The Role of Advisory Services in Proxy Voting

by[1]

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ABSTRACT

We study the information content and consequences of third-party proxy voting advice. Focusing on recommendations issued during proxy contests by a leading proxy advisor, we find significant excess stock returns around public recommendation dates, and we document that these price movements depend on the direction of the voting advice. The economic interpretation is that the advisor brings new information to the market. We also find a robust association between recommendations and contest outcomes after controlling for such factors as contest characteristics, voting rules, and ownership levels of dissidents and incumbents. Further analysis suggests that recommendations convey non-public information to investors about outcome-contingent stock valuations under dissident and incumbent management. The general implication of these findings is that proxy advice plays a dual role, serving both to certify the quality of rival teams and to help investors predict contest outcomes.

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THE ROLE OF ADVISORY SERVICES IN PROXY VOTING

1. INTRODUCTION

Proxy voting is a major corporate activity. During the 2005 U.S. proxy season alone, over 299 billion shares were voted to elect 35,283 individual directors, ratify 3,300 auditors, adopt 2,293 compensation plans, and approve 340 M&A transactions and a large number of internal governance proposals.[2] Most proxy voting is undertaken by mutual funds and other institutional investors, which collectively hold over two-thirds of the voting shares in the United States. Given the key role played by institutional investors in proxy voting, the overall effectiveness of the proxy mechanism depends largely on whether it can overcome potential agency problems so that votes are cast in an informed, objective manner.[3]

In the past few years, a striking development has been the rapid growth in institutional investors' use of information provided by proxy advisors. These third-party advisors supply fund clients with research, recommendations, and other services on a range of corporate voting issues. The perceived importance of proxy advice is illustrated by the circumstances surrounding the $19 billion merger of Hewlett-Packard Co. (HP) with Compaq Computer Corp. in 2002. After an acrimonious, months-long proxy fight waged by board member Walter Hewlett in opposition to the merger, shareholders of HP voted narrowly in favor of the merger by 51.4% to 48.6%. Observers largely credited the vote recommendation of Institutional Shareholder Services (ISS), a leading proxy advisory service, for turning the tide in favor of the controversial merger proposal. As one Merrill Lynch analyst said of the ISS decision, "If it had gone the other way, the deal would have been dead. Now, it's a horse race." (*BusinessWeek*, March 18, 2002, p. 62).

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[2] *2005 Proxy Season: Key Statistics & Performance Ratings*, ADP Investor Communication Services.

[3] Prior research has identified a number of potential factors that might prevent institutions from voting in the collective interests of investors. For example, when corporate ownership is widely dispersed, the private cost to a shareholder of informed voting is likely to be large relative to the private benefit. Also, investors who are dissatisfied with a firm's management may sell their shares—i.e., follow the "Wall Street Rule"—rather than holding and voting them (Parrino, Sias, and Starks (2003)). Finally, mutual funds that manage the pension plans of corporate clients in which they invest may face a potential conflict of interest in voting their shares (Davis and Kim (2005)).

Despite the anecdotal evidence that third-party advisors may wield considerable influence in specific cases, there has been an absence of corresponding academic research.[4] In particular, there is little systematic evidence on the extent to which proxy recommendations actually influence voting outcomes or convey new information about the merits of competing proxy proposals. Such evidence is relevant to the broader issue of whether proxy advice represents an efficient market solution to agency and coordination problems in voting or whether, instead, it is a source of new agency costs and inefficiencies to be borne by investors.[5]

The goal of this paper is to examine empirically the economic role of third-party proxy advice in corporate proxy voting. We study voting advice given during proxy contests, in which a dissident team actively and formally solicits votes to oppose incumbent management.[6] In addition to providing some of the first systematic findings on the characteristics of proxy advice in contested corporate voting, we address three questions about the proxy advisor's economic role. First, do recommendations convey information that affects stock prices? Second, to what extent are recommendations good predictors of contest outcomes? And third, does voting advice actually convey information about the relative merits of competing outcomes, i.e., do they convey information about the outcome-contingent value of the company, and thereby possibly inform the decision how to vote?

Our analysis focuses on vote recommendations made during high-profile proxy contests that are widely reported in the news media. Specifically, we construct a sample of all publicly-reported recommendations that were issued by the leading advisory firm during proxy contests waged from 1992 to 2005. These contentious proxy-voting situations

[4] One exception is Bethel and Gillan (2002), which presents evidence on the effects of ISS recommendations on votes for non-contest proposals (i.e., proposals contained in management's proxy statement, rather than in a dissident proxy statement).

[5] Berman and Lublin (2006) illustrate the substantial value associated with proxy advice in the context of the recent acquisition of ISS. In September 2006, ISS placed itself on the market with an asking price of $500 million. The move elicited 19 bids and resulted in an eventual sale of the company to Risk Metrics for approximately $550 million.

[6] The term "proxy contest" is not formally defined in the federal securities laws, although regulations under those laws define a "solicitation in opposition" of the incumbent management and require special disclosures by the dissident and the incumbent whenever such a solicitation occurs. For our purposes, a "proxy contest" is taken to be an instance in which a dissident distributes its own proxy statement to investors to solicit votes rather than simply campaigning in favor of a shareholder proposal that has been added to the company's own proxy materials.

provide a natural setting in which to investigate the informational impact and consequences of proxy advice. Indeed, while most corporate proxy votes are routine and do not pose a direct threat to incumbent management teams, proxy contests represent instances in which shareholders tend to face considerable uncertainty about a consequential outcome.

The evidence suggests that recommendations do convey new information to the market. We document that the direction of a recommendation matters greatly for the ensuing price impact. Recommendations that favor dissidents are accompanied by an average abnormal return of 3.55 percent, while pro-incumbent recommendations give rise to an average abnormal return of approximately zero. This difference is consistent with the view that proxy advice that favors the challengers conveys positive information relative to favoring the incumbent management, whose actions are currently determining the firm's value. We also document an average abnormal stock return of 1.7 percent around the news dates of all observed recommendations.[7,8] Examining stock price reactions in more detail, we find that the average market response to a recommendation depends heavily on the size of the targeted company. Smaller companies, which presumably are surrounded by relatively more uncertainty, experience significantly more positive abnormal returns than larger companies do. This finding, together with the other stock price evidence, strongly suggests that proxy vote recommendations do indeed convey nonpublic, value-relevant information to investors.

Interestingly, further examination of the stock price reaction to the advisory recommendations reveals a significant reduction in the magnitude of price response subsequent to the adoption of Regulation FD. Natural explanations for this result are that Reg FD may have impaired the advisor's ability to elicit information from incumbent

[7] Since it would appear predictable that ISS provides an opinion concerning each contest, it could seem surprising that there is a substantial expected price response at the time of its recommendation. However, in many cases the recommendation may not be sufficiently newsworthy to be included in our dataset, so that there is incremental information on average if the recommendation is widely available through the news media and included in our sample. In fact, because ISS's decision to support the dissident would be relatively more newsworthy (as reflected by the comparison of the average absolute return between supporting the dissident vs. management), the structure of the sample could be biased towards a positive expected price response. Of course, the expected return at the time of a recommendation can also be positive if a risk premium is earned at the resolution of uncertainty.

managers via private communications or, relatedly, that it may have caused managers to make more timely disclosures to the market, thereby reducing the price impact and informativeness of vote recommendations.[9]

In additional tests, we seek to understand better the nature of the price response to proxy voting advice. We consider two hypotheses about the specific information content in advisor recommendations. The first hypothesis ascribes a predictive role to vote recommendations. Under this *outcome prediction hypothesis*, vote recommendations cause investors to revise their beliefs about the likely outcomes of proxy contests. In particular, a recommendation might directly influence the voting behavior of shareholders (e.g., by providing voters with a default decision or a coordination device), or it might simply be a good leading indicator of the outcome. A second hypothesis that we consider is the *certification hypothesis*. Under this view, a recommendation serves as a statement about the fundamental quality of a dissident or incumbent management team. That is, recommendations help investors to learn about how good each team in a contest is, rather than simply how likely each team is to win. Note that the certification and outcome prediction hypotheses are not mutually exclusive. They have different implications, though, for the role played by advisory services in proxy voting.

We explore these informational hypotheses by analyzing the relationships among contest outcomes, recommendations, and stock-price movements around news of recommendations and outcomes. The results provide some support for the outcome prediction hypothesis. Specifically, we find a significant, positive relationship between the probability of a win by incumbent management and the presence of a recommendation in favor of management. This finding is robust to different econometric specifications and persists after controlling for other factors that may plausibly explain observed outcomes, such as contest characteristics, voting rules, and ownership levels of incumbents and dissidents.

[9] It is also possible that the difference in pre- versus post-FD reactions reflects a tendency over the sample period for the news media to increasingly expand its coverage of low-impact contests. However, our examination of filing date returns across sample years does not indicate this to be the case.

We also find evidence in favor of the certification hypothesis. In multivariate regressions, we relate stock price changes around news of proxy advice to the direction of the advice. Even after controlling for the estimated effect of the recommendation on the contest outcome probability, there remains a significant relation between the direction of the recommendation – i.e., whether it favors the dissident – and the abnormal return around the news date of the recommendation. This relationship is particularly strong in the case of contests won by the dissident. The finding persists even after we correct for the exclusion of non-selected contests (contests for which we sought but found no evidence of a publicly-reported recommendation) from our sample. We interpret these findings as evidence that, at a minimum, some part of the price impact of recommendations can only be explained in terms of certification.

Our results complement the findings of previous empirical studies that examine various aspects of proxy contests and proxy voting. These studies include a number of papers that investigate the shareholder value implications of proxy contests (DeAngelo and DeAngelo (1989), Dodd and Warner (1983), Pound (1989), Ikenberry and Lakonishok (1992), Mulherin and Poulsen (1998)). Another strand of the literature examines the economic determinants of voting outcomes in proxy contests or in general corporate voting (Brickley, Lease, and Smith (1988), Pound (1988), Gordon and Pound (1993), Bethel and Gillan (2002), Maug and Rydqvist (2005)). These previous studies largely focus on the vote resolution date or the period thereafter as being the key time during which critical information is revealed. Our work highlights the fact that public proxy advice may cause much of the information relevant to a contest outcome to arrive in the marketplace well before a vote actually takes place.

More generally, our findings on the informational role of proxy advice have implications for the ability of the proxy voting mechanism to properly allocate control among rival management teams. A well-established body of work shows how agency and free-rider problems in corporate voting can lead to inefficient contest outcomes (Manne (1964), Easterbrook and Fischel (1983), Grossman and Hart (1980, 1988) and Harris and Raviv (1988)). Recent work has shown how certain market institutions, such as the equity-loan market, can mitigate inefficiencies in corporate voting by reducing costly informational problems (Christoffersen et al. (2006)). Our evidence suggests that proxy advice

represents another market development that can facilitate information aggregation in corporate voting, potentially leading to improved voting outcomes.

Some of the tests we use to examine the certification hypothesis are methodologically related to those in Bhagat and Jefferis (1991) and Betton and Eckbo (2000), who employ estimates of outcome probabilities in their work on voting on proxy proposals. However, our approach differs in that we examine changes in outcome probabilities and condition on contest outcomes in order to isolate the certification effect of recommendations.

Finally, the results have potential policy implications concerning the role of proxy advice in corporate governance. Concerns have been voiced in the media that an inherent pro-management bias in third-party proxy advice might cause individual investors to collect less of their own information, thus resulting in less information in aggregate. In addition, some market participants have alleged that the business model of at least one advisor gives rise to an inherent conflict of interest that undermines the objectivity of its vote recommendations. Our positive findings regarding the price impact and certification effect of vote recommendations suggest that recommendations do provide information and that conflicts of interest are not the sole determinant of this advising activity.

The rest of the paper is organized as follows. Section 2 provides some institutional background on proxy advisors and the market for their services. To clarify the intuition behind our empirical hypotheses and tests, Section 3 presents a simple economic model of stock price formation in proxy contests. Section 4 describes the data used in the empirical investigation, focusing on the compilation of contests and recommendations for the leading advisory service, ISS, over the study period. Section 5 presents our univariate evidence on stock price reactions as well as our multivariate findings concerning the outcome prediction and certification hypotheses. Section 6 concludes.

2. INSTITUTIONAL BACKGROUND: ADVISORY SERVICES IN PROXY VOTING

New securities rules adopted in 2003 underscore the fiduciary duty of institutional investors with respect to proxy voting. These rules obligate funds to publicly disclose how they vote in corporate elections and also require funds to adopt written policies and

procedures to help ensure that proxies are voted in the best interests of clients.[10] For large, highly diversified mutual funds, the costs of directly collecting information and voting appropriately for every company in the portfolio may be substantial. Thus, it is not surprising that many of the largest and most visible institutional investors in the U.S., including Fidelity, T. Rowe Price, Janus, TIAA-CREF, and CalPERS, have come to rely on the research and recommendations provided by third-party proxy advisory firms.

While recent regulatory developments may have strengthened demand for proxy advisory services, the market for such services is not new. Advisory services date back to the founding of the nonprofit Investor Responsibility Research Center (IRRC) in the early 1970s. IRRC provided independent research analysis but not recommendations, focusing on social issues, such as were associated with the offshore operation of U.S. businesses. With the passage of ERISA in 1974, the Department of Labor (DOL) began enforcing a requirement that pension fund fiduciaries act solely in the interest of pension plan participants and beneficiaries. This duty applies to the voting of pension fund stock, as was made clear by interpretative guidance that the DOL issued in 1988 and has refined through subsequent releases.[11] Demand for third-party voting advice thus grew markedly in the 1980's; proxy vote recommendations and related services began to be offered commercially to institutional investors.

Among the early providers of proxy vote advisory services were Proxy Monitor Inc., founded in 1984, and Institutional Shareholder Services (ISS), founded in 1985. The research reports issued by these firms covered a wide range of corporate election items, including routine management proposals, shareholder proposals, and contested director elections. The businesses grew rapidly throughout the 1990s as companies expanded

[10] See "Final Rule: Proxy Voting by Investment Advisers" (File No. s7-38-02). The new rule, along with the SEC's No-Action Letter to Egan-Jones Proxy Services on May 27, 2004, explicitly recognizes the role that third-party proxy advice may play in mitigating conflicts of interest in fund voting. In particular, the rule provides that an investment adviser could demonstrate that a vote was not the product of a conflict of interest if in accordance with a pre-determined policy, the vote was made based upon the recommendations of an independent third party. These rules are adopted under the Investment Advisers Act of 1940 and reflect an understanding that mutual funds and other institutional investors are fiduciaries with respect to all services conducted on behalf of clients, including proxy voting.

[11] See Letter from Deputy Assistant Secretary of Labor Alan Lebowitz to Helmuth Fandl, Avon Products, Inc., February 23 1988. This "Avon Letter" indicated that shareholder voting rights are plan assets under ERISA, and that related fiduciary duties thus apply to voting of stock.

their institutional clienteles. In July 2001, ISS merged with Proxy Monitor, leading to a single set of widely-used proxy recommendations in the marketplace (Sidel (2001)).

Presently, institutional investors have at least four alternative sources of obtaining proxy advice. These include ISS, Egan-Jones Proxy Services, Glass, Lewis & Co., and Proxy Governance Inc. Egan-Jones and Glass Lewis began offering proxy recommendations commercially in 2003, and Proxy Governance entered the market in 2005. The core business of each of these advisors is to provide clients with express voting recommendations on a subscription basis. Today, the largest advisor is ISS. According to the company's website, http://www.issproxy.com, as of July 2006 ISS maintained research coverage on 35,196 companies (including all companies in the Russell 3000 index) for the benefit of 1,667 institutional subscribers that control assets totaling over $25 trillion.[12]

The alternative proxy services are distinguishable along a number of dimensions. First, there is differentiation in the nature and scope of ancillary services that may be bundled with the advisory recommendations. While all of the advisors provide automated vote execution, recordkeeping, and reporting services, ISS and Egan-Jones provide quantitative assessments of corporate governance quality alongside reports and recommendations.[13] Second, the services differ in the sources of information that they use to formulate recommendations. For example, ISS and Glass Lewis often host public conference calls at which opposing sides in proxy contests can present their arguments to institutions. Also, when recommending on routine or non-contest items, the largest advisors typically adhere to pre-specified voting policy guidelines. Proxy Governance, in contrast, aims to evaluate all election items on a case-by-case basis. Third, the providers themselves adhere to different overall business models. ISS, in addition to providing institutions with proxy services, provides advice and related services to corporations to

[12] While exact market-share figures for the newer entrants appear to be less readily available, evidence suggests that these advisors have also grown rapidly over the past few years. For instance, Glass Lewis, the second-largest proxy advisor, was reported to have about 200 clients in June 2006 (Hershey (2006)).

[13] ISS includes its proprietary Corporate Governance Quotient score in many of its published research reports. Egan-Jones' reports include grades on several key governance characteristics, such as board independence and financial performance.

help them assess and improve their corporate governance practices.[14] Egan-Jones is affiliated with Egan-Jones Ratings Co., a credit rating agency that issues for-profit debt ratings. Glass Lewis and Proxy Governance do not sell consulting services to corporations and thus purport to be free of potential conflicts of interest.

These differences notwithstanding, the advisory services all share the common feature that they issue their reports and recommendations privately to institutions on a subscription basis. While these reports, in contrast to sell-side analyst reports, are typically not widely disseminated,[15] it is often the case that one or both sides in a high profile proxy contest will issue a press release publicizing a particular recommendation. The recommendations of the leading advisory service are most frequently the topic of timely reporting in the public news media. It is thus is natural to initiate the empirical inquiry into the economics of proxy recommendations by studying what is publicly known about the reports of the leading proxy advisor.

3. A MODEL OF STOCK PRICE FORMATION IN PROXY CONTESTS

Our empirical examination of the economic role of third-party proxy advice in corporate proxy voting is guided by a model of the potential informational channels whereby vote recommendations may influence stock prices. The presentation of the model in this section allows us to formalize the intuition behind our two hypotheses about the information content of proxy advice, namely, the certification hypothesis and the outcome prediction hypothesis. By focusing on price formation, our model leads naturally to empirically testable implications. Indeed, while we cannot test directly whether a particular voter acquires new information from proxy advice, we can ask whether investors update their beliefs in response to public dissemination of that advice. Thus, our conceptual framework distinguishes between the hypothetical pivotal voter,

[14] To help reduce potential conflicts of interest between the two businesses, ISS maintains separate staffs, office equipment, and databases for the two operations. In June 2006, to further address potential conflicts of interet between the two businesses that could compromise the objectivity of vote recommendations, ISS spun off its corporate services into a new, separately incorporated subsidiary.

[15] For example, Investext, a large database containing roughly 2 million company and industry research reports, carries only a fraction of the reports produced by the largest of the vote advisory services.

who determines which side wins a proxy contest, and the marginal investor, who determines the stock price in equilibrium.[16]

We assume for simplicity that a marginal investor exists and is risk-neutral with respect to uncertainty about the outcome of a proxy contest. Then the price p_t of the stock at date t during the contest is given by

$$(1) \qquad p_t = \pi_t^d \, \mu_t^d + (1 - \pi_t^d) \, \mu_t^m$$

where π_t^d represents the marginal investor's beliefs about the probability that the dissident will win; $\mu_t^d = E_t[p \mid \text{dissident wins}]$ is the marginal investor's time-t expectation of the outcome-date price conditional on a dissident win; and μ_t^m is the corresponding expected outcome-date price conditional on a management win.

Suppose that information (e.g., an advisor recommendation) arrives between time t and time t + r, r > 0 that causes the marginal investor to update his beliefs about outcome probabilities and/or conditional stock values. Abstracting away from non-contest influences on the stock price, we have that the resulting change in stock price from t to t + r is

$$(2) \qquad \begin{aligned} p_{t+r} - p_t &= \pi_{t+r}^d \, \mu_{t+r}^d + (1 - \pi_{t+r}^d) \, \mu_{t+r}^m - [\pi_t^d \, \mu_t^d + (1 - \pi_t^d) \, \mu_t^m] \\ &= \Delta\mu_{t,r}^m + \pi_{t+r}^d \, [\Delta\mu_{t,r}^d - \Delta\mu_{t,r}^m] + \Delta\pi_{t,r}^d \, [\mu_t^d - \mu_t^m] \end{aligned}$$

where $\Delta\mu_{t,r}^m \equiv \mu_{t+r}^m - \mu_t^m$, $\Delta\mu_{t,r}^d \equiv \mu_{t+r}^d - \mu_t^d$, and $\Delta\pi_{t,r}^d \equiv \pi_{t+r}^d - \pi_t^d$ represent revisions in beliefs about the incumbent-win stock price, the dissident-win stock price, and the probability of a dissident win, respectively. Equation (2) makes it clear that a change in the stock price can be due to a change in the marginal investor's beliefs about *outcome*

[16] Proxy contests are uncertain because the individual voting decisions of shareholders can depend on public information that may arrive in the future (including public actions by the incumbents or dissidents), on asymmetric information if voters are heterogeneously informed, and on the extent of any private conflicts of interest that may cause the pivotal voter's decision to deviate from value maximization. If investors are heterogeneously informed, then the pivotal voter may have information that is inferior to the market's information (if information collection is costly), or superior to that of the market (if he has private information).

probabilities, a change in beliefs about *conditional stock values*, or a combination of the two.

Two distinct hypotheses thus emerge about how proxy advisor recommendations affect the stock price in equation (2). First, according to the *outcome prediction hypothesis*, a recommendation for the dissident (management) results in an increase (decrease) in the marginal investor's probability estimate of a dissident win, implying that $\Delta\pi_{t,r}^{d} > 0$ ($\Delta\pi_{t,r}^{d} < 0$). This could arise from the advisor's expertise in forecasting the vote outcome, or it could occur via the advisor's direct influence on that outcome. Influence requires a causal link whereby the proxy advisor recommendation actually alters the behavior of the pivotal voter. Forecasting, in contrast, simply posits that the proxy recommendation is statistically helpful to investors in predicting how the pivotal voter will vote. Second, the *certification hypothesis* states that a pro-dissident recommendation causes the marginal investor to update favorably his assessment about the stock valuation that would prevail under a dissident win ($\Delta\mu_{t,r}^{d} > 0$). Likewise, a pro-management recommendation increases the marginal investor's expectation of what the stock value would be after a management victory ($\Delta\mu_{t,r}^{m} > 0$).

Both of these informational hypotheses are empirically testable. In Section 5.2, we test the outcome prediction hypothesis by directly examining the empirical relationship between outcomes and recommendations. In Section 5.3, we test the certification hypothesis through a two-stage multivariate analysis. In the first stage, we estimate implied probabilities of proxy contest outcomes. We then estimate a second-stage regression that relates observed abnormal price movements around recommendations to changes in conditional expectations (i.e., $\Delta\mu_{t,r}^{d}$ and $\Delta\mu_{t,r}^{m}$) after explicitly controlling for changes in implied outcome probabilities.

4. DATA

To evaluate the information content of advisory recommendations and to test the prediction and certification hypotheses discussed in the previous section, we have sought data on all proxy contests involving U.S. public companies over the 1992-2005 period. These contentious proxy-voting situations provide a natural setting in which to

investigate the informational impact and consequences of proxy advice. Documents filed publicly on the SEC's EDGAR system provide information about proxy contests, including participants and dates. A search of the proxy materials and other documents filed on the EDGAR system reveals that they only infrequently include information about third-party advisory recommendations. The reports of proxy advisors, unlike the reports of stock analysts, are not widely disseminated. For the purpose of this paper, we have turned to a well-known and comprehensive news media data base, Factiva, for information on the substantive content and dates of the advisory recommendations. Of the advisors for which we have sought data, only the leading advisor has participated in the market over the entire period of the study. The data discussion in this section and subsequent analysis in this paper accordingly focus on the leading advisor, Institutional Shareholder Services.

Our initial sample of proxy contests and voting recommendations is constructed from the public filings of companies and dissident shareholders in contested elections. Proxy rules in the U.S. require dissidents in a contest to make a written proxy statement publicly available to solicited investors. A dissident's proxy statement must include information on voting requirements, ownership and compensation levels of dissident party members, and background information concerning the dispute. Companies that are targeted by dissidents must designate their own proxy materials as contested. This designation is reflected in public records filed in the SEC EDGAR electronic database. Thus, our first step is to search the SEC EDGAR electronic database to identify all instances from 1992 through 2005 in which a dissident shareholder or subject company filed a preliminary or definitive controversy proxy (PREC14A or DEFC14A). The elimination of duplicate filings and multiple filings for individual contests results in an initial sample of 835 contests over the 1992-2005 period.

We construct a database containing the details of all contests for which a vote recommendation by "Institutional Shareholder Services" or "ISS" was reported publicly in the media.[17] Specifically, for each contest in our initial sample, we conduct a keyword

[17]Although not all recommendations are reported in the media, restricting attention to proxy contests and, among contests, to the newsworthy cases ensures that the economic significance of the recommendations in our sample is high relative to the population of all recommendations, as indicated by

search in the *Factiva* database (provided by *Dow Jones & Reuters)* for news articles within two years of the filing date that mention Institutional Shareholder Services in connection with the target firm. By searching all relevant news sources in this comprehensive database, including PR Newswire and Business Wire releases, Reuters, Dow Jones News Service, and over 50 daily U.S. newspapers, we are able to find details on the direction and timing of vote recommendations for 216 proxy contests. For three firms (Computer Associates, Computer Horizons, and Designs Inc.), two distinct contests occurred within the same calendar year. After excluding the contests for these firms, we obtain a final sample of 210 contests and accompanying proxy voting recommendations.[18] From reading the relevant news articles, we ascertain the background of each proxy contest, including whether the dissident was seeking board representation, whether the dissident campaign was accompanied by an outstanding takeover bid, and whether internal governance reforms were being sought. Some of our analyses require the use of CRSP data; imposing this requirement further reduces our sample to 190 contests over the 1992-2005 period.

Table 1, Panel A, provides an overview of the data, focusing on the distribution of contests and recommendations over time. Over the sample period, the share of contests for which the advisor issued a public recommendation appears to have increased, yet the average size of firms in our sample exhibits no obvious pattern across years. The size distribution is skewed; in the empirical tests, we examine whether size differences are important to contest outcome.

In order to be included in our final sample, the subject company in each contest must have stock returns data in CRSP and must be the subject of a publicly reported ISS vote advisory recommendation before the meeting date. The effect of excluding contests for which there is no public news of a recommendation is less obvious than that of excluding contests with missing CRSP data. Thus, to examine the selection issue further, we gather

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the recommendation's effect on the marginal investor's belief about the outcome-contingent value of the firm or the probability of a given outcome.

[18]We also searched in Factiva for contest-related recommendations issued by Glass, Lewis, & Co., Egan-Jones Proxy Services, and Proxy Governance Inc. As discussed in Section 2, these competitors did not enter the industry until 2003 or later. Our search revealed 22 contests over our sample period in which a Factiva story reported the vote recommendation of at least one of the competing advisors. For the purposes of the present study, we focus on recommendations made by ISS.

additional data on market capitalization, stock return volatility, and Tobin's Q for the initial 835 contest firms. In untabulated tests, we find that the contest firms in the final sample are not statistically different from the other contest firms in terms of average market capitalization or stock price volatility. However, the final-sample companies have significantly smaller average Tobin's q's, and they also experience significantly larger event-time abnormal stock returns in the twenty-one days ending the day after the initial contest filing date. This indicates that our final sample of contests is not strictly representative of all contests, and methods to correct for selectivity may thus be appropriate for our tests. We conduct a Heckman selectivity correction for most of our tests in Section 5. Since the test statistics from this procedure fail to reject the hypothesis of independence, we present our findings in Section 5 without the adjustment.

The research reports that contain vote recommendations are issued to institutional clients about two weeks prior to shareholder meetings. Our conversations with ISS officials indicate that vote recommendations often become known to the public shortly after the time they are privately distributed to institutional clients. We measure the effective (news) date of a vote advisory recommendation to be the date of its earliest mention in Factiva. For proxy contests and other high-profile corporate elections, this is typically within a week of the original report date.[19] In testing for a stock-price response to recommendations, we thus choose an event window that includes a period beginning shortly before the date of the first Factiva news story. This recognizes the fact that news of a recommendation enters the market not only through the formal news media, but also through the reactions of the advisor's clients to the publication of the report, which may occur before the news media date.

For each contest and recommendation, we also use Factiva as a source of information about the contest outcome. All of the proxy contests in our sample were resolved through one of three methods: a vote at an annual meeting of shareholders, a vote at a special meeting of shareholders, or a private settlement between the incumbent and dissident

[19]It is important that our measurement window be sufficiently wide to capture both leakage of recommendation information via actions of institutional clients as well as the price response to news stories about the recommendations. Of course, lengthening the measurement interval does add further noise. The timely reporting of vote recommendations in the public media is a key property that we exploit in order to test our hypotheses about price formation surrounding recommendations.

groups that led to cessation of the contest. For contests resolved by vote, typically either the company or the dissident group issued a press release announcing unofficial election results within a few days after the meeting. In our data, the identity of the preliminary winner always coincides with the officially-certified winner of the contest. Therefore, for contests resolved by vote, we take the contest resolution date to be the earlier of the preliminary election result date (if preliminary results were announced) and the official election result date. For contests that were resolved by settlement, we use the earliest announcement date (in Factiva) of the withdrawn solicitation as the contest resolution date.

Proxy contests can involve multiple, disparate election items of varying importance. To facilitate the empirical analysis, we classify the recommendations in a simple yet meaningful way. First, if the contest involves the election of board members, we deem the recommendation to support the dissident group if it favors one or more of the dissident board nominees.[20] Second, if a contest is not board-related, we categorize a recommendation as being pro-dissident if it favors the dissident on at least one of the contested election proposals.

We define a contest outcome to be a dissident victory unless all of the dissident's requested election items are defeated by a vote of shareholders. Note that this approach automatically classifies negotiated settlements as dissident wins. The rationale for this classification is that negotiated settlements typically involve some concessions made by management. Rather than face a high-profile election defeat at an annual meeting of shareholders, an incumbent may choose to yield a board seat to dissidents or agree to adopt some of the dissident's proposals.[21] We also replicate our main empirical tests for the sub-sample of contests that excludes settlement outcomes. The results from these tests are qualitatively similar to those for tests on the entire sample.

[20]Fewer than three percent of the contests in our final sample entailed a "split" recommendation.

[21]For example, in early March 2001, Carl Icahn launched a proxy contest at VISX Inc., citing management's unwillingness to contemplate a sale of the company that would benefit shareholders. The company subsequently amended its shareholder rights plan and agreed to let him conduct due diligence pursuant to a sale. In May 2001, Icahn withdrew his slate of nominees, stating that there was no longer a need for a contest given management's "significant shift" toward his position. (Dow Jones News Service, May 1, 2001).

A number of our empirical tests utilize data about the general voting environment surrounding contests. From dissident and management proxy statements, we obtain information on various voting provisions that can make it easier or harder for a given proxy proposal to pass. For example, we gather information on whether cumulative voting is in effect for director elections; whether a contested proposal is subject to a supermajority requirement; and whether the dissident is launching the proxy campaign through a special meeting of shareholders or through a written consent solicitation.

We also assemble data on key governance and ownership characteristics. For each sample company, we gather information from proxy statements on the tenure of the CEO in his office and whether the positions of CEO and Chairman are combined. Ownership levels for dissidents and incumbents are obtained from the latest proxy filings available prior to contest resolution dates. As discussed in Section 5.2 below, these ownership levels exclude shares obtainable from options that are exercisable by executives, but they include other securities (e.g., preferred stock or dual-class stock) and take into account that some firms have multiple classes of stock with different voting rights. We supplement this ownership information with information on shares held by institutional investors.

Table 1, Panel B, provides a breakdown of the frequency of contests and recommendations by type, including, for example, whether the contest involved a concurrent tender offer by the dissident, whether the target firm was an investment company, or whether the dissident sought reforms of internal governance. Most contests (about four-fifths) involve issues of board representation. Across almost all contest and dissident types, recommendations for and against management are well represented.

Table 2 provides a summary overview of the key variables used in this study. Overall, the advisory recommendations and the contest outcomes are each divided quite evenly between dissidents and incumbents. In the typical (median) contest, the dissident team owns about 7 percent of the outstanding voting stock, while incumbents own about 5 percent. The median level of institutional ownership is approximately 37%. Most contests last for less than two months, as measured from the dissident filing date, and involve small firms with less than $300 million in total assets. Table 2 also shows that,

for most of the ownership, governance, and contest characteristics, the level of correlation with the vote recommendation is relatively low. Apart from institutional ownership, the dissident bid indicator, and the contest outcome itself, no other characteristic has a correlation with the recommendation of above 10% in absolute value. Nevertheless, to the extent that the various voting provisions taken together could have substantial predictive power for contest outcomes, it will be important in Section 5.2 to control for these characteristics in a multivariate framework.

5. EVIDENCE

This section presents the main empirical findings of the paper. Our presentation of the evidence proceeds in three parts. First, we consider evidence on the overall informativeness of the vote advisory recommendations and show that stock-price movements imply that the recommendations are informative about proxy contests—either by helping to predict the outcome or by revealing the likely effect on shareholder value of one or both prospective outcomes. We then examine the nature of the information that the recommendations reveal through multivariate analysis of the predictability of contest outcomes. Finally, to investigate the implications of recommendations for conditional outcome valuations, we conduct multivariate analysis of the stock-price movements that occur around news dates leading to the contest outcome.

It should be emphasized that our results, while based on a sample of ISS recommendations, should be interpreted as speaking to the role of proxy voting advisory services more generally. Of course, absent comparable data for other advisors, inferences about possible differences across individual advisors are unwarranted by the present analysis.

5.1. EVIDENCE OF PRICE RESPONSE TO RECOMMENDATIONS

The behavior of returns around the public release of news about the advisor's recommendations is of central importance to all of the hypotheses considered in this paper. Table 3 reports the average price responses to public news about vote advisory recommendations for the full sample and for various sub-samples. We evaluate the

stock-price movement around the recommendation using an event window of [-6, +2] relative to the date of the first story that reports the recommendation in the Factiva database. The decision to include a week before the news report in the event window reflects our understanding of the sequential process by which reports are mailed to clients and then publicly released in substance through the news media (see Section 3). We use a standard event-study methodology (Dodd and Warner (1983)) to compute abnormal returns and cumulative abnormal returns, estimating market model parameters over a 250-day period ending 21 days before the contest filing date.

The evidence indicates that the release of a proxy voting recommendation to clients in our sample generates a significant stock-price response. As Table 3 shows, the abnormal return around the recommendation date is 1.7 percent ($p < .05$), on average, across all contests. Recommendations for board and non-board contests are associated with similar stock-price responses of 1.76 and 1.44 percent, as shown. The implication is that the recommendations, under certain conditions, bring new information to the market, as opposed to simply reflecting information that is already publicly impounded in prices.

Since it is public knowledge that ISS issues recommendations, one might question whether our finding of a positive average abnormal return around recommendation dates in our sample is consistent with the standard assumptions of market efficiency on which we rely elsewhere in the analysis. Recall, however, that our sample is designed to include a disproportionate number of contests in which the recommendation had a significant affect on the stock price using two pieces of ex-post information. The first is the information that a recommendation occurred. The second is that the recommendation had a strong effect on the stock-price or contest outcome. It is consistent with the assumption of market efficiency to consider that the contests in which the recommendation has a strong effect are also recommendations on which the effect on the stock price tends to be positive, on average. This is, however, not the only candidate explanation for our finding of a positive average abnormal return at the recommendation. If recommendations are not provided in all contests, the news of a recommendation could resolve uncertainty and convey good news about the firm's prospects, on average. Relatedly, the positive abnormal return may reflect changes in risk due to the resolution

of uncertainty about whether the advisor recommends the incumbent management or the dissident.[22]

The evidence in Table 3 also underscores the economic significance of the contests selected for inclusion in our data. In addition to the recommendation date, the table reports average stock-price movements for the full contest window and around two other key events: the filing date and the contest resolution date. As in previous studies of proxy contests (see, e.g., Dodd and Warner (1983), DeAngelo and DeAngelo (1989), and Mulherin and Poulsen (1998)), the abnormal returns at the initiation of a proxy contest (the filing date) are economically and statistically significant. The average abnormal return for all sample contests is 8.02 percent ($p<.01$).

The average abnormal return around the filing date exceeds 6 percent (with p-values less than 0.01) regardless of whether the dissident sought a board seat; whether the company was large or small relative to the sample median; whether (as a proxy measure for ex ante heterogeneity in the strength of different dissidents) the subsequent recommendation favored management or the dissident; or whether the dissident ultimately won any concessions. Average filing-date returns are less than 6 percent only for contests that occurred after the promulgation of Rule NPX, which mandated public disclosure by mutual funds of their proxy votes and voting policies beginning in 2003. The average abnormal return after Rule NPX is only 3.82 percent ($n=29$), versus more than 8 percent before the rule.

Another indicator of the economic significance of the contests in our sample are the large average cumulative returns found over the entire contest period, as shown in the last column of Table 3. The average cumulative return is 14.29 percent in the full sample, and more than 9.9 percent in all sub-samples. It is also noteworthy that the average cumulative return over contests won by incumbents, while lower than that for contests won by dissidents, is still a sizeable 13.02 percent. This suggests that even proxy contests that are unsuccessful from the dissident's viewpoint can have a salutary impact

[22] This last explanation requires that idiosyncratic risk is priced since proxy contest outcome randomness is not likely to be systematic.

on firm valuations, possibly by forcing managers to commit to operating changes that are good substitutes for what the dissident has requested in order to win the contest.

The stock-price response to the public announcement of the contest outcome is less pronounced than the response to the initial dissident proxy filing. The average abnormal return of -0.35 percent around the news of the vote outcome (or contest settlement) is close to zero, as would occur under market efficiency in a random sample of vote outcomes. However, the evidence in Table 3 suggests that the market regards the resolution of contests in which the dissident (management) wins as good (bad) news, as indicated by the observed average abnormal returns of 2.35 percent in the dissident win sub-sample and -2.98 percent in the incumbent win sub-sample. A somewhat more nuanced interpretation is that it may be good news when the dissident campaign is subsequently revealed to be strong enough to win, but disappointing news when the dissident campaign turns out to be too weak to win.

A finding that will be important for our later analysis is that the stock-price response to the advisor's recommendation depends on whether the recommendation favors the dissident or the incumbent. The average abnormal return around recommendations favoring the dissident is 3.55 percent ($p<.01$) versus only -0.09 percent around recommendations for management.

Table 4 explores this empirical fact in greater detail by comparing abnormal returns given dissident versus management recommendations for various sub-samples.[23] The dissident versus incumbent recommendation return differential persists in some–but not all–of the sub-samples that we examine. The evidence is that the pro-dissident recommendation has a greater price impact (at $p<.05$) in board contests, for contests involving smaller companies, for contests ultimately won by the dissident, and for contests with below-median filing-date returns. In the last instance, the recommendation may represent a signal that a dissident campaign that initially seemed weak has turned out to be unexpectedly better than the initial impression.

[23] For convenience, Table 4 repeats the sample-wide averages in the first column so that they can be easily compared with the cross-tabulated results.

Table 4 also shows that stock-price responses to the recommendations appear to have changed after Regulation Fair Disclosure (FD) was adopted and implemented by the SEC. Regulation FD, which took effect on October 23, 2000, prohibits public companies from giving investment advisers preferential access to information by requiring dissemination of information to all interested parties at the same time. Before Regulation FD, the average stock-price response to a recommendation is large (2.98 percent with a $p<.01$), as is the differential price response to dissident versus incumbent recommendations ($p = .049$). After Regulation FD, the average response and the differential response are both much smaller and are no longer statistically different from zero.[24] There is some indication, based on the point estimates, that the recent adoption and implementation of Rule NPX may have led to a resurgence of both effects. However, the post-NPX sample size (29 observations) is too small for a powerful formal test.

Overall, the findings in Tables 3 and 4 support the notion that the proxy advisor's recommendations are informative to stock market participants. The significant price movements around recommendation dates are consistent with both the certification hypothesis and with the outcome prediction hypothesis (we examine both of these hypotheses in the next section). However, the informativeness of the recommendations clearly seems to vary across contest types and informational environments. These results motivate taking a closer look at the relationship between contest outcomes and recommendations to shed more light on the nature of the information contained in ISS advice.

5.2. VOTE RECOMMENDATIONS AS PREDICTORS OF CONTEST OUTCOMES

Under the outcome prediction hypothesis, the advisor's recommendation informs the market about the likely outcome. If this predictive power is strong enough, it will be discernible in the data. We seek evidence of such a relation by, first, evaluating the univariate relation between outcomes and recommendations and, second, examining the

[24] Jorion, Liu and Shi (2005) offers a different example of how Regulation FD changed the nature of the market's response to third-party evaluations. Because credit rating agencies are exempt from FD, they faced more limited competition post-FD, increasing the informativeness of credit ratings.

link between outcome and recommendation in a multivariate setting that controls for other factors. The data reveal a robust positive relation between recommendations and outcomes in both univariate and multivariate comparisons, even after controlling for other factors. The evidence from this analysis of outcomes thus lends support to the outcome prediction hypothesis.

Table 5 reports the frequencies of contest outcomes conditional on a recommendation in favor of the dissident or in favor of management. As shown, when the advisor recommends against management, the dissident group wins 59 percent of the time (60 out of 102 contests in our data). However, dissidents win only 43 percent of contests (46 out of 108) in which they do not have ISS support. A Pearson chi-squared test supports rejection of the null of no relation at the 2% significance level.

While the contingency table does not imply that the recommendations directly influence contest outcomes, it does suggest that certification of dissident quality alone cannot fully explain the stock-price movements that we observe around the recommendation news. In the multivariate probit analysis below, we examine the incremental explanatory power of recommendations for outcomes, controlling for basic factors that previous work (e.g., Brickley, Lease, and Smith (1988), Pound (1988), Bethel and Gillan (2002)) has found to be relevant to voting outcomes. These characteristics are all publicly observable at the time of the contest resolution and include the voting power controlled by each team (as measured by ownership of voting securities), voting rules, and a number of other public indicators of the relative advantage of the management and dissident teams.

5.2.1. DISCUSSION OF CONTROL VARIABLES

The control variables in the analysis of outcome serve two purposes. One is to account for factors that might explain the outcome, conditional on the contest appearing in the data. These include the relative bargaining positions of the dissident and incumbent management, measured as their respective ownership stakes in the subject firm, the voting rules of the subject company, whether the dissident is an activist investor, the number of shareholders, and the length of the contest.

Other control variables account for the tendency of contests with relatively greater economic significance to appear in our data, relative to other contests that receive lesser media attention and are thus absent from the news database from which our sample derives.[25] These include the size of the company, the closeness of the contest, ex ante, as measured by the difference (or closeness) between the stock percentage holdings of the management and the dissident, and the stock-price response to the filing of the dissident proposal, and the size and stock-price volatility of the subject company.

We measure the voting power of a management or dissident group by the number of voting shares owned as a percentage of total voting shares outstanding. These holdings exclude shares obtainable from options that are (or will soon be) exercisable by executives, but they include other securities (e.g., preferred stock or dual-class stock) and adjust for multiple classes of shares with differential voting rights. In computing dissident ownership, we include all shares owned by members of the dissident shareholders' committee as well as voting shares owned by any dissident director nominees. Management ownership is measured by the total number of voting shares held by all executive officers and directors, minus those held by dissidents who are members of the company's current board of directors.

We also control for other salient differences in contest characteristics, such as whether the dissident is an activist shareholder or whether the dissident has launched a concurrent takeover bid to acquire the company. Activist dissidents (i.e., individuals who target more than one company in our sample) may have broader agendas, and hence they may be viewed as contributing less to the day-to-day operational management of any one target firm. These activists may have benefits from these efforts at a particular firm, but they may also have lower costs due to scale economies. Dissident campaigns accompanied by takeover offers may be viewed more favorably by shareholders due to

[25] This recognizes that the unconditional probability of a management win is equal to the product of the conditional probability of management win (conditional on the contest's appearance in our data) and the unconditional probability of the contest's appearance in our data. The unconditional probability, expressed in logs, thus has two components, the latter of which is the probability of the contest appearing in our data. We do not expressly estimate the selection probability here, but rather include factors that we believe are related to the selection probability as controls in the multivariate analysis for the outcome. Thus, we control for factors that affect selection of the contest into the data, in addition to factors other than the recommendation that could affect the outcome, conditional on the contest's appearance in the data.

the contingent prospect of receiving a substantial takeover premium. We also include in some specifications the log of the number of days between the initial filing date and the date of the scheduled vote to control for the fact that some contests may afford dissidents more time to solicit proxies.

Other notable controls include the log of the tenure of the CEO; whether the CEO is the same individual as the Chairman; whether or not certain voting provisions favor the dissident (cumulative voting) or management (supermajority provisions); and whether or not the contest developed around a special meeting or through a written consent solicitation.

5.2.2. EVIDENCE FROM PROBIT REGRESSION ANALYSIS

Table 6 reports the findings from multivariate probit regressions explaining contest outcomes. The probability of a management win is positively related to the occurrence of a pro-management recommendation. As the table shows, this finding is robust to the successive introduction of controls for governance and ownership; for other measures of relative advantage in the voting contest; and for factors that may affect either the marginal voter's appraisal of the alternatives being offered or the chance of a contest occurring in the first place.

In the first specification (column 1), we control only for the size of the firm, the timing of the contest, and the industry of the contest. The addition of controls for the type of contest, the information environment, and the ownership of votes by the management and dissident causes a decline in the size of the sample, yet the finding of a positive relation between outcomes and recommendations persists, as should occur if the recommendation provides information about the likely contest outcome. Each specification includes dummy variables to control for the contest year, the one-digit SIC industry of the subject firm, and whether the firm is a fund company. The results indicate that the explanatory power of each model is highly significant. The pseudo-R^2 statistics for the specification that includes all control variables exceeds 32%.

Our main finding from this analysis is that proxy advisor recommendations have significant explanatory power for outcomes. The ISS coefficient is robustly positive and significant, based on two-tailed tests. The marginal effect of differences in recommendations is substantial. For instance, column 1 indicates that, holding all non-recommendation explanatory variables at their means, the estimated probability of a management win in our data increases by roughly 16.5 percentage points if the recommendation is in favor of management rather than the dissident.

In the next two specifications (columns 2 and 3), management ownership appears to be positively related to the probability of a management win. A test of the hypothesis that the coefficients on the incumbent and dissident ownership variables are of opposite signs and the same magnitude cannot be rejected at the 10% level. This suggests that the ownership holdings influence the contest outcome via a mechanical voting power effect rather than through a signaling device. This is so because while the signaling impact per percentage management ownership (given the accumulated impact of company stock and option incentive plans) is unlikely to be comparable to the signaling impact of dissident stockholdings, the voting power effect of shares should be comparable, whether they are owned by incumbents or dissidents.

In line with the view that a longer delay between the contest initiation and the scheduled vote confers an advantage to dissidents, we find that an increase in the contest length is associated with a statistically significant decrease in the probability of a management win. This finding is consistent with the view that a longer delay affords the dissident group more time to publicize its campaign, solicit votes, and win over key voters (see, e.g., Pound (1988)) or that a better organized and higher quality dissident will file earlier in order to have more time in its campaign.

The estimated coefficient on the activist dissident indicator is positive for board contests resolved by a vote, in line with the view that activist dissidents have aims that are not fully aligned with those of other existing shareholders and that they engage in more general campaigns with lower chances of success. The coefficient on the dissident bid dummy is significantly positive for board contests, contrary to expectations. However, the fact that the significance of the coefficient disappears in the vote-resolution

regressions suggests that most of the contests involving dissident bids eventually ended in negotiated settlement before the contests went to a vote. A check of the negotiated outcomes in which the dissident withdrew from the contest confirms that these contests very frequently involve a dissident bid for the company.

The coefficients on some of the other control variables are also noteworthy. For instance, the logarithm of the CEO's tenure in office is significantly negatively related to the probability of a management win. This result may be driven by the fact that more is usually known about CEOs who have been in office longer, but such individuals tend to be close to retirement and less resistant to being displaced. As expected, in the last two specifications (in columns 3 and 4), whether a company has cumulative voting is negatively related to the probability of a management win. Contests that take the form of written consent solicitations tend to have a higher probability of a dissident win, perhaps because such contests tend to be waged at the outset only by strong dissident campaigns. The full specification in column 4 also shows that the level of institutional ownership is significantly negatively related to the probability of a management win. This is consistent with the view that institutional shareholder activism has increased in recent years (Gillan and Starks (1998)), and, compared with other non-committed shareholders (i.e., retail investors), institutions may be more likely to actively vote against management when appropriate.

Overall, the evidence is that the direction of ISS's vote recommendations is clearly related to the contest outcome. Although this evidence alone cannot distinguish between whether ISS is directly affecting institutions' voting behavior or whether ISS is predicting contest outcomes using a mixture of private and public information, the overall evidence seems to indicate that the recommendations are doing more than certifying dissident campaigns. Indeed, the predictive power of the recommendations remains strong even in the presence of other obvious contest outcome predictors.

We next examine the extent to which the predictive power of the recommendations varies in different informational and economic environments. We do this by adding interaction variables – the products of the recommendations with environmental variables – to the specification in column 4 of Table 6. The results of adding these interactions are shown

in Table 7. To conserve space, Table 7 only reports the estimated coefficients on the interaction terms and p-values from a Chi-squared test for the additional interaction variables.

We consider three hypotheses relating to institutional ownership, the impact of Regulation FD and Rule NPX, and the amount of company information arriving in the market. First, we interact the recommendations with dummy variables for above- and below-median institutional ownership. If ISS plays a causal role in influencing contest outcomes through research delivered to institutional clients, then the predictive power of the recommendations should be increasing in institutional ownership. Empirically, however, we find little difference in ISS predictive power for contests in firms with above-median versus below-median institutional ownership (p-value of 0.61). In contrast, there is at least some weak evidence that ISS predictive power may vary across the other two dimensions. The post-FD interaction coefficient is smaller than the pre-FD interaction coefficient (0.18 versus 0.48) and has a low t-statistic, suggesting that the recommendations became less predictive after Regulation FD. A formal Chi-Squared test cannot, however, reject the null of no difference. Thus, the evidence is suggestive but not definitive. Similarly, the recommendations are associated with larger estimated coefficients and t-statistics for contests involving firms with relatively high return volatility. This suggests that recommendations are more informative for outcomes in environments where the price impact of firm-specific information flows is relatively large.

5.3 RECOMMENDATIONS AS A FORM OF CERTIFICATION

In this section, we turn to the certification hypothesis. We investigate the extent to which recommendations convey information about the relative or absolute merits of competing proxy proposals. At issue is whether a recommendation for the dissident (incumbent) reveals good news to clients and to the market about the value of the firm under dissident (incumbent) management. If so, then the possible influence documented in section 5.2 is potentially explained by new information produced by ISS about conditional firm valuations under the two competing sides.

We develop two tests for certification. The basic idea behind each of our tests is to examine whether abnormal stock returns are associated with the recommendations *after controlling for the change in investor's beliefs about the dissident win probability.* The two tests differ from each other in that they use distinct approaches to control for changes in the subjective outcome probabilities. To conduct the first test, we use an event window that encompasses both the recommendation and the contest resolution. The change in the probability of a given outcome during this window depends only on the marginal investor's pre-recommendation probability beliefs and on the actual outcome, which is known at the end of the window. Our choice of window thus implies that, in order to isolate a certification effect, we only need to control for the marginal investor's pre-recommendation probability beliefs and condition on the occurrence of a particular type of outcome. To control for the probability beliefs, we estimate a first-stage probit regression similar to the outcome model in Section 5.2.

The second test uses a tighter event window that encompasses only the recommendation. Hence, it becomes necessary to explicitly control for the change in the investor's subjective probability of the outcome. As with the first test, we use a two-stage procedure. The difference, however, is that now we estimate *two* probabilities in the first stage—the pre-recommendation dissident win probability and the post-recommendation dissident win probability. Both of these estimated probabilities are needed to control explicitly for the change in subjective probability surrounding the recommendation.

5.3.1 ARE RECOMMENDATIONS INFORMATIVE TO THE MARKET ABOUT CONDITIONAL FIRM VALUES?

Our first test of certification examines whether the direction of a recommendation is associated with the evolution of market beliefs from before the recommendation to after the contest resolution. From Section 3, the stock price change from a pre-recommendation date t to a post-resolution date A is given by

$$(3) \qquad p_{t+A} - p_t = \Delta\mu_{t,A}{}^{m} + \pi_{t+A}{}^{d} [\Delta\mu_{t,A}{}^{d} - \Delta\mu_{t,A}{}^{m}] + \Delta\pi_{t,A}{}^{d} [\mu_t{}^{d} - \mu_t{}^{m}]$$

where $\Delta\mu_{t,A}^{m} = \mu_{t+A}^{m} - \mu_t^{m}$, $\Delta\mu_{t,A}^{d} = \mu_{t+A}^{d} - \mu_t^{d}$, and $\Delta\pi_{t,A}^{d} = \pi_{t+A}^{d} - \pi_t^{d}$. Recall that μ_t^{k} denotes the expected final stock price (k = m or d), as perceived by the marginal investor at date t. Also, π_t^{k} denotes the prior probability of outcome k, as perceived by the marginal investor at date t.

Consider a proxy contest in which, for example, the dissident ultimately wins. Because all uncertainty about the contest outcome is resolved at t + r, we have that $\pi_{t+A}^{d} = 1$ and, thus, $\Delta\pi_{t,A}^{d} = 1 - \pi_t^{d} = \pi_t^{m}$. Hence, Equation (3) implies the following:

$$(4) \qquad p_{t+A} - p_t = \Delta\mu_{t,A}^{d} + \pi_t^{m}[\mu_t^{d} - \mu_t^{m}].$$

That is, conditional on dissident victory, the price change from t to t + A depends on $\Delta\mu_{t,A}^{d}$, the change in the assessment of stock value over this interval. However, the important point to note is that because we have conditioned on dissident victory, *the price change is unaffected by any information that only changes interim beliefs about the probability of a dissident win*. In other words, interim probability information is redundant once we condition on the final contest outcome. Therefore, news of a recommendation between t and t + A can only affect the price change in (4) via a certification effect, i.e., by changing expectations of conditional firm valuations.

In light of this fact, we can test the certification hypothesis by estimating the following cross-sectional regression using the sub-sample of proxy contests in which the dissident actually won:

$$(5) \qquad CAR_{j,A}^{d} = a_0 + a_1\, REC_j^{d} + a_2\, \hat{\pi}_{jt}^{m} + e_j$$

where $CAR_{j,A}^{d}$ is firm j's cumulative abnormal return[26] over the pre-recommendation to post-outcome window [t, t+A] given a dissident win, REC_j^{d} is a dummy variable equal to 1 if ISS recommended the dissident and equal to 0 if ISS recommended the incumbent,

[26] There are two reasons for taking the dependent variable in (5) to be the cumulative abnormal return rather than the raw return. First, controlling for the impact of a broad stock market index returns filters out, at least partially, stock price movements unrelated to the proxy contests. Second, using returns normalizes conditional valuations to be percentages of a pre-outcome firm value benchmark.

and $\hat{\pi}_{jt}^{m}$ is an estimate of the market's belief at time t about the probability of an incumbent win. If the certification hypothesis is true, then we expect the coefficient a_1 to be positive.[27]

We measure $CAR_{j,A}^{d}$ over a window that spans from six days prior to the first news report of the recommendation to two days after the final contest outcome was publicly announced. To estimate $\hat{\pi}_{jt}^{m}$, we use the fitted probability of a management win from a probit model with the same explanatory variables as in the full specification of Table 6, but excluding the recommendation. The recommendation is excluded from this specification because $\hat{\pi}_{jt}^{m}$ is intended to estimate the probability of an incumbent win based on information prior to the recommendation.

Panel A of Table 8 reports, for the subsample of contests ultimately won by the dissident, results from estimating variants of specification (5). The empirical evidence supports the certification hypothesis. The main specification is shown in Column 2. The estimates indicate that, on average, the excess return associated with a dissident win at the news of a pro-dissident recommendation is 6.9 percent greater than the excess return for a dissident win at the news of a pro-incumbent recommendation. The associated t-statistic is 2.19. Thus, the certification effect is both economically and statistically significant.

The specification in column 2 does appear to have difficulty controlling for cross-sectional variation in the ex ante probability π_{jt}^{m} of an incumbent win, given that we cannot reject a null of zero for the coefficient a_2. There are at least two possible explanations for this. First, the fitted values $\hat{\pi}_{jt}^{m}$ are likely to estimate the marginal investor's actual probability beliefs π_{jt}^{m} with error. This measurement error will tend to bias the estimated coefficient a_2 toward zero. Nonetheless, when we simply drop the

[27] We can give an interpretation to the other coefficients in (5) as follows: a_0 is the cross-sectional average of $\Delta\mu_r^{d}/p_{jt}$ given a recommendation for the incumbent management, and $a_1 + a_0$ is the cross-sectional average of $\Delta\mu_r^{d}/p_{jt}$ given a recommendation for the dissident. a_2 is cross-sectional average of the pre-recommendation expected value differential $(\mu_{jt}^{d} - \mu_{jt}^{m})/p_{jt}$. This interpretation is related to the analysis of Betton and Eckbo (2000), who use first-stage probability estimates to proxy for terminal expected payoffs in takeover contests. Their methodology does not, however, make essential use of particular subsamples.

estimated probability from the specification (column 1 of Table 8, Panel A), the estimation results still support the certification hypothesis.

Second, cross-sectional variation in $\mu_{jt}^{d} - \mu_{jt}^{m}$ across firms in the sample will enter the error term and, thus, tend to increase the coefficient standard errors. We consider two alternate specifications that use the filing-window abnormal return to control for cross-sectional variation in $(\mu_{jt}^{d} - \mu_{jt}^{m})$.[28] First, we add the filing-date return separately to (5) as an explanatory variable. Second, we add to (5) an interaction between the filing-date return and the fitted probability $\hat{\pi}_{jt}^{m}$. Results for these two alternative specifications are reported in columns 3 and 4 of Table 8, Panel A. Both specifications support dissident certification, but the inclusion of the filing window excess return does not appear to increase the regression's ability to capture the impact of the ex ante outcome probability π_{jt}^{d}.

Turning to incumbent certification, analogous reasoning to that underlying the tests in Panel A suggests estimating the following specification using the subsample of contests won by the incumbent:

$$(7) \qquad CAR_{j,A}^{m} = b_0 + b_1 REC_j^{m} + b_2 \hat{\pi}_{jt}^{d} + e_j,$$

In this specification, $CAR_{j,A}^{m}$ is defined as the excess return over the pre-recommendation to post-outcome window, given that the incumbent wins. If recommendations serve to certify the incumbent, then $b_1 > 0$. In light of the previous evidence supporting certification of the dissident, the null of $b_1 = 0$ is consistent with the notion that recommendations only certify dissidents, not incumbents.

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[28] To see that the filing-date return should be highly correlated with $(\mu_{jt}^{d} - \mu_{jt}^{m})$, note that firm j's abnormal return from a pre-filing date t to a date immediately after the filing, t + F, can be written as

$$(6) \qquad \begin{aligned} CAR_{j,F} &= (p_{j,t+F} - p_{jt})/p_{jt} \\ &= (\mu_{j,t+F}^{d} + \pi_{j,t+F}^{m} (\mu_{j,t+F}^{m} - \mu_{j,t+F}^{d}) - p_{jt})/p_{jt} \\ &\approx (1 - \pi_{j,t+F}^{m})(\mu_{j,t+F}^{d} - \mu_{j,t+F}^{m})/p_{jt} \end{aligned}$$

where the third line follows if the contest initiation was a low probability event and if there is a small degree of uncertainty about the incumbent (i.e., so that $p_{jt} \approx \mu_{j,t+F}^{m}$).

Panel B in Table 8 reports the empirical results from estimating (7) for the subsample of contests won by the incumbent team. Since none of the estimates of b_1 are statistically different from zero at the five percent significance level, a null of dissident-only certification cannot be rejected. We also note that positive estimate of b_3 on the fitted probability of a dissident win $\hat{\pi}_{jt}^{d}$ in column 2 can be interpreted – based on the parallelism with the coefficients in specification (6) – to mean that the expected conditional value differential $(\mu_{jt}^{m} - \mu_{jt}^{d})/p_{jt}$ is a statistically and economically significant 15 percent. A plausible interpretation is that these are contests in which the incumbents appeared ex ante to be of significantly higher quality than the dissidents – a finding that is consistent with these being contests that the incumbents ultimately did win.

5.3.2 ADDITIONAL TESTS OF THE CERTIFICATION HYPOTHESIS

Our second approach to testing the certification hypothesis is to investigate directly whether stock price changes at the recommendation announcement reflect updating of outcome-contingent firm valuations. From Section 3, we can write the price change over a narrow window [t, t+B] surrounding the announcement of a recommendation as the sum of three terms:

$$(8) \qquad p_{t+B} - p_t = \Delta\mu_{t,B}^{m} + \pi_{t+B}^{d}[\Delta\mu_{t,B}^{d} - \Delta\mu_{t}^{m}] + \Delta\pi_{t,B}^{d}\,[\mu_{t}^{d} - \mu_{t}^{m}].$$

Apart from influencing the post-recommendation probability π_{t+B}^{d} and, thereby, the probability revision $\Delta\pi_{t,B}^{d}$, the recommendation can only influence the stock price change by inducing a revision in the marginal investor's assessments of conditional values. If the certification hypothesis is true, then $\Delta\mu_{t,B}^{d} \neq 0$ or $\Delta\mu_{t,B}^{m} \neq 0$ after a recommendation. This suggests the following cross-sectional model as a test for certification:

$$(9) \qquad CAR_{j,B} = c_0 + c_1\,REC_j^{d} * \hat{\pi}_{j,t+B}^{d} + c_2\,REC_j^{m} * \hat{\pi}_{j,t+B}^{d} + c_3\,(\hat{\pi}_{j,t+B}^{d} - \hat{\pi}_{j,t}^{d}) + e_j.$$

In the empirical implementation of (9), we measure the dependent variable $CAR_{j,B}$ as the nine-day cumulative abnormal return [−6,+2] surrounding the recommendation news date (as documented in Table 3 and Table 4).

Certification implies that $c_1 > 0 > c_2$. That is, a pro-dissident recommendation should lead to an increase in the differential value of dissident versus incumbent management, while a pro-incumbent recommendation should lead to a negative change. Since most of the uncertainty is likely to be about the dissident—incumbent management teams have past track records with their companies—we assume it is $\Delta\mu_{t,B}{}^{d}$ and not $\Delta\mu_{t,B}{}^{m}$ that responds to the advisor's recommendation. Note that such an assumption is consistent with the empirical evidence from our first certification tests in Table 8.

Table 9 reports the empirical results for our second test of certification. Column 1 gives the results for specification (9). The estimate of 7.1 percent for c_1 is statistically significant at the 10 percent level, but the other two coefficients have low t-statistics. However, an F-test shows that the variables have joint explanatory power, suggesting that multicollinearity could be a problem. The correlations between the three explanatory variables are indeed large in magnitude, ranging from -0.70 to 0.79. This is not surprising: the fitted difference $\hat{\pi}^{d}_{j,t+B} - \hat{\pi}^{d}_{jt}$ is positively correlated with $REC_j{}^{d}$ (consistent with our results in Table 6) and, thus, will be positively correlated with $REC_j{}^{d} * \hat{\pi}^{d}_{j,t+B}$ and negatively correlated with $REC_j{}^{m} * \hat{\pi}^{d}_{j,t+B}$.

We can lessen the potential multicollinearity problem by rearranging the terms in (9) as follows. First, combine the $\hat{\pi}^{d}_{j,t+B}$ in the last explanatory variable in (9) with the $\hat{\pi}^{d}_{j,t+B}$'s in the two interaction terms to get:

$$(10) \quad CAR_{j,B} = d_0 + d_1 REC_j{}^{d} * \hat{\pi}^{d}_{j,t+B} + d_2 REC_j{}^{m} * \hat{\pi}^{d}_{j,t+B} + d_3 \hat{\pi}^{d}_{jt} + e_j$$

where $d_1 = c_1 + c_3$ and $d_2 = c_2 + c_3$ and $d_3 = -c_3$. In addition, if we impose a condition $c_2 = -c_3$, which means that a recommendation for the incumbent wipes out any pre-recommendation differential $\mu_{jt}{}^{d} - \mu_{jt}{}^{m}$, then we get

(9') $CAR_{j,B} = g_0 + g_1 REC_j^d * \hat{\pi}^d_{j,t+B} + g_3 \hat{\pi}^d_{jt} + e_j$

where now $g_1 = c_1 + c_3$ and $g_3 = c_3$. Column 2 in Table 9 shows that the estimated coefficient g_1 is statistically significant and positive while the estimated g_3 is not, implying that $c_1 > 0$. Thus, the evidence again supports the certification hypothesis.

6. CONCLUSION

This paper is the first systematic empirical investigation of the role of proxy vote advisory services in contested elections. We have introduced two hypotheses – outcome prediction and certification – under which an advisor brings new information to the market. A stronger causal version of outcome prediction involves the advisor's recommendation actually influencing the contest outcome. To test these hypotheses against the alternative of no effect, we have compiled data on a sample of proxy votes in which proxy advisors are *a priori* most likely to have an impact. We focus on Institutional Shareholder Services (ISS) as the most prominent proxy advisory firm. We establish three main findings. First, the advisory recommendations tend to bring new information to the market. We document a positive abnormal stock return surrounding the arrival of public news about the recommendations; this abnormal return is particularly positive when the recommendation favors the dissident group. Second, proxy advisor recommendations are good predictors of contest outcomes in the sense of influencing or forecasting the vote, even after controlling for other factors that may affect contest selection or be plausible predictors of the outcome, conditional on selection, such as voting rules, ownership stakes, and contest characteristics. Third, advisors play a certification role: stock valuations conditional on a dissident win are significantly related to recommendations.

The economic interpretation of these results is as follows. The average positive and significant abnormal returns around recommendations, accompanied by evidence of a relation between recommendations and outcomes, imply that recommendations reveal information, especially information about whether the management or dissident will win

the contest. The positive and significant abnormal returns surrounding pro-dissident recommendations are consistent with the view that the advisor plays an important certification role. In other words, vote advisory recommendations may help alter investors' perceptions of the relative value of the dissident and incumbent teams. Our empirical tests of the certification hypothesis lend support to this view. At the same time, the ability of proxy advisor recommendations to predict (in a statistical sense) contest outcomes suggests that the role of the recommendations extends beyond simply certification to include helping shareholders to predict contest outcomes or influencing the behavior of pivotal voters. Future work could seek to shed more light on the implications of advisor' recommendations for proxy voting outcomes and investor welfare.

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Table 1

Frequency of Contests and Recommendations, by Year and by Type

This table presents frequencies for our sample of proxy contests and associated vote recommendations issued by Institutional Shareholder Services. Proxy contests are identified via the SEC EDGAR database using all available controversy proxy filings made by non-management persons or dissident groups over the 1992 to 2005 period (DEFC14A and PREC14A filings). The initial sample consists of all unique contests associated with such filings. Board contests are contests in which a dissident group proposes nominees for board seats or seeks to remove incumbent directors. The final sample consists of contests for which an ISS vote recommendation can be identified via the Dow Jones & Reuters' Factiva database. A recommendation is classified as being in favor of the dissident group if it advises a vote in favor of at least one dissident director (in board contests) or favors at least one dissident election proposal (in non-board contests). Contest type classifications used in Panel B are described in the text and based on the authors' readings of news articles in the Factiva database.

Panel A: Distribution of Contests and Recommendations Over Time

	Number of Contests			Size of Firms in Final Sample (Assets, $M)		Recommendations	
Period	Initial Sample	Final Sample	%	Mean	Median	For Diss	For Mgmt
1992-1995	178	20	11	1,835	356	7	13
1996-1997	117	24	21	2,672	278	8	16
1998-1999	141	30	21	952	193	16	14
2000-2001	150	56	37	3,016	307	32	24
2002-2003	141	56	40	2,463	195	22	34
2004-2005	108	24	22	992	401	17	7

Panel B: Contest Types, Dissident Types, and Recommendations

	Contests			Recommendations	
	Not Board-Related	Board-Related	% Board-Related	For Diss.	For Mgmt.
All Contests	34	176	81	102	108
Contest Type					
Acquisition by Dissident	13	33	72	28	18
Dissident Seeks Sale of Co.	11	54	83	24	44
Fund Restructuring	3	13	81	6	10
Internal Governance	9	26	74	21	16
Takeover Defense	9	26	74	22	13
Financial Policy	0	17	100	7	10
Dissident Type					
Nonfinancial Corporation	15	37	71	35	17
Investment Company	9	60	87	32	37
Activist Dissident	6	13	68	11	8
Current Company Director	0	3	100	3	0
Former Company Director	2	22	92	6	18

Table 2

Summary Statistics Related to Recommendations, Contest Characteristics, and Firm Characteristics

The sample consists of 210 proxy contests over the 1992-2005 time period identified from SEC EDGAR filings and news stories (Dow Jones & Reuters' Factiva database). The rightmost column shows correlations of each characteristic with the direction of the vote recommendation (1 = for management, 0 = for dissident). The number of observations for institutional ownership is restricted due to limited availability of ownership data for fund companies. All variables are constructed using publicly available sources of data. Table A1 in the Appendix provides descriptions of each variable.

Variable	Mean	Median	Std. Dev.	*N*	Correlation with REC_j^m
REC_j^m (recommendation for mgmt.)	0.51	1	0.50	210	1.00
Management wins contest	0.49	0	0.50	210	0.16
Firm Size, Assets ($M)	2,191	283	7,379	210	0.006
1-year adj. return, prior to filing	-0.299	-0.279	0.45	184	-0.050
1-year adj. return, post-contest	-0.135	-0.240	0.740	131	0.041
Ownership and Governance					
Dissident Ownership	8.40	6.69	8.67	210	0.077
Management Ownership	9.39	5.43	10.77	210	0.002
Institutional Ownership	38.74	37.21	26.06	191	-0.194
CEO tenure	6.66	4	7.72	210	-0.107
CEO = Chairman	0.63	1	0.48	210	-0.037
Contest Characteristics					
Contest length	71.46	56.50	48.02	210	0.024
Contest for Board Seats	0.84	1	0.369	210	0.064
Takeover bid by dissident	0.22	0	0.41	210	-0.130
Dissident is activist	0.09	0	0.29	210	-0.059
Voting Provisions					
Cumulative Voting	0.10	0	0.30	210	0.006
Special Meeting	0.10	0	0.30	210	-0.057
Consent Solicitation	0.07	0	0.25	210	0.068
Supermajority req'd. for dissident	0.30	0	0.46	210	-0.071
Supermajority req'd. for mgmt.	0.02	0	0.14	210	0.066

Table 3

Abnormal Returns Around Key Contest Dates

This table reports average cumulative abnormal returns around key dates during proxy contests. Abnormal returns are calculated using a standard one-factor market model in which market returns are measured using the return on a value-weighted CRSP index. The initial filing date is the first date on which the dissident group filed proxy materials with the SEC (forms PREC14A and DEFC14A). The recommendation news date is the date of the earliest media report in Dow Jones & Reuters' Factiva database of a proxy contest recommendation made by Institutional Shareholder Services. The proxy contest resolution date is the earliest news report in the Factiva database of either (1) a negotiated settlement in which the dissident withdraws the contest; or (2) a contest winner is announced based on a preliminary vote count. ** and * denote statistical significance at the 1% and 5% levels, respectively.

		[-20,+1] around initial filing date of dissident proxy materials		[-6,+2] around news date of recommendation		[-2,+2] around date of proxy contest resolution		20 days before initial filing date through 2 days after contest resolution	
	N	Mean	T-stat	Mean	T-stat	Mean	T-stat	Mean	T-stat
All Contests	190	8.02**	6.50	1.70*	2.04	-0.35	-0.55	14.29**	10.88
Election of board members									
Board-related	156	8.32**	5.88	1.76	1.83	0.031	0.04	14.99**	9.96
Non-board related	34	6.62**	2.89	1.44	0.94	-2.16	-1.83	10.92**	4.47
Company size									
Large (Assets > median)	103	8.16**	5.81	0.457	0.48	0.051	0.07	12.28**	8.15
Small (Assets <= median)	87	7.84**	3.71	3.13*	2.21	-0.79	-0.74	16.53**	7.47
Time period									
Pre-FD	96	8.16**	5.17	2.98**	2.63	-0.904	-1.07	18.34**	10.93
Interim period	65	9.68**	4.12	0.04	0.02	-0.68	-0.57	10.36**	4.11
Post-NPX rule	29	3.818	1.20	1.397	0.71	2.179	1.49	9.942**	2.98
Outcome									
Dissident win	95	8.93**	5.19	2.53*	2.22	2.35**	2.76	15.58**	8.44
Management win	95	7.10**	4.02	0.902	0.74	-2.98**	-3.23	13.02**	6.97
ISS recommendation									
For dissident	93	8.68**	5.16	3.55**	3.20	1.50	1.75	14.54**	8.03
For management	97	7.38**	4.10	-0.09	-0.08	-2.04*	-2.23	14.05**	7.42

Table 4

Stock Price Reaction to Recommendations For and Against Management

This table shows the average cumulative abnormal stock return around the earliest media reports of proxy vote recommendations issued by Institutional Shareholder Services (ISS). Abnormal returns are calculated from six days before the announcement date to two days afterwards; a standard one-factor market model is used in which market returns are measured using the return on a value-weighted CRSP index. The ISS recommendation news date is the date of the earliest news story in Dow Jones & Reuters' Factiva database reporting the vote recommendation. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Contest Sample	All Recs.	Rec. for Mgmt	Rec. for Dissident	P-value of test for difference
All contests	1.70** (2.04) 183	-0.001 (-0.08) 93	3.554*** (3.20) 90	0.026
Board contests	1.758* (1.83) 150	-0.894 (-0.64) 79	4.710*** (3.64) 71	0.003
Tender offer by the dissident	-0.848 (-0.54) 43	-3.217 (-1.28) 17	0.699 (0.35) 26	0.123
Large firms (assets above sample median)	0.457 (0.48) 98	-0.658 (-0.46) 47	1.484 (1.15) 51	0.243
Small firms (assets below sample median)	3.135** (2.21) 85	0.484 (0.24) 46	6.261*** (3.24) 39	0.041
Contests won by management	0.902 (0.74) 93	0.156 (0.09) 55	1.982 (1.13) 38	0.408
Contests won by dissident	2.526** (2.22) 90	-0.453 (-0.24) 38	4.704*** (3.28) 52	0.039
Pre-FD (Jan. 1992 to Oct. 2000)	2.981*** (2.63) 90	0.314 (0.18) 44	5.533*** (3.75) 46	0.049
Interim Period (Nov. 2000 to Mar. 2003)	0.037 (0.02) 64	-0.618 (-0.31) 38	0.995 (0.42) 26	0.532
Post-Mutual Fund Disclosure Rule (Apr. 2003 to Dec. 2005)	1.397 (0.71) 29	0.091 (0.02) 11	2.195 (0.99) 18	0.478
Filing date return above sample median	0.901 (0.69) 91	-0.530 (-0.27) 47	2.429 (1.42) 44	0.248
Filing date return below sample median	2.492** (2.42) 92	0.353 (0.24) 46	4.630*** (3.26) 46	0.039

Table 5

Contest Outcome Frequencies, by Recommendation

This contingency table shows the relative frequencies of management and dissident wins for cases in which Institutional Shareholder Services recommended either for management or for the dissident group. The sample consists of 210 proxy contests over the 1992-2005 time period identified from SEC EDGAR filings and news stories (Dow-Jones & Reuters' Factiva database). A recommendation is classified as being pro-dissident if the advisor supported a dissident nominee (in board contests) or if it favored a dissident proxy proposal (in non-board contests). In board contests, the incumbent management team wins if the issue goes to a shareholder vote and if the dissident team does not gain any seats on the board of directors. For non-board contests, a management win occurs if no settlement occurs and the dissident team does not win the vote on any proxy proposal. Numbers in parentheses indicate the relative percentages of wins and losses in each column. The p-value is reported for a Pearson Chi-Squared test of independence.

	REC for Dissident	**REC for Management**	**Total**
Dissident Wins	60 (58.82%)	46 (42.59%)	106 (50.48%)
Management Wins	42 (41.18%)	62 (57.41%)	104 (49.52%)
Total	102	108	210
Pearson Chi-Squared Test	**p-value = 0.019**		

Table 6

Determinants of Proxy Contest Outcomes

Marginal effects in a multivariate (probit) analysis of the contest outcome (1 = incumbent management win). Explanatory variables include the direction of ISS recommendation, contest characteristics, and characteristics of the dissident and the target firm. The sample consists of 210 proxy contests over the 1992-2005 time period identified from SEC EDGAR filings and news stories (Dow Jones & Reuters' Factiva database). The SIC 67 dummy captures whether or not the target of a contest is a fund company. Each specification includes 1-digit SIC indicators. The filing date return window ranges from 20 days before the dissident proxy filing date to 1 day after the filing date. The cumulative abnormal return is calculated using a standard one-factor market model in which market returns are measured with an equal-weighted CRSP index. All other variables are described in Table A1 in the Appendix. Z-statistics appear in parentheses below each estimated marginal effect. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels.

Independent Variable	**(1)**	**(2)**	**(3)**	**(4)**
REC_j^m (1 = for management)	0.165** (2.25)	0.180** (2.35)	0.245*** (2.80)	0.309*** (2.85)
Log of total assets	0.007 (0.36)	0.011 (0.51)	0.004 (0.14)	0.066 (1.43)
Dissident ownership %		-0.007 (-1.41)	-0.006 (-0.93)	-0.012 (-1.60)
Management ownership %		0.008** (2.06)	0.009** (1.99)	0.006 (1.00)
Dummy for activist dissident		0.170 (1.23)	0.053 (0.35)	0.199 (1.04)
Dummy for takeover bid by dissident		-0.025 (-0.25)	-0.014 (-0.13)	-0.083 (-0.63)
CEO = Chairman		0.171** (2.06)	0.151 (1.57)	0.126 (1.02)
Log(1 + years CEO in office)		-0.137*** (-2.70)	-0.150** (-2.58)	-0.178** (-2.29)
Institutional ownership %				-0.013*** (-4.09)
Log of volatility				0.672 (0.18)
Log(1 + contest length in days)			-0.176** (-2.39)	-0.284*** (-3.12)
Log(number of shareholders)			0.011 (0.32)	0.064 (1.44)

(continued)

Table 6 (continued)

Independent Variable	(1)	(2)	(3)	(4)
Dummy for cumulative voting			-0.365*** (-2.89)	-0.413*** (-2.80)
Dummy for supermajority provision favors management			0.032 (0.29)	0.301** (2.01)
Dummy for Special meeting			-0.183 (-1.30)	-0.221 (-1.24)
Dummy for written consent solicitation			-0.384** (-2.20)	-0.534*** (-3.10)
Abnormal return, [-20,+1] around filing date				0.128 (0.47)
Contest year	0.023 (1.03)	0.020 (0.89)	0.016 (0.61)	0.019 (0.62)
Dummy for Pre-FD	0.127 (1.05)	0.134 (1.07)	0.161 (1.17)	0.066 (0.40)
Dummy for post-mutual fund disclosure rule	-0.097 (-0.80)	-0.078 (-0.62)	-0.026 (-0.18)	-0.035 (-0.19)
Dummy for SIC code 67	0.086 (0.61)	0.139 (0.92)	0.209 (0.98)	0.395 (1.31)
1-digit SIC industry dummies	**Yes**	**Yes**	**Yes**	**Yes**
Number of Observations	210	210	190	159
Pseudo-R^2	0.048	0.105	0.191	0.329

Table 7
Tests of Prediction, Conditional on Information and Influence Factors

This table presents results from analysis of the contribution of ISS recommendation in multivariate (probit) analysis of contest outcomes focusing on interaction between the recommendation and factors associated with the informational environment and the prospective influence of the recommendation. High and low institutional holdings in the subject company are measured relative to the sample median. High and low volatility of the subject company's stock price is measured using volatility from the year before the contest relative to the sample median. Pre- versus post-Reg FD indicators are evaluated according to whether the contest filing occurred before or after the effective date of Reg FD. Robust standard errors appear in parentheses. P-values are from a Chi-Squared test against the null that the added controls have no explanatory power or that the coefficient on the recommendation indicator is unaffected by interaction with an institutional holding, volatility or era indicator variable. ***, **, and * indicate significance levels of z-statistics at .01, .05 and .10 based on a two-tailed test.

Independent Variable	**dF/dX**	**p-value**
By Addition of Control Variables to Sample		
REC_j^m (for management) w/o additional controls	0.348*** (0.097)	
REC_j^m w/ controls for: Pre-contest performance of company Disparity b/t holdings of mgt & dissident	0.332*** (0.105)	.97
By Recommendation and Institutional Holdings		
REC_j^m * *High Inst Holdings*	0.373*** (0.120)	
REC_j^m * *Low Inst Holdings*	0.2922** (0.135)	.61
By Recommendation and Volatility		
REC_j^m * *High Volatility*	0.4642*** (0.12)	
REC_j^m * *Low Volatility*	0.1937 (0.14)	.13
By Recommendation and Era of Contest		
REC_j^m * *Pre-Reg FD*	0.4779*** (.134)	
REC_j^m * *Post-Reg FD*	0.1829 (0.145)	.15

Table 8
Tests of Certification Using Pre-Recommendation to Post-Resolution Returns and Conditioning on Contest Outcomes

This table presents results from multivariate (ordinary-least squares) analysis of the cumulative return around the recommendation news date, testing for certification in proxy contests. The dependent variable is the stock return over the period from six days prior to the recommendation announcement date to two days after the contest resolution date, minus the contemporaneous return on an equal-weighted market portfolio. The main explanatory variables include REC_j^d and REC_j^m, indicators for whether or not a recommendation by Institutional Shareholder Services was reported to have favored the dissident group or incumbent management, respectively. Control variables include the abnormal return over the interval [−20,+1] surrounding the filing date; and $\hat{\pi}_{jt}^{m}$ and $\hat{\pi}_{jt}^{d}$, the predicted probabilities of incumbent and dissident victory from first-stage probit regressions of contest outcomes on all control variables except the recommendation. T-statistics appear in parentheses below coefficient estimates. ***, **, and * denote statistical significance at 1%, 5%, and 10%, respectively.

Variable	(1)	(2)	(3)	(4)
Panel A: Subsample of Dissident Wins (N = 91)				
Intercept	-0.006 (-0.24)	0.007 (0.18)	-0.003 (-0.13)	0.001 (0.02)
REC_j^d	0.069** (2.20)	0.069** (2.19)	0.072** (2.26)	0.076** (2.39)
$\hat{\pi}_{jt}^{m}$		-0.031 (-0.43)		-0.002 (-0.03)
Filing-date abnormal return			-0.053 (-0.61)	
Filing-date abnormal return * $\hat{\pi}_{jt}^{m}$				-0.282 (-1.38)
R-square	0.052	0.054	0.056	0.074
P-value of F-test for joint significance	0.030	0.088	0.081	0.082
Panel B: Subsample of Management Wins (N = 91)				
Intercept	-0.017 (-0.87)	-0.066** (-2.10)	-0.012 (-0.60)	-0.055 (-1.74)
REC_j^m	-0.015 (-0.57)	-0.024 (-0.93)	-0.011 (-0.45)	-0.023 (-0.91)
$\hat{\pi}_{jt}^{d}$		0.140** (1.98)		0.133* (1.92)
Filing-date abnormal return			-0.092 (-1.29)	
Filing-date abnormal return * $\hat{\pi}_{jt}^{d}$				-0.222** (-1.98)
R-square	0.004	0.046	0.022	0.087
P-value of F-test for joint significance	0.568	0.126	0.375	0.046

Table 9

Tests of Certification Based on Abnormal Announcement Returns Surrounding ISS Recommendations

This table reports results from the multivariate (ordinary-least squares) analysis of cumulative abnormal return at the recommendation date, testing for a certification effect of ISS proxy advisor recommendations. The dependent variable is the cumulative abnormal return over the interval [−6,+2] surrounding the recommendation announcement date. Abnormal returns are calculated using a one-factor market model with the equal-weighted CRSP index. The explanatory variables are constructed from REC_j^m and REC_j^d (binary variables indicating whether an ISS proxy vote recommendation was for the dissident or for the management) and from $\hat{\pi}^d_{j,t+1}$ and $\hat{\pi}^d_{jt}$ (dissident win probabilities estimated using the approach of Table 6 with and without the ISS recommendation, respectively). T-statistics appear in parentheses below coefficient estimates. ***, **, and * denote statistical significance at the 5% and 10% levels, respectively.

Variable	(1)	(2)
Intercept	-0.014 (-0.70)	-0.014 (-0.69)
$REC_j^d * \hat{\pi}^d_{j,t+1}$	0.071* (1.70)	0.063** (2.45)
$REC_j^m * \hat{\pi}^d_{j,t+1}$	0.049 (1.07)	
$\hat{\pi}^d_{j,t+1} - \hat{\pi}^d_{jt}$	0.124 (0.78)	
$\hat{\pi}^d_{jt}$		0.025 (0.66)
Number of Observations	183	183
R-square	0.052	0.047
P-value of F-test for joint significance	0.023	0.013

Table A1

Variable Descriptions

Variable	Description
Board Contest	Binary variable indicating whether the dissident is seeking board seats in a contest or seeking to remove incumbent directors. Source: Controversy proxy filings (PREC14A, DEFC14a).
Management win	Binary variable equal to 1 if and only if management wins a contest. For board contests, a management win occurs if no negotiated settlement occurs and the dissident team does not gain any board representation. For non-board contests, a management win occurs if no settlement occurs and the dissident team does not win the vote on any proxy proposal. Source: Dow Jones & Reuters' Factiva database
REC_j^m	Equal to 1 if and only if ISS recommends in favor of all management nominees (in board contests) or in favor of all management proxy proposals (in non-board contests). Source: Dow Jones & Reuters' Factiva database
Dissident ownership	Total percentage of shares held by dissident committee and dissident director nominees. Shareholdings are measured for the latest available date prior to the date of record for the scheduled election. Multiple classes of voting stock are weighted according to relative voting rights. Source: Company and dissident proxy statements
Management ownership	Percentage of voting shares held by incumbent management. (directors and executive officers). Shareholdings are measured for the latest available date prior to the date of record for the election. Voting power is adjusted for multiple classes of shares and excludes (1) shares not currently owned but obtainable from the exercise of options and (2) shares of dissidents who are current board members. Source: Company and dissident proxy statements
Institutional ownership	Percentage of common stock owned by institutions. Measured at the latest quarter or month preceding the record date. Sources: Compact D/SEC, Standard and Poor's Stock Guide, Value Line
Cumulative voting	Equal to 1 if the company's by-laws permit shareholders to vote their shares cumulatively in the election of directors. Source: Company and dissident proxy statements
Special meeting	Equal to 1 if the vote is scheduled for a special meeting (rather than an annual meeting). Source: Company proxy statements

Consent solicitation	Equal to 1 if the dissident seeks written consent solicitations under Delaware corporation law. Source: Company proxy statements
Supermajority required (for dissident proposal)	Equal to 1 if a dissident proposal requires a supermajority vote. This indicates a higher threshold for proposal passage than a majority of votes cast at the meeting (e.g., a requirement that passage requires affirmative votes from 75% of shares cast; or a majority of *all* outstanding shares) Source: Company and dissident proxies
Supermajority required (management proposal)	Equal to 1 if a management proposal requires a supermajority vote *and* is being opposed by the dissident. Source: Company and dissident proxies.
Total assets	Book value of total assets, measured as of the end of fiscal year preceding the contest filing date. Source: Compustat, 10-Q filings
Contest length	Number of days between earliest filing of a dissident's controversy proxy with the Securities and Exchange Commission and the resolution of the contest. Sources: computed from Dow Jones & Reuters' Factiva and dissident proxy statements.
Takeover bid by dissident	Indicates whether or not dissident has launched a concurrent takeover offer for the company Source: Dow Jones & Reuters' Factiva, dissident proxy statements
Activist dissident	Indicates whether or not the dissident is an "activist," i.e., has initiated contests at multiple firms in the sample. Source: Dow Jones & Reuters' Factiva
CEO tenure	Length of time in years that the current CEO has held office. Source: Company proxy statements.
CEO is chairman	Equal to 1 if the same individual is both CEO and chairman of the board of the company. Equals 1 if there is no designated chairman of the board. Source: Company proxy statements
Volatility	Average daily standard deviation of stock returns over one year prior to initiation of proxy contest. Source: CRSP
Number of Shareholders	The number of shareholders of record, as of the latest available date preceding the contest election record date. Sources: 10-K, annual report