support

Table 9  
Shareholder wealth effects by subperiod

This table reports results on shareholder wealth effects for three time periods: 1979–1983, 1984–1989, and 1990–1994. CARs are for 20 d prior to contest initiation through one year following the contest. In each subperiod, proxy contests are partitioned by whether the firm is acquired and by whether the senior officer is replaced. Information on the classification of contests is provided in the Appendix. CARs are estimated using simple compounding and the CRSP equally weighted index. *z*-Statistics are computed from standardized prediction errors.

	Mean CAR (%), <i>z</i> -Statistic, % negative, average days in window	
	Management turnover	No turnover
A. 1979–1983 [ <i>N</i> = 59]		
<i>Firm acquired</i>	57.1 3.75 12.5 229 [ <i>N</i> = 8]	23.6 1.31 66.7 289 [ <i>N</i> = 3]
<i>Firm not acquired</i>	13.6 1.68 39.3 328 [ <i>N</i> = 28]	3.01 0.47 45.0 344 [ <i>N</i> = 20]
B. 1984–1989 [ <i>N</i> = 133]		
<i>Firm acquired</i>	15.6 4.81 33.3 227 [ <i>N</i> = 27]	27.9 2.19 22.2 196 [ <i>N</i> = 9]
<i>Firm not acquired</i>	10.3 1.42 41.1 332 [ <i>N</i> = 57]	– 48.8 – 3.69 56.1 363 [ <i>N</i> = 40]
C. 1990–1994 [ <i>N</i> = 78]		
<i>Firm not acquired</i>	37.4 3.01 37.5 222 [ <i>N</i> = 8]	62.8 3.58 37.5 272 [ <i>N</i> = 8]
<i>Firm not acquired</i>	12.0 0.52 48.6 318 [ <i>N</i> = 37]	– 10.7 – 1.36 60.0 339 [ <i>N</i> = 25]

Note: 20 d prior to initiation through one year following resolution.

Table 10  
Interaction of management turnover and corporate restructuring

This table reports the interaction between management turnover and corporate restructuring for the 207 sample firms not acquired proximate to the proxy contest and for three subsamples based on time period. The determination of management turnover is defined in the Appendix. Corporate restructuring is defined as complete liquidation, sale of a major division(s), sale of assets representing 10% or more of asset value, or other downsizing as evidenced by plant closings or a substantial write-down of assets. The chi-square statistic tests the null of no association between management turnover and corporate restructuring (*p*-values are in parentheses).

		Restructuring			Chi-square
		No	Yes	% Restructuring	
<i>Panel A. Full Sample (N = 207 firms not acquired)</i>					
Management turnover	No	47	38	45%	14.82 (0.000)
	Yes	35	87	71%	
<i>Panel B. Subperiod Analysis</i>					
<i>B.1. 1979–1983 (N = 48 firms not acquired)</i>					
Management turnover	No	14	6	30%	11.32 (0.001)
	Yes	6	22	79%	
<i>B.2. 1984–1989 (N = 97 firms not acquired)</i>					
Management turnover	No	19	21	53%	2.53 (0.112)
	Yes	18	39	68%	
<i>B.3. 1990–1994 (N = 62 firms not acquired)</i>					
Management turnover	No	14	11	44%	4.28 (0.039)
	Yes	11	26	70%	

a generalization in the strategy literature that ‘a precondition for almost all successful turnarounds is the replacement of the current top management of the business in question’ Hofer (1980, p. 25).

The results are also consistent with related research that more generally analyzes the causes and effects of management turnover. Studying the later divestitures following a series of acquisitions made in the 1971–1982 period, Weisbach (1995) finds that the probability of divesting poorly performing assets increases after a management change. Studying the subsequent behavior of firms experiencing management turnover in the 1984–1989 period, Denis and Denis (1995, Table 7) document a substantial amount of restructuring activity. Similarly, in analysis of the 1983–1989 period, Denis and Serrano (1996) find that

a significant number of firms that repel the raider in a hostile takeover contest still experience a change in senior management and also engage in post-contest asset restructuring.

To examine whether the relation between management turnover and corporate restructuring varies over time, Panel B of Table 10 reports the cross-tabulation results for three time periods: 1979–1983, 1984–1989, and 1990–1994. Consistent with the results for the full sample, management turnover is associated with a greater likelihood of restructuring in each of the three subperiods.

One noticeable difference across subperiods, however, is the rate of restructuring in the 1984–1989 period for the firms not experiencing management turnover. In this period, which is marked by the greatest rate of outright takeover bids, over half of the firms without management turnover still engage in corporate restructuring. These results resemble findings of Mikkelsen and Partch (1997) showing that the market for managers faced more discipline during the high takeover activity of the 1984–1988 period compared to the relatively lower takeover activity of the 1989–1993 period.

## **7. Summary and implications**

Proxy contests for board seats have long been a part of the market for corporate control in the US. Due to their widespread use, proxy contests have also been the focus of substantial theoretical and empirical research. The theory of the firm (e.g., Alchian and Demsetz, 1972; Manne, 1965) depicts the proxy contest as an integral component of the control devices disciplining management. Motivated by this theory, a number of papers have studied the causes and effects of proxy contests. Consistent with the theory of the firm, prior research has found that proxy contests occur at poorly performing firms and that the announcement of a proxy contest is associated with a significant increase in shareholder wealth. However, prior research has also documented shareholder wealth declines following proxy contests, with the greatest post-contest wealth decline occurring in contests in which dissidents attain seats.

We resolve many of the ambiguous findings of the prior research. Our results indicate that, on average, proxy contests create value. The bulk of the shareholder wealth gains arise from firms that are acquired in the period surrounding the contest. In related findings, we show that the requirement that a firm be listed on Compustat in the period proximate to the proxy contest imparts a downward bias on the estimated performance effects of proxy contests because such a requirement excludes a sizable fraction of the firms acquired during the proxy contest. For firms that are not acquired, we show that the occurrence of management turnover has a significant, positive effect on shareholder wealth relative to the firms that do not replace senior management. We further show

that one reason that management turnover is an important outcome is that firms replacing management are more likely to engage in restructuring following the contest.

Our results on the important complementary role between proxy contests and outright takeover bids can be viewed as one realization of Roe's (1993, p. 393) prediction of the use of 'a new technology to overcome the [growing trend in] antitakeover laws'. In effect, proxy contests can turn a hostile tender offer into a friendly deal by removing incumbent management who might otherwise use the terms of poison pills or the provisions in state laws to block an acquisition. The ability of proxy contests to facilitate tender offers suggests one reason for Comment and Schwert's (1995) finding that the growing occurrence of hurdles to tender offers did not systematically deter corporate control transactions in the 1980s.

In addition to contributing to the policy debate on the corporate control market, our results also have implications for the broader study of the performance effects of corporate events. Consistent with recent analysis by Barber and Lyon (1997) and Kothari and Warner (1997), we show that sampling procedure is quite important in the study of proxy contests. In particular, the requirement that a firm be listed on Compustat in the year before through the year after a proxy contest imparts a significant downward bias in the estimation of the shareholder wealth effects of proxy contests. This negative effect of the Compustat requirement is the opposite of the normal positive bias for sample survivors because the firms in our sample that are the Compustat 'survivors' are much less likely to be acquired in the period proximate to the proxy contest. Related research of the long-term shareholder wealth effects of corporate spinoffs (Cusatis et al., 1993) and open market share repurchases (Ikenberry et al., 1995) also document that wealth changes are greater for firms that are acquired following the event. As a whole, the interaction of takeovers with other corporate events suggests that care must be taken by researchers who wish to study both equity and accounting performance surrounding the event.

## **Appendix A. Sample formation and variable definition**

Our sample comprises 270 proxy contests for board seats in the 1979–1994 period. Our sample selection proceeds at two different stages. We initially gather information on proxy contests in the 1979–1989 period and later extend this analysis by gathering information on proxy contests in the 1990–1994 period. The source from which we derive the sample contests differs across these two time periods. For the 1979–1989 period, we employ the list of proxy solicitations (Schedule 14b) filed at the US Securities and Exchange Commission (SEC). For the 1990–1994 period, we use the Securities Data Company's Proxy Fight

Database (SDC). While we have no a priori reason to believe that the different sources for sample formation would affect our results, we separately report information on the contests in the 1990–1994 period.

For each of these sample sources, we exclude firms not having stock returns on the NYSE/Amex or Nasdaq CRSP data files. We also drop observations in the original databases for which the proxy solicitation was not for board seats or where the occurrence of the contest could not be verified in the *Wall Street Journal* or on the *Dow Jones News Retrieval Service*.

For the 1979–1989 period, we begin with roughly 500 Schedule 14b solicitations. The requirement of available CRSP data reduces the number of contests to 371. We then drop all firms for which we can find no listing at all in the *Wall Street Journal* or on the *Dow Jones News Retrieval Service* in the year of the contest, leaving 313 observations. Finally, we check each remaining firm's *WSJ Index* and *DJ News Retrieval* stories for evidence that a proxy contest for board seats occurred and arrive at 192 contests in the 1979–1989 period.

For the 1990–1994 period, we begin with 198 proxy fights listed in the SDC database. We delete 32 firms not listed on CRSP, 58 firms with no mention of a proxy fight in the *Wall Street Journal*, 24 contests for which the *Wall Street Journal* indicated the contest was not for board seats, and six contests with incomplete or inconsistent records in the SDC database. The 1990–1994 period thereby comprises 78 proxy contests for board seats.

We consult multiple sources for information on each of the 270 contests in our sample, including (i) annual reports, proxy filings by incumbents and dissidents, and other SEC documents, (ii) material reported quarterly in *Standard & Poor's Stock Reports* and material reported annually in *Moody's Manuals*, and (iii) stories in the *Wall Street Journal*, the *Dow Jones News Retrieval Service*, the *New York Times*, and other financial publications. Below, we note the primary source for each variable.

(1) *Steady dividend*. As a measure of pre-contest performance, we analyze the dividend record of the sample firms in the period before and during the proxy contest. We create four mutually exclusive categories according to whether the firm (i) paid no dividend at all in the three years prior to the contest through two years following the contest, (ii) reduced or omitted a dividend in the three years prior to the contest, (iii) reduced or omitted a dividend in the two years following the contest, or (iv) paid a steady or increasing dividend from three years prior to the contest through two years following the contest. Firms in the latter category are classified as paying a steady dividend. Our main source of information for this variable is the *Wall Street Journal Index*, with supplementary information taken from *Standard & Poor's Stock Reports* and *Moody's Manuals*.

(2) *Dissident stake*. This variable measures the fraction of common stock held by the dissident group at the time of the contest. Dissident ownership is



commonly reported in the *Wall Street Journal*. We supplement such reports with information from proxy filings.

(3) *Type of contest*. As is common in the analysis of proxy contests, we classify the sample contests according to whether they are for full or partial control. A full-control contest is defined as one in which dissidents seek at least a majority of total board seats, although in most cases a full-control contest entails an attempt by dissidents to attain all board seats. A partial control contest is defined as one in which dissidents seek less than a majority of the total number of board seats, with most partial-control contests occurring at firms with a staggered election of directors or with cumulative voting. Information for this variable comes from proxy filings and from stories in the *Wall Street Journal*.

(4) *Accompanying takeover bid; Acquisition of target firms*. For each contest, we determine whether the target firm is also the object of an ongoing tender offer, merger, or leveraged buyout bid by either the dissident or a third party in the period from 20 d prior to the initiation of the proxy contest through one year following the resolution of the proxy contest. For those firms that are the object of a takeover bid, we then determine whether the firm is actually acquired. Information about takeover attempts and actual acquisitions is taken primarily from stories in the *Wall Street Journal* and in other financial publications.

(5) *Poison pill*. For each sample firm, we examine whether the firm has a poison pill in place at the time of the proxy contest. The primary source for this variable is *Moody's Manuals*, which reports firms with shareholder rights plans, preferred stock purchase rights, and other poison pills discussed in Ryngaert (1988). We also obtain information on poison pills from the *Wall Street Journal* and from *Standard & Poor's Stock Reports*.

(6) *Dissidents win seats*. We classify each contest according to whether dissidents attain seats. A contest is classified as one in which dissidents attain seats if at least one dissident representative attains a place on the board. Information for this variable comes primarily from proxy filings and from stories in the *Wall Street Journal*, with some additional information taken from *Moody's Manuals*.

(7) *Management turnover*. For each sample firm, we determine whether the senior officer of the target company is replaced within the three years following the proxy contest. The standard of three years follows prior research, although most of the cases of management turnover occur within one year of the contest. In cases involving acquired firms, we follow Martin and McConnell (1991) in registering management turnover only when we find an explicit reference to the replacement of senior management; for example, if the manager remains as head of the acquiring firm's new subsidiary, we classify the contest as not having management turnover. The *Wall Street Journal* is the primary source used to classify management turnover, but we also consult proxy filings, annual reports,

*Moody's Manuals*, and the *Standard & Poor's Directory of Corporations and Directors*.

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