UNDER THE SPOTLIGHT: HOW MEDIA COVERAGE IMPACTS SHAREHOLDER ACTIVISM CAMPAIGNS

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Abstract

This study provides novel evidence on the strategic role of media coverage in influencing shareholder activism campaigns. Analyzing a comprehensive dataset of activist interventions from 2000-2014, we find activists strategically target firms with high levels of recent business press coverage, especially negative coverage. These findings support theoretical predictions that activists prefer transparent, poorly performing firms. We also find a positive association between pre-intervention press coverage and the likelihood an activism campaign receives coverage. This "sticky" media coverage effect suggests activists target visible firms to increase campaign exposure. Finally, using propensity score matching and regression analysis, we show activist campaigns receiving press coverage have significantly higher announcement returns, underscoring a key benefit of media coverage for activists. Overall, our results highlight the important interplay between media coverage, shareholder activists, and capital markets. The findings should interest managers seeking to assess activism risk and activists aiming to maximize campaign impact.

Keywords: Shareholder Activism, Business Press, Media Coverage, Propensity Score Matching, Event Study, Investor Attention

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1. INTRODUCTION

This study examines the role of the business press in activists' targeting decisions and the effect of business press coverage on returns to activist campaign announcements. More specifically, we address two main research questions:

RQ1: How does the quantity, tone, and dissemination breadth of recent media coverage influence the likelihood of a firm being targeted by activist investors?

RQ2: Does pre-announcement media coverage of a firm impact the likelihood of an activist's campaign receiving media attention when announced, and does such media coverage amplify the stock market reaction to the campaign announcement?

A substantial body of literature has identified primarily two important roles of the media, namely: 1) as creators and disseminators of information and 2) as monitors of the firm. Benefits of media coverage include lower information asymmetry (Bushee et al., 2010), greater liquidity (Peress, 2014),

VIRTUS

faster price formation (Twedt, 2016), and stronger corporate governance (Miller, 2006; Dyck et al., 2008; Dai et al., 2015), to name a few. This study bridges both streams of literature by showing how the business press, in its role as an information intermediary, attracts other monitoring entities to the firm, namely, activist investors. By examining the market response to activist campaign announcements, the study is also linked to prior work that examines the media's role in disseminating information that becomes impounded in stock prices.

As the first study to explore the interaction between the business press and shareholder activism, we begin by providing descriptive evidence of media coverage around shareholder activism announcements. Using a database of business press articles from 2000 to 2014, we find that press coverage of firms targeted by activists increases 254% on the day of the activism announcement, relative to coverage one week earlier. We find that both favorable and unfavorable coverage increase on the announcement date, but the increase in favorable coverage is significantly larger (276% vs. 85%). We also identify similar trends over a long-term window. These results confirm the newsworthiness of activist campaigns and are consistent with the perception that activism campaigns are generally viewed favorably by market participants (Swanson et al., 2022).

We next examine in a multivariate setting whether media coverage influences the likelihood that a firm is targeted by an activist. We find consistent evidence that higher media coverage is positively associated with the likelihood of being targeted by an activist, and the relation is larger for negative media coverage than it is for positive media coverage. We also find that the breadth of information dissemination has a larger impact on the likelihood of being targeted than does the quantity of information. These findings are consistent with results from Kahn and Winton (1998) and Bushee et al. (2010).

If media coverage is sticky, one explanation for the observed relation between media coverage and the likelihood of a firm being targeted is that activists target firms with high levels of pre-intervention media coverage to increase the likelihood that their campaign receives coverage. Indeed, we find that the breadth of dissemination (but not the amount) of pre-intervention news coverage is positively associated with the likelihood of a campaign receiving news coverage.

Anecdotal evidence suggests that activists rely heavily on publicity to garner support for their campaigns, but little research has examined the potential capital market benefits of a campaign announcement receiving media coverage. Accordingly, in our final analysis, we generate a propensity-score matched sample of campaign announcements that receive business press coverage and a sample of announcements with similar observable characteristics that do not receive coverage. Holding other factors constant, we find that two-day, cumulative abnormal returns for campaign announcements that receive business press coverage are 1.71% higher than those that do not. Consistent with earlier results, we find evidence that breadth of information dissemination also

impacts announcement returns: a one-unit increase in the number of sources covering a campaign is associated with a 1.1% higher announcement return.

This study makes several contributions. First, the study is the first to empirically investigate how coverage business press changes around activism shareholder campaigns. Despite the proliferation of activism in recent years (Schiereck et al., 2023), to date, there is little empirical evidence regarding the level of media interest around activist campaign announcements in either the short- or long-term. Of interest to managers and public relations departments seeking to mitigate the risk of being targeted by activists, identifies the study new determinants of shareholder activism campaigns, namely, the tone, quantity, and breadth of dissemination of pre-campaign business press coverage related to the firm. Second, this study is also the first to provide insight into the factors that influence the likelihood and level of media coverage of an activist campaign. Given the capital market benefits of media coverage that we document, understanding the factors that influence media coverage should be of interest to shareholder activists as they attempt to maximize media exposure to their interventions. Finally, we contribute to prior work that examines how information dissemination by the media impacts capital markets. We show that breadth of information dissemination around activism campaign announcements is as important as the quantity of information generated hv the business press.

The rest of the paper is organized as follows. Section 2 presents a review of the relevant literature and develops our hypotheses. Section 3 describes our data sources and sample selection procedures. Section 4 outlines our research design and empirical models. Section 5 presents and discusses the results of our analyses. Finally, Section 6 concludes the paper by summarizing our key findings, discussing implications and limitations, and suggesting avenues for future research.

2. LITERATURE REVIEW

2.1. The choice to intervene

When a firm performs poorly, equity holders face one of two choices: 1) they can intervene to take corrective action or 2) they can liquidate their position, i.e., "vote with their feet". Several theoretical studies examine the optimal conditions for each of these choices, including Kahn and Winton (1998), who make two predictions that are relevant to the potential effect of media coverage on shareholder activism intervention. First, Kahn and Winton (1998) predict that institutions will only intervene in target firms to improve firm performance if they understand the target's industry and the market understands the target's information environment such that it can quickly ascertain the benefits of the institution's interventions. Thus, they hypothesize, an activist's portfolio will tend to concentrate in those industries and firms that are relatively transparent, as opposed to opaque firms or industries where information is more difficult for both the institution and the market to obtain and

VIRTUS

interpret. Given the significant costs incurred during activist campaigns (Gantchev, 2013), which activists most often recoup entirely through share price appreciation, the resolution of and timely market response to the activist's intervention is of considerable importance.

The second prediction from Kahn and Winton (1998) is that the likelihood of intervention depends on market expectations prior to the activist's targeting decision. The intervention will be most profitable (and, hence, most likely) at firms that are publicly perceived as poor performers and least profitable at firms that are perceived as good performers. Intervention in the former case revises the market's beliefs, whereas intervention in the latter case only confirms the market's expectations. Thus, pre-campaign business press affect coverage may market participants' understanding of a firm's information environments as well as their perceptions of the firm's prospects.

2.2. The impact of media coverage on the information environment

One of the earliest studies to provide evidence of the value of the media for price formation is Davies and Cane (1978). The study examines the market response to secondary dissemination of stock recommendations following analysts' earlier dissemination to the analysts' clients. The authors find that prices do not adjust fully to the information in the stock recommendations until published publicly in the Wall Street Journal. Another study, by Huberman and Regev (2001), focuses on an article published in the 1998 New York Times Sunday edition, which discussed potential cancer-treatment drugs under development by the pharmaceutical company EntreMed. Between Friday close and Monday morning, after the article was published, the price of EntreMed stock rose 700%, even though all the information in the article had been published five months earlier in the journal Nature and other media outlets. These studies indicate that media coverage can reduce frictions that prevent even market public information from being impounded into stock prices immediately. More recent studies have confirmed in a variety of settings that media coverage is associated with faster price formation and reduced information asymmetry around important information events such as earnings announcements (Bushee et al., 2010), management's disclosure of earnings guidance (Twedt, 2016), insider trading disclosure (Rogers et al., 2016), and initial public offerings (IPOs) (Chen et al., 2020).

2.3. Hypotheses development

As noted previously, Kahn and Winton (1998) predict that intervention will be more likely at firms with robust information environments. Given the role of the media as an important information intermediary, we hypothesize that shareholder activists will be attracted to firms with greater levels of business press coverage because higher levels of coverage help activists and other outside investors understand the implications of the activism campaign for firm's prospects. This relation is not guaranteed, however. If greater media coverage results in a more robust information environment, the information advantage enjoyed by privately informed traders, including the activist, may be reduced (Diamond & Verrecchia, 1991). To the extent that a robust information environment preempts private information gathering, activists may actually choose to target firms with low levels of media coverage. Given these competing predictions, we state our first hypothesis in the null:

H1: The likelihood of an activist intervention is unrelated to a firm's recent business press coverage.

One implication from Kahn and Winton's (1998) second prediction is that intervention is most likely for firms that are perceived poorly by the public. For these firms, "intervening pushes the firm's return in the unexpected direction, which tends to increase the institution's trading profits" (Kahn & Winton, 1998, p. 100). In contrast, intervening at a firm where market expectations are already optimistic only reaffirms investors' beliefs and so may not result in significant share price appreciation. Prior research (Fang & Peress, 2009; Tetlock, 2011; Lee et al., 2015; Twedt, 2016) indicates that media coverage has a significant impact on market expectations, even controlling for the information conveyed by such coverage. Accordingly, activists may be attracted to firms with negative media coverage if such coverage dampens market expectations about firms' prospects. This prediction informs our second hypothesis, stated in the alternative:

H2: The likelihood of an activist intervention is inversely related to the favorability of recent business press coverage.

To the extent that business press coverage increases the attention that firms receive, high levels of past coverage may be positively associated with current press coverage - that is, press coverage may be sticky. In our setting, activists may target firms with high press coverage because press prior to activist campaign coverage an announcement may increase the likelihood that the campaign receives media coverage when it is announced. This prediction forms the basis for our next hypothesis, stated in the alternative:

H3: The likelihood that an activist campaign announcement receives business press coverage is positively related to the firm's recent level of press coverage.

Activists should only target firms with high media coverage if such coverage conveys benefits to the activist. One benefit of press coverage of an activism campaign may be a larger initial market reaction to the campaign announcement. Indeed, Twedt (2016) finds that the initial market reaction to the disclosure of management earnings guidance is stronger for disclosures that are covered in the business press. Drake et al. (2017) find similar results when examining the effect of coverage by professional and semi-professional internet media outlets on the market reaction to earnings news. This leads to our final hypothesis, stated in the alternative form:

H4: The initial market reaction to an activism campaign announcement is larger for campaigns that receive business press coverage.

NTER PRESS VIRTUS 72

3. DATA

3.1. Activist data

We gather information related to activist campaigns from Thomson One and Shark Repellant. Shark Repellant offers data on activist campaigns from the 1980s to the present. We obtained a one-time download, which includes data for campaigns through early 2013. For Thomson One, coverage begin in 2000 and continues through the present, though it ends in 2014 for our dataset. From these two datasets, we obtain the date of the activism announcement, the activist's status as prominent or not, and the activist's campaign objective. We eliminate duplicate observations resulting from the overlap between the two datasets, which results in a final dataset of 4966 activist campaigns covering 2656 unique firms.

We group campaigns into six non-mutually exclusive categories according to the activist's initial demand(s) as classified by Thomson One and Shark Repellant. The six categories include events related to corporate governance, strategy, engaging management, board composition, pushing for a sale, and other miscellaneous campaigns. Descriptions of the types of events classified in each group are presented in Appendix B.

3.2. Business press data

RavenPack provides real-time textual analysis of the *Dow Jones* news archive beginning in 2000, including coverage of articles published by the *Wall Street Journal, Barron's, MarketWatch,* and *Dow Jones Newswires.* Examples of available data items include the category of event covered in the article, the companies discussed in the article and their relevance to the article, and the novelty of the story.

3.3. Other data

We obtain data related to firm fundamentals and other firm characteristics from Compustat. Stock market data is provided by Center for Research in Security Prices (CRSP). Institutional ownership is reported quarterly and obtained from Thomson Reuters, and analyst coverage is calculated using Institutional Brokers' Estimate System (I/B/E/S). See Appendix A for a detailed description of each variable used in the analyses.

4. RESEARCH DESIGN

4.1. Factors influencing the likelihood of an activist intervention

To examine whether press coverage influences the likelihood of an activist intervention (H1 and H2), we use logistic regression to estimate the following model using variables from year t - 1 to predict activism events in year t (firm subscripts omitted for clarity):

$$\begin{aligned} Activist &= \beta_0 + \beta_1 [Press]_{t-1} + \beta_2 LSize_{t-1} + \\ \beta_3 BHAR_{t-1} + \beta_4 Lev_{t-1} + \beta_5 Div_Y ield_{t-1} + \\ \beta_6 ROA_{t-1} + \beta_7 Growth_{t-1} + \beta_8 Analyst_{t-1} + \\ \beta_9 Inst_{t-1} + \beta_{10} Liquidity_{t-1} + YearFE + \\ IndustryFE \end{aligned}$$
(1)

The press refers to various permutations of the following press-related variables, which we posit may influence the likelihood of an activist intervention: 1) the total number of articles published in year t - 1 (*N_Articles*), 2) the total number of articles with non-neutral sentiment (*N_Articles_No50*), 3) the number of positive articles (N_Pos) , 4) the number of negative articles (N_Neg) , 5) the number of very positive articles (*N_VeryPos*), and 6) the number of very negative articles $(N_VeryNeg)^1$. As an alternative to using counts of positive and negative articles to examine the differential effects of positive and negative press coverage, we also use the average sentiment level of all articles (Av_ESS) and the average sentiment level of all non-neutral articles (Av_ESS_No50). Event Sentiment Score (ESS) is a proprietary measure of sentiment ranging in values of 0 to 100, with higher numbers reflecting more favorable sentiment based on the economic implications of the event being discussed in the article. Articles with an ESS score of 50 are considered neutral in sentiment. Our final press-related variable used to predict activism is the number of unique news sources providing press coverage (*N_Sources*). At the construct level, article-based variables capture the amount of positive, negative, and total press coverage, whereas *N_Sources* captures the breadth of dissemination of press coverage (similar to Bushee et al., 2010). All the other independent variables have been shown in prior literature to be associated with the likelihood of an activist intervention and are defined in Appendix A. We also include year and industry-fixed effects to control for industry and time differences in the likelihood of being targeted by an activist.

If press coverage increases the likelihood of being targeted by an activist, we expect the coefficient on *N_Articles* and *N_Articles_No50* to be positive. If activists are particularly attracted to firms with negative media coverage, we expect the coefficient on *N_Neg* (*N_VeryNeg*) to be positive and significantly different from the coefficients on *N_Pos* (*N_VeryPos*), and the coefficient on *Av_ESS* and *Av_ESS_No50* to be negative. If the breadth of press coverage influences activists' targeting decisions, we expect the coefficient on *N_Sources* to be positive.

4.2. Factors influencing the likelihood of an activism announcement receiving press coverage

We use logistic regression to estimate the following model to identify factors that are associated with the likelihood of an activism campaign announcement receiving press coverage:

$$News_Cover = \beta_1 N_Articles_PMonth + \beta_2 N_Sources_PMonth + \beta_3 Prominent + \beta_4 SP150 + \beta_5 Inst + \beta_6 LSize + \beta_7 Analyst + (2) \beta_8 CAR_Pre30 + \beta_{9-14} [Act_TypeFE] + YearFE + IndustryFE + WeekdayFE + \varepsilon$$

The dependent variable, *News_Cover*, is equal to one for interventions that receive press coverage on the campaign announcement date. Unlike other events such as earnings announcements or

¹ As recommended by RavenPack, all the news-related variables we construct only include articles with relevance (measured from 0 to 100) greater than 75 in order to ensure that the articles are significantly relevant to the firm.

management guidance announcements, RavenPack does not have a category that identifies coverage related to activism campaign announcements. Consequently, to identify activism campaigns that receive press coverage, we classify an activism campaign as receiving coverage (News_Cover) if the total number of news articles on the date of the activism announcement is greater than the daily average number of articles from days [-30, -1] relative to the announcement date. To the extent that our measure misclassifies firms, we should not find significant results. We also estimate Eq. (2) with a negative binomial regression using the number of articles published on the announcement date dependent (*N_Articles_Annc*) as an alternative variable. The independent variables of interest that we use to predict press coverage of activist events include the number of articles published in leading the 30 days up to the campaign announcement (N_Articles_PMonth) and the number of unique sources of coverage over the same period (N_Sources_PMonth). If prior levels or breadth of press coverage is positively associated with coverage of an activist campaign announcement, we expect the coefficients on N_Articles_PMonth and *N_Sources_PMonth* to be positive. We include several other measures, defined in Appendix A, that may be associated with the likelihood that a campaign receives press coverage.

4.3. The effect of press coverage on the market response to activism announcements

In our final analysis, we estimate the following model to investigate how the initial market reaction to an activism announcement differs for campaigns that receive press coverage compared to those that do not:

 $\begin{aligned} CAR_Evt2 &= \beta_0 + \beta_1[Press] + \beta_2Prominent + \\ \beta_3Inst + \beta_4LSize + \beta_5Analyst + \beta_6CAR_Pre30 + \\ \beta_{7-12}[Act_TypeFE] + YearFE + IndustryFE + \\ WeekdayFE + \varepsilon \end{aligned} \tag{3}$

The dependent variable in the model, CAR_Evt2 , is the cumulative abnormal return over the two-day period beginning on the day of the announcement. The abnormal return for firm *i* on day *t* is calculated as the firm's raw return on day *t* less the value-weighted market return on day *t*. Press refers to three variables that capture the effect

of press coverage of the campaign announcement announcement returns: 1) News_Cover, on 2) N_Articles_Annc, 3) N_Sources_Annc and (the number of unique sources providing coverage on the announcement day). If investors give greater attention to activist campaign announcements that receive press coverage, we expect to find significantly positive coefficients on the three press-related variables above. To reduce concerns possible about reverse causality, i.e.. the newsworthiness of higher returns leading to higher same-day news coverage - we exclude any article that is categorized as relating to a rise or decline in share price in calculating the independent variables of interest (the specific category names in RavenPack are "stock-gain" and "stock loss").

5. RESULTS

5.1. Descriptive evidence on differences between targets and non-targets

We begin by graphing short-window business press coverage (Figures 1a-1c) and long-window business press coverage around activism announcements. Figure 1a depicts the average daily number of articles published in the month before and after the activist's campaign announcement. Two aspects of Figure 1a deserve mention: first, a noticeable weekly time trend in press coverage underscores the importance of using weekday fixed effects to control for day-of-the-week variation in press coverage. Second, there is a large spike in the number of articles on the date of the activism announcement representing an increase of 254%, relative to the same day a week earlier. Figure 1b shows that this spike is concentrated in favorable news coverage: the number of articles exhibiting positive sentiment increases by 276%, whereas the number of articles with negative sentiment increases by 85%. This result is confirmed in Figure 1c, which graphs the average sentiment level of all articles. It increases from 53.1% on the same day one week earlier to 57.2% on the announcement date, an increase of approximately 8%. These results confirm the newsworthiness of activist campaigns and the greater increase in positive articles is consistent with the perception in the press that activism campaigns are beneficial for target firms (Swanson et al., 2022).

Figure 1a. Short-window business press coverage around activism announcements: Average daily number of articles



Note: This figure plots variation in media coverage in the [-30, 30] day window surrounding an activist campaign announcement. The figure plots the average daily number of articles across all news sources in the RavenPack database.







- N_Pos - N_Neg

Note: This figure plots variation in media coverage in the [-30, 30] day window surrounding an activist campaign announcement. The figure plots the average daily number of favorable and unfavorable press articles, where favorable (unfavorable) articles are those with an ESS score greater than (less than) 50.





Note: This figure plots variation in media coverage in the [-30, 30] day window surrounding an activist campaign announcement. The figure plots the average daily ESS score of all articles for the target firms.

Figures 2a–2c depict business press coverage in the two years before and after an activism campaign announcement. Figure 2a shows significant variation in press coverage in the year before and after an activist campaign announcement. Press coverage increases in the months leading up to an activist campaign announcement and is highest in the month of the activist campaign announcement (70% higher than the same month one year earlier). Figure 2b shows that favorable (unfavorable) news coverage increases 51% (53%) in the month of the announcement relative to the same month one year earlier. Despite the similar relative increase in the number of positive and negative articles, there is still a noticeable spike in sentiment when averaged across all articles (Figure 2c). This suggests that, while the number of positive and negative articles may increase at the same rate, the tone in articles becomes more positive (or less negative) in the month of an activist campaign announcement and the two months after.

NTER PRESS VIRTUS 75





Note: This figure plots variation in media coverage in the two years before and after an activist campaign announcement. The figure plots the average monthly number of articles across all news sources in the RavenPack database.





Note: This figure plots variation in media coverage in the two years before and after an activist campaign announcement. The figure plots the average monthly number of favorable and unfavorable press articles, where favorable (unfavorable) articles are those with an ESS score greater than (less than) 50.





Note: This figure plots variation in media coverage in the two years before and after an activist campaign announcement. The figure plots the average monthly ESS score of all articles for the target firms.

Table 1 displays differences in descriptive statistics for variables used to predict activist interventions (Eq. 1) separately for target and non-target firms. Activist targets are significantly different from the universe of non-targeted firms along almost all dimensions, underscoring

NTERPRESS VIRTUS 76

the importance of controlling for differences when comparing target and non-target firms. Univariate tests of differences in press coverage suggest that activist targets receive much more press coverage than non-target firms, and this is true for both positive and negative press coverage. Sentiment of press coverage is lower for activist targets compared to control firms, which supports the possibility that activists deliberately target firms with negative press coverage.

 Table 1. Descriptive statistics for variables used to predict activist interventions: comparison of activist targets and non-targets

| Variables | Non-t | argets | T | argets | MagyDiff |
|-----------------|--------|---------|------|--------|-------------|
| variables | N | Mean | N | Mean | MeanDiff |
| N_Articles | 72,950 | 122.272 | 3131 | 237.84 | -115.568*** |
| N_Articles_No50 | 72,950 | 34.443 | 3131 | 61.909 | -27.466*** |
| N_Sources | 72,950 | 1.228 | 3131 | 1.515 | -0.287*** |
| N_Pos | 72,950 | 23.583 | 3131 | 41.683 | -18.100*** |
| N_Neg | 72,950 | 10.859 | 3131 | 20.225 | -9.366*** |
| N_VeryPos | 72,950 | 3.375 | 3131 | 5.286 | -1.911*** |
| N_VeryNeg | 72,950 | 1.572 | 3131 | 4.276 | -2.703*** |
| Av_ESS | 55,667 | 54.803 | 2715 | 53.834 | 0.969*** |
| Av_ESS_No50 | 55,400 | 57.151 | 2705 | 55.814 | 1.337*** |
| LSize | 72,950 | 5.960 | 3131 | 5.914 | 0.046 |
| BHAR | 72,950 | 0.067 | 3131 | -0.035 | 0.102*** |
| Lev | 72,950 | 0.558 | 3131 | 0.553 | 0.004 |
| Div_Yield | 72,950 | 0.015 | 3131 | 0.012 | 0.003*** |
| ROA | 72,950 | 0.048 | 3131 | 0.072 | -0.024*** |
| Growth | 72,950 | 0.197 | 3131 | 0.115 | 0.083*** |
| Analyst | 72,950 | 7.195 | 3131 | 8.196 | -1.002*** |
| Inst | 72,950 | 0.395 | 3131 | 0.529 | -0.134*** |
| Liquidity | 72,950 | -0.497 | 3131 | -0.391 | -0.106*** |

Note: This table provides descriptive statistics for the universe of targeted and non-targeted firms with available annual data, which are used to estimate Eq. (1); *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively, with two-tailed *p*-values. All continuous variables are winsorized at the 1% and 99% levels. See Appendix A for variable definitions.

5.2. Descriptive evidence on differences between covered and non-covered campaigns

Table 2a displays descriptive statistics for the full sample of activist campaigns, and Table 2b displays statistics separately for activist campaign announcements that receive press coverage and those that do not. Approximately half of campaigns receive press coverage on the announcement date, and Table 2b shows that firms receiving coverage are different from those that do not in several ways. Covered firms have more press coverage both before and on the day of the activism announcement. Pre-announcement breadth of press coverage is also larger for targets with covered campaign announcements. There significant are also differences in the types of campaigns that receive coverage. Campaigns related to corporate strategy and campaigns seeking a sale of the company are most likely to be covered by the press. Consistent with our hypothesis, the univariate difference in the market reaction to covered and non-covered campaign announcements is significant -3.6% for covered announcements and 1.6% for non-covered announcements.

Table 2a. Descriptive statistics for activist campaigns: Statistics for the pooled sample of activism campaigns

| Variables | Mean | Std. dev. | 10th | 25th | Median | 75th | 90th |
|-------------------|--------|-----------|--------|--------|--------|-------|-------|
| News_Cover | 0.509 | 0.500 | 0 | 0 | 1 | 1 | 1 |
| N_Articles_Annc | 3.631 | 9.038 | 0 | 0 | 1 | 4 | 9 |
| N_Articles_PMonth | 20.646 | 46.482 | 0 | 1 | 8 | 19 | 43 |
| N_Sources_Annc | 0.651 | 0.729 | 0 | 0 | 1 | 1 | 1 |
| N_Sources_PMonth | 1.073 | 0.917 | 0 | 1 | 1 | 1 | 3 |
| CAR_Evt2 | 0.026 | 0.087 | -0.032 | -0.009 | 0.010 | 0.040 | 0.101 |
| Prominent | 0.359 | 0.480 | 0 | 0 | 0 | 1 | 1 |
| SP1500 | 0.151 | 0.358 | 0 | 0 | 0 | 0 | 1 |
| Inst | 0.480 | 0.352 | 0 | 0.127 | 0.500 | 0.786 | 0.934 |
| LSize | 5.821 | 2.127 | 3.379 | 4.250 | 5.516 | 7.093 | 8.752 |
| Analyst | 7.106 | 9.339 | 0 | 0 | 4 | 10 | 20 |
| CAR_Pre30 | 0.022 | 0.198 | -0.180 | -0.070 | 0.009 | 0.104 | 0.246 |
| Engage | 0.434 | 0.496 | 0 | 0 | 0 | 1 | 1 |
| Board | 0.394 | 0.489 | 0 | 0 | 0 | 1 | 1 |
| Corpgov | 0.154 | 0.361 | 0 | 0 | 0 | 0 | 1 |
| Strategy | 0.094 | 0.292 | 0 | 0 | 0 | 0 | 0 |
| Sale | 0.086 | 0.280 | 0 | 0 | 0 | 0 | 0 |
| Other | 0.128 | 0.334 | 0 | 0 | 0 | 0 | 1 |

Note: This table provides descriptive statistics for all activist campaigns with available data that is used to estimate Eq. (2) and (3). This table describes all campaigns; *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively, with two-tailed p-values. See Appendix A for variable definitions.

VIRTUS

| Variables | No cov | verage | Cove | erage | Ma Diff |
|-------------------|--------|--------|------|--------|-----------|
| Variables | Ν | Mean | Ν | Mean | MeanDiff |
| N_Articles_Annc | 2105 | 0.203 | 2185 | 6.934 | -6.730*** |
| N_Articles_PMonth | 2105 | 15.919 | 2185 | 25.200 | -9.281*** |
| N_Sources_Annc | 2105 | 0.085 | 2185 | 1.196 | -1.111*** |
| N_Sources_PMonth | 2105 | 0.829 | 2185 | 1.308 | -0.478*** |
| CAR_Evt2 | 2074 | 0.016 | 2173 | 0.036 | -0.021*** |
| Prominent | 2105 | 0.357 | 2185 | 0.360 | -0.002 |
| SP1500 | 2105 | 0.102 | 2185 | 0.198 | -0.096*** |
| Inst | 2105 | 0.372 | 2185 | 0.583 | -0.211*** |
| LSize | 1931 | 5.465 | 2133 | 6.143 | -0.678*** |
| Analyst | 2105 | 5.628 | 2185 | 8.529 | -2.901*** |
| CAR_Pre30 | 2074 | 0.032 | 2173 | 0.013 | 0.019*** |
| Engage | 2105 | 0.411 | 2185 | 0.455 | -0.044*** |
| Board | 2105 | 0.399 | 2185 | 0.389 | 0.010 |
| Corpgov | 2105 | 0.164 | 2185 | 0.144 | 0.020* |
| Strategy | 2105 | 0.076 | 2185 | 0.112 | -0.036*** |
| Sale | 2105 | 0.066 | 2185 | 0.105 | -0.039*** |
| Other | 2105 | 0.152 | 2185 | 0.105 | 0.046*** |

Table 2b. Descriptive statistics for activist campaigns: Subsample comparison for campaigns with and without press coverage

Note: This table provides descriptive statistics for all activist campaigns with available data that is used to estimate Eq. (2) and (3). This table compares campaigns with and without announcement-date press coverage; *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively, with two-tailed p-values. See Appendix A for variable definitions.

Given the differences between covered and non-covered campaigns, we use propensity-score matching (PSM) to identify subsamples of covered campaigns and campaigns that do not receive press coverage, but which are similar to covered firms in other observable respects. We use this PSM sample in subsequent analyses to compare the effect of differences in press coverage on the market reaction to activist campaign announcements.

5.3. Press coverage and the likelihood of intervention (*H1*)

Multivariate results from estimating the relation between press coverage and the likelihood of being targeted by an activist investor are displayed in Tables 3a and 3b. In Table 3a, we use press coverage variables that include both neutral and non-neutral articles. In Table 3b, we report estimates for the same models using press coverage variables that exclude neutral articles. The independent variables of interest in columns 1 and 2 of Table 3a are $N_Articles$ and $N_Sources$, respectively.

Table 3a. Press coverage and the likelihood of being targeted by an activist: Coverage variables including neutral articles

| Variables | Coefficient (Std. err.) | Coefficient (Std. err.) | Coefficient (Std. err.) | Odds ratio |
|---------------------------------|----------------------------|----------------------------|----------------------------|------------|
| | (1) | (2) | (3) | (4) |
| NI Antiplan | 0.000197** | | 0.000176** | 1.000** |
| $N_Articles_{t-1}$ | (7.67e-05) | | (7.08e-05) | (7.08e-05) |
| N_Sources _{ta} | | 0.169*** | 0.148*** | 1.159*** |
| N_SOURCES _{t-1} | | (0.0241) | (0.0248) | (0.0288) |
| LSize | -0.208*** | -0.211*** | -0.223*** | 0.800*** |
| LSIZe _{t-1} | (0.0219) | (0.0218) | (0.0219) | (0.0175) |
| DIIAD | -0.188*** | -0.189*** | -0.183*** | 0.832*** |
| $BHAR_{t-1}$ | (0.0428) | (0.0425) | (0.0424) | (0.0353) |
| Lau | 0.108** | 0.0875* | 0.0866* | 1.090* |
| Lev_{t-1} | (0.0436) | (0.0457) | (0.0458) | (0.0499) |
| Div_Yield ₁₋₁ | -1.036 | -1.150 | -1.189 | 0.304 |
| | (0.851) | (0.845) | (0.851) | (0.259) |
| PO4 | 0.290*** | 0.319*** | 0.327*** | 1.387*** |
| ROA_{t-1} | (0.105) | (0.108) | (0.108) | (0.150) |
| <i>Growth</i> ₁₁ | -0.160*** | -0.160*** | -0.157*** | 0.855*** |
| Growth _{t-1} | (0.0485) | (0.0480) | (0.0476) | (0.0407) |
| Amahist | 0.0137*** | 0.0105** | 0.00924** | 1.009** |
| $Analyst_{t-1}$ | (0.00427) | (0.00445) | (0.00440) | (0.00444) |
| hast | 1.037*** | 0.896*** | 0.924*** | 2.518*** |
| Inst _{t-1} | (0.0826) | (0.0874) | (0.0867) | (0.218) |
| <i>Liquidity</i> _{i-1} | 0.143*** | 0.142*** | 0.152*** | 1.165*** |
| Liquinity _{t-1} | (0.0384) | (0.0380) | (0.0383) | (0.0446) |
| Year fixed effects | Yes | Yes | Yes | Yes |
| Industry fixed effects | Yes | Yes | Yes | Yes |
| N | 76,081 | 76,081 | 76,081 | 76,081 |
| Pseudo R-squared | 0.08 | 0.08 | 0.08 | 0.08 |
| Area under the ROC Curve | 0.73 | 0.73 | 0.74 | 0.74 |

Note: Dependent variable = Activist. This table reports the effect of press coverage (number of articles and number of sources) in year t -1 on the likelihood of being targeted by an activist in year t. Table 3a includes all articles with positive, negative, and neutral sentiment. *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively, with two-tailed p-values, calculated based on standard errors clustered at the firm-level. Appendix A provides variable definitions.

VIRTUS 78

| Variables | Coefficient (Std. err.) | Coefficient (Std. err.) | Coefficient (Std. err.) | Odds ratio |
|---------------------------------|----------------------------|----------------------------|----------------------------|------------|
| | (1) | (2) | (3) | (4) |
| N_Articles_No50 | 0.00423*** | | 0.00401*** | 1.004*** |
| N_Articles_N050 _{t-1} | (0.000427) | | (0.000429) | (0.000431) |
| N. Sourcas | | 0.169*** | 0.0788*** | 1.082*** |
| $N_Sources_{t-1}$ | | (0.0241) | (0.0271) | (0.0293) |
| LSize | -0.259*** | -0.211*** | -0.265*** | 0.768*** |
| LSIZe _{t-1} | (0.0221) | (0.0218) | (0.0221) | (0.0170) |
| DIIAD | -0.158*** | -0.189*** | -0.157*** | 0.855*** |
| $BHAR_{t-1}$ | (0.0416) | (0.0425) | (0.0414) | (0.0354) |
| Im | 0.0598 | 0.0875* | 0.0489 | 1.050 |
| Lev_{t-1} | (0.0496) | (0.0457) | (0.0509) | (0.0535) |
| Die Vield | -1.562* | -1.150 | -1.613* | 0.199* |
| Div_Yield_{t-1} | (0.874) | (0.845) | (0.873) | (0.174) |
| PO4 | 0.363*** | 0.319*** | 0.379*** | 1.461*** |
| $ROA_{t\cdot 1}$ | (0.112) | (0.108) | (0.113) | (0.165) |
| Crowth | -0.145*** | -0.160*** | -0.144*** | 0.866*** |
| <i>Growth</i> _{t-1} | (0.0463) | (0.0480) | (0.0460) | (0.0398) |
| America | 0.00235 | 0.0105** | 0.000543 | 1.001 |
| $Analyst_{t-1}$ | (0.00435) | (0.00445) | (0.00439) | (0.00440) |
| best | 1.051*** | 0.896*** | 0.995*** | 2.704*** |
| Inst _{t-1} | (0.0839) | (0.0874) | (0.0861) | (0.233) |
| Liquidity | 0.193*** | 0.142*** | 0.196*** | 1.216*** |
| <i>Liquidity</i> _{t-1} | (0.0396) | (0.0380) | (0.0396) | (0.0481) |
| Year fixed effects | Yes | Yes | Yes | Yes |
| Industry fixed effects | Yes | Yes | Yes | Yes |
| N | 76,081 | 76,081 | 76,081 | 76,081 |
| Pseudo R-squared | 0.09 | 0.08 | 0.09 | 0.09 |
| Area under the ROC Curve | 0.74 | 0.73 | 0.74 | 0.74 |

 Table 3b. Press coverage and the likelihood of being targeted by an activist: Coverage variables excluding neutral articles

Note: Dependent variable = Activist. This table reports the effect of press coverage (number of articles and number of sources) in year t - 1 on the likelihood of being targeted by an activist in year t. Table 3b excludes articles with neutral sentiment. *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively, with two-tailed p-values, calculated based on standard errors clustered at the firm-level. Appendix A provides variable definitions.

The significantly positive coefficient on *N_Articles* suggests that activists target firms with higher press coverage. The significantly positive coefficient on N_Sources indicates that activists target firms with a greater breadth of coverage as well. Column 3 includes both variables in the model, and the odds ratio for the column 3 model are displayed in column 4. Although both variables remain significant, the odds ratio for N_Articles is not economically meaningful. In contrast, the odds ratio for N_Sources indicates that a one-unit increase in the number of sources providing coverage for the firm increases the odds of being targeted by an activist almost 16%. We find consistent results when limiting the sample of articles to those with non-neutral sentiment (Table 3b). These results indicate that recent press coverage influences activists' targeting decisions, and breadth of press coverage is more important for their decision than the amount of press coverage. These results suggest that, in addition to using financial and performance measures to identify targets, activist investors may also strategically select their targets based on public perception.

5.4. Favorability of recent coverage and the likelihood of intervention (*H2*)

Results from estimating the relation between the favorability of press coverage and the likelihood

of being targeted by an activist investor are displayed in Tables 4a and 4b. In Table 4a, we use counts of positive and negative articles as our primary independent variables, and we use sentiment scores in Table 4b. The coefficients on both *N_Pos* and *N_Neg* are positive and statistically significant. However, a chi-squared test of equality of the coefficients fails to reject the null that the coefficients are equal. Column 3 shows that this difference between positive and negative coverage is more pronounced when limiting articles to those that are very positive (ESS > 75) and very negative (ESS < 75), and a chi-squared test rejects the null that the coefficients on N_VeryPos and N_VeryNeg are equal (p-value = 0.026). Odds ratios in column 4 indicate that a one-unit increase in the number of very positive (negative) business press articles is associated with a 1.4% (2.8%) increase in the odds of being targeted by an activist. We reach similar inferences when using article sentiment instead of article counts in Table 4b: the odds ratio for Av_ESS (Av_ESS_No50) in column 2 and 4 indicates that a one-unit decrease in sentiment is associated with a 2.2% (1.5%) increase in the odds of being targeted by an activist. Taken together, the results in Tables 3a, 3b, 4a and 4b provide consistent evidence that activists are more likely to intervene at firms that have received high levels of press coverage, especially negative coverage.



Table 4a. Favorability of press coverage and the likelihood of being targeted by an activist: Using counts of
positive and negative articles

| Variables | Coefficient (Std. err.) | Odds ratio | Coefficient (Std. err.) | Odds ratio |
|---------------------------------|----------------------------|------------|----------------------------|------------|
| | (1) | (2) | (3) | (4) |
| N. Doc | 0.00332*** | 1.003*** | | |
| N_Pos_{t-1} | (0.000700) | (0.000702) | | |
| N. No. | 0.00561*** | 1.006*** | | |
| N_Neg_{t-1} | (0.00188) | (0.00189) | | |
| N_VeryPos _{t-1} | | | 0.0140*** | 1.014*** |
| N_VERYPOS _{t-1} | | | (0.00423) | (0.00429) |
| N_VeryNeg _{t-1} | | | 0.0277*** | 1.028*** |
| IN_VERVINES _{t-1} | | | (0.00416) | (0.00428) |
| N Sourcas | 0.0759*** | 1.079*** | 0.0997*** | 1.105*** |
| $N_Sources_{t-1}$ | (0.0278) | (0.0300) | (0.0264) | (0.0292) |
| I Size | -0.262*** | 0.770*** | -0.242*** | 0.785*** |
| LSize _{t-1} | (0.0221) | (0.0170) | (0.0213) | (0.0167) |
| DLIAD | -0.152*** | 0.859*** | -0.159*** | 0.853*** |
| BHAR _{t-1} | (0.0414) | (0.0356) | (0.0415) | (0.0354) |
| Lev _{i-1} | 0.0466 | 1.048 | 0.0615 | 1.063 |
| Lev _{t-1} | (0.0514) | (0.0538) | (0.0493) | (0.0524) |
| Div_Yield | -1.659* | 0.190* | -1.618* | 0.198* |
| Div_1ieia_{t-1} | (0.876) | (0.167) | (0.874) | (0.173) |
| ROA | 0.386*** | 1.471*** | 0.367*** | 1.443*** |
| KOA _{t-1} | (0.114) | (0.167) | (0.112) | (0.161) |
| Growth ₁₋₁ | -0.142*** | 0.867*** | -0.146*** | 0.864*** |
| Growin _{t-1} | (0.0458) | (0.0397) | (0.0462) | (0.0399) |
| Analyst | 0.000466 | 1.000 | 0.00176 | 1.002 |
| Analyst | (0.00442) | (0.00442) | (0.00453) | (0.00454) |
| Inact | 0.990*** | 2.692*** | 0.963*** | 2.619*** |
| Inst _{t-1} | (0.0856) | (0.230) | (0.0868) | (0.227) |
| Liquidity | 0.193*** | 1.213*** | 0.177*** | 1.194*** |
| <i>Liquidity</i> _{t-1} | (0.0395) | (0.0479) | (0.0389) | (0.0464) |
| Year fixed effects | Yes | Yes | Yes | Yes |
| Industry fixed effects | Yes | Yes | Yes | Yes |
| N | 76,081 | 76,081 | 76,081 | 76,081 |
| Pseudo R-squared | 0.09 | 0.09 | 0.09 | 0.09 |
| Area under the ROC Curve | 0.74 | 0.74 | 0.74 | 0.74 |

Note: Dependent variable = Activist. This table reports the effect of the favorability of press coverage in year t-1 on the likelihood of being targeted by an activist in year t. Table 4a measures favorability using counts of positive, negative, very positive, and very negative articles. *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively, with two-tailed p-values, calculated based on standard errors clustered at the firm-level. Appendix A provides variable definitions.

Table 4b. Favorability of press coverage and the likelihood of being targeted by an activist: Using EventSentiment Scores

| Variables | Coefficient (Std. err.) | Odds ratio | Coefficient (Std. err.) | Odds ratio |
|---------------------------------|----------------------------|------------|----------------------------|------------|
| | (1) | (2) | (3) | (4) |
| $Av_ESS_{t,l}$ | -0.0224*** | 0.978*** | | |
| AV_LSS_{t-1} | (0.00483) | (0.00472) | | |
| $Av_ESS_No50_{til}$ | | | -0.0156*** | 0.985*** |
| $AV_{E33_10030_{t-1}}$ | | | (0.00319) | (0.00314) |
| N. Sourcas | 0.200*** | 1.221*** | 0.194*** | 1.214*** |
| $N_Sources_{t-1}$ | (0.0271) | (0.0331) | (0.0272) | (0.0330) |
| LSize _{r-1} | -0.156*** | 0.856*** | -0.159*** | 0.853*** |
| LSIZe _{t-1} | (0.0261) | (0.0224) | (0.0262) | (0.0223) |
| DIIAD | -0.163*** | 0.850*** | -0.158*** | 0.854*** |
| BHAR _{t-1} | (0.0480) | (0.0408) | (0.0480) | (0.0409) |
| Im | 0.0518 | 1.053 | 0.0506 | 1.052 |
| Lev_{t-1} | (0.0601) | (0.0632) | (0.0601) | (0.0632) |
| Din Viold | -1.516 | 0.220 | -1.456 | 0.233 |
| Div_Yield ₁₋₁ | (0.976) | (0.214) | (0.975) | (0.227) |
| PO4 | 0.338*** | 1.401*** | 0.361*** | 1.435*** |
| ROA_{t-1} | (0.129) | (0.181) | (0.133) | (0.190) |
| Granuth | -0.126** | 0.882** | -0.125** | 0.882** |
| <i>Growth</i> _{t-1} | (0.0513) | (0.0452) | (0.0513) | (0.0453) |
| Annahunt | 0.00515 | 1.005 | 0.00511 | 1.005 |
| Analyst _{t-1} | (0.00490) | (0.00492) | (0.00489) | (0.00491) |
| hast | 0.708*** | 2.030*** | 0.709*** | 2.031*** |
| Inst _{t-1} | (0.106) | (0.215) | (0.106) | (0.216) |
| Liquidity | 0.104** | 1.110** | 0.111** | 1.117** |
| <i>Liquidity</i> _{t-1} | (0.0429) | (0.0476) | (0.0436) | (0.0487) |
| Year fixed effects | Yes | Yes | Yes | Yes |
| Industry fixed effects | Yes | Yes | Yes | Yes |
| N | 58,382 | 58,382 | 58,105 | 58,105 |
| Pseudo R-squared | 0.08 | 0.08 | 0.08 | 0.08 |
| Area under the ROC Curve | 0.72 | 0.72 | 0.72 | 0.72 |

Area under the KOC Curve 0.72 0.72 0.72 0.72 0.72 0.72 Note: Dependent variable = Activist. This table reports the effect of the favorability of press coverage in year t-1 on the likelihood of being targeted by an activist in year t. Table 4b uses the average level of sentiment (with and without articles of neutral sentiment) based on RavenPack's Event Sentiment Score. *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels respectively, with two-tailed p-values, calculated based on standard errors clustered at the firm-level. Appendix A provides variable definitions.

VIRTUS NTERPRESS® 80

5.5. Recent coverage and the likelihood of announcement coverage (*H3*)

Results from estimating the relation between pre-announcement press coverage and campaign announcement press coverage are displayed in Table 5a. To investigate the channels through which prior press coverage may influence campaign announcement coverage, we model announcement coverage as a function of the amount of recent coverage, i.e., the number of articles in the month prior to the campaign announcement (column 1) and as a function of the breadth of recent coverage, i.e., the number of unique sources that covered the target firm in the month prior to the intervention (column 2). We find that both measures are positively associated with the likelihood of a campaign receiving coverage when estimated separately. However, when estimated together,

the sign on *N_Articles_PMonth* is negative (albeit economically insignificant). In contrast, the relation between breadth of coverage and announcement press coverage is consistently positive and economically significant in all specifications: for example, a one-unit increase in the number of sources providing pre-intervention coverage is associated with a 95% increase in the odds of a campaign receiving press coverage (column 4), and one-unit increase in the number а of pre-intervention sources covering a target firm is associated with a 60% increase in the number of announcement day articles for the firm (column 5). Overall, these results underscore the sticky nature of media coverage in that pre-intervention business press coverage is positively associated with campaign announcement coverage, but the effect is driven through the breadth, not the amount, of pre-intervention coverage.

Table 5a. Prior press coverage and the likelihood of an activist campaign receiving press coverage: Logistic and negative binomial models predicting press coverage of campaign announcements

| | 1 | Dependent variab | le = News_Cover | | Dependent variable =N_Articles_Annc |
|-----------------------------|----------------------------|----------------------------|----------------------------|------------|--|
| Variable | Coefficient (Std. err.) | Coefficient (Std. err.) | Coefficient (Std. err.) | Odds ratio | Coefficient (Std. err.) |
| | (1) | (2) | (3) | (4) | (5) |
| N_Articles_PMonth | 0.00270*** | | -0.00372*** | 0.996*** | 0.00240*** |
| N_Articles_PMonth | (0.00105) | | (0.00116) | (0.00116) | (0.000721) |
| N Sources PMonth | | 0.567*** | 0.668*** | 1.950*** | 0.471*** |
| n_sources_rmonth | | (0.0577) | (0.0699) | (0.136) | (0.0481) |
| Prominent | 0.106 | 0.130 | 0.120 | 1.127 | 0.0210 |
| Prominent | (0.0800) | (0.0804) | (0.0804) | (0.0906) | (0.0605) |
| SP1500 | 0.140 | 0.122 | 0.100 | 1.105 | 0.114 |
| SP1500 | (0.111) | (0.113) | (0.112) | (0.124) | (0.0711) |
| hast | 1.469*** | 1.285*** | 1.222*** | 3.395*** | 0.645*** |
| Inst | (0.131) | (0.131) | (0.132) | (0.448) | (0.124) |
| I Ci | 0.00616 | -0.0376 | -0.0246 | 0.976 | 0.0811*** |
| LSize | (0.0294) | (0.0291) | (0.0292) | (0.0285) | (0.0263) |
| Are about | 0.00335 | -0.00442 | 0.000381 | 1.000 | 0.0125** |
| Analyst | (0.00647) | (0.00661) | (0.00643) | (0.00643) | (0.00528) |
| CAR Pre30 | -0.501*** | -0.674*** | -0.674*** | 0.509*** | -0.336** |
| CAR_FIESO | (0.182) | (0.189) | (0.189) | (0.0965) | (0.134) |
| Activism type fixed effects | Yes | Yes | Yes | Yes | Yes |
| Year fixed effects | Yes | Yes | Yes | Yes | Yes |
| Day-of-week fixed effects | Yes | Yes | Yes | Yes | Yes |
| Industry fixed effects | Yes | Yes | Yes | Yes | Yes |
| Ν | 4,047 | 4,047 | 4,047 | 4,047 | 4,054 |
| Pseudo R-squared | 0.11 | 0.13 | 0.13 | 0.13 | 0.08 |
| Area under the ROC Curve | 0.71 | 0.74 | 0.74 | 0.74 | |

Note: This table reports the effect of prior press coverage on the likelihood of an activist campaign receiving press coverage. *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively, with two-tailed p-values, calculated based on standard errors clustered at the firm-level. Appendix A provides variable definitions.

 Table 5b. Prior press coverage and the likelihood of an activist campaign receiving press coverage:

 Covariate balance between matched pairs of covered and non-covered announcements

| V | Subsam | ple means | 1:66 |
|-------------------------|----------|-------------|------------------------------|
| Variable | Coverage | No coverage | <i>diff. p</i> > <i> t</i> / |
| N_Articles_PMonth | 23.021 | 22.148 | 0.67 |
| N_Sources_PMonth | 1.152 | 1.125 | 0.44 |
| Prominent | 0.345 | 0.344 | 0.93 |
| SP1500 | 0.144 | 0.147 | 0.82 |
| Inst | 0.490 | 0.503 | 0.32 |
| LSize | 5.717 | 5.752 | 0.68 |
| Analyst | 7.285 | 7.200 | 0.82 |
| CAR_Pre30 | 0.023 | 0.020 | 0.71 |
| Engage | 0.436 | 0.440 | 0.84 |
| Board | 0.379 | 0.379 | 1.00 |
| Corpgov | 0.163 | 0.154 | 0.51 |
| Strategy | 0.088 | 0.088 | 1.00 |
| Sale | 0.129 | 0.132 | 0.81 |
| Other | 0.078 | 0.074 | 0.71 |
| Number of matched pairs | 1 | 260 | |

Note: This table reports descriptive statistics for the covariates used to predict the likelihood of an activist campaign receiving press coverage on the day of the campaign announcement. P-values reported in this table are based on two-sample t-tests. Appendix A provides variable definitions.

VIRTUS 81

5.6. Press coverage and the market response to campaign announcements (H4)

Given the differences between covered and noncovered campaigns (Table 2b), any difference in the market response to campaign announcements could be due to differences unrelated to media coverage. To mitigate this concern, we use PSM to create a sample of covered announcements and non-covered announcements that are similar along observable dimensions. Using the predicted values (i.e., propensity scores) from estimating Eq. (2), we match (without replacement) each covered campaign to the non-covered campaign that has the closest propensity score (i.e., the "nearest neighbor"). We require that the difference in propensities between a target firm and its match be no larger than 1 percent. Covariate balance for the 1260 pairs of covered and non-covered campaigns are displayed in Table 5b. Differences between covered and non-covered firms are statistically insignificant, indicating that the covered and non-covered firms are similar along observable dimensions. The area under the receiver operating characteristic (ROC) curve is 0.74, and a goodness-of-fit test fails to reject the null, suggesting that the model fits the data reasonably well.

Table 6a. The effect of business press coverage on the initial market response to campaign announcements:Full sample of activism campaign announcements

| Variables | Coefficient (Std. err.) | Coefficient (Std. err.) | Coefficient (Std. err.) | Coefficient (Std. err.) |
|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | (1) | (2) | (3) | (4) |
| Name Carrier | 0.0164*** | | | 0.00893** |
| News_Cover | (0.00268) | | | (0.00409) |
| N_Articles_Annc | | 0.000877*** | | 0.000553** |
| N_Articles_Annc | | (0.000266) | | (0.000263) |
| N_Sources_Annc | | | 0.0128*** | 0.00394 |
| N_SOURCES_ANNC | | | (0.00237) | (0.00352) |
| Prominent | -0.000309 | -0.000289 | -0.000374 | -0.000484 |
| Prominent | (0.00265) | (0.00266) | (0.00265) | (0.00265) |
| ¥ | 0.00862* | 0.0132*** | 0.0108** | 0.00952** |
| Inst | (0.00451) | (0.00445) | (0.00439) | (0.00463) |
| LSize | -0.00217** | -0.00278*** | -0.00280*** | -0.00279*** |
| LSIZE | (0.000971) | (0.000976) | (0.000984) | (0.00100) |
| Anchist | 7.89e-05 | -5.27e-05 | -0.000131 | -8.31e-05 |
| Analyst | (0.000201) | (0.000206) | (0.000207) | (0.000207) |
| CAR_Pre30 | -0.0357*** | -0.0363*** | -0.0367*** | -0.0355*** |
| - | (0.00887) | (0.00887) | (0.00882) | (0.00890) |
| Activism type fixed effects | Yes | Yes | Yes | Yes |
| Year fixed effects | Yes | Yes | Yes | Yes |
| Day-of-week fixed effects | Yes | Yes | Yes | Yes |
| Industry fixed effects | Yes | Yes | Yes | Yes |
| N | 4,052 | 4,052 | 4,052 | 4,052 |
| R-squared | 0.173 | 0.172 | 0.174 | 0.176 |

Note: Dependent variable = CAR_Evt2 . This table reports the effect of announcement-date press coverage on announcement-period stock returns. Table 6a (Table 6b) presents results for the full sample of all (subsample of PSM-matched covered and non-covered) activist campaigns with available data. *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively, with two-tailed p-values, calculated based on standard errors clustered at the firm-level. Appendix A provides variable definitions.

| Table 6b. The effect of business press coverage on the initial market response to campaign announcements: |
|--|
| PSM sample of activism campaign announcements |

| Variables | Coefficient (Std. err.) | Coefficient (Std. err.) | Coefficient (Std. err.) | Coefficient (Std. err.) |
|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | (1) | (2) | (3) | (4) |
| Naura Caura | 0.0171*** | | | 0.0173*** |
| News_Cover | (0.00319) | | | (0.00451) |
| N_Articles_Annc | | 0.000863** | | 0.000587 |
| N_Articles_Anne | | (0.000404) | | (0.000419) |
| N_Sources_Annc | | | 0.0110*** | -0.00341 |
| N_SOURCES_ANNC | | | (0.00283) | (0.00440) |
| Prominent | -6.04e-05 | -0.000230 | 5.37e-05 | -0.000202 |
| | (0.00311) | (0.00312) | (0.00312) | (0.00312) |
| Inst | 0.00615 | 0.00717 | 0.00758 | 0.00666 |
| mst | (0.00540) | (0.00544) | (0.00549) | (0.00547) |
| LSize | -0.000934 | -0.00159 | -0.00155 | -0.00116 |
| LSIZE | (0.00124) | (0.00124) | (0.00125) | (0.00127) |
| Analyst | -1.38e-05 | -0.000145 | -0.000208 | -5.34e-05 |
| Analyst | (0.000249) | (0.000250) | (0.000255) | (0.000255) |
| CAR Pre30 | -0.0323*** | -0.0324*** | -0.0331*** | -0.0323*** |
| CAR_Preso | (0.0112) | (0.0112) | (0.0112) | (0.0112) |
| Activism type fixed effects | Yes | Yes | Yes | Yes |
| Year fixed effects | Yes | Yes | Yes | Yes |
| Day-of-week fixed effects | Yes | Yes | Yes | Yes |
| Industry fixed effects | Yes | Yes | Yes | Yes |
| Ν | 2,518 | 2,518 | 2,518 | 2,518 |
| R-squared | 0.184 | 0.180 | 0.181 | 0.185 |

Note: Dependent variable = CAR_Evt2 . This table reports the effect of announcement-date press coverage on announcement-period stock returns. Table 6a (Table 6b) presents results for the full sample of all (subsample of PSM-matched covered and non-covered) activist campaigns with available data. *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively, with two-tailed p-values, calculated based on standard errors clustered at the firm-level. Appendix A provides variable definitions.

VIRTUS 82

Using both the full sample of activist campaign announcements (Table6a) and the PSM sample of announcements (Table 6b), we estimate the effect of business press coverage on the initial market response to campaign announcements. In columns 1 through 3, our primary variables of interest are, respectively, an indicator for whether the campaign announcement received coverage, a count of the number of articles on the announcement date, and a count of the number of unique sources reporting on the firm. When considered individually, we find a positive and economically significant relation between each of the press coverage measures and announcement returns. For example, using results for the PSM sample (Table 6b), receiving campaign coverage is associated with a 1.71% higher announcement return (column 1), and a one-unit increase in the sources covering the firm is associated with a 1.1% higher announcement return (column 3). When included in the same model (column 4), however, only News_Cover remains statistically significant, with returns for covered announcements being almost 1.73% higher than that of non-covered announcements. This result confirms that business press coverage of activism campaign announcements indirectly benefits activists through its effect on the market response to the announcement, although it is unclear whether the effect is driven by the amount or breadth of coverage.

5.7. Robustness tests

As a robustness test, we create the same press variables using an alternative measure of sentiment supplied by RavenPack, composite sentiment score (CSS). CSS combines textual characteristics of news articles with 5 other signals to create a composite measure of sentiment. We find that CSS exhibits less variation than ESS, and consequently, although the sign and significance of our tests are comparable across both measures, economic magnitudes are slightly smaller when using CSS.

In addition to reducing concerns over reverse causality by excluding articles that relate to changes in targets' stock prices, we take other steps to mitigate endogeneity concerns. One possible alternative explanation for the results of our returns test is that the relation between business press coverage and returns is driven by the economic implications of the campaign. That is, the economic news of the campaign causes both the increase in business press coverage and the stock market Unlike reaction. other information events (e.g., earnings announcements or management forecasts), there is no readily observable proxy for the economic value embedded in an activist announcement. We attempt to control for the economics of the intervention by controlling for the campaign objective and the prominence of the activists, but in addition, in untabulated tests, we also include either the one- or two-year buy-and-hold abnormal return (starting on the announcement date) as a proxy for the economic value of the campaign, and we find consistent results.

Finally, we investigate the possibility that the increased attention from business press coverage causes investors to initially overreact to an activist campaign announcement. We substitute 6- and 11-day cumulative abnormal returns for the 2-day returns and find a consistently positive and significant effect of media coverage up to two weeks after the intervention. Longer returns periods cause the media coverage (and other) variables to lose significance but not to flip sign. This suggests that markets do not correct to a potential overreaction to covered campaign announcements.

6. CONCLUSION

This study is the first to provide large-sample evidence on the role of the business press in shareholder activism campaigns. We find that activists tend to target firms with greater press coverage, especially negative coverage, in the year prior to the campaign. To the extent that press coverage makes a firm's information environment more transparent, this finding is consistent with theoretical predictions that activists will tend to target more transparent firms and firms that are perceived poorly by market participants.

We also find that breadth of press coverage prior to a campaign announcement is positively associated with the likelihood that the campaign announcement receives press coverage, suggesting that activists may deliberately target firms with broad press coverage to increase the likelihood that their campaign receives media attention. Consistent with the notion that press coverage of a campaign is beneficial to activists, we find that campaign announcements that receive coverage are associated with significantly higher announcement returns than are similar campaigns that do not receive coverage.

Limitations of this study provide opportunities for future research. First, our measures of press coverage focus on coverage by the business press and may not generalize to other forms of media coverage, including coverage by the mainstream media or social media. Future research could explore how these alternative sources of firm-specific information impact the shareholder activism process. Second, our study does not address the specific mechanism through which press coverage influences activists' targeting decisions. For example, does press coverage simply attract the activist's attention to potential targets, or does it facilitate the activist's ability to effect change once a target has been identified? Finally, although we find evidence of a larger market reaction to campaign announcements that receive press coverage, we do not explore the long-term implications of announcement press coverage for the outcome of the activist's campaign. Understanding how media coverage impacts the activist's ability to implement the desired changes would provide additional insight into the role of the media in the shareholder activism process.

Despite these limitations, our study contributes to the growing literature on the determinants and consequences of shareholder activism by highlighting the important role of the media in this process. Our findings should be of interest to managers of firms wishing to understand their susceptibility to being targeted by activists as well as to activists seeking to maximize the impact of their campaigns.

VIRTUS 83

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VIRTUS 84

APPENDIX A

Table A.1. Variable definitions

| Primary dependent var Activist News_Cover N_Articles_Annc CAR_Evt2 | iablesAn indicator equal to 1 for observations representing firms targeted by an activist investor and equal to 0 for non-targeted firms.An indicator equal to 1 for activist campaigns that receive press coverage on the day of the campaign announcement. Campaigns are designated as receiving coverage if the count of articles on the day of the announcement is greater than the average daily count for days [-30, -1] relative to the announcement date.The number of articles on the activist campaign announcement date.The cumulative abnormal return over the campaign announcement date, $t = 0$, and day $t + 1$. Abnormal returns for each day are calculated as the firm's raw return less the value-weighted market return. |
|--|--|
| News_Cover N_Articles_Annc CAR_Evt2 | to 0 for non-targeted firms. An indicator equal to 1 for activist campaigns that receive press coverage on the day of the campaign announcement. Campaigns are designated as receiving coverage if the count of articles on the day of the announcement is greater than the average daily count for days [-30, -1] relative to the announcement date. The number of articles on the activist campaign announcement date. The cumulative abnormal return over the campaign announcement date, <i>t</i> = 0, and day <i>t</i> + 1. Abnormal |
| N_Articles_Annc CAR_Evt2 | announcement. Campaigns are designated as receiving coverage if the count of articles on the day of the announcement is greater than the average daily count for days [-30, -1] relative to the announcement date. The number of articles on the activist campaign announcement date. The cumulative abnormal return over the campaign announcement date, $t = 0$, and day $t + 1$. Abnormal |
| CAR_Evt2 | The cumulative abnormal return over the campaign announcement date, $t = 0$, and day $t + 1$. Abnormal |
| | |
| | |
| Independent variables | |
| Press Variables | |
| N_Articles | The total number of articles over the fiscal year. |
| N_Articles_No50 | The total number of articles over the fiscal year, excluding those that are classified as being neutral in sentiment (ESS = 50). |
| N_Articles_PMonth | The total number of articles over days $[-31, -2]$ relative to the campaign announcement date, $t = 0$. |
| N_Sources | The number of unique sources providing coverage of the firm during the fiscal year. Because the Dow Jones edition of the RavenPack database includes press coverage for four media outlets (by the <i>Wall Street Journal, Barron's, MarketWatch, and Dow Jones Newswires), N_Sources</i> ranges from 0 to 4. |
| N_Sources_Annc | The number of unique sources providing coverage of the firm on the campaign announcement date. |
| N_Sources_PMonth | The number of unique sources providing coverage of the firm over days $[-31, -2]$ relative to the campaign announcement date, $t = 0$. |
| N_Pos | The total number of positive articles (i.e., ESS > 50) over the fiscal year. |
| N_Neg | The total number of negative articles (i.e., ESS < 50) over the fiscal year. |
| N_VeryPos | The total number of very positive articles (i.e., ESS > 75) over the fiscal year. |
| N_VeryNeg | The total number of very negative articles (i.e., ESS < 25) over the fiscal year. |
| Av_ESS | The average level of ESS for all articles over the fiscal year. |
| Av_ESS_No50 | The average level of ESS for all articles, excluding non-neutral (i.e., ESS = 50) over the fiscal year. |
| Control variables | |
| Prominent | An indicator equal to 1 for campaigns launched by an activist that is classified as prominent by either Shark Repellant (i.e., whether the activist is a member of the "SharkWatch 50") or Thomson One (i.e., whether the activist is included in the "Prominent Activist" search option). |
| SP1500 | An indicator equal to 1 for activist targets that are part of the S&P Composite 1500 at the time of the campaign announcement. |
| Inst | Average institutional ownership over the four quarters during the fiscal year (Eq. 1) or institutional ownership as of the quarter-end that most closely precedes the activist campaign announcement (Eq. 2 and 3). |
| LSize | Natural log of market value of equity for the company at the end of the fiscal year (Eq. 1) or at the end of the fiscal quarter most closely preceding the campaign announcement date. |
| Analyst | A count of the number of analysts who made either an annual or a quarterly forecast for the firm during the fiscal year. |
| BHAR | 12-month buy-and-hold abnormal return in excess of the value-weighted market return, measured over the fiscal year. |
| Lev | Long-term debt-to-assets ratio at the end of the fiscal year. |
| Div_Yield | The sum of common and preferred dividends, divided by the sum of the market value of common stock plus the book value of preferred stock. |
| ROA | EBITDA divided by lagged assets. |
| Growth | Current year sales divided by lagged sales, less one. |
| Liquidity | The yearly average, using daily data, of $-1 * 1000 \sqrt{\frac{ Return }{Dollar Trading Volume}}$ |
| Act_TypeFE | Fixed effects based on the type of activism (see Appendix B for activism types). |

APPENDIX B

Table B.1. Classification of activism events

| Initial demand | Description |
|----------------------|--|
| Sale | The activist's goal is for management to put the company, or a part of the company, up for sale. |
| Engage management | The activist announces its intention to communicate with management to discuss ways to "enhance |
| | shareholder value" but does not include any specific plans or proposals in its announcement. |
| Board composition | The activist seeks to change the board composition in some way. |
| Corporate governance | The activist pushes for changes that are related to corporate governance but are not related to board composition. |
| Corporate strategy | This type of activism includes campaigns aimed at changing some aspect of the company's strategy, for example, by spinning off a division or opposing a proposed sale. |
| Other | This category includes activist interventions that do not fall into the categories above. |

VIRTUS