The Relevance of Fiduciary Conflict-of-Interests in Control versus Issue Proxy Contests

Robert A. Jarrow and J. Chris Leach*

Abstract

The role of fiduciaries with conflicting interests has received considerable attention recently. The purpose of this paper is to analyze the role of a fiduciary casting votes under conflicting interests in proxy contests that seek to control the corporation and those waged solely for the purpose of deciding an issue. By deriving comparisons across types of contests, we provide implications concerning differences in success probabilities and resolution effects for the two types of contests. The empirical verification (refutation) of such effects would provide insight regarding the (ir)relevance of fiduciary conflict-of-interests in proxy contests.

I. Introduction

Recently, some prominent participants in proxy contests have raised concerns about the role of fiduciaries. Shareholders’ rights associations contend that conflict-of-interests arise that can significantly affect the voting behavior of fiduciaries (Parker and Givant (1987)). The Employee Benefit Research Institute and the Investor Responsibility Research Center (IRRC) have completed studies specifically addressing the voting behavior of fiduciaries. (See Parker (1987a), (1987c).) The Department of Labor has recently issued its first formal statement regarding the responsibilities of ERISA fiduciaries when voting on proxies (Monks and Minow (1988)), which includes guidelines for handling and recording contacts regarding proxy voting or other control issues. Concern about the fiduciary’s conflicting interests is not new (see Trust (1984), Monks (1984), Chernoff (1984), (1985), Ring (1988), Aranow and Einhorn ((1968), p. 258)) and the legal system may be beginning to address the issue (Parker (1987b)).

The purpose of this paper is to consider the role of a fiduciary faced with conflicting interests when voting in proxy contests. Two types of proxy contests are studied, those involving issues and those for control. Issue contests do not involve (re)election of the firm’s board of directors. Control contests, however,

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*S. C. Johnson Graduate School of Management, Cornell University, Ithaca, NY 14853, and The Wharton School, University of Pennsylvania, Philadelphia, PA 19104, respectively. Helpful comments from JFQA Managing Editor Paul Malatesta and an anonymous JFQA referee are gratefully acknowledged.
occur when a majority of the firm’s board of directors are up for (re)election. The different incentives present for fiduciaries in issue contests compared to those in control contests provide a method for examining the extent of coercion, if any, present in the proxy contest mechanism. Two testable implications are generated; one, for the success and failure probabilities of proxy contests and two, for the change in stock prices arising from the resolution of a proxy contest, either issue or control. Tests of these implications can help determine the relevance of fiduciary conflict-of-interests.

Schleifer and Vishny (1986) study tender offers with large shareholders. In Section III, they briefly analyze the decision to gain control by using a proxy contest versus a tender offer. They argue that a proxy contest must be a costly activity, otherwise tender offers are a dominated choice and would never be observed in equilibrium. From this perspective, our analysis provides insight into one significant cost associated with proxy fights, the implicit cost due to fiduciary conflict-of-interests.

The paper proceeds as follows. Section II analyzes an issue contest involving a voting fiduciary with conflicting interests. Section III studies a control contest involving a fiduciary with similar conflicting interests. Section IV compares and contrasts the two contests and discusses new empirical implications for the probability of success. Section V analyzes proxy contests in a dynamic environment and derives implications for share price behavior. Section VI concludes the paper.

II. The Issue Contest

There are four subsets of stockholders that we treat as cohesive groups of voters. The first is the incumbent management, which controls the fraction \(1 \geq w_1 \geq 0\) of the firm’s voting shares. The second is a fiduciary who controls \(1 \geq w_2 \geq 0\) of the votes and maintains a business relationship with the firm. The fiduciary’s business relationship with the corporation may be terminated if incumbent management so chooses. Such a relationship could include tasks like commercial and investment banking activities, asset management, pension management, and consulting. The shareholders represented by the fiduciary are assumed to desire firm value maximization. This is consistent with the delegation of their voting responsibility to an agent, the fiduciary. The third and fourth groups are insurgents aligned against incumbent management and sympathizers aligned with incumbent management. They hold \(1 \geq w_3 \geq 0\) and \(1 \geq w_4 \geq 0\) fractions of the firm’s shares, respectively.

Let \(\alpha > 0\) denote the net present value to the fiduciary from performing the aforementioned business task. The parameter \(\beta_1\) represents the change in firm value due to management’s losing the proxy contest compared to the status quo, which is defined to be the situation where management wins the proxy contest. The sign of \(\beta_1\) is unrestricted. For example, if \(\beta_1 > 0\), then management’s losing is in the best interests of the shareholders represented by the fiduciary. Conversely, if \(\beta_1 < 0\), then management’s losing is not in the best interests of the shareholders represented by the fiduciary. Denote by \(\gamma \geq 0\) the commission rate to the fiduciary on the portfolio it manages (containing the \(w_2\) portion of the
votes). If management loses, the fiduciary will gain $y w_2 \beta_I$ from its management fee on the portfolio. If management wins (the status quo), there is no change in the fiduciary’s management fee.

We capture conflicting interests of the fiduciary by assuming that a supportive fiduciary retains his business relationship with the firm, and a hostile fiduciary is replaced (but not until after the outcome of the process). Table 1 presents the possible payoffs (in utility) to the four groups of voters. A simple majority procedure has been assumed. In a large class of corporate control models, Harris and Raviv (1988) have shown that such a rule is socially optimal. Extending the analysis to supermajority rules, however, is straightforward.

| TABLE 1  |
| Payoffs to the Four Groups of Voters in the Issue Contest |

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Incumbent Management</th>
<th>Fiduciary</th>
<th>Insurgents</th>
<th>Sympathizers</th>
</tr>
</thead>
<tbody>
<tr>
<td>if $f$ and $w_1 + w_2 + w_4 \geq 1/2$</td>
<td>1</td>
<td>$\alpha$</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>if $f$ and $w_1 + w_2 + w_4 &lt; 1/2$</td>
<td>0</td>
<td>$y w_2 \beta_I + \alpha$</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>if $a$ and $w_1 + w_4 \geq 1/2$</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
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<td>if $a$ and $w_1 + w_4 &lt; 1/2$</td>
<td>0</td>
<td>$y w_2 \beta_I$</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

$f$ represents a supportive vote for incumbent management by the fiduciary and $a$ represents a negative vote.

The utility payoffs to incumbent management and the sympathizers have been normalized so that these groups prefer management to win, irrespective of $\beta_I$ and its effect on their share holdings. Similarly, the insurgents’ utility payoffs reflect their preference for a management loss, irrespective of the effect of the wealth differential $\beta_I$ on their holdings. To these groups of voters, the contest is all or nothing. The utility payoffs indicate that management will vote its own position, sympathizers will vote with management, and insurgents will vote against management’s position.

The fiduciary is assumed to be risk neutral. If he votes for management ($f$) and management wins ($w_1 + w_2 + w_4 \geq 1/2$), then the fiduciary’s payoff is ($\alpha$). If he votes for management ($f$) and management loses ($w_1 + w_2 + w_4 < 1/2$), then the fiduciary retains ($\alpha$) but also obtains the change in its fiduciary fee ($y w_2 \beta_I$). Conversely, if the fiduciary votes against management ($a$) and management wins ($w_1 + w_4 \geq 1/2$), then the fiduciary loses ($\alpha$) and receives a zero payoff. Last, if the fiduciary votes against management ($a$) and management loses ($w_1 + w_4 < 1/2$), then the fiduciary loses ($\alpha$) but receives the change in his fiduciary fee ($y w_2 \beta_I$).

Given the simple structure of the utility payoffs to the groups of voters, only the strategic action of the fiduciary requires analysis. He faces a trade-off between his fiduciary responsibilities ($y w_2 \beta_I$) and the revenues from his business relationship with the firm ($\alpha$). This revenue provides a conflict-of-interests. For an issue on which management’s interests conflict with those of the shareholders represented by the fiduciary ($\beta_I > 0$), the best outcome for the fiduciary would be to have management lose even though the fiduciary voted
with them (with profit of $y w_2 \beta_f + \alpha$). However, if the fiduciary is pivotal, i.e., $w_1 + w_4 < 1/2 \leq w_1 + w_2 + w_4$, then the fiduciary must weigh personal interests ($\alpha$) against the interests of the shareholders he represents ($y w_2 \beta_f$).

To solve for the optimal voting behavior of the fiduciary, we need to discuss the uncertainty he faces. We assume that prior to the vote, the fiduciary knows $w_1$ and $w_2$, but he does not know $w_3$ and $w_4$. This occurs because shareholders secretly submit proxy cards. Denote the cumulative distribution for the percentage of votes $w_4$ by $G_{w_4}$. The support for this cumulative distribution is known to be $[0, 1 - w_1 - w_2]$. Define the relevant probabilities for the fiduciary by

$$\text{Prob}[\text{Management Loses}|f] = G_{w_4}(1/2 - w_1 - w_2) \equiv P_f$$
$$\text{Prob}[\text{Management Loses}|a] = G_{w_4}(1/2 - w_1) \equiv P_a,$$

where $f$ is a vote by the fiduciary for management, and $a$ is a vote by the fiduciary against management’s position. Note that by construction, $P_f \leq P_a$. We assume that the fiduciary’s vote is relevant, i.e., $P_f < P_a$.

Proposition 1. (Optimal Voting Behavior for the Fiduciary in Issue Contests). The optimal voting behavior of the fiduciary is

$$f \text{ if } \beta_f < \beta^*$$
$$\{f, a\} \text{ if } \beta_f = \beta^*$$
$$a \text{ if } \beta_f > \beta^*, \text{ where } \beta^* \equiv \frac{\alpha}{y w_2(P_a - P_f)} > 0.$$

Proof. The expected payoff from action $f$ is: $(y w_2 \beta_f)P_f + \alpha$. The expected payoff from action $a$ is: $(y w_2 \beta_f)P_a$. The sign of $(y w_2 \beta_f)P_f + \alpha - (y w_2 \beta_f)P_a = (y w_2 \beta_f)(P_f - P_a) + \alpha$ is the relevant factor in determining the optimal action. Positivity implies that action $f$ is optimal; negativity implies that action $a$ is optimal. □

Since $\beta^* > 0$, the proposition implies that the fiduciary will not vote against management when management’s position on the issue maximizes firm value ($\beta_f < 0$). In this case, the conflict-of-interests does not influence the vote. Similarly, for very profitable changes ($\beta_f > \beta^* > 0$), the fiduciary will oppose management even though he faces a certain loss of $\alpha$. In these cases, the fiduciary fee $(y w_2 \beta_f)$ outweighs the profit from performing the business task with the firm ($\alpha$). However, for cases where management’s position does not maximize firm value, and the magnitude of foregone expected gains from opposing management is smaller than the known loss to opposing management ($\beta^* > \beta_f > 0$), the conflict-of-interests problem can influence the outcome of the proxy contest. In these cases, the firm value difference from the status quo ($\beta_f$) could be large and of great importance to the shareholders represented by the fiduciary. This happens if there are small management fees $y$ or when $P_a$ is approximately equal to $P_f$.

III. The Control Contest

In the control contest, the groups of voters are the same as in the issue contest. Define $\beta_c$ to be the differential realized if incumbent management loses
and is replaced. As the notation makes explicit, we allow the differential for control contests ($\beta_c$) to differ from that for issue contests ($\beta_I$). The decision by the insurgent shareholders to raise either an issue or control contest is exogenous to our model.\footnote{This decision, if formally analyzed, would involve a strategic tradeoff between the costs of the various types of proxy contests versus their benefits (including the probability of success). Given differences in the costs and benefits across the two types of contests, equilibrium would generate optimal strategies, depending on the level of the differential. Consequently, in equilibrium, different contests would be associated with different differentials. Allowing $\beta_c$ to differ from $\beta_I$ incorporates this strategic decision into our model without a formal analysis. }

The possible utility payoffs to this control contest are given in Table 2. All payoffs are identical to those in Table 1 except the payoff to the fiduciary. Here, hostile fiduciaries are denied the right to perform the business task (of value $\alpha$) if they don’t vote with the winner. We assume that incumbent management keeps only those fiduciaries who support them, and opposing management, if successful, retains only the fiduciaries who supported them. Consequently, if the fiduciary votes for management ($f$) and management wins ($w_1 + w_2 + w_4 \geq 1/2$), then he receives the present value of his business relationship with management ($\alpha$). If he votes for management ($f$) and management loses, he loses ($\alpha$) but gains the wealth differential ($\gamma w_2 \beta_c$). Alternatively, if he votes against management ($a$) and management wins ($w_1 + w_4 \geq 1/2$), then he loses ($\alpha$). Finally, a vote against management ($a$) when management loses generates a retention of ($\alpha$) and the change in the fiduciary fee ($\gamma w_2 \beta_c$).

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<td>0</td>
<td>$\gamma w_2 \beta_c$</td>
<td>1</td>
<td>0</td>
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<tr>
<td>if $a$ and $w_1 + w_4 \geq 1/2$</td>
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<td>0</td>
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<td>if $a$ and $w_1 + w_4 &lt; 1/2$</td>
<td>0</td>
<td>$\gamma w_2 \beta_c + \alpha$</td>
<td>1</td>
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</tr>
</tbody>
</table>

$f$ represents a vote for incumbent management, and $a$ represents a vote against incumbent management.

Thus, with conflict-of-interests, there is a fundamental difference between issue and control contests. In the former, the opposition has no ability to threaten the fiduciary. In the latter, the opposition can threaten to remove the fiduciary. This distinction is crucial for developing the empirical implications of the model. Although this threat lessens the conflict-of-interests problem in a control contest, it does not eliminate it, as the following proposition shows.

**Proposition 2. (Optimal Voting Behavior for the Fiduciary in Control Contests).**

The optimal voting behavior of the fiduciary is

\[
\begin{align*}
  f & \quad \text{if } \beta_c < \beta^* [1 - P_a - P_f] \\
  [f, a] & \quad \text{if } \beta_c = \beta^* [1 - P_a - P_f] \\
  a & \quad \text{if } \beta_c > \beta^* [1 - P_a - P_f] , \quad \text{where } \beta^* \equiv \frac{\alpha}{\gamma w_2 (P_a - P_f)} > 0.
\end{align*}
\]
Proof. The sign of \( \alpha(1 - P_f) + \gamma w_2 \beta_c(P_f) - (\gamma w_2 \beta_c + \alpha)(P_a) = \alpha(1 - P_f - P_a) + \gamma w_2 \beta_c(P_f - P_a) \) is the relevant factor in determining the optimal action. Positivity implies that action \( f \) is optimal; negativity implies that action \( a \) is optimal. Simple algebra yields the expression given in the proposition. \( \square \)

Proposition 2 involves a more complex optimal strategy than its counterpart in an issue contest. In particular, the expression \( [1 - P_a - P_f] \), a measure related to the likelihood of management’s replacement, enters the inequalities. For a high probability of replacement, \( [1 - P_a - P_f] \) is negative. For a low probability of replacement, this expression is positive. Suppose a superior insurgent management team is being considered (\( \beta_c > 0 \)). Then, irrespective of the magnitude of \( \beta_c \), if \( [1 - P_a - P_f] \) is negative (there is a high probability of replacement), the fiduciary will vote against management since \( \beta_c > 0 > \beta^* [1 - P_a - P_f] \). This is consistent with his fiduciary responsibilities. Conversely, if \( [1 - P_a - P_f] \) is positive, some levels of compensation (\( \alpha \)) induce the fiduciary to vote for, and other levels induce the fiduciary to vote against, the incumbent management. Now it is possible for the fiduciary to vote for an opposition with inferior potential (\( \beta_c < 0 \)), if the probability of replacement is large, i.e., \( [1 - P_a - P_f] < 0 \). This behavior is different from the issue contest where the fiduciary never votes against management if \( \beta_f < 0 \). The difference is that in a control contest, the fiduciary is effectively threatened by loss of \( \alpha \) if he does not support the opposition. This action is in conflict with his fiduciary responsibilities.

In summary, while a threatened loss of (\( \alpha \)) by the opposing shareholders helps mitigate the conflict-of-interests problem for (\( \beta_c > 0 \)), it also creates one for inferior outside management (\( \beta_c < 0 \)) that was not present in the issue game. The differences in the optimal actions of the fiduciary across the two types of contests allows one to develop differential empirical implications. A comparison of the optimal strategies for the two types of proxy contests and the testable implications based on the probability of success are provided in the next section.

IV. Comparison of Control and Issue Contests under Fiduciary Conflict-of-Interest

The different voting behavior of the fiduciary across issue and control contests leads to some empirical implications. In a control contest, the ability of the opposing management team to threaten the fiduciary increases the fiduciary’s incentive to vote in favor of better outside management (\( \beta_f > 0 \)). Consequently, the magnitude of the levels of wealth differentials (\( \beta \)) needed to induce the fiduciary to vote against the desires of the shareholders he represents should differ across the two types of proxy contests. These differences are explored in the following corollary.

Corollary 1. (Issue Contests are More Likely to Generate Conflicting Interests). For a fixed \{\( \alpha, \gamma, w_1, w_2, \) and \( G_{w_4} \)}, the set of wealth differentials (\( \beta \)’s) where the conflict-of-interests induces the fiduciary to vote against the value maximizing alternative has greater Lebesgue measure under issue contests than under control contests.
Proof. For issue contests, the interval of $\beta_i$’s where the fiduciary votes against firm value maximization ($f$ if $\beta_i > 0$ or $a$ if $\beta_i < 0$) are, by Proposition 1,

\[
\begin{align*}
\beta_i < 0 & \quad \beta_i > 0 \\
1 - P_a - P_f > 0 & \quad \emptyset & [0, \beta^*] \\
1 - P_a - P_f < 0 & \quad \emptyset & [0, \beta^*]
\end{align*}
\]

The corresponding matrix ($f$ if $\beta_c > 0$ or $a$ if $\beta_c < 0$) for control contests is

\[
\begin{align*}
\beta_c < 0 & \quad \beta_c > 0 \\
1 - P_a - P_f > 0 & \quad \emptyset & [0, \beta^*(1 - P_a - P_f)] \\
1 - P_a - P_f < 0 & \quad (\beta^*(1 - P_a - P_f), 0] & \emptyset
\end{align*}
\]

from Proposition 2. Therefore, for $1 - P_a - P_f > 0$, the interval for control contests is strictly smaller since $1 - P_a - P_f < 1$ as $1 - P_a - P_f \leq 1$ and $P_a > P_f$, so that both $P_a$ and $P_f$ cannot be zero. For $1 - P_a - P_f < 0$, we must compare the positive $\beta$’s in an issue contest against the negative $\beta$’s in a control contest. Since $1 - P_a - P_f$ is bounded below by $-1, [\beta^*(1 - P_a - P_f)] < \beta^*$, implying again that the interval of conflicting interests in $\beta$’s is strictly larger for issue contests. □

Corollary 1 states that if $\beta$’s were uniformly distributed over some interval containing $[-\beta^*, \beta^*]$, then one would expect to see fiduciaries voting against the interests of the shareholders they represent more often in issue than in control contests.

The next corollary states a testable implication concerning the (observed) probability of insurgents winning across the two types of contests.

Corollary 2. (Insurgents More Likely to Win Control Contests). For a given \{\alpha, \gamma, w_1, w_2, and G_{\omega}\}, if the wealth differential in issue contests is less than those in control contests (i.e., $\beta_i \leq \beta_c$), then insurgents are (weakly) more likely to succeed in control contests than in issue contests.

Proof. The following tables present the probabilities of insurgents winning as derived from Propositions 1 and 2. Propositions 1 and 2 indicate how the fiduciary votes for the different values of $\beta_i$ for $i \in \{I, c\}$.

<table>
<thead>
<tr>
<th>Type of Contest</th>
<th>For $1 - P_a - P_f &gt; 0$</th>
<th>Possible Values of $\beta_i$ for $i \in {I, c}$</th>
<th>$[\beta^* \cdot \infty)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue Control</td>
<td>$P_f$</td>
<td>$P_f$</td>
<td>$P_a$</td>
</tr>
<tr>
<td>Control</td>
<td>$P_f$</td>
<td>$P_f$</td>
<td>$P_a$</td>
</tr>
</tbody>
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<tr>
<th>Type of Contest</th>
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<td>$P_f$</td>
<td>$P_a$</td>
<td>$P_a$</td>
</tr>
</tbody>
</table>
From the first table, we can see that when \(1 - P_a - P_f > 0\), the probability of management’s losing in an issue contest is \(P_a\) only for \(\beta_l \geq \beta^*\). Similarly, the probability of management’s losing in a control contest is \(P_f\) only for \(\beta_c \leq \beta^*(1 - P_a - P_f)\). Recall that \(P_f < P_a\). Therefore, the probability of management’s losing in a control is strictly lower than that for an issue contest only when \(\beta_l \geq \beta^*\) and \(\beta_c < \beta^*(1 - P_a - P_f)\). When either of these conditions is violated, management is more likely to lose in a control contest. The hypothesis of the corollary is that \(\beta^c \geq \beta^l\). If \(\beta_l \geq \beta^*\), then \(\beta^c \geq \beta^* \geq \beta^*(1 - P_a - P_f)\), since \(1 - P_a - P_f < 1\). Therefore, the two conditions are inconsistent with \(\beta^c \geq \beta^l\), proving the corollary for \(1 - P_a - P_f > 0\).

From the second table (for \(1 - P_a - P_f < 0\)), we can see that the probability of management’s losing in a control contest is strictly lower only when \(\beta_l \geq \beta^* > 0\) and \(\beta_c \leq \beta^*(1 - P_a - P_f)\). Again, when \(\beta_c \geq \beta_l\), then \(\beta_c \geq \beta^*(1 - P_a - P_f)\) follows from the first condition, but contradicts the second. Therefore, the conditions cannot be met for \(\beta_c \geq \beta_l\), and management is (weakly) more likely to lose in a control contest when \(\beta_c \geq \beta_l\) and \(1 - P_a - P_f < 0\).

This corollary does not follow trivially from the fact that for a given type of contest, success probabilities are increasing in \(\beta\). Indeed, \(\beta_l \geq \beta_c\) does not imply higher success probabilities for an issue contest. For example, take \(1 - P_a - P_f < 0, \beta_l = 0, \beta_c \in \{\beta^*(1 - P_a - P_f), 0\}\). Here, from the tables in the previous proofs, success is more likely for a control contest even though \(\beta_l > \beta_c\).

If we fix a particular firm with parameters \(\{\alpha, \gamma, w_1, w_2, G_{wa}\}\), then Corollary 2 states that when the change in firm value for control contests exceeds that of issue contests (\(\beta_c \geq \beta_l\)), control contests should have a higher success rate for insurgents. One possible justification for (\(\beta_c \geq \beta_l\)) can be seen by considering only value increasing insurgent proposals and superior insurgent management (\(\beta_l \geq 0, \beta_c \geq 0\)). If insurgents are truly capable of making the firm more profitable, then their ability to implement new measures is surely greater in a complete takeover. It would therefore seem reasonable to assume that value improvement would be higher under a control contest than under an issue contest. In a sense, the improvements from a takeover can be viewed as the sum of a series of issue improvements, and should be greater than any one issue alone. The case (\(\beta_c = \beta_l\)) coincides with a belief that the value changes offered by an issue contest are not systematically different from those offered in control contests.

If, however, one believes that (\(\beta_c < \beta_l\)) is descriptive of the typical control and proxy contests, then it is possible that insurgent success probabilities may be equal or even higher for issue contests. This, however, is tantamount to stating that changes implemented by new management (other than the issue) would lower the value of the firm. This seems unlikely since, in a control contest, the status quo (on all other changes) is always available.

We find the case (\(\beta_c \geq \beta_l\)) to be the most compelling and would expect to observe a higher insurgent success rate in control contests than in issue contests. Dodd and Warner (1983) have presented evidence consistent with this belief. In their sample, in proxy contests that did not involve a majority of the board of
directors (an “issue” contest, by our definition), insurgents succeeded less often than in control contests.

V. Price Dynamics in a Proxy Contest

Thus far, we have limited our discussion to the analysis of the fiduciary’s strategy when the fiduciary is not certain of the distribution of shares among sympathizers and insurgents ($w_3$ and $w_4$). However, both ($\alpha$) and ($\beta$) were known by the fiduciary. This analysis has been “post-announcement,” and our results have been static. If we wish to determine the implications of our conflicting-interests model on stock prices around a proxy contest, we must consider the uncertainty resolution that occurs from the preannouncement to the outcome.

Let the present value of the fiduciary’s business relation with the company be distributed as $G_\alpha$ (with a density). The fiduciary does not know the resolution of ($\alpha$) until the announcement of the outcome. Define $G_{X,\beta}$ to be the joint cumulative distribution function (with a density) of the firm’s value under a win by current management, denoted $X$, and the value improvement offered by insurgents, $\beta$. Note that $X$ need not be the preannouncement market value.\(^2\)

The following sequence of events is relevant in calculating price changes prior to the contest:

- **time 0:** Prior to the annual meeting and any announcement of a proxy contest to be held at that meeting.
- **time 1:** Announcement of the proxy contest and revelation of the stakes ($X$ and $\beta$).
- **time 2:** Resolution and announcement of the outcome of the proxy contest ($w_4$ and $\alpha$).

At time 0, no uncertainty is resolved. At time 1, the stakes ($X$ and $\beta$) and the type of contest are announced. This is consistent with public disclosure laws. Finally, at time 2, the uncertainty about the outside votes ($w_4$) is removed (the votes are counted). Also, the outcome and the present value of the business relationship with the fiduciary ($\alpha$) is revealed.

Given the sequence of events associated with a proxy contest, a potential strategy for the fiduciary to avoid the conflict-of-interests and still obtain both the fiduciary’s fee ($\gamma w_2 \beta$) and business benefit ($\alpha$) is to sell the firm’s shares at time 1. However, we assume that such an action would be viewed by the incumbent management as a negative vote. This would, therefore, maintain the incentive for a conflict-of-interests and invalidate this strategy. This assumption is consistent with the “Wall Street Rule.”\(^3\) Consequently, under this assumption, the fiduciary is indifferent between selling his shares and voting against incumbent management.

Because of the inherent differences in the relevance of fiduciary conflict-of-interests across issue and control contests, the market capitalizes the possible

\(^2\)In fact, the general finding of a positive impact of proxy contests would lead us to believe that $X$ is greater than the preannouncement price.

\(^3\)The “Wall Street Rule” is a rule often used by money managers that states that, if they are against incumbent management, rather than voting against them, they should sell their shares.
gains differently. The intuition is most easily seen in the special case of a control and issue contest with the same wealth differential $\beta_I = \beta_c > 0$. Since, by Corollary 2, the control contest is more likely to succeed (ceteris paribus), more of the wealth differential $\beta_I = \beta_c$ is capitalized into the time 1 stock price for a control contest than under an issue contest. Following from this, a success will be more of a surprise for the issue contest. Therefore, the stock price change from the announcement time 1 to be the resolution time 2 should be greater for a successful issue contest than for a successful control contest.

To formalize this intuition in the general case, let $X_I$ and $X_c$ denote the firm value for an issue and control contest, respectively. To obtain stock prices at the various dates, we assume that the remaining traders in the market are risk neutral and that interest rates are zero. The assumption of zero interest rates is just a normalization and it is without loss of generality. Given these assumptions, stock prices at the various dates are represented by the time 2 expected values, conditional upon the information available at each date. The next proposition states the general result.

**Proposition 3. (Stock Price Changes in Issue versus Control Contests).** For a fixed $\{y, w_1, w_2, G_{w_1}, G_{\alpha}, G_{X,\beta}\}$, if sign $(\beta_c) = \text{sign}(\beta_I)$ and $|\beta_c| \geq |\beta_I(1 - P_a - P_f)|$, then the stock price movement per unit of the wealth differential $(\beta)$ when management loses is greater for issue contests than for control contests.

**Proof.** In the Appendix. □

This result is the appropriate generalization of the intuitive argument given prior to the statement of the proposition. For fixed $\{y, w_1, w_2, G_{w_1}, G_{\alpha}, G_{X,\beta}\}$, if both an issue contest and a control contest have the same directional effect on firm value (i.e., sign $(\beta_c) = \text{sign}(\beta_I)$) and the wealth differential of the control contest is at least as large as that of the issue contest (i.e., $|\beta_c| \geq |\beta_I(1 - P_a - P_f)|$), then the change in the stock price due to a successful contest between the announcement date and the outcome date is greater for issue contests than for control contests. As before, this is due to the greater surprise effect of winning in the issue contest compared to that in the control contest. Testing of this proposition awaits subsequent research.

VI. Conclusion

This paper presents a model of issue and control proxy contests that involve a fiduciary who provides a service to the company. Optimal fiduciary voting strategies are derived for issue and control proxy contests. Ceteris paribus, the conflicting interests decrease the likelihood of the success for the opposition in issue contests relative to control contests. By considering the dynamics of a proxy contest, we show that stock price swings from announcement to successful resolution are larger for issue contests than for control contests. Empirical

---

4 Since both the market and the fiduciary are risk neutral, and both possess the same priors $(G_{\alpha}, G_{w_1}, G_{X,\beta})$, then the market prices for both of them are identical.

5 Again, one can argue, as we did following Corollary 2, that the magnitude of the firm value differential is likely to be higher for control than for issue contests. If the insurgents have value increasing skills, they should be able to do at least as well in control contests as in issue contests.
examination of these hypotheses would lead to a better understanding of the relevance of fiduciaries’ conflicting interests in proxy contests.

Appendix

This appendix proves Proposition 3 through a sequence of related lemmas and propositions.

**Proposition 1A.** The optimal action of the fiduciary in the issue game is

\[
\begin{align*}
f & \quad \text{if } \alpha > \alpha_f^* \\
\{f, a\} & \quad \text{if } \alpha = \alpha_f^* \\
a & \quad \text{if } \alpha < \alpha_f^*,
\end{align*}
\]

where \( \alpha_f^* = \gamma w_2 \beta_1 (P_a - P_f) \).

**Proof.** This proposition follows from the proof of Proposition 1. \( \square \)

**Proposition 2A.** The optimal action of the fiduciary in the control game is

\[
\begin{align*}
a & \quad \text{if } 1 - P_a - P_f > 0 \text{ and } \alpha < \alpha_c^*/(1 - P_a - P_f) \\
\{f, a\} & \quad \text{if } 1 - P_a - P_f > 0 \text{ and } \alpha = \alpha_c^*/(1 - P_a - P_f) \\
f & \quad \text{if } 1 - P_a - P_f > 0 \text{ and } \alpha > \alpha_c^*/(1 - P_a - P_f) \\
a & \quad \text{if } 1 - P_a - P_f = 0 \text{ and } \beta_c > 0 \\
\{f, a\} & \quad \text{if } 1 - P_a - P_f = 0 \text{ and } \beta_c = 0 \\
f & \quad \text{if } 1 - P_a - P_f = 0 \text{ and } \beta_c < 0 \\
a & \quad \text{if } 1 - P_a - P_f < 0 \text{ and } \alpha > \alpha_c^*/(1 - P_a - P_f) \\
\{f, a\} & \quad \text{if } 1 - P_a - P_f < 0 \text{ and } \alpha = \alpha_c^*/(1 - P_a - P_f) \\
f & \quad \text{if } 1 - P_a - P_f < 0 \text{ and } \alpha < \alpha_c^*/(1 - P_a - P_f),
\end{align*}
\]

where \( \alpha_c^* = \gamma w_2 \beta_c (P_a - P_f) \).

**Proof.** The proposition follows directly from the proof of Proposition 2 in the text. \( \square \)

**Lemma 1.** For the issue contest, management loses and \( \beta_f \) is realized if

\[(1) \quad w_4 < 1/2 - w_1 - w_2 \text{ or if}
\]

\[(2) \quad 1/2 - w_1 - w_2 \leq w_4 < 1/2 - w_1 \text{ and } \alpha \leq \alpha_f^*.
\]

**Proof.** The proof of Conditions (1) and (2) follows directly from Proposition 1A. The first condition corresponds to an outcome where the fiduciary’s vote is irrelevant. The second corresponds to an outcome where the fiduciary could have swung the vote to management but did not because the influence of \( \beta_f \) dominated that of \( \alpha \). Management wins otherwise. For cases with \( \alpha = \alpha_f^* \), the fiduciary is indifferent, but these occur with zero probability. \( \square \)

**Lemma 2.** For control contests, management loses if
\begin{align*}
(1') & \quad w_4 < \frac{1}{2} - w_1 - w_2 \text{ or if} \\
(2') & \quad \frac{1}{2} - w_1 - w_2 \leq w_4 < \frac{1}{2} - w_1 \text{ and one of the following} \\
& \quad (2a') \quad 1 - P_a - P_f > 0 \quad \text{and} \quad \alpha \leq \alpha_c^* / (1 - P_a - P_f) \\
& \quad (2b') \quad 1 - P_a - P_f = 0 \quad \text{and} \quad \beta_c \geq 0 \\
& \quad (2c') \quad 1 - P_a - P_f < 0 \quad \text{and} \quad \alpha \geq \alpha_c^* / (1 - P_a - P_f).
\end{align*}

**Proof.** These conditions follow directly from Proposition 2A. These conditions have the same interpretation as in the issue contest, except that in the expression (2') the sign of \((1 - P_a - P_f)\) effects the direction of the inequalities. Management wins the control contest otherwise. □

**Lemma 3.** The stock prices for an issue contest are given by

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Stock Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>(X_I) if management wins</td>
<td>(X_I + \beta_I) if management loses</td>
</tr>
<tr>
<td>1</td>
<td>(X_I + \beta_I[P_f[1 - G_\alpha(\alpha_I^<em>)] + P_a G_\alpha(\alpha_I^</em>)]), where (\alpha_I^* = \gamma w_2 \beta_I(P_a - P_f)).</td>
<td></td>
</tr>
</tbody>
</table>

**Proof of Lemma 3.** At time 1, the only uncertainty remaining is due to \(G_{w_4}\) and \(G_\alpha\). Expectations at time 2 are

\[
X_I + \beta_I [\text{Prob\{Opposition Success\}}] =
X_I + \beta_I [\text{Prob\{w_4 < 1/2 - w_1 - w_2\}}]
+ \text{Prob\{1/2 - w_1 - w_2 \leq w_4 < 1/2 - w_1 \text{ and } \alpha \leq \alpha_I^*}}]
\]

which by independence of \(\alpha\) and \(w_4\),

\[
= X_I + \beta_I [G_{w_4}(1/2 - w_1 - w_2) + (G_{w_4}(1/2 - w_1) - G_{w_4}(1/2 - w_1 - w_2))(G_\alpha(\alpha_I^*))]
= X_I + \beta_I [P_f + (P_a - P_f)(G_\alpha(\alpha_I^*))]
= X_I + \beta_I [P_f(1 - G_\alpha(\alpha_I^*)) + P_a G_\alpha(\alpha_I^*)].
\]

\(\square\)

**Lemma 4.** The stock prices for a control contest are given by

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>(1 - P_a - P_f)</th>
<th>Market Value of Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>(outcome)</td>
<td>all</td>
<td>(X_c) if management wins</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(X_c + \beta_c) if management loses</td>
</tr>
<tr>
<td>1</td>
<td>(announcement)</td>
<td>&lt; 0</td>
<td>(X_c + \beta_c[P_c G_\alpha(\alpha_c^* / (1 - P_a - P_f)) + P_a (1 - G_\alpha(\alpha_c^* / (1 - P_a - P_f)))])</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= 0</td>
<td>(X_c + \beta_c(P_f/1_{\beta_c&lt;0} + P_a/1_{\beta_c&gt;0}))</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 0</td>
<td>(X_c + \beta_c[P_f(1 - G_\alpha(\alpha_c^* / (1 - P_a - P_f)) + P_a G_\alpha(\alpha_c^* / (1 - P_a - P_f))],)</td>
</tr>
</tbody>
</table>

where \(\alpha_c^* = \gamma w_2 \beta_c(P_a - P_f)\).
Proof of Lemma 4. At time 1, the only uncertainty remaining is due to $G_{w_4}$ and $G_\alpha$. The additional complexity introduced by the term $(1 - P_a - P_f)$ creates the need to case on $(1 - P_a - P_f)$.

Case 1. $1 - P_a - P_f < 0$.

The time 1 expectation of time 2 price is

$$X + \beta [\text{Prob}\{w_4 < 1/2 - w_1 - w_2\} + \text{Prob}\{1/2 - w_1 - w_2 \leq w_4 < 1/2 - w_1\}$$

and $\alpha \geq \alpha^*_c/(1 - P_a - P_f))$, which by independence of $\alpha$ and $w_4$,

$$= X_c + \beta_c [G_{w_4}(1/2 - w_1 - w_2) + (G_{w_4}(1/2 - w_1))$$

$$-G_{w_4}(1/2 - w_1 - w_2))(1 - G_\alpha(\alpha^*_c/(1 - P_a - P_f))))]$$

$$= X_c + \beta_c [P_f + (P_a - P_f)(1 - G_\alpha(\alpha^*_c/(1 - P_a - P_f))))]$$

$$= X_c + \beta_c [P_f G_\alpha(\alpha^*_c/(1 - P_a - P_f)) + P_a(1 - G_\alpha(\alpha^*_c/(1 - P_a - P_f)))]$$

Case 2. $1 - P_a - P_f = 0$.

The time 1 expectation of time 2 price is

$$X_c + \beta_c [\text{Prob}\{w_4 < 1/2 - w_1 - w_2\} + \text{Prob}\{1/2 - w_1 - w_2 \leq w_4 < 1/2 - w_1\}$$

and $\beta_c \geq 0]$]

$$= X_c + \beta_c [G_{w_4}(1/2 - w_1 - w_2) + G_{w_4}(1/2 - w_1) - G_{w_4}(1/2 - w_1 - w_2)]$$

if $\beta_c \geq 0$

$$= X_c + \beta_c [G_{w_4}(1/2 - w_1 - w_2)]$$

if $\beta_c < 0$

$$= X_c + \beta_c [P_a]$$

if $\beta_c \geq 0$

$$= X_c + \beta_c [P_f]$$

if $\beta_c < 0$

$$= X_c + \beta_c (P_a 1_{\beta_c \geq 0} + P_f 1_{\beta_c < 0})$$

Case 3. $1 - P_a - P_f > 0$.

The time expectation of time 2 price is

$$X_c + \beta_c [\text{Prob}\{w_4 < 1/2 - w_1 - w_2\} + \text{Prob}\{1/2 - w_1 - w_2 \leq w_4 < 1/2 - w_1\}$$

and $\alpha \leq \alpha^*_c/(1 - P_a - P_f))$, which by independence of $\alpha$ and $w_4$,

$$= X_c + \beta_c [G_{w_4}(1/2 - w_1 - w_2) + (G_{w_4}(1/2 - w_1))$$

$$-G_{w_4}(1/2 - w_1 - w_2))G_\alpha(\alpha^*_c/(1 - P_a - P_f))]$$

$$= X_c + \beta_c [P_f + (P_a - P_f)G_\alpha(\alpha^*_c/(1 - P_a - P_f))]$$

$$= X_c + \beta_c [P_f (1 - G_\alpha(\alpha^*_c/(1 - P_a - P_f))) + P_a G_\alpha(\alpha^*_c/(1 - P_a - P_f))]$$

Proof of Proposition 3. For an issue contest, from Lemma 3, the relevant ratio is

$$\frac{X_I + \beta_I - X_I - \beta_I [P_f (1 - G_\alpha(\alpha^*_I))] + P_a G_\alpha(\alpha^*_I)]}{\beta_I} = 1 - [m_I],$$
and for a control contest, from Lemma 4, it is

\[
\frac{X_c + \beta_c - X_c - \beta_c}{\beta_c} \left[ P_f G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right) + P_a \left( 1 - G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right) \right) \right] = 1 - [m_2] \quad \text{if } 1 - P_a - P_f < 0
\]

\[
\frac{X_c + \beta_c - X_c - \beta_c[P_f 1_{\beta_c < 0} + P_a 1_{\beta_c \geq 0}]}{\beta_c} = 1 - [m_3] \quad \text{if } 1 - P_a - P_f = 0
\]

\[
\frac{X_c + \beta_c - X_c - \beta_c}{\beta_c} \left[ P_f \left( 1 - G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right) \right) + P_a G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right) \right] = 1 - [m_4] \quad \text{if } 1 - P_a - P_f > 0,
\]

where

\[
[m_1] = P_f (1 - G_\alpha(\alpha_c^*)) + P_a G_\alpha(\alpha_c^*)
\]

\[
[m_2] = P_f G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right) + P_a \left( 1 - G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right) \right)
\]

\[
[m_3] = P_f 1_{\beta_c < 0} + P_a 1_{\beta_c \geq 0}
\]

\[
[m_4] = P_f \left( 1 - G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right) \right) + P_a G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right).
\]

The condition put forth in the proposition is proven if we can show that

\[
|1 - [m_1]| \geq |1 - [m]|\]

for \([m] \in \{[m_2], [m_3], [m_4]\}\). Since both inside terms are positive and less than 1, this is equivalent to

\[
[m_1] \leq [m] \text{ for } [m] \in \{[m_2], [m_3], [m_4]\}.
\]

This is the condition we will prove.

Since all braced terms are convex combinations of \(P_a\) and \(P_f\), where \(P_a > P_f\), the condition is equivalent to requiring that the weight on \(P_a\) in \([m_1]\) is less than the weight on \(P_a\) in \([m_2], [m_3], \text{ and } [m_4]\). This is

\[
G_\alpha(\alpha_c^*) \leq \begin{cases} 
1 - G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right) & \text{if } 1 - P_a - P_f < 0 \\
1_{\beta_c \geq 0} & \text{if } 1 - P_a - P_f = 0 \\
G_\alpha \left( \frac{\alpha_c^*}{1 - P_a - P_f} \right) & \text{if } 1 - P_a - P_f > 0.
\end{cases}
\]

For \(\beta_f < 0\), \(\alpha_c^* < 0\) and \(G_\alpha(\alpha_c^*) = 0\), so this is always true. Next, consider \(\beta_f > 0\) and, by the sign restriction, therefore, only \(\beta_c\)'s > 0. For \(1 - P_a - P_f < 0\), \(|\alpha_c^*/(1 - P_a - P_f)| < 0\) implies that \(G_\alpha(\alpha_c^*/(1 - P_a - P_f)) = 0\), so the
right-hand side is 1, satisfying the required inequality. For \(1 - P_a - P_f = 0\), again the right side is 1. For \(1 - P_a - P_f > 0\), we know the inequality is true because \(|\beta_c| \geq |\beta_t(1 - P_a - P_f)|\) implies \(\beta_c \geq \beta_t(1 - P_a - P_f)\), which in turn implies \(\alpha_c^*/(1 - P_a - P_f) = (\gamma w_2 \beta_c(P_a - P_f)/(1 - P_a - P_f))\) is greater than \(\alpha_c^* = \gamma w_2 \beta_c(P_a - P_f)\). This gives the required condition on the \(G\)'s in the third inequality.

References


Monks, R. "Funds Can't Hide Any Longer From Activist Sharehold Role." *Pension and Investment Age* (May 28, 1983), 46.


