Benefits of Publicity

Umit G. Gurun
University of Texas at Dallas

October 15, 2016

Abstract

We investigate whether corporate board members with media expertise influence firms' media coverage and media slant. We find that firms with a media professional on the board of directors receive more media coverage, and articles written about them include fewer negative words compared with articles on control firms. These findings highlight the importance of the composition of the board of directors as a determinant of information disclosure mechanism.

JEL Classification: G10, G12, G34, M41, M43, L82
Key words: Media, Press Release, Investor relations, Corporate board composition.
Contact Information: Umit G. Gurun, Email: umit.gurun@utdallas.edu, Phone: 972-8835917.
Acknowledgments: We are grateful to Mitch Cohen of Boardex for his help with Boardex data, Sandra Azzollini of PR Newswire for her assistance with press release data, and David Solomon for sharing his investor relations firm data. We also thank Andres Almazan, Malcolm Baker, Nina Baranchuk, Geoff Booth, Alex Butler, Jonathan Cohn, Lauren Cohen, Bill Cready, Cesare Fracassi, John Griffin, Charlie Hadlock, Rick Johnston, David Mauer, Chris Malloy, Gregor Miller, Volkan Muslu, Rajesh Naraine, Ram Natarajan, Bob Parrino, Suresh Radhakrishnan, Chip Ryan, Jesse Shapiro, David Solomon, Eugene Soltes, Laura Starks, and seminar participants at Harvard University, University of Texas at Dallas and University of Texas at Austin for their helpful comments. Any errors are ours. This paper was circulated under the title "Price of Publicity".

News coverage is an important source of information about a firm. Because most outsiders learn about a firm from news articles written about it, firms have incentives to manage how they are covered in the news so that they are presented in the most favorable light possible. This paper presents evidence that the composition of a firm's board of directors can affect the way the firm is covered in the news. Specifically, we show that a board member with media expertise enhances the firm's ability to manage how the firm is portrayed in mass media.

We define an individual with past experience in a news organization as an owner, top executive, board member, editor, journalist, and so on as a media professional (MP). We determine a firm's willingness to actively influence media relations by the existence of such individuals on that firm's corporate board. We then track the firm's news coverage and qualitative content of news stories (slant) in a large database of articles from *Wall Street Journal, New York Times,* and eight major local newspapers that meet our data requirements *(Boston Globe, Chicago Sun Times, Denver Post, Pittsburgh Post-Gazette, San Francisco Chronicle, Seattle Post-Intelligencer, St. Louis Post-Dispatch,* and *Washington Post)* between 1996 and 2006. We define a firm's *coverage* in a period as the number of times it is mentioned in a news article during the period. We define *slant* as the percentage of negative minus positive financial words in these firm-specific news stories. Following Loughran and McDonald (2011), Tetlock, Saar-Tsechansky, and Macskassy (2008), and Gurun and Butler (2012), we use textual analysis to identify these negative and positive words.

We show that firms with MPs on their boards experience both greater coverage and more favorable slant. Having an MP increases the number of articles mentioning the firm in a year by 33%, which corresponds to one more article a year for an average firm in the sample. Having an MP decreases the slant in articles mentioning the firm in a year by 21%; however, most of this slant effect is subsumed by time-invariant unobserved firm characteristics.

We then move on to potential explanations for these results. We investigate three distinct hypotheses. The first hypothesis (*media management hypothesis*) suggests that MPs are instrumental in creating awareness within a firm of the importance of its media coverage. This could happen if firms hire MPs purposely to become more efficient in dealing with the media, or if MPs create awareness within the

firm regarding the importance of media coverage. This hypothesis suggests that appointment of MPs should be correlated with better representation of the firm in the media, in terms of both increased coverage and content of the coverage. In other words, MPs provide expertise that other board members and other media channels do not. Results by and large are consistent with this hypothesis.

The second hypothesis (*connections hypothesis*) suggests that MPs use their personal connections to influence media coverage and slant in the media outlets they are directly connected with. To investigate the relative importance of these roles (connections vs. expertise), we restrict the sample to those MPs that have direct ties to *Wall Street Journal* and *New York Times* to see if MPs affect their firms' coverage and slant in their connected journal. We find that these media outlets do not seem to have greater coverage or more favorable slant for firms with MPs who have direct ties to these two newspapers.

The third hypothesis (*journalist attention hypothesis*) suggests that journalists pay more attention to events occurring in firms that have MPs. According to this hypothesis, Coca-Cola would be more likely than Pepsi to have coverage in the *New York Times* if Peter Rice, CEO of Fox Entertainment Group, were on the Coca-Cola board. This demand-side hypothesis suggests that MPs attract more media attention to a firm, rather than suggesting that firms use MPs to become more visible to the outside world. Although this mechanism predicts increased coverage, it does not predict press releases of MP firms to be pickup more by media. Our findings show that media, inconsistent with this demand-side explanation, disproportionately picks up press releases of MP firms.

Miller (2006) argues that media are more inclined to report stories that are likely to be sensational and interesting to the public. Using coverage and slant around specific sensational stories, we investigate whether firms with MPs (who were hired before the events occurred) weather crisis better compared with other firms. We identify two categories of possibly sensational stories involving conflicts between firms and their two major stakeholders (customers and employees). The first category of sensational events relates to product safety. *Product safety events* are events in which firms paid substantial fines or civil penalties or were involved in major controversies or regulatory actions due to product safety issues. The second category relates to employee safety. *Employee safety events* involve cases in which firms paid substantial fines or civil

penalties for violations of employee health and safety standards. To examine how MPs actually help firms achieve better media coverage, we introduce industry-wide shocks to product- and employee-safety-related issues. We identify exogenous shocks by the ratio of firms in a given industry (as defined by the 30 Fama French industry definition) experiencing a product- or employee-safety-related problem.[1] We assume that industries with a higher ratio of violations are likely to experience higher media scrutiny. We find that media coverage of firms with MPs is higher especially during these times, suggesting that the expertise channel works during times when it is valuable for the firm.

The influence of MPs on media coverage does not necessarily mean the media are in favor of these firms when the truth is something else. We show that firms with MPs engage in more corporate social responsibility (CSR) activities following a bad event, suggesting that firms with MPs are better positioned to find means to communicate newsworthy stories out to journalists, or to do things that are more newsworthy.

Board members with media expertise may be better at advising their firms to work with effective public or investor relations firms. Effective PR firms provide connections to networks of media professionals who may lower information acquisition costs for journalists, so journalists may be more inclined to cover firms represented by the PR firm *with the information supplied by the firm*. This could happen if information flow within the network lowers information acquisition costs to journalists through easier access to key people in the firm, who may be more forthcoming with information if a journalist within the network approaches them. Consistent with these conjectures, we find that press releases of firms with MPs are more likely to be picked up by the press. Specifically, press releases of firms with MPs are 8.3% more likely to receive media coverage within five days than those without. We do not find, however, that the slant of news following the press release is more favorable for firms with MPs. Given that the unconditional probability of having a press release followed by a media report is 23 %, this 8.3% increase in probability is economically significant.

[1] Our research design is similar to that of Dass et al. (2014), who examine whether firms with board members in related industries can anticipate and maneuver around negative industry sales shocks and take better advantage of positive sales shocks than do firms without board members in related industries. Because the industry sales shock is an exogenous event, the research design used by Dass et al. (2014) gives an opportunity to test whether having board members with related industry information matters.

The effect of an MP on news coverage is more pronounced if the MP is or was an owner, a top executive, or a board member in the media rather than a person in another position (e.g., a journalist). To the extent that high-ranking MPs are more likely to have influence in efficiently managing press relations, these additional findings support the notion that MPs are influential in managing a firm's media relations. We do not view the MP channel to be the sole strategy a firm can use to manage media relations. Other options include using an internal or external investor/press relations department (Solomon 2012) or increasing advertising (Gurun and Butler 2012). In our analysis, we include these variables to investigate the incremental role of MPs in media management. Collectively our results suggest that the composition of a firm's board of directors can affect the way it is covered in the news: firms with MPs on their boards enjoy both more coverage and more favorable news coverage, and the effect of MP is incremental to other channels previously documented in the literature.

1 Background and Hypothesis Development

Models of market efficiency assume that in a frictionless market, investors receive and process all relevant information; therefore, there is no obvious role for the media to affect prices.[2] However, a body of recent literature shows that investors react to attention-grabbing news by trading more of the relevant stocks and sometimes create episodes of temporary price pressures (Barber and Odean 2008). Under this "attention-grabbing" perspective, the media can affect asset prices not only because they select, package, and certify information (Dyck, Volchkova, and Zingales 2008), but also because their interest lies in going after news that is "sensational."

Another way the media can affect prices is by providing information to a wider audience by increasing firm recognition ("visibility perspective"). Greater visibility may increase firm value through lower expected returns and/or higher expected cash flows. Merton (1987) argues that greater investor

[2] A related line of literature studies the effect of media on reversal of returns, trading volume, and liquidity. See Chan (2003) and Gutierrez and Kelley (2008), which explore this link between trading activity and returns on news days; Chae (2005) and Chava and Tookes (2007), which analyze trading volume around news events; and Tetlock (2009), which shows that media can also release previously privately held information and help the market absorb a persistent liquidity shock quickly.

recognition can increase the efficiency of risk sharing, which in turn will decrease (increase) the cost of capital and increase (decrease) firm value. Moreover, greater investor recognition can also lead to higher expected cash flows through effective monitoring and greater demand for the firm's product or brand. Under this "visibility perspective," the media play a crucial role in asset prices through the coverage of firms (Bushee and Miller 2012; Bushee, Core, Guay, and Hamm 2010; Soltes 2009).

Recent works present convincing evidence that the media play a role in reducing information asymmetry between firms and investors (Bushee, Core, Guay, and Hamm 2010; Blankespoor, Miller, and White 2014) and therefore affect the market's response to new information releases (Li, Ramesh, and Shen 2011; Kothari, Li, and Short 2009). There is also evidence showing that the media influence dissemination of publicly available information, and that dissemination of stale information becomes impounded into security prices when investors suffer from limited attention (Rogers, Skinner, and Zechman 2013; Solomon and Soltes 2012; Da, Gurun, and Warachka 2014).

Although the terms "attention-grabbing" and "visibility perspective" characterize the impact of media on asset prices, they are silent on how media select certain news. Gurun and Butler (2012) and Solomon (2012) show that the media can affect the prices through "media slant" or "media spin." This channel suggests that firms actively manage the content of information that the media report, either through advertising dollars spent at newspapers (Gurun and Butler 2012) or through investor relations (Solomon 2012). These papers differ from the studies of determinants of media coverage (e.g., Fang and Peress 2009), as both of them investigate how media coverage can be affected by actions firms take to actively manage relations with media. Our paper offers a third channel: the role of board members. As such, our study complements Agrawal and Knoeber (2001), Cohen, Frazzini, and Malloy (2012), and Guner et al. (2008), who study corporate board ties between firms and politicians, sell-side analysts, and commercial/investment bankers, respectively.[3]

[3] The idea that the media cater to corporations with media connections goes back to Herman and Chomsky's (1988) propaganda theory, which postulates that business connections between the media and the corporate world determine the type of news that is presented in news media.

2 Data and Methods

We use several sources to collect data on firm-specific news published by national newspapers (*Wall Street Journal* and *New York Times*), eight major local newspapers (*Boston Globe, Chicago Sun Times, Denver Post, Pittsburgh Post-Gazette, San Francisco Chronicle, Seattle Post-Intelligencer, St. Louis Post-Dispatch,* and *Washington Post*) and a newswire (Dow Jones Newswire), press releases disseminated through PR Newswire, a list of individuals who have newspaper media experience, financial analyst following, and firm-specific data. We obtain stock return and accounting data from CRSP/COMPUSTAT. Sell-side analyst-following data come from First Call. We use Thompson 13F filings for all reporting institutions to construct firm-level institutional ownership.

2.1 Media Professional

We obtain the names of people who have media experience from the Boardex database provided by Management Diagnostic Limited. Management Diagnostic is a private research company that specializes in collection and dissemination of social network data on company officials of U.S. and European public and private companies. The query to obtain this list involves a search of more than 40,000 individual resumes to identify persons who (1) served on boards of public and/or private firms and (2) have worked for any of the firms that can be classified under the media-newspaper category.

The media-newspaper category includes the following corporations: Tribune Company, Journal Register Company, Knight Ridder, The McClatchy Company, MediaNews Group, The Seattle Times Company, Gannett Company, Lee Enterprises, Hearst Communications, The New York Times Company, E. W. Scripts, Washington Post, and News Corporation. This list contains the top ten newspaper publishing companies according to circulation data provided by Editor & Publisher's Annual Yearbook (2006) and three other companies that have been acquired by one of these ten companies since then. As can be seen from Panel A of Table 1, these 13 media newspaper publishers publish more than 350 daily newspapers, including major national newspapers such as *Wall Street Journal, USA Today, New York Times,* and *Washington Post,* as well as several regional newspapers, such as *Los Angeles Times, Houston Chronicle,* and *Arizona Republic*. A conservative estimate of the circulation of newspapers owned by these media groups is that they

constituted more than 90% of daily U.S. circulation as of 2008.

The number of individuals affiliated with these companies at some point in their career is 1,284, according to a snapshot of the Boardex database in 2009. The list contains several high-profile media people like Rupert Murdoch (CEO and chairman of News Corporation), Donald Graham (chairman of Washington Post), Sam Zell (CEO of The Tribune Company), Mary Junck (CEO of Lee Enterprises), and Garry Pruitt (CEO of The McClatchy Company). The media-person list does not necessarily involve only executives. This list also includes individuals with titles like "Director," "Independent Director," "Editor," "Regional Editor," and "Journalist."[4]

Our next step is to identify individuals who serve on boards of public corporations. We first exclude names of persons who sit on boards of private firms. We also exclude names of persons who sit *only* on boards of media firms (e.g., News Corporation), as it is not interesting to investigate if newspapers use their resources to manage their media exposure. In addition, we also require the media expertise to *precede* the involvement in a public firm. This is very important to ensure that the MPs in our sample selection have knowledge and connections to the media industry to provide the values firms expect from them. This leaves us 417 individuals whom we identify as MPs. Panel B of Table 1 summarizes the breakdown of these MPs by the media companies they were affiliated with. In this panel, an MP with a *New York Times* and a News Corporation affiliation is counted twice, resulting in 467 "MP-Publishing firm" observations.

A total of 394 companies had an MP at the firm at some point during the sample period. A breakdown of these companies with respect to Fama-French industries (Table 1, Panel C) shows that certain industries employ more MPs than others. For example, 117 firms in finance-related industries, 62 firms in service industries, 37 firms in business equipment industries, and 35 firms in communication industries had

[4] Assume that a representative Boardex resume has eight positions listed. These positions include internships, prior jobs, other board appointments, and so on. Based on this assumption, media-related jobs constitute roughly 0.37% of listed positions (1,284/(40,000 x 8)). One out of 300 people encountered on boards would have involvement in these 13 media companies in some capacity. Clearly, several factors are at work when one picks a sample based on a particular expertise from biographies. The probability of encountering a particular institution/position on someone's resume depends on: (1) size of that institution, (2) age of that institution, (3) age of the person, (4) self-selection of reporting that experience on the resume, and (4) other experiences the person discloses on the resume.

an MP during the sample period, whereas the coal industry had none. In Panel D of Table 1, we report the number of firms that had at least one MP on the board in that particular year.[5]

2.2 Media Mention Measures

We collect media mentions from two national newspapers (*Wall Street Journal* and *New York Times*), eight major local newspapers (*Boston Globe, Chicago Sun Times, Denver Post, Pittsburgh Post-Gazette, San Francisco Chronicle, Seattle Post-Intelligencer, St. Louis Post-Dispatch,* and *Washington Post*). National and local newspapers are printed on a daily basis. Articles printed in newspapers are often disseminated through the Internet, especially since Internet technology became widely available. Newspapers contain business news as part of their overall coverage both in their general reporting of events and in a separate business section. To match news stories to other databases, we use the ticker symbols, firm names, and name variants of the stocks from the CRSP database as the search strings in Factiva. The name variants we use include singular and plural versions of the following abbreviations from the company names: ADR, CO, CORP, HLDG, INC, IND, LTD, and MFG. Our search algorithm first searches for ticker symbols within brackets (e.g., [GM] for General Motors) in article titles and lead paragraphs. If no match is found, we then search for name and name variants. We use the CRSP company name change file to identify situations in which a firm has name variations. Newspapers may report on companies that are bankrupt or that will go public in an initial public offering (IPO). To allow for this possibility we keep the names of firms before IPO and after delisting for an additional six-month period. We define three measures for media coverage: *Coverage_national* is the number of times *Wall Street Journal* and *New York Times* cover a firm in a given

[5] Board affiliation information in the Boardex database may contain a single year, rather than a period of time to indicate beginning and ending years of service on board. This could happen either if Boardex does not contain a recorded ending year although the individual is no longer on the board, or if the individual is still serving on the board of the firm. We cross-check our data with bios of individuals found on Internet searches to identify the missing ending years and recode the data accordingly (84 cases). The average tenure of MPs in our data is 3.4 years (1,338/394), which is lower than 7 years, the average tenure of board members reported in the literature (see Larcker and Tayan 2011). We attribute this difference to two sources: (i) In our data, 26% of the MPs served less than three years on boards. (ii) The number of firms with MP increases over time by 30% (Table 1, Panel D), and their tenure information is truncated by sample ending year.

year. *Coverage_local* is the number of times a firm is covered in local newspapers.[6,7,8]

In addition to these coverage variables, we define the qualitative content of news stories (*Slant*) using scaled counts of certain words.[9] Specifically, we use the negative and positive word categorization used in the Loughran and McDonald (2011) dictionary to count the number of negative and positive words in all articles published in a given year about a given firm. The Loughran and McDonald (2011) dictionary contains 2,337 (354) *financial* words that carry negative (positive) tone. Our results are primarily driven by negative words as such words have much stronger correlation with stock returns (Tetlock, Saar-Tsechansky, and Macskassy 2008) and negative information is processed more thoroughly than positive information (Baumeister et al. 2001; Rozin and Royzman 2001). It is possible that not all negative (or positive) words are equally informative and some of the negative (or positive) words in the news may not truly relate to the company. Therefore, by assigning equal weights to each word and by including words that may not truly relate to companies, the *Slant* measure includes errors. However, there is no clear reason why this measurement error should be clustered in firms with or without an MP. Formally, to construct the *Slant* measure, we multiply a fraction of *financially* negative words minus positive words to total words by –100 (e.g., higher values of *Slant* correspond to less negative bias from media):

$Slant_{it}$ = –100 x (number of negative minus positive words in all articles)/(number of all words in all articles), where i is the firm, t is the year.

2.3 Press Release Sample

To measure press release intensity, we use two sources to collect data: Dow Jones Newswire and PR Newswire. Newswires and newspapers differ in terms of information dissemination and customer profile.

[6] Engelberg and Parsons (2012) shows that local investors react significantly to articles published in local or regional newspapers.

[7] The local newspapers included in the sample are the only ones that have the body of the article available in Factiva at the time of data collection. Sources through which local newspaper data are available (e.g., Factiva and Proquest historical newspapers) occasionally backfill their databases with new local newspapers, and such backfilling usually contains only headlines.

[8] Our results don't change if we define local coverage by coverage in newspapers that are within 250 miles of a given firm's headquarters.

[9] These quantitative measures have been dubbed "media slant" (Gentzkow and Shapiro 2006; Gurun and Butler 2012) and "media bias" (Dyck, Volchkova, and Zingales 2008).

Unlike most newspapers, newswires publish news exclusively in electronic format, which allows them to enjoy no capacity constraint in terms of the number of pages available to run stories. Consumers of newswires, on average, are more likely to be more financial market–driven consumers of information compared with consumers of newspapers. In addition, business wires are more likely to repeat firm disclosures without any change in tone or frequency, and they would be the first to reach the investors and have the largest impact on price.

Our first press release dataset contains all corporate press releases disseminated by PR Newswire for over 3,600 public companies from January 2000 to December 2006. Press releases are usually disseminated via newswire services, and firms typically engage one newswire company at a given point in time. Neuhierl, Scherbina, and Schlusche (2010) report that nearly 60% of all publicly traded firms use PR Newswire as their press release initiation point. Other major newswires include BusinessWire (30% market share), GlobeNewswire, and MarketWire. (In unreported results, we find that firms using PR Newswire versus other alternatives do not differ in terms of firm characteristics such as firm size, growth, and industry affiliations.) We match press releases to firm identifiers (CRSP PERMNO) using the source identifier provided by PR Newswire, which includes the website URL of the issuing company as well as its name and address.

News distribution channels, which include newspapers, television networks, and financial news services such as Bloomberg, Dow Jones, and Thomson Reuters, distribute press releases depending on the newsworthiness of the press release and the channels' news processing capacity. We use Dow Jones Newswire as our second source of press releases. We use the Factiva database to collect press releases reported in Dow Jones Newswire.[10] Using Dow Jones helps us to collect press releases prior to 2000, and also pick up press releases that are not disseminated through PR Newswire. By combining data from PR Newswire and Dow Jones, we define the *Press Release* variable to measure the number of days in a given year a firm has issued a press release.

2.4 Investor Relations Firms

[10] Factiva allows users to identify press releases in Dow Jones Newswire through the "subject" category.

The board member channel is not the sole strategy a firm can use to manage media relations. Other options include using an internal or external investor/press relations department. To investigate the incremental importance of a firm's having an MP on the board, we collect data on investor relations firms that are used by public firms. We use O'Dwyer's directory of public relations firms, which contains information on firms in the public relations industry, such as their specialties and client lists. Our data for 2002 to 2006 were generously provided to us by David Solomon, who used them for empirical tests in Solomon (2011).We supplement these data using the digital version of O'Dwyer's for the years 1997 and 1999, using data stored in HathiTrust. HathiTrust allows automated searches of firm names, enabling us to identify firms with external investor relations departments.[11,12] Because the digital version of O'Dwyer's is not available for all years, we use the 1997 dictionary for the years 1996, 1997, and 1998, and the 1999 directory for 1999, 2000, and 2001.

3 Results and Discussion

3.1 Summary Statistics

Table 2 presents summary statistics for the panel data used in this paper. The sample contains 31,067 firm-year observations, where a firm is defined as an entity with a unique CRSP PERMNO identifier, and spans eleven years (1996–2006).

The *Coverage* variable in Table 2 reports the number of times in a given year that the newspapers (*Wall Street Journal* and *New York Times*) and the newswire (Dow Jones) report a story on a firm. A typical firm was covered around 2.8 times per year in national newspapers. A typical firm's media slant was around –0.90% per year in Dow Jones, *Wall Street Journal*, and *New York Times*. In other words, a typical national (local) newspaper article contains about one (0.25) negative word per 100 words. [13] The mean coverage in local newspapers is higher than that of national media, as we add up coverage in eight newspapers together to

[11] HathiTrust is a large-scale collaborative repository of digital content provided by Google Books, Internet Archive digitization initiatives, and participant libraries (www.hathitrust.org).
[12] The 1997 O'Dwyer's directory of public relations firms can be searched at **http://tinyurl.com/q4ojoxx;** the 1999 O'Dwyer's directory of public relations firms can be searched at **http://tinyurl.com/ohegor7.**
[13] Summary statistics on slant also shows that the 95th percentile of the slant measure is 0, suggesting that the count of negative words outweighs the count of positive words in the majority of cases.

define the local media variables.

Our sample contains larger firms compared with the universe of COMPUSTAT firms for the same time period. The pooled average market value of equity in our sample is $3.2 billion, with a median of $297 million, whereas the pooled average of market value of equity in COMPUSTAT is $1.3 billion, with a median of $76 million. The market-to-book ratio of the sample has a mean of 3.89 and a median of 2.13. This ratio is larger than that of the universe of COMPUSTAT firms for the same time period, 3.02 (mean) and 1.52 (median). The average annual advertising expenses to total assets as reported in COMPUSTAT (data item 45) for the sample firms is about 1.00%. This figure corresponds to annual advertising spending of $64 million.

The average number of analysts following the firm's stock is 3.32, which is statistically lower than the average analyst following of First Call database's number of earnings estimates data (3.48) for the corresponding time period. Average institutional ownership during the sample period (36.9%) is greater than the average percentage of institutional ownership reported by Thompson 13F filings (29.5%).

3.2 Which Firms Appoint MPs?

In Panel B of Table 2, we examine differences in characteristics of firms with an MP and firms without an MP. We report difference of means tests for each pair, with *p*-values computed using standard errors adjusted for clustering by firm. These tests indicate that firms with an MP are covered more often than firms without an MP. After all, as the results in Panel B of Table 2 show, firms with MPs also have larger market capitalization and spend more on advertising. Furthermore, firms with MPs are covered by more analysts (7.75 vs. 3.15) and have more institutional ownership (54% vs. 35%).

In undocumented results, we regress the *MP* dummy on all these characteristics using a probit model. We find that a one-standard-deviation increase in advertising expenditure corresponds to a 0.32% increase in the probability of having an MP on the board after controlling for all the firm characteristics reported in this panel. The existence of an MP is positively correlated with prior returns and negatively correlated with current accounting performance, as measured by industry-adjusted return on assets (*ROA*) and share

turnover. A one-standard-deviation increase in firm performance corresponds to a decrease in the probability of an MP on the board by 0.30%, whereas a one-standard-deviation increase in prior stock return performance and share turnover is associated with a 0.20% and a –0.38% increase in probability of having an MP on the board, respectively. In this multivariate setting, institutional ownership and analyst following have no statistical significance when firm size is included in the specification.

3.3 Benefits of MPs

3.3.1 Media Coverage

In this section, we investigate how future media coverage changes with the existence of MPs on the board (using the dummy variable *MP*). The dependent variable in this analysis is one-year-ahead media coverage, in which media coverage is measured by the natural logarithm of 1 plus the number of articles that appeared in *Wall Street Journal* and *New York Times* over the course of a calendar year. We assume the correlation between coverage in these two media outlets and all other media outlets to be high because pressure from readers and competitors will force news outlets to seek and deliver information in a timely manner (Mullainathan and Shleifer 2005).

Our main variable of interest is *MP,* which is a binary variable that takes a value of 1 if the board of the firm includes an individual who had experience in a news organization as an owner, board member, top executive, editor, or journalist prior to joining to the firm's board. We also use the following firm characteristics that may explain media coverage for various reasons: firm accounting performance (*ROA*), existence of an external investor relations department (*IR Firm*), press release intensity (*Press Release*), firm market capitalization (*Ln(MarketValue)*), firm growth (*Ln(Market/Book)*), prior return, share turnover, institutional ownership, analyst coverage, advertising, and Fama and French 30 industry dummies.

Larger companies and companies that are growing are more likely to attract media attention if these companies are more likely to be owned by many individual investors. Miller (2006) finds that the media are more likely to fill a watchdog role for firms with a larger public following and in cases where the story is more likely to be sensational and interesting to the public. We include firm market capitalization (measured

by log of market value of equity) and growth rate (measured by market-to-book ratio) to capture these dimensions. Similarly, if journalists are catering stories to the tastes of readers, it is possible that certain industries (e.g., the motion picture industry) will get more coverage than others (i.e., mining). We include either industry fixed effects or firm fixed effects (which absorbs industry fixed effects) variables to capture such industry-specific variation in media coverage. Firm fixed effects specification is a stringent specification, as it absorbs any time-invariant firm characteristics that could be correlated with the MP variable.

We use percentage of a firm owned by institutions to capture institutional activism that is likely to reveal newsworthy stories to the media. Likewise, compared with individual investors, analysts are more likely to uncover "sensational" stories that are thus more likely to appear in newspapers. We include institutional ownership percentage and analyst coverage to capture influence of institutional owners and sell-side analysts to uncover "bad news."

If MPs join firms that are likely to spend more advertising in media outlets, and media cover firms that are heavy advertisers, then omitting advertising expenditures from the model may cause a spurious correlation between the existence of MPs and a firm's press coverage. We include advertising expenditures in the analysis to capture the influence of advertising expenditures on media coverage. We estimate the following specification to test whether links to media account for future media coverage:[14,15]

$$Coverage_{i,t+1} = a + b \times MP_{it} + c \times Controls_{it} + d \times Fixed\ Effects_{it} + \varepsilon_{it} \quad (1)$$

In this model, we include firm fixed effects, year dummies, and an intercept term. Because the left-hand-side variable is one-year-ahead coverage, media coverage data span 1997 to 2007, whereas independent variables are measured using observations from 1996 to 2006. For the main tests we have 31,067 firm-year observations.[16] We compute heteroskedasticity-robust standard errors adjusted for clustering by firm. Table 3

[14] Board members are usually appointed after a vote at shareholder meetings. Employing an event study using the appointment dates as event dates is not a powerful research design due to multiple confounding factors occurring at shareholder meetings.

[15] In Appendix 1, we estimate a changes specification in which change in coverage (or change in slant) is regressed on changes in all the right-hand-side variables. The results are consistent with our overall findings reported in Tables 3 and 4.

[16] When we merge Boardex, media coverage (national and local media), press release intensity (Dow Jones Wire and PR Newswire), and investor relations firm datasets to Compustat, we start with the Compustat universe as our base and

presents the results. The first specification analyzes the main question of this paper using OLS.

Consistent with the argument that MPs increase media coverage, we find the coefficient of *MP* to be positive and significant. Because the dependent variables are in logarithms, the coefficients can be interpreted as percentages. Results in first column suggest firms with MPs receive 33% (p=7.95) more media coverage, however this effect goes down to 14% (t=2.71) when firm fixed effects are included. This suggests that time invariant firm specific factors account for a large portion of the media coverage that we attributed to MP in the first specification. In terms of total media coverage, the coefficient on the main effect using the most conservative estimate (14%) suggests an increase in press coverage by one article a year when evaluated at the mean coverage of one article per year. Results in the second column of Table 3 also suggest that the magnitude of *MP* on media coverage is comparable to investor relation firm effect (0.14 vs. 0.11). These results suggest that the impact of MPs is distinct from, and not subsumed by, previously documented effects of investor relations firms on media coverage. In the last two specifications, the results indicate that having an MP on the board increases media coverage by 8.02% (t=1.95) in national and 10.55% (t=2.15) in local media outlets.

As discussed before, the characteristics of firms with MPs are significantly different from those of firms without MPs. Firms with MPs are very large compared with firms without MPs. In undocumented results, we include square of firm size to capture possible nonlinearity effects of firm size on coverage and find quantitatively similar results. Furthermore, variance inflation factors for all the control variables are less than 2. Collectively, the evidence suggests that our findings are robust to multicollinearity concerns.

3.3.2 Media Slant

In this section, we investigate how future media slant changes with the existence of MPs on the board of directors. The dependent variable in this analysis is one-year-ahead media slant, where media slant is measured by the fraction of *financially* negative minus positive words to total words in articles that

---

impute 0 to *MP*, media coverage, and investor relations firm variables if the firm does not have any data on these metrics. We drop observations if the firm does not have an MP or media coverage throughout the sample period (i.e., a firm has to have no media coverage or no MP to get into this category).

appeared in *Wall Street Journal*, *New York Times,* and eight local newspapers we have data on over the course of a calendar year multiplied by –100 (i.e., higher values of *Slant* correspond to less negative bias from media).

In constructing the vector of variables that would explain the cross-sectional differences in media slant, we follow Gurun and Butler (2012), which studies the influence of advertising expenditures on both national and local media slant. In addition to the main variable of interest, *MP*, we include the variables used in coverage analysis and following variables in our specification: *Press Release, IR Firm, ROA, Ln (MarketValue), Ln (Market/Book), Prior Return, Turnover, Institutional Ownership %, Analyst Coverage, Ad&Promotion%,* and *Lag Media Coverage.*[17] To analyze slant, we use the same specifications we use to analyze coverage. Specifically, we first report OLS estimates of the following specification:

$$Slant_{i,t+1} = a + b \times MP_{it} + c \times Controls_{it} + d \times Fixed\ Effects_{it} + \varepsilon_{it} \qquad (4)$$

Consistent with the argument that MPs increase the media slant, we find the coefficient of *MP* to be positive and significant (Table 4). In the first specification, results indicate that having an MP on the board increases media slant by 22% (t=3.99) in all newspapers. However, in Column 2, this effect is subsumed by firm fixed effects (5%, t=0.82) suggesting that time invariant firm specific factors account for media slant effect, which we attributed to MP in the first specification. Results in Column 3 and 4 show that neither national nor local newspaper have abnormal slant for firm with MP after accounting for firm fixed effects.

There are two major concerns with using OLS to estimate the effect of MPs on media outcomes. First, MPs may not be randomly distributed to firms. Firms choose to appoint MPs, and the need to appoint MPs may be unobservable. Second, the unobservable need to appoint MPs may be correlated with future media coverage. Firms that anticipate that a particularly negative (or positive) publicity event is coming up will be more likely to seek advice from an MP or a public relations firm. That is, the association between asymmetric media coverage and the existence of MPs may be driven by contemporaneous events occurring

[17] The list of variables to explain slant is similar to the list of variables used in coverage analysis, with the exception of the *Lag Media Coverage* variable. If the bad news event is slowly unfolded, then the slant in each article on the same subject would increase over time by construction. Because we calculate slant measure after combining all the news in a given year, our slant measure does not capture the relation between information dissemination rates and slant change over time. We include *Lag Media Coverage* to capture information dissemination rate of each firm. In later analysis (Table 6B), we investigate the relation between information dissemination and slant in detail.

in the years that MPs are appointed. Under these circumstances, OLS estimates are inconsistent because the *MP* dummy is correlated with the error term. In our sample, the *MP* measure is indeed somewhat persistent: 73%, 66%, and 51% of the firms that have an MP in year *t* also have an MP in years *t*+1, *t*+2, and *t* +3, respectively. However, changes in the MPs do not typically coincide with other major events; for example, only 16% of CEO turnovers and 10% of mergers and acquisitions (M&As) coincide with changes in the firm's media-professional status (i.e., firms with MPs continue to have them, and those without MPs continue not to have them). Therefore, this evidence partially allays the concern that our regressions with firm fixed effects may be picking up a correlation between MP and media coverage that is driven by some other, unobservable events.

Collectively, these results suggest that the composition of a firm's board of directors can affect the way it is covered in the news: firms with MPs on their boards enjoy both more coverage and more favorable news coverage, however most of the favorable coverage can be attributed to unobserved factors correlated with having an MP.

3.3 How Do MPs Affect Media Coverage and Slant?

Having established the baseline results, we now turn our attention to potential explanations of these patterns. One potential explanation, our *connections hypothesis,* suggests that MPs use their personal connections to influence media coverage and slant in the media outlets they are directly connected with. To investigate the relative importance of these roles (connections vs. expertise), we restrict the sample to those MPs that had direct ties to the *Wall Street Journal* (WSJ) and the *New York Times* (NYT) to see if their existence in a firm affects that firm's coverage and slant in the corresponding journal. We find that these media outlets do not seem to have greater coverage or more favorable slant for firms with MPs that have direct ties to WSJ and NYT (Table 5). In other words, MPs who are primarily connected to WSJ or NYT *do not* get additional or favorable coverage from the media outlets they are primarily related to; thus we

conclude that the connections hypothesis is not supported by data.[18]

The *media management hypothesis* suggests that MPs are instrumental in creating awareness of the importance of the media coverage of the firm. Journalists need sources to write stories. Effective public or investor relations firms may provide connections to a network of media professionals, thus lowering information acquisition costs for journalists. Journalists, therefore, may be more inclined to cover firms represented by these PR firms *with the information supplied by the firm*. Thus, having a board member who can connect a firm to these effective PR firms should benefit the firm. Literature on professional networks argues that information flow within networks could occur if such networks lower the cost of gathering information for networked people (see Cohen et al. 2008, 2010). For example, it may be easier for journalists to gain access to key people in a firm through the network. In addition, managers may be more forthcoming with information if a journalist within their network approaches them. Finally, the information that journalists obtain through networks could be more precise and value-relevant. Thus, one possible explanation for why firms with MPs on their boards enjoy both more coverage and more favorable news coverage may relate to connections provided by these board members.

In our analysis thus far, we treat all MPs alike. However, it is possible that the connections and expertise provided by someone who owns or sits on boards of media outlets may be different from someone who happened to spend a year as a journalist at the *New York Times* two decades earlier. The *media management hypothesis* predicts that MPs who have expertise in higher levels of organizational structure would have more influence in providing connections and more expertise in handling media relations. Therefore, we investigate whether the influence of an MP is larger if the MP was an owner, a top executive, or a board member. To do this, we define two dummy variables: *MP_top* takes a value of 1 if the MP was an owner, top executive, or a board member. *MP_bottom* takes a value of 1 if the MP was a journalist, regional editor, etc. (128 out of 467 MPs fall into this category). We use the ratio of these two variables

[18] Running a similar analysis for each local newspaper also gives similar results; however, interpretation of such analysis is problematic as there are not many board members directly affiliated with these local newspapers to analyze the variation in coverage and slant.

(1+*MP_top*)/(1+*MP_bottom*) to capture the relative power of these two categories.[19] In both the coverage and the slant analysis, we find that the coefficient of *MP_top* is statistically significant, while *MP_bottom is not*. These results suggest that the effect of an MP on news coverage is more pronounced if the MP was an owner, a top executive, or a board member in the media rather than a journalist (Table 6, Panel A).

Information dissemination rate affects the slant measure. If the bad news event is slowly unfolded, then the slant in each article on the same subject would increase over time by construction. Because we calculate slant measure after combining all the news in a given year, our slant measure does not capture the relation between information dissemination rates and slant change over time. In other words, both our coverage and slant results are consistent with the idea that (1) firms with MPs are good at disseminating bad news slowly, or (2) bad news is unfolded slowly over time in some firms and firms with MPs happen to be on the boards of these firms. To investigate whether information dissemination is related to slant measure, we perform the slant analysis on two subsamples: firms with high coverage (above the mean coverage in a given year) versus firms with low coverage. If information dissemination is indeed related to slant measure in a systematic way, we should see our results primarily driven by the high coverage subsample. Results in Table 6, Panel B, suggest firms with MPs have slightly higher media slant in the high coverage subsample; however, a formal test of the *MP* coefficient shows that the effects of MPs across subsamples are not statistically different (p=0.18), suggesting that the theoretical link between information dissemination and slant measure does not affect our results.[20]

Next, we investigate whether or not press releases of firms with MPs are more likely to be followed by media coverage. To the extent that media coverage following a press release is influenced by the content of the press release, and to the extent that a press release is likely to involve a description of events from the firm's point of view, firms benefit from wider dissemination of their own press releases via media. The *media management hypothesis* predicts that press releases of firms with MPs will be followed by more media

[19] The advantage of this ratio is to accommodate the few instances when a firm has both an *MP_top* and an *MP_bottom*. Our results are similar if we introduce both variables in the specification at the same time.

[20] Our data does not allow us to cleanly identify whole story chain for a given event. An alternative test is measure how slant evolves along the story chains as the story develops, and test whether slant dissemination rate is different for firms with MPs than that of firms without MPs.

coverage than press releases of firms without MPs.

According to *journalist attention* hypothesis, journalists pay more attention to events occurring in firms that have MPs, i.e. Coca-Cola would be more likely than Pepsi to have coverage in the *New York Times* if Peter Rice, CEO of Fox Entertainment Group, were on the Coca-Cola board. This demand-side hypothesis suggests that MPs attract more media attention to a firm, rather than suggesting that firms use media professionals on boards to become more visible to the outside world. Although *journalist attention* mechanism predicts increased coverage, it does not predict press releases of MP firms to be pickup more by media.

We focus on all corporate press releases disseminated by PR Newswire for over 3,600 public companies from January 2000 to December 2006 (n=78,657). We define a variable, *MediaFollowingPR,* that takes a value of 1 if a press release was followed by a media mention in *Wall Street Journal* or *New York Times* within five days following a firm's press release. Because *MP* is an endogenous variable, we employ the bivariate probit model utilized in Altonji, Elder, and Taber (2005, 2008). Specifically, we estimate the following:

$$MediaFollowingPR_{it} = a + b1 \times MP_{it} + c \times Controls_{it} + d \times Fixed\ Effects_{it} + \varepsilon_{1it}. \quad (7)$$

$$MP_{it} = a + c \times Controls_{it} + d \times Fixed\ Effects_{it} + \varepsilon_{2it}. \quad (8)$$

where i is the firm, and t indicates a firm-initiated press release.

Bivariate probit estimation yields consistent parameter estimates if $\varepsilon_1, \varepsilon_2 \sim N(0; 0; 1; 1; \varnothing)$. The correlation coefficient, $\varnothing$, captures the correlation between unobservables of the treatment model (Equation 7) and selection of the MPs' model (Equation 8). In other words, the bivariate approach assumes that unobserved factors manifest themselves in the correlation of the errors of the two equations and the errors are distributed by bivariate normal. Altonji, Elder, and Taber (2005) argue that the primary benefit of using a bivariate model is to assess the importance of unobservables on the results. In particular, the approach of Altonji, Elder, and Taber (2005) uses the degree of selection on observables as a guide to the degree of selection on the unobservables, and it provides a way to quantitatively assess the degree of bias from omitted variables. Specifically, to assess the role of treatment selection without formally relying on the distributional

assumption, the Altonji, Elder, and Taber (2005, 2008) approach treats the model as under-identified by $\varnothing$. Then, by using different values of $\varnothing$ in the estimate, one can assess the importance of unobservables on the results ($\varnothing$ equal to zero means that estimates are obtained by selection on *observables only*). We follow their methodology and estimate the model with different values of $\varnothing$.

We first estimate the unconstrained model (Table 7). In this model, the coefficient of *MP* is 1.254 (t=5.62). This corresponds to a marginal effect of 8.3% when the other variables are kept at their median values. In other words, press releases of firms with MPs are 8.3% more likely to be followed by media coverage within five days than those without. To put this in perspective, consider the sample average *MediaFollowingPR*—for example, the unconditional probability of a press release followed by a media report is 23%. In the unconstrained model, $\varnothing$ is estimated to be –0.54 (Table 7). This result suggests that the unobservable characteristics we fail to control in the selection model (appointment of MPs) correlate negatively with the factors that would make the press release of the firm more newsworthy. A possible omitted variable in both selection and treatment models could be unobserved positive news surrounding the company that is not captured by the existing control variables (for instance, a firm may sign a new contract with a small-size customer). If MPs are more likely to join a firm that enjoys good news and if media outlets are more likely to print "bad news," as journalists may be more inclined to cover "what's bleeding," a negative correlation between unobservables will occur.[21,22]

Following the methodology of Altonji, Elder, and Taber (2005), we estimate the model with different values of $\varnothing$ to assess the importance of unobservables on the results. When we change $\varnothing$ to –0.2 or –0.8, we find that the coefficient of *MP* remains both economically and statistically significant. We conclude that, to the extent that the correlation between unobserved error terms of the selection and treatment models is within this range, these results provide some support for the robustness of the relation between the existence of MPs and the media's propensity to pick up press releases.

[21] Yermack (2004) presents evidence that firm performance affects outside board members' wealth because of loss of the directorship if the firm performs poorly and the chance to obtain additional directorships if the firm does well.
[22] Hamilton (2004) argues that editors will select news that will appeal to the publication's readership because a publication's objective is to maximize circulation. Green, Hand, and Penn (2011) provide evidence that dissemination bias in favor of bad news arises because bad news grabs journalists' limited attention.

In Panel B, we explore whether the slant in press release is similar to the slant of the news picked up by the media. To do so, we calculate the difference between slant of each press release and the average slant of articles published within five days following the press release (in this analysis, we exclude all observations that do not have a news article following the press release). We then regress the slant gap on the covariates we used in slant analysis. We find that *MP* is not correlated with the difference in slant, suggesting that the media do not seem to treat firms with MPs differently in terms of altering the slant of press releases.

The above analysis shows that the probability of having a press release picked up by the media is higher if the firm has an MP, but it is not clear if the increase in media coverage associated with the appointment of an MP is due to more press releases issued by the firm. In Panel C, we test whether the appointment of an MP changes the number of press releases issued by the firm and find that firms with MPs indeed issue more press releases following the appointment of an MP.

Findings reported in Table 7 show that media, inconsistent with *journalist attention* hypothesis, disproportionately picks up press releases of MP firms. Overall, results lend support to the *media management hypothesis,* which predicts that press releases of firms with MPs will be followed by more media coverage than those of firms without MPs.

3.4 Effect of MPs During Crisis Times

Media are more inclined to report stories that are likely to be sensational and interesting to the public (Miller 2006). Media reports after negative publicity events provide a unique opportunity to assess whether firms with MPs receive differential treatment from the media. Using coverage and slant around specific sensational stories, we investigate whether firms with MPs (who were hired before the events occurred) weather crisis better compared with other firms. We identify two categories of possibly sensational stories involving conflicts between firms and their two major stakeholders from the KLD database.[23] The first

[23] KLD is a commonly used measure of corporate social performance (Graves and Waddock 1994; Hillman and Keim 2001). KLD focuses on ranking firms on several dimensions of social performance, including employee relations, product characteristics, community relations, military contracting, and production of alcohol or tobacco, among others. The ratings provided by KLD come from several sources, including documents filed to the Securities and Exchange Commission (annual reports and proxies), firm websites, and media sources for developing issues on a daily basis. Prior

category of sensational events relates to product safety. *Product safety events* are defined as events in which firms paid substantial fines or civil penalties or were involved in major controversies or regulatory actions due to product safety issues. The second category relates to employee safety. *Employee safety events* involve cases in which firms paid substantial fines or civil penalties for violations of employee health and safety standards. Panel A of Table 8 tabulates the number of product safety and employee safety events by year. The percentage of firm years with MP is 13.8% (78/562) and 7.5% (46/566), which is higher than the 2.8% for the entire sample. These numbers indicate that firms are more likely to experience such events (due to the nature of industry or firm operation types) are more likely to have MPs.

To examine how MPs actually help firms achieve better media coverage, we employ a new test inspired by the research design of papers in the "board expertise" literature. This literature argues that board members with certain expertise (e.g., prior involvement in banking, sell-side research, or firms in upstream/downstream firms) help firms utilize this expertise when needed. For example, Guner et al. (2008) suggest that firms with bankers on their boards borrow at lower rates and interpret this as evidence of expertise provision. Likewise, directors from related industries with information on the supply chain provide expertise on potential shocks along the supply chain (Dass et al. 2014). They further substantiate their claim by examining whether firms with board members in related industries can anticipate and maneuver around negative industry sales shocks and take better advantage of positive sales shocks than do firms without board members in related industries. Because the industry sales shock is an exogenous event, this setting gives an opportunity to test whether the expertise of board members with related industry information matters. Following by this research design, we introduce industry-wide shocks to product- and employee-safety-related issues. We identify these shocks using the KLD database by calculating the ratio of firms in a given industry (as defined by the 30 Fama-French industry definition) experiencing a product- or employee-safety-related problem. Our conjecture is that firms in industries with a higher ratio of violations are likely to attract higher media scrutiny. We note that, when calculating this variable for each firm, we exclude the violations

---

to 2001, KLD coverage of firms includes mostly S&P 500 firms. Following 2001, the coverage increases gradually to the 3,000 largest publicly traded firms.

of that specific firm's own product and employee safety violations. If the ratio for a given firm exceeds mean ratio across all firms in that year, *Shock* indicator takes a value of 1. Thus, with this procedure, we separate firms with industry peers suffering from product- or employee-safety-related problem from the firms that are directly suffering from the problem.

The prediction on the effect of MPs on coverage and slant is ambiguous during bad times because a firm may choose to use the influence of its MP to either lower negative media coverage or push its side of the story in response to negative publicity events. If a firm with an MP is more successful in pushing its side of the story on the negative-publicity issue (or stories that portray positive aspects of the company), we should see more favorable coverage (e.g., higher slant) of that firm than one without an MP following one of these events. In this analysis, we also introduce an interaction term, *IRFirm x Shock,* to investigate the importance of investor relations and media professional channels relative to each other.

The positive and statistically significant interaction term *MPxShock* suggests that media coverage of firms with MPs is 17% (t=2.85) higher especially during these times, suggesting that the expertise channel works during times when it is valuable for the firm (Table 8, Panel B). However, media slant toward firms with MPs is not any different from non-MP firms. Next, we investigate whether media reports on these firms differ from those of other firms experiencing a similar crisis. Specifically, we follow Byun and Oh (2015) to identify media coverage of CSR activities and test whether media covers CSR activities firms with MPs more. We search for "CSR," "social* responsib*," "charit*," "philanthrop-," "environment* friend*," "clean* energy*," "eco-friend*," and "pollut* prevent*" in the media reports following the negative shocks.[24] The results reported in the third column of Table 8, Panel B, show that in fact media treat CSR activities of the firms with MPs more favorably, consistent with the idea that firms with MPs use CSR as a strategic tool to weather negative publicity events.[25] We conclude that, to the extent that product safety and employee safety events are unpredictable, results in this section provide some comfort that the findings on the effects of MPs on coverage and slant are not solely driven by endogeneity of board appointments.

[24] Byun and Oh (2015) shows that the publicity of CSR, apart from the actual level of CSR, is positively associated with shareholder value. The search terms we are using are borrowed from their methodology.
[25] Evidence on the effect of CSR to affect public opinion is mixed. Luo, Meier, and Oberholzer-Gee (2012) show that within the oil industry, firms with higher CSR receive less favorable treatment from media following oil spills.

4 Conclusion

The main contribution of our paper is to show that certain individuals who sit on boards of public corporations influence the media exposure of their firms. The existence of board members with media experience predicts a firm's future press coverage and slant. Articles written on firms with MPs then include fewer *negative* words compared with articles written on control firms. Furthermore, press releases of firms with MPs are more likely to be followed by media coverage within five days of a press release. These findings not only highlight the importance of the composition of board of directors as a determinant of disclosure mechanism but also identify a previously overlooked determinant of media bias.

References

Adams, Renee, and Daniel Ferreira. 2007. A theory of friendly boards. *Journal of Finance* 62:217–50.

Agrawal, Anup, and Charles Knoeber. 2001. Do some outside directors play a political role? *Journal of Law and Economics* 44:179–98.

Altonji, J. G., T. E. Elder, and C. R. Taber. 2005. Selection on observed and unobserved variables: Assessing the effectiveness of Catholic schools. *Journal of Political Economy* 113:151–84.

———. 2008. Using selection on observed variables to assess bias from unobservables when evaluating Swan-Ganz catheterization. *American Economic Review* 98:345–50.

Angrist, Joshua D., and Jörn-Steffen Pischke. 2008. *Mostly harmless econometrics: An empiricist's companion*. Princeton, NJ: Princeton University Press.

Barber, Brad M., and Terrance Odean. 2008. All that glitters: the effect of attention and news on the buying behavior of individual and institutional investors. *Review of Financial Studies* 21:785–818.

Baumeister, Roy F., Ellen Bratslavsky, Catrin Finkenauer, and Kathleen D. Vohs. 2001. Bad is stronger than good. *Review of General Psychology* 5:323–70.

Boone, Audra, Laura Field, Jonathan Karpoff, and Charu Raheja. 2007. The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial Economics* 85:66–101.

Bushee, Brian J., John Core, Wayne Guay, and Sophie Hamm. 2010. The role of the business press as an information intermediary. *Journal of Accounting Research* 48:1–19.

Bushee, Brian J., and Gregory S. Miller, 2012. Investor relations, firm visibility, and investor following. *The Accounting Review* 87: 867-897.

Butler, Alexander W., and Umit G. Gurun. Educational networks, mutual fund voting patterns, and CEO compensation. *Review of Financial Studies* (2012): hhs067.

Byun, Seong K. and Oh, Jong-Min. 2015. Publicity of corporate social responsibility and shareholder wealth. Available at SSRN: http://ssrn.com/abstract=2153248.

Chae, Joon. 2005. Trading volume, information asymmetry, and timing information. *Journal of Finance* 60: 413–42.

Chan, Wesley S. 2003. Stock price reaction to news and no-news: Drift and reversal after headlines. *Journal of Financial Economics* 70:223–60.

Chava, Sudheer, and Heather Tookes. 2007. News, disagreement, and trading location. Working paper, Yale University.

Cohen, Lauren, Andrea Frazzini, and Christopher J. Malloy. 2008. The small world of investing: Board connections and mutual fund returns. *Journal of Political Economy* 116:951–79.

———. 2010. Sell-side school ties. *Journal of Finance* 65(4):1409–37.

———. 2012. Hiring cheerleaders: Board appointments of "independent" directors. *Management Science*, *58*(6), 1039-1058.

Coles, J., N. Daniel, and L. Naveen. 2008. Boards: Does one size fit all? *Journal of Financial Economics* 87:329–56.

Da, Zhi, Umit G. Gurun, and Mitch Warachka. 2014. Frog in the pan: Continuous information and momentum. *Review of Financial Studies* 27(7):2171–2218.

Dass, Nishant, Omesh Kini, Vikram Nanda, Bunyamin Onal, and Jun Wang. 2014. Board expertise: Do directors from related industries help bridge the information gap? *Review of Financial Studies* 27(5):1533–92.

Dyck, Alexander, N. Volchkova, and L. Zingales. 2008. The corporate governance role of the media: Evidence from Russia. *Journal of Finance* 63:1093–1135.

Easley, D., and M. O'Hara. 2004. Information and the cost of capital. *Journal of Finance* 59:1553–83.

Engelberg, Joseph E., and Parsons, Chris A. 2011. The causal impact of media in financial markets. *The Journal of Finance*, *66*(1), 67-97.

Fang, Lily H., and Joel Peress. 2009. Media coverage and the cross-section of stock returns. *Journal of Finance* 64:2023–52.

Fich, Eliezer. 2005. Are some outside directors better than others? Evidence from director appointments by Fortune 1000 firms. *Journal of Business* 78(5):1943–71.

Gentzkow, M., and Jesse M. Shapiro. 2006. Media bias and reputation. *Journal of Political Economy* 114(2):280–316.

Graves, S., and S. Waddock. 1994. Institutional investors and corporate social performance. *Academy of Management Journal* 37:1035–46.

Green, Jeremiah, John R. M. Hand, Michael W. Penn, Jr. 2011. Disseminating business information: The attention-grabbing role of bad news. Working paper, University of North Carolina.

Guner, A. Burak, Ulrike Malmendier, and Geoffrey Tate. 2008. Financial expertise of directors. *Journal of Financial Expertise* 88:323–54.

Gurun, Umit G., and Alexander W. Butler. 2012. Don't believe the hype: Local media slant, local advertising, and firm value. *Journal of Finance* 67(2):561–98.

Gutierrez, Roberto C., and Eric K. Kelley. 2008. The long-lasting momentum in weekly returns. *Journal of Finance* 63:415–47.

Hamilton, J. 2004. All the news that's fit to sell: How the market transforms information to news. Princeton, NJ: Princeton University Press.

Hasbrouck, Joel. 2009. Trading costs and returns for U.S. equities: Estimating effective costs from daily data. *Journal of Finance* 64:1445–77.

Heckman, James J. 1976. The common structure of statistical models of truncation, sample selection and limited dependent variables and a simple estimator for such models. *Annals of Economic and Social Measurement* 5:475–92.

———. 1978. Dummy endogenous variables in a simultaneous equation system. *Econometrica* 46:931–59.

Hermalin, Benjamin E., and Michael S. Weisbach. 1988. The determinants of board composition. *RAND Journal of Economics* 19(4):589−606.

———. 1998. Endogenously chosen boards of directors and their monitoring of the CEO. *American Economics Review* 88(1):96−118.

———. 2003. Boards of directors as an endogenously determined institution: A survey of the economic literature. *Federal Reserve Bank of New York Economic Policy Review* 9:7−26.

Herman, Edward S., and Noam Chomsky. 1988. Manufacturing consent: The political economy of the mass media. New York: Pantheon Books.

Hillman, A. J., and G. D. Keim. 2001. Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal* 22(2):125–39.

Kelly, Bryan and Alexander Ljungqvist, 2012. Testing asymmetric-information asset pricing models. *Review of Financial Studies*, *25*(5), 1366-1413.

Knyazeva, Anzhela, Diana Knyazeva, and Charu Raheja. 2009. The benefits of focus vs. heterogeneity: An analysis of corporate boards. Working paper, University of Rochester.

Krozner, Randall, and Philip Strahan. 2001. Bankers on boards: Monitoring, conflicts of interest, and lender liability. *Journal of Financial Economics* 62(3):415–52.

Larcker, D., & Tayan, B. 2011. Corporate governance matters: A closer look at organizational choices and their consequences. FT Press.

Li, Edward Xuejun, K. Ramesh, and Min Shen. 2011. The role of newswires in screening and disseminating value-relevant information in periodic SEC reports. *Accounting Review* 86(2): 669–701.

Li, Kai, and N. R. Prabhala. 2005. Self-Selection Models In Corporate Finance, in: Ziemba/Eckbo(Eds.): Handbook of Corporate Finance, Volume 1.

Loughran, Tim, and Bill McDonald. 2011. When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *Journal of Finance* 66:35–65.

Luo, Jiao, Stephan Meier, and Felix Oberholzer-Gee. 2012. *No news is good news: CSR strategy and newspaper coverage of negative firm events*. Cambridge, MA: Harvard Business School.

Manning, Allan. 2004. Instrumental variables for binary treatments with heterogeneous treatment effects: A simple exposition. *B.E. Journal of Economic Analysis & Policy* 3(1), article 9.

Merton, Robert C. 1987. A simple model of capital market equilibrium with incomplete information. *Journal of Finance* 42:483–510.

Miller, Gregory. 2006. The press as a watchdog for accounting fraud. *Journal of Accounting Research* 44: 1001–33.

Mullainathan, Sendhil, and Andrei Shleifer. 2005. The market for news. *American Economic Review* 95(4):1031–53.

Neuhierl, A., Scherbina, A., and B. Schlusche. 2010. Market reaction to corporate news and the influence of the financial crisis. Working Paper.

Rogers, Jonathan L., Douglas J. Skinner, and Sarah L. C. Zechman. 2013. The role of the media in disseminating insider trading news. Chicago Booth Research Paper 13-34.

Rozin, Paul, and Edward B. Royzman. 2001. Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review* 5:296–320.

Solomon, David H. 2012. Selective publicity and stock prices. *Journal of Finance* 67(2):599–638.

Solomon, David H., and Eugene F. Soltes. 2012. Managerial control of business press coverage. Available at SSRN 1918138.

Soltes, Eugene F. 2009. News dissemination and the impact of the business press. Working paper, Harvard University.

Tetlock, Paul C. 2009. Does public financial news resolve asymmetric information? *Review of Financial Studies* 23(9):3520–57.

Tetlock, Paul C., Maytal Saar-Tsechansky, and Sofus Macskassy. 2008. More than words: Quantifying language to measure firms' fundamentals. *Journal of Finance* 63:1437–67.

Yermack, David. 1996. High market valuation of companies with a small board of directors. *Journal of Financial Economics* 40(2):185–211.

———. 2004. Remuneration, retention, and reputation incentives for outside directors. *Journal of Finance* 59(5):2281–2308.

Table 1. Data Description

Panel A lists the newspaper publishing companies, their headquarters location (in parentheses), flagship newspapers, and the scope of the newspaper distribution network. Panel B reports the number of individuals that worked at the corresponding media firm. Panel C tabulates the number of public firms with an MP in top-five Fama-French 30-industry classification. Panel D tabulates the number of public firms with MPs over years.

Panel A. Newspaper Publishing Companies, Headquarter Locations, and Flagship Newspapers

	Company	Flagship Newspapers		Newspaper Network
1	New York Times Co. (NY)	*New York Times*	*Boston Globe*	17 newspapers in 8 states
2	Gannett Company, Inc. (VA)	*USA TODAY*	*Arizona Republic*	91 newspapers in 35 states
3	News Corporation (NY)	*Wall Street Journal*	*New York Post*	7 newspapers in 3 states
4	Tribune Company (IL)	*Los Angeles Times*	*Chicago Tribune*	15 newspapers in 8 states
5	Knight Ridder (CA)	*Detroit Free Press*	*Kansas City Star*	32 newspapers in 10 states
6	Lee Enterprises, Inc. (IA)	*St. Louis Post-Dispatch*	*Arizona Daily Star*	51 newspapers in 22 states
7	E. W. Scripts (OH)	*Rocky Mountain News*	*Knoxville News*	19 newspapers in 11 states
8	The McClatchy Company (CA)	*Miami Herald*	*Fort Worth Star*	32 newspapers in 16 states
9	Hearst Newspapers (NY)	*San Francisco Chronicle*	*Houston Chronicle*	12 newspapers in 6 states
10	Washington Post (D.C.)	*Washington Post*		8 newspaper in 2 states
11	MediaNews Group, Inc. (CO)	*San Jose Mercury News*	*Detroit News*	53 newspapers in 14 states
12	Journal Registry (NJ)	*Oakland Press*		22 newspapers in 7 states
13	Seattle Times (WA)	*Seattle Times*		1 newspaper in 1 state

Panel B. MPs by Publishing Firm

	Media Company	MPs in Boardex Database	MPs on Boards of Public Firms
1	New York Times Co. (NY)	230	65
2	Gannett Company, Inc. (VA)	189	52
3	News Corporation (NY)	182	70
4	Tribune Company (IL)	118	50
5	Knight Ridder (CA)	94	54
6	Lee Enterprises, Inc . (IA)	92	24
7	E. W. Scripts (OH)	91	55
8	The McClatchy Company (CA)	82	15
9	Hearst Newspapers (NY)	68	23
10	Washington Post (District of Columbia)	54	23
11	MediaNews Group, Inc. (CO)	44	10
12	Journal Registry (NJ)	31	20
13	Seattle Times (WA)	9	6
		1,284	467

Panel C. MPs by Industry (Top 5 Industries)

	Industry	Number of Public Firms
1	Banking, Insurance, Real Estate, and Trading	117
2	Personal and Business Services	62
3	Business Equipment	37
4	Communication	35
5	Healthcare, Medical Equipment, Pharmaceutical	27

Panel D. MPs by Years

Year	Number of Public Firms with at Least One MP
1997	111
1998	118
1999	122
2000	108
2001	115
2002	104
2003	121
2004	137
2005	135
2006	134
Total	1,338

Table 2. Descriptive Statistics of Variables

MP is a dummy variable that takes a value of 1 if a firm in a given year has a board member with media expertise. *Coverage(National)* is the number of articles that appeared on a given firm in a given year in national newspapers (*Wall Street Journal, New York Times)*. *Coverage(Local)* is the number of articles that appeared on a given firm in a given year in eight local newspapers (*Boston Globe, Chicago Sun Times, Denver Post, Pittsburgh Post-Gazette, San Francisco Chronicle, Seattle Post-Intelligencer, St. Louis Post-Dispatch, Washington Post*). We apply the 1+log(x) transformation to *coverage* variables to create variables used in the analysis (e.g., *coverage_national, coverage_local,* and *coverage_all.*) *Slant (x100)* is ratio of the number of *financially* negative minus positve words (Loughran and McDonald 2011) to the total number of words used in a composite article. Combining all news stories from all media outlets for each firm in a given year forms a composite article. *Press Release* is the number of unique press releases per year, disseminated by Dow Jones Newswire (1997–2006) and PR Newswire (2001–2006). *IR Department* is a dummy variable to indicate the existence of an investor relations department. *Ad&Promotion%* represents the cost of advertising media (radio, television, newspapers, periodicals) and promotional expenses (COMPUSTAT data item 45) divided by total assets. *Total Assets* is COMPUSTAT annual data item 6. This item represents current assets plus property, plant, and equipment, plus other non-current assets (including intangible assets, deferred charges, and investments and advances). *Market Value (Market Value of Equity)* is measured at the end of the fiscal year using the multiplication of CRSP-COMPUSTAT data item 25 and data item 24. *Book (Book Value of Equity)* is measured at the end of the fiscal year CRSP-COMPUSTAT data item 60. *Prior Return* is the cumulative 12-month raw return. *Analyst Coverage* is the number of analysts following a firm at the end of the prior calendar year. *Turnover* is the average monthly turnover ratio in a calendar year. *ROA* is Fama-French (1997) 30 industry-adjusted return on assets. Panel B provides univariate statistics of firm-year observations with and without an MP. *p*-values for median comparison are provided in the last column of Panel B. The sample period is 1997–2006, and the unit of observation is firm-year.

Panel A. Descriptive Statistics (N=31,067)

	MP	*Coverage(National)*	*Coverage(Local)*	*Coverage(All)*
Mean	0.043	2.816	7.549	10.365
Median	0.000	0.000	1.000	3.000
Std. Dev.	0.202	11.390	19.738	27.912
P5	0.000	0.000	0.000	0.000
P95	0.000	11.000	32.000	39.000
	Press Release	*Slant_national*	*Slant_local*	*Slant_all*
Mean	10.568	-0.901	-0.232	-0.950
Median	5.000	0.000	0.000	0.000
Std. Dev.	31.247	1.927	0.805	1.827
P5	0.000	-5.185	-1.579	-4.821
P95	33.000	0.000	0.000	0.000
	IR Firm	*MV of Equity*	*Market/Book*	*Ad&Promotion %*
Mean	0.054	3,151	3.893	0.010
Median	0.000	266	2.132	0.000
Std. Dev.	0.227	16,610	18.093	0.039
P5	0.000	13	0.661	0.000
P95	1.000	10,745	10.310	0.057
	Inst. Ownership %	*Prior Return*	*Industry Adj. ROA*	*Analyst Coverage*
Mean	0.369	0.196	0.021	3.324
Median	0.323	0.057	0.021	1.000
Std. Dev.	0.301	0.995	0.180	4.814
P5	0.000	-0.684	-0.282	0.000
P95	0.866	1.392	0.268	14.000

Panel B. Comparison of Means of Samples with and without MPs

	Without *MP*	With *MP*	*p*-value
Coverage(National)	2.349	15.752	0.00
Coverage(Local)	7.178	17.819	0.00
Coverage(All)	9.527	33.571	0.00
Slant_national	-0.878	-1.243	0.29
Slant_local	-0.220	-0.470	0.06
Slant_all	-0.932	-1.190	0.74
IR Firm	0.049	0.191	0.00
MV of Equity	2,415	22,055	0.00
Market/Book	3.827	5.326	0.00
Ad&Promotion %	0.010	0.016	0.00
Institutional Ownership %	0.352	0.538	0.00
Prior Return	0.197	0.167	0.00
Industry Adj. ROA	0.019	0.060	0.00
Analyst Coverage	3.155	7.753	0.00

Table 3. Determinants of Future Coverage

Panel A of this table reports the following pooled OLS regression:

$$Coverage_{i,t+1} = a + b \times MP_{it} + c \times Controls_{it} + d \times Fixed\ Effects_{it} + \varepsilon_{it} \quad (1)$$

The unit of analysis is firm-year. In column 1 and 2, coverage in both local and national newspapers is used as the response variable. In column 3, the response variable, *Coverage_national*, is the number of articles in national newspapers (*Wall Street Journal, New York Times)*. In column 4, the response variable, *Coverage_local,* measures the number of articles in eight local newspapers (*Boston Globe, Chicago Sun Times, Denver Post, Pittsburgh Post-Gazette, San Francisco Chronicle, Seattle Post-Intelligencer, St. Louis Post-Dispatch, Washington Post*). We use the 1+log(x) transformation to all coverage variables. Other control variables are defined in Table 2. Heteroskedasticity-robust standard errors clustered by firm are reported in parentheses. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively.

	Coverage_all	*Coverage_all*	*Coverage_national*	*Coverage_local*
MP	0.3342***	0.1382***	0.0802**	0.1055**
	(0.041)	(0.051)	(0.041)	(0.049)
Press Release	0.0756***	0.3365***	0.2057***	0.2902***
	(0.006)	(0.026)	(0.021)	(0.024)
IR Firm	0.5517***	0.1147**	0.1077***	-0.0664
	(0.029)	(0.045)	(0.034)	(0.042)
ROA	-0.3640***	0.1024***	0.1220***	0.0490***
	(0.028)	(0.013)	(0.010)	(0.012)
Ln (MarketValue)	0.2835***	0.0187	-0.0384***	0.0581***
	(0.005)	(0.012)	(0.009)	(0.011)
Ln (Market/Book)	-0.0933***	0.0566***	0.0022	0.0636***
	(0.008)	(0.007)	(0.004)	(0.007)
Prior Return	0.0922***	0.0472***	0.0306***	0.0350***
	(0.008)	(0.007)	(0.004)	(0.006)
Turnover	0.0667***	0.0779	0.2483	-0.2428
	(0.007)	(0.222)	(0.184)	(0.215)
Ad&Promotion %	0.6516***	-0.3602***	-0.1924***	-0.3331***
	(0.143)	(0.044)	(0.034)	(0.043)
Institutional Ownership %	-0.3034***	0.0086***	0.0097***	0.0040**
	(0.025)	(0.002)	(0.002)	(0.002)
Analyst Coverage	0.0235***	0.0982***	0.0531***	0.0813***
	(0.002)	(0.007)	(0.005)	(0.007)
Industry Fixed Effects	Included	Subsumed	Subsumed	Subsumed
Firm Fixed Effects	Excluded	Included	Included	Included
Year FE + Intercept	Included	Included	Included	Included
N	31,067	31,067	31,067	31,067
Adjusted R^2	0.55	0.78	0.74	0.78

Table 4. Determinants of Future Slant

This table reports the following pooled OLS regression:

$$Slant_{i,t+1} = a + b \times MP_{it} + c \times Controls_{it} + d \times Fixed\ Effects_{it} + \varepsilon_{it} \quad (4)$$

The unit of analysis is firm-year. In column 1 and 2, the response variable, *Slant_national (x100)*, is the ratio of the number of *financially* negative minus positive words to the total number of words used in all articles in both national and local newspapers. In column 3 (4), the response variable measures slant in the national (local) newspapers. Other control variables are defined in Table 2. Heteroskedasticity-robust standard errors clustered by firm are reported in parentheses. ***, **, and *represent statistical significance at the 1%, 5%, and 10% levels, respectively.

	Slant_all	*Slant_all*	*Slant_ national*	*Slant_local*
MP	0.2158***	0.0809	0.0898	0.0466
	(0.054)	(0.098)	(0.108)	(0.049)
Press Release	0.1442***	0.1349***	0.0193	0.0472***
	(0.010)	(0.016)	(0.017)	(0.008)
IR Firm	-0.0455	-0.1478**	-0.0804	-0.0284
	(0.047)	(0.061)	(0.062)	(0.032)
ROA	0.1812***	0.1348	-0.1415	0.0804
	(0.051)	(0.120)	(0.114)	(0.050)
Ln (MarketValue)	-0.1448***	-0.1251***	-0.0374	-0.0423***
	(0.008)	(0.033)	(0.034)	(0.014)
Ln (Market/Book)	0.2037***	0.1972***	0.0711**	0.0523***
	(0.014)	(0.032)	(0.033)	(0.013)
Prior Return	0.0344***	0.0351**	0.0330**	0.011
	(0.012)	(0.014)	(0.014)	(0.007)
Turnover	-0.0313***	-0.0078	-0.0102	-0.0014
	(0.006)	(0.008)	(0.008)	(0.004)
Ad&Promotion %	-0.2273	-1.7750**	-1.2804*	-0.6211**
	(0.257)	(0.853)	(0.744)	(0.297)
Institutional Ownership %	-0.2447***	-0.0259	0.0042	-0.0869
	(0.046)	(0.112)	(0.113)	(0.057)
Analyst Coverage	-0.0016	-0.0079*	0.0005	-0.0021
	(0.003)	(0.004)	(0.005)	(0.002)
Lag Media Coverage	-0.4691***	-0.4076***	-0.9693***	-0.0794***
	(0.010)	(0.017)	(0.028)	(0.008)
Industry Fixed Effects	Included	Subsumed	Subsumed	Subsumed
Firm Fixed Effects	Excluded	Included	Included	Included
Year FE + Intercept	Included	Included	Included	Included
N	31,067	31,067	31,067	31,067
Adjusted R^2	0.18	0.47	0.50	0.44

Table 5. Connections, Coverage, and Slant

This table reports the results of the following pooled OLS regression:
Coverage (Slant) in WSJ $_{i,t+1}$ = a + b1×*MP Related to News Co.* + c×*Controls* +d×*Fixed Effects* + residual.
Coverage (Slant) in NYT $_{i,t+1}$ = a + b1×*MP Related to NYT Co* .+ c×*Controls* + d×*Fixed Effects* + residual.
The unit of analysis is firm-year. In Panel A, analysis of coverage and slant in WSJ is reported.

In column 1 (3), the response variable is coverage in WSJ (NYT). In column 2 (4), the response variable is slant in WSJ (NYT). In the first (last) two columns, connections to News Corporation (New York Times Company) is the main variable of interest. Other control variables are defined in Table 2. Heteroskedasticity-robust standard errors clustered by firm are reported in parentheses. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively.

	Coverage in WSJ	**Slant in WSJ**	**Coverage in NYT**	**Slant in NYT**
MP related to News Corp.	–0.1084	–0.2011		
	(0.154)	(0.158)		
MP related to NYT			0.1090	0.2724
			(0.113)	(0.401)
Control variables used in Table 3	Included		Included	
Control variables used in Table 4		Included		Included
Firm Fixed Effects	Included	Included	Included	Included
Year FE + Intercept	Included	Included	Included	Included
N	12,960	12,960	3, 915	3,915
Adjusted R^2	0.73	0.55	0.69	0.62

Table 6. Coverage and Slant- Subsample Analysis

Panel A of this table reports the results of the following pooled OLS regression:
Coverage (Slant) $_{i,t+1}$ = a + b1× *MP(Top vs. Bottom)* + c×*Controls* + d×*Fixed Effects* + residual.
The unit of analysis is firm-year. The response variable in the first two models, *All Coverage*, is the combined media coverage by *Wall Street Journal, New York Times,* and all local newspapers. *M_top* is equal to 1 if MP is/was a CEO/CFO or board member at a media firm listed in Table 2. *MP_bottom* is equal to 1 if MP is/was *not* a C-level executive or board member at a media firm listed in Table 2. *MP(Top vs. Bottom)* is the ratio of *1+MP_top* to *1+MP_bottom.* The control variables are defined in Table 2. In Panel B, we report the slant results for firms with high (low) amount of coverage firms in a given year. Heteroskedasticity-robust standard errors clustered by firm are reported in parentheses. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. MPs Connections to Media Organizations

	Coverage_all	*Slant_all*
MP (Top vs. Bottom)	0.0893**	-0.0090
	(0.042)	(0.057)
Control variables used in Table 3	Included	
Control variables used in Table 4		Included
Firm Fixed Effects	Included	Included
Year FE + Intercept	Included	Included
N	31,067	31,067
Adjusted R^2	0.78	0.47

Panel B. Dissemination of Information

	Low coverage	**High Coverage**
	Slant	**Slant**
MP	0.0838	0.1405
	(0.124)	(0.113)
Control variables used in Table 3	Included	
Control variables used in Table 4		Included
Firm Fixed Effects	Included	Included
Year FE + Intercept	Included	Included
N	11,448	19,619
Adjusted R^2	0.59	0.46

Table 7. Media Coverage after Press Release

Panel A reports the results of the following unconditional biprobit model:

$MediaFollowingPR_{it}$= a + b1×MP_{it} + c×$Controls_{it}$ + d×$Fixed\ Effects_{it}$ + ε_{1it}. (7)

MP_{it} = a + c×$Controls_{it}$ + d×$Fixed\ Effects_{it}$ + ε_{2it}. (8)

The response variable, $MediaFollowingPR_{it}$, equals 1 if there is an article in the media within five days of a firm-initiated press release. Control variables are defined in Table 2. The marginal effect of *MP* is provided in brackets. In Panel B, we regress *Slant_Gap* on *MP* and other covariates used in Table 4. *Slant_Gap* is the difference of each press release's slant and the average of slant for all news articles published within five days of the press release. In Panel C, we regress change in press release intensity (Δ *Press Release*) on change in *MP*. Heteroskedasticity-robust standard errors clustered by firm are reported in parentheses. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Unconstrained Model

	MediaFollowingPR	*MP*
MP	1.254***	
	(5.623)	
Marginal Effect	[0.083]	
ROA	0.388*	–0.581
	(2.064)	(1.167)
Ln (MarketValue)	0.168***	0.319***
	(7.000)	(7.250)
Ln (Market/Book)	–0.086*	0.056
	(2.389)	(0.737)
IR Firm	0.154	0.044
	(0.403)	(1.325)
Prior Return	–0.062	0.118
	(1.824)	(1.735)
Turnover	0.037**	–0.026
	(3.364)	(0.743)
Ad&Promotion %	1.824***	2.454*
	(3.889)	(2.125)
Institutional Ownership %	–0.369**	–0.398
	(2.774)	(1.869)
Analyst Coverage	0.007*	0.006
	(1.750)	(0.857)
N	78,657	78,657
ø	–0.5421	
	(0.000)	

Panel B. Slant Gap and MP

	Slant_Gap
MP	-0.0454
	(0.040)
IR Firm	-0.0655**
	(0.033)
ROA	0.1236***
	(0.029)
Ln (MarketValue)	-0.0455***
	(0.006)
Ln (Market/Book)	0.0293***
	(0.008)
Prior Return	-0.0025
	(0.004)
Turnover	0.0040
	(0.003)
Ad&Promotion %	0.1310
	(0.140)
Institutional Ownership %	0.0225
	(0.027)
Analyst Coverage	-0.0010
	(0.002)
Lag Media Coverage	0.2481***
	(0.009)
Firm Fixed Effects	Included
Year FE + Intercept	Included
N	18,105
Adjusted R^2	*0.04*

Panel C. Press Release Intensity Following Appointment of MP

	Δ *Press Release*
Δ *MP*	0.1843***
	(0.042)
Δ *IR Firm*	0.0192
	(0.028)
Δ *ROA*	0.0388
	(0.059)
Δ *Ln (MarketValue)*	0.0090
	(0.019)
Δ *Ln (Market/Book)*	-0.0069
	(0.016)
Δ *Prior Return*	-0.0069
	(0.005)
Δ *Turnover*	-0.0089**
	(0.004)
Δ *Ad&Promotion %*	0.4823
	(0.340)
Δ *Institutional Ownership %*	0.1041
	(0.058)
Δ *Analyst Coverage*	0.0008
	(0.002)
Year FE + Intercept	Included
N	23,552
Adjusted R^2	0.19

Table 8. Future Coverage and Slant Following Sensational Events

Panel A tabulates the number of product- and employee-safety-related events by year. In Panel B, the unit of analysis is firm-year. In Panel B, column 1, coverage in both local and national newspapers is used as the response variable. In column 2, response variable is *Slant_all (x100)*. In column 3, *CSR Mention* is the number of times the articles contain the following terms in year *t*+1: "CSR," "social* responsib*," "charit*," "philanthrop-," "environment* friend*," "clean* energy*," "eco-friend*," and "pollut* prevent*" We define *Shock* variable using the procedure outlined in section 3.4. Control variables are defined in Table 2. Heteroskedasticity-robust standard errors clustered by firm are reported in parentheses. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Number of Events

	Product Safety		Employee Safety	
	Without MP	With MP	Without MP	With MP
1997	24	3	14	1
1998	23	5	17	1
1999	20	8	16	1
2000	29	8	16	0
2001	41	6	20	1
2002	52	8	30	3
2003	68	7	40	3
2004	75	11	85	9
2005	74	13	130	11
2006	78	9	198	16
Sub Total	484	78	566	46
Total	562		612	

Panel B. MPs and Crisis Management

	Coverage_all	*Slant_all*	*CSR Mention*
MP	0.1030**	0.075	0.0385
	(0.042)	(0.085)	(0.030)
IR Firm	0.3102***	-0.1404**	0.1175***
	(0.027)	(0.057)	(0.019)
Shock	0.0435**	-0.0889*	0.0478***
	(0.021)	(0.045)	(0.015)
MP x Shock	**0.1759****	**0.0396**	**0.1416****
	(0.085)	**(0.162)**	**(0.061)**
IR Firm x Shock	**0.0857***	**-0.0281**	**0.0516**
	(0.049)	**(0.105)**	**(0.036)**
Press Release	0.0970***	0.1350***	0.0948***
	(0.006)	(0.012)	(0.004)
ROA	-0.1122**	0.1376	-0.1671***
	(0.045)	(0.098)	(0.033)
Ln (MarketValue)	0.0996***	-0.1240***	0.1485***
	(0.011)	(0.024)	(0.008)
Ln (Market/Book)	0.0200*	0.1975***	-0.0065
	(0.011)	(0.023)	(0.008)
Prior Return	0.0563***	0.0356***	0.0228***
	(0.005)	(0.011)	(0.004)
Turnover	0.0466***	-0.0073	0.0422***
	(0.004)	(0.008)	(0.003)
Ad&Promotion %	0.0705	-1.7748***	0.2436
	(0.249)	(0.534)	(0.181)
Institutional Ownership %	-0.3579***	-0.0236	-0.0449
	(0.038)	(0.081)	(0.027)
Analyst Coverage	0.0085***	-0.0080**	0.0073***
	(0.002)	(0.004)	(0.001)
Lag Media Coverage		-0.4071***	
		(0.013)	
Firm Fixed Effects	Included	Included	Included
Year FE + Intercept	Included	Included	Included
N	31,067	31,067	31,067
R^2	0.78	0.47	0.76

Appendix Table 1. Changes Specification

This table reports OLS estimates of changes specification using specification (1) reported in Table 3, and specification (4) reported in Table 4. Definition of all variables are reported in Table 2.

$$\Delta Coverage_{i,t+1} = a + b \times \Delta MP_{it} + c \times \Delta Controls_{it} + d \times Fixed\ Effects_{it} + \varepsilon_{it}$$

$$\Delta Slant_{i,t+1} = a + b \times \Delta MP_{it} + c \times \Delta Controls_{it} + d \times Fixed\ Effects_{it} + \varepsilon_{it}$$

The unit of analysis is firm-year. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively.

	Δ *Coverage(All)*	Δ *Slant(All)*
Δ *MP*	0.072*	0.1160
	(0.040)	(0.090)
Δ *Press Release*	-0.068***	0.059***
	(0.006)	(0.013)
Δ *IR Firm*	0.045*	-0.0730
	(0.026)	(0.060)
Δ *ROA*	-0.361***	0.0760
	(0.053)	(0.120)
Δ *Ln (MarketValue)*	0.206***	-0.0550
	(0.016)	(0.037)
Δ *Ln (Market/Book)*	-0.0030	0.211***
	(0.014)	(0.032)
Δ *Prior Return*	0.014***	0.037***
	(0.005)	(0.011)
Δ *Turnover*	0.0040	-0.0010
	(0.004)	(0.008)
Δ *Ad&Promotion %*	0.1340	-1.773***
	(0.296)	(0.670)
Δ *Institutional Ownership %*	0.456***	-0.325***
	(0.051)	(0.115)
Δ *Analyst Coverage*	0.004***	-0.006*
	(0.002)	(0.004)
Δ *Lag Coverage*		-0.188***
		(0.015)
Intercept + Year FE	Included	Included
N	23,552	23,552
Adjusted R^2	0.03	0.01