

The Determinants of Coverage in the Business Press

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Abstract

The business press plays a significant role in distributing firm news to investors. We investigate variables that influence a firm's level of press coverage. In addition to firm and news characteristics, we examine choices of timing, press wire service, and ease of firm access. While we find that managers can increase coverage by issuing press releases during the day, the largest determinants of coverage are factors outside managerial control. We also find evidence of a newspaper bias towards covering negative news, which suggests the press differs from other intermediaries by choosing to focus on news for reasons other than its salience for making investment decisions.

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1. Introduction

A burgeoning literature on the business press has found that coverage by media publications has significant implications for both the trading and pricing of securities.¹ This empirical work has largely focused on the effects of receiving more or less press coverage. Much less attention has been specifically focused on the determinants of coverage.² This is surprising given the amount of managerial time and firm resources (e.g. public relations) focused on trying to influence coverage.

To help fill this gap in the literature, this paper seeks to understand what factors contribute to press coverage of firm-initiated disclosures. Our choice of factors is motivated by both the incentives of journalists about what to publish and the opportunities firms have to influence coverage. Through our investigation, we seek to understand both the range of variables that affect coverage, and the extent to which press coverage can be influenced by managerial decisions.

We explore three types of factors that affect coverage – factors that are specific to the firm, factors that are variable with the information disclosed by the firm, and factors that managers have the immediate ability to influence. Some variables, like size and industry, are firm characteristics that are not directly influenced by managers.³ On the other hand, other

¹ This literature includes Solomon (2010), Engelberg and Parsons (2010), Bushee et al. (2010), Chan (2003), Fang and Peress (2009), Huberman and Regev (2001), Dyck and Zingales (2003), Foster (1979), Gurun and Butler (2010), Li et al (2011), and Solomon et al (2011).

² In the context of their investigations, several papers have some considered some factors that influence media coverage. Miller (2006) posits a number of factors that influence whether the press will play a monitoring role for accounting fraud. Core et al (2008) examines several variables which influence whether the compensation for a CEO will be featured in the press.

³ Variables like firm size and industry are influenced by managerial decision making and strategy. However, changes in these variables are a by-product of other decisions rather than determined by the direct decisions of managers.

decisions like press wire service choice and the timing of a release are under direct managerial discretion. We find significant evidence that all three categories, to differing degrees, affect press coverage.

We examine the determinants of coverage using a dataset of earnings releases for US publicly listed companies from 2002 to 2006. The advantage of studying earnings announcements is that they provide a sample of routine news events with measurable information content that can be controlled for empirically. This reduces the concern that we will be measuring omitted variables related to heterogeneity in the underlying events being disclosed. In addition, focusing on earnings releases connects this analysis most closely to the previous work on the effects of the business press (e.g. Bushee et al. (2010)).

In terms of firm characteristics, we find that both firm size and industry affect the likelihood and amount of coverage. Moving from the 1st to the 5th quintile of market capitalization increases the likelihood of newspaper coverage from 5% to 58%, and newswire coverage from 75% to 99%. We also find evidence that some industries, particularly those which are more consumer-focused, are more likely to receive coverage.

We also analyze the effect of different properties of the news itself. Specifically, we examine how the level of expectedness (i.e. deviation from analyst expectations) and the negativity of the news (i.e. whether the results are below expectations) affects coverage. We find evidence that more surprising news receives more coverage by wires and an increase in the likelihood and amount of coverage by papers. For instance, firms disclosing news in the highest quintile of unexpectedness receive 13% more wire coverage. Our analysis also shows that very negative news is more likely to receive coverage by papers.

In terms of variables that are subject to managerial discretion from release to release, we investigate the timing of a release (i.e. whether the release is disclosed during or after business hours), the number of firm contacts provided on the release, and the choice of press wire service. We find support that disclosing in the evening reduces the probability of newspaper coverage from 20% to 9%, and the probability of newswire coverage from 95% to 89%. Offering more firm contacts is associated with greater press coverage, but does not appear to causally affect coverage from release to release. We do not find robust support, despite advertising claims to the contrary, that certain press wire services garner greater press coverage for firms using their service.

Our results also show that certain factors influence newswire and newspaper coverage differently and in ways consistent with the objectives and restrictions faced by journalists at each medium. For example, print journalists at national publications have significant space constraints and are required to be more selective about what news to publish. Consequently, we find that print publications focus significantly more attention on news that is more surprising as compared with wire services. Wire journalists also appear unaffected by the negativity of news whereas newspaper journalists are more likely to publish articles covering very surprising negative events. Given wire journalists' expertise in covering financial news and their target audience of finance professionals, this suggests that newspapers do not cover more negative news because of its perceived economic value, but rather a bias towards coverage of sensational events.

Investigating the determinants of business press coverage contributes to the academic literature in several ways. First, a growing literature finds that press coverage has significant

economic implications. Coverage affects trading (Engelberg and Parsons (2010), Bushee et al. (2010)), spreads (Bushee et al. (2010)), pricing (Chan (2003), Fang and Peress (2009), Huberman and Regev (2001), Dyck and Zingales (2003), Foster (1979)), firm value (Gurun and Butler (2010)), and mutual fund selection (Solomon et al (2011)). Without variation in what journalists cover, we would not observe these effects. To actually see where these effects originate, it is important to understand what causes journalists to cover and report on specific firms and releases. Therefore, by better understanding the institutions and environment which gives rise to this variation, we can better appreciate the implications of differential press coverage. In this way, this paper seeks to begin to answer the question posed in Berger (2011) which asked “when, why, and to what extent does the business press screen or filter firm-initiated disclosures” (211).

Secondly, by understanding the press’ choices, we can begin to understand how the press compliments other information intermediaries like analysts. An extensive literature seeks to explain why analysts cover and issue firm forecasts (e.g. Lang and Lundholm (1993), Healy et al (1999), Francis et al (1998)). As compared with the literature on analysts, our understanding of the determinants of what journalists choose to cover and publish is quite limited. By understanding coverage decisions, we can better understand the circumstances when journalists have the opportunity to create value in the capital markets.

While both analysts and the business press are information intermediaries, our analysis suggests that it would be erroneous to classify all information intermediaries into one homogenous group. In particular, like analysts, the business press disseminates economically relevant news that facilitates market transactions. However, the press also plays an

“entertainment role” by disproportionately covering certain news events (e.g. extreme negative news), which are not obviously linked to the significance of economic phenomena. This suggests that the press is not simply a benign intermediary that only seeks to enhance the functioning of markets.⁴

Finally, this study also has the opportunity to offer insights to managers about the efficacy of their efforts to influence the press. We find that the largest determinants of coverage appear to be factors outside managerial control. The biggest effects on coverage are firm size and industry, which between them explain between 18 and 41% of variation in coverage (depending on the specification). The effect of changing the timing of disclosures is considerably smaller, and efforts like switching press wire service do not appear to be effective at all. This suggests that other mechanisms of trying to distribute news to investors, like direct news dissemination may prove more effective than short run efforts to influence journalists through the limited number of variables under management control. A growing array of tools, now allows managers to reach investors directly. Blankespoor et al. (2010) examine managers’ use of Twitter to reach investors and reduce information asymmetries while avoiding journalistic barriers. Alternatively, managers could choose to focus on long-term efforts that require building relationships, which other research has shown to be effective in influencing coverage (e.g. Solomon (2010)).

The remainder of the paper is organized as follows. Section 2 describes the objectives of the business press and presents our hypotheses of factors affecting coverage. Section 3 reviews the

⁴ In context of CEO compensation, Core, Guay, and Larcker (2008) find that the press also exhibits some sensationalism in their choice of coverage. Reuter and Zitzewitz (2006) show that several periodicals, but not newspapers, provide biased recommendations that are correlated to past advertising by firms.

data used in the study. Section 4 presents the results. Section 5 examines questions of identification. Section 6 explores whether regional papers may act as substitute or complement to national/wire coverage. Section 7 concludes and offers suggestions for further research.

2. Coverage Choices by the Business Press

2.1 The Constituency of the Business Press

Beginning in the mid 19th century, the business press grew out of the interest to “gather, [to] interpret, and to disseminate” information related to the performance of firms (Smith 1954). A wide range of publications developed to satiate investors’ desire for timely business news and information. These publications differed in frequency, style, depth, perspective, and audience.

Our analysis focuses on two types of publications that differ significantly in their distribution and coverage. National newspapers are published on a daily basis and delivered to homes, businesses, and newsstands. More recently, articles for these publications are being offered online. Circulation for each of these publications is in the hundreds of thousands to millions of readers. They contain business news as part of their overall coverage in both their general reporting of events (e.g. front section) and a separate business news section.

Newswires differ most significantly from newspapers in that they publish news exclusively in electronic format. Newswire coverage is available both through direct subscription with services like Reuters and through publication partners like Yahoo! Finance. Business newswires are aimed at “financial professionals” (Dow Jones). As a result, consumers of newswires, on average, tend to be more market driven consumers of information than

consumers of newspapers. The electronic distribution medium removes space constraints permitting more generous coverage of firms and news events.

2.2 Objectives of Journalists

The press, like other commercial information intermediaries, faces limitations on how much news its journalists can both cover and publish. Both newswires and newspapers are constrained on the number of journalists that are able to research and write articles. In addition, print newspapers, unlike newswires, also have limitations on the amount of space available for articles.

Given bounds on the amount that publications can cover and publish, editors are forced to make choices about which firms and events to cover. When faced with the publication's objective to maximize circulation, editors will select items that will appeal to the readership (Hamilton 2004). Consequently, journalistic choices about what firm news to cover will be motivated by how broadly the story will appeal to the publication's audience.

Along with the desire to write articles with maximum appeal is the need to produce articles in a timely manner. While a particular news event may have significant appeal from a journalistic standpoint, the circumstance provided by another event may offer a more convenient opportunity to produce an article in the allotted time. For example, journalists at the *New York Times* are asked to submit their copy by 6pm. There are opportunities to extend this deadline by communicating directly with the copy desk until approximately 8pm. Significantly beyond this time, or unless an exception is made, stories are unlikely to make the following day's publication since the paper needs to be sent out for printing and delivery. Consequently, events occurring in the evening near the deadline are more difficult for journalists to cover.

Journalists desire to produce stories with wide appeal while being under specific institutional conditions that restrict the amount of firm news they can cover and ultimately publish. In doing so, not all firms or disclosures by firms are covered in the press. Choices about which articles to produce are the result of an equilibrium between the objective of publications (e.g. maximize circulation) and the limitations of the news production process (e.g. time and number of journalists).

2.3 Influencing Coverage

We examine how seven different factors affect coverage by newswires and newspapers. Some of these factors, like industry, are outside the immediate control of management, whereas others, like press wire service choice can be more readily changed. By investigating these factors, we seek to better understand the degree of managerial discretion to influence the amount of press coverage a firm receives. Specifically, how much influence do managers have over press coverage, relative to other factors outside their control?

For each of the factors, we describe how the variable can influence journalist activities and its hypothesized effect on press coverage.

Firm Size

Larger firms will have a shareholder base with more shareholders, more invested shareholders, and/or more potential investors. Larger firms are also likely to have more connections with other firms and economic activities of interest to non-shareholders. In doing so, larger firms have a connection or relationship with a greater number of readers. Editors who seek to publish news that is of interest to the greatest number of readers may thus endeavor to

publish news on larger firms. Thus, we expect larger firms to have significantly more newswire and newspaper coverage.

Level of Unexpectedness

In their goal to publish news that engages and interests readers, financial journalists will seek to publish stories on events deemed more newsworthy. Among the basic tenets of journalism is that news which is less expected and of greater surprise is more newsworthy (Pape and Featherston 2005). Editors seek to engage as many readers as possible in their publications' stories and will choose more newsworthy items to accomplish this. Following this tenet, we hypothesize that firm news that is more unexpected has a greater likelihood of being covered.

Industry

Within the nexus of business, industries vary in their scope and influence. Industries playing a more interconnected role to a greater number of firms will attract additional interest and attention. For example, the availability and pricing of oil affects a wide range of businesses (e.g. aviation, fabricated products). Consequently, the performance of firms in the petroleum industry has significant implications for firms and industries outside the petroleum business. At the same time, editors of publications may also want to use their discretion to tilt coverage towards certain industries that are seen as being of greater interest to their desired readership base. For example, in the late 1990's the *Wall Street Journal* began publishing more stories about retail firms under the belief that this would help attract more female readers to the publication.⁵

⁵ During the first decade of the 21st century, *The Wall Street Journal* continued this practice (Seelye 2007).

Following this anecdotal evidence, we anticipate that some industries with a consumer focus will garner greater coverage.

Negativity

The press is widely regarded as producers of entertainment as well as news (Jensen 1979). Events that are viewed as sensational can attract readers interested in the spectacular. Although events can be sensationally positive or negative, there is a widely held perception that the press is more likely to cover negative news and events (Holstein 2008). Extreme negative news about firms also has the opportunity to be of greater interest and economic value to readers. For example, firms disclosing news that suggests future insolvency would be of interest to debt holders, creditors, and other firms relying on the continued operation of the firm (e.g. as part of the manufacturing supply chain). Thus, we investigate whether negative events are more likely to receive press coverage.

Timing of Release

Journalists face deadlines for the submission and publication of articles. At newspapers facing deadlines to accommodate printing, journalists are subject to “hard-stop” times at which point they are required to submit stories. Events occurring soon before the deadline are more difficult to cover. In addition, even if a story can be completed before the deadline, the reporter’s obligation or the desired space may have already been filled. For these reasons, we hypothesize that newspapers are less likely to cover disclosures released later in the day.

Newswire journalists do not face the same publication deadlines. Although they are motivated by speed of publication (Tambini 2010), whether an event occurs at 3pm or 3am does not affect whether it can be physically published as in the case of newspapers. However,

outside of regular business hours staffing is reduced and/or outsourced. Moreover, the demand for 'updated' newswire pieces about a disclosure is reduced. Consequently, fewer wire articles are likely to be produced when a release is made later in the day.

Beyond journalists' limitations in covering news later in the day, managers could also choose to support evening releases differently. Specifically, given that evening releases occur after hours, the level of support offered to these releases could diminish. If so and to the extent that this unobservable support is significant at gaining coverage, we would also expect this to reduce the likelihood of coverage of releases made later in the day.

Press Wire Service

Press wire services act as intermediaries between firms and the media. When a firm seeks to distribute a press release, it sends the release to a press wire service, which then redistributes the release to media partners. There are four major press wire services: PR Newswire, Business Wire, Market Wire, and GlobeNewswire. Most publicly traded firms in the United States rely on the two leading press wire services- PR Newswire and Business Wire (a subsidiary of Berkshire Hathaway). Competition for clients among the press wire services focuses heavily on differential service quality (e.g. accessibility of personalized customer assistance).

PR Newswire also advertises its ability to garner more press coverage for their clients. This argument is supplemented with a study on its web site to substantiate this view.⁶ Consequently, clients may be inclined to use PR Newswire over other press wire services because of its ability to garner greater press coverage. To investigate potential differences in

⁶ See <http://multivu.prnewswire.com/mnr/prnewswire/35169> for results of the study. Last accessed March 16, 2011.

coverage due to a firm's choices in press wire service, we investigate whether any press wire service helps garner more coverage than others.

Ease of Company Access

The pressure journalists face to produce articles in a timely manner increases their reliance on sources that are convenient to access (Tambini 2010). For firm-initiated news, journalists may seek to follow-up with the company that issued the release. All firms are required by the major press wire vendors (e.g. Business Press, PR Newswire) to provide at least one name and telephone number of a company contact. However, some firms choose to supplement this information with additional firm contacts. For example, Tiffany and Company's May 27th, 2010 earnings release concludes with two telephone numbers:

SOURCE: Tiffany & Co.

Tiffany & Co.
James N. Fernandez, 212-230-5315
or
Mark L. Aaron, 212-230-5301

Firms offering more than one contact create greater ease for journalists to follow up with a company spoke-person; this may increase the likelihood that a journalist will write about the firm. We expect this relationship to differ for newswires and print publications. Wire services strive to provide information rapidly and thus the choice of initially covering a press release may be less sensitive to the ease of following up with the firm. However, wire journalists sometimes write 'update articles' (i.e. follow-up wire article about the firm's release), and the ease of contacting the firm may have a greater effect on their tendency to write such updates. Journalists at print publications are typically expected to write in greater depth and investigate

matters more deeply suggesting they would have a greater interest in contacting the company than a newswire journalist.

3. Data

3.1 Description of Sources and Variable Measurement

We acquire data from numerous sources to examine the factors influencing press coverage. Our sample period begins in January 2002, ends in December 2006, and focuses on earnings news. We utilize market capitalization data from CRSP and analyst coverage and earnings data from the Institutional Brokers Estimates System (I/B/E/S). Doyle and Magilke kindly provided us their data for earnings announcement times, from 2000-2005. Our sample includes all non-financial domestic NYSE, NASDAQ, and AMEX firms with available data.

Firm size is calculated as the number of shares outstanding multiplied by share price. We measure the level of unexpectedness of news as the absolute deviation of actual earnings from the mean analyst estimate deflated by share price. Bad news refers to cases in which the deviation from expectations is negative.

We acquire news data from the Factiva database. We search for each earnings announcement release and newswire and newspaper articles about those releases. For newswires, we examine Dow Jones and Reuters, and for newspapers we examine articles from the *Wall Street Journal*, *New York Times*, *Washington Post*, and *USA Today*. These four papers are some of the most influential publications in the print news market and account for 11% of weekly newspaper sales (Fang and Peress 2009).

For each search, we utilize a number of combinations of the firm name to conduct the search. We also supplement each search using the Factiva company code, which is a unique code assigned to each firm by Dow Jones. For newspaper searches, Factiva company keys tend to be a less reliable way of searching for company cites than using the company name due to coding errors on Factiva. Our analysis only includes articles with some textual content (i.e. exclude articles which are only a table). This reduces the possible confounding of journalistic coverage with automated computerized tabulation. From the articles on Factiva, we find the press wire service from the source field. To measure ease of access we count the number of phone numbers provided in the contact field of the release in Factiva.

For all factors, we investigate how the variables affect four different measures of press coverage- two measures of newswire coverage and two measures of newspaper coverage. The measures are designed to be closely linked to the literature on the effects of coverage (e.g. Fang and Peress (2009) and Bushee et al (2010) utilize measures of the presence and count of articles covering a firm). Each press coverage variable is measured over a day-long period (for newswires it is the same day as the release and papers the following day). For robustness, we also examine additional specifications extending the measurement window. An examination of articles suggests that the shorter one-day window appears to most accurately capture articles given our focus on earnings releases. This is consistent with the relatively short life cycle of most news events (Pape and Featherstone 2005).

3.2 Descriptive Statistics

Table I presents descriptive statistics for the firm and press coverage variables. Panel A provides data on the frequency of particular release choices. For timing, 39% of the releases are

in the evening. As suggested by industry data, the vast majority of the firms in our sample utilize either PR Newswire or Business Wire. PR Newswire has a larger share with 54% of the sample utilizing its service as compared with 45% with Business Wire. Multiple contacts are offered on 44% of the releases.

Table I, Panel B provides statistics on the amount of press coverage received by each release. Most releases receive some wire coverage and conditional on receiving some coverage, the average release receives coverage by nearly 4 newswires. Coverage by newspapers is somewhat lower as expected given their more limited space. 18% of releases receive some newspaper coverage and each release receives .26 newspaper articles of coverage on average.

The correlation matrix of independent variables is shown in Table II, Panel A. The correlation between the variables is generally low with the exception of market capitalization and surprise that is $-.41$. However, this is still sufficiently below the threshold to raise multicollinearity concerns. Panel B provides correlations of the press coverage variables. There are some differences between wire and paper coverage. However, the correlation between the availability of coverage and the amount of coverage is quite high which suggests that the results of these analyses may be similar.

4. Analysis of Coverage

4.1 Firm Size and Industry

In Table III, we investigate how firm size and industry affect coverage of earnings releases by newswires and newspapers. We examine separately whether the firm received any coverage at all in that news source and the total amount of coverage received. The regressions

examining whether any coverage was received use a probit specification, and the regressions examining the amount of coverage use an OLS specification. For instance, in column (3), the regression equation is:

$$Lnum_wires = a + b_1*lmktcap + b_{2-48}*Industry_{2-48} + e \quad (1)$$

where *lnum_wires* is the log of one plus the number of articles about the companies in the two newswire services, Reuters and Dow Jones newswires. Columns (1) and (2) have a dependent variable of *wire*, a dummy variable that equals one if the firm received any newswire coverage and zero otherwise. Columns (5) and (6) have a dependent variable of *paper*, an analogous dummy variable for receiving any coverage in the newspapers considered – the *Wall Street Journal*, *New York Times*, *USA Today* and *Washington Post*. Columns (7) and (8) have a dependent variable of *lnum_papers*, the log of one plus the total number of articles in the four newspapers.

In terms of independent variables, columns (1), (3), (5) and (7) consider *lmktcap*, the log of the firm's market capitalization, and *Industry₂₋₄₈*, 48 dummy variables corresponding to the 48 industries identified in Fama and French (1997) by SIC code. In columns (2), (4), (6) and (8), the measure of market capitalization is *mcap_quintile₂₋₅*, five dummy variables corresponding to quintiles of market capitalization.

Regressions (1)-(4) show that larger firms are significantly more likely to receive some wire coverage. Regressions (2) and (4) further examine the relationship using size quintiles. One advantage of the quintile variable is that it permits nonlinearities and allows a more careful inspection of the effects of size on coverage. For wires, we find a pronounced and economically significant effect of size on both the likelihood of coverage and the amount of coverage. Being in the fifth (i.e. largest) size quintile increases the probability of some wire coverage by 25% (i.e.

the likelihood of coverage rises from 74% to 99%), with these differences being significant at a 1% level.⁷ Several industries are more likely to receive coverage. At the 10% level of statistical significance, defense, consumer goods, transportation, and hospitality industries are more likely to receive some wire coverage. These industries are consumables that appeal to news readers on an individual level.⁸

Turning to the newspaper regressions in (5)-(8), we also find a pronounced effect of firm size on coverage. Being in the fifth (i.e. largest) size significantly increases the probability of some paper coverage by 48% (i.e. the likelihood of coverage rises from 6% to 54%), again significant at a 1% level. When it comes to the amount of paper coverage, firms in the highest quintiles receive incremental coverage. Firms in the food, tobacco, precious metals, and real estate industries are more likely to have articles written about them at the 10% level of statistical significance.

Between them, market capitalization and industry explain between 36 and 41% of the variation in the number of newswire articles, and between 21 and 26% of the variation in the number of newspaper articles. Our findings that the press is more likely to cover some industries is in contrast to Fang and Peress (2009). Given the similarities in press data, one explanation is their reliance on coarser one and two digit SIC codes rather than Fama French industry portfolios. Nonetheless, this difference is important since it suggests there are certain types of firms which receive disproportionate coverage by the media.

⁷ We interpret the marginal effects of all other variables for our probit estimates at their average value.

⁸ We also examined longer time windows for measurement of the dependent variables. The statistical and economic significance between the specifications is largely similar. For example, using a two-day coverage window, the coefficient on firm size for the amount of paper coverage is .13 (as compared with .09 for a one-day window). The standard error is .008 (as compared with .006 for a one day window).

Given the consumer product nature of the firms in this area, this also provides evidence that the business press is not solely playing a monitoring role. Specifically, in contrast to Miller (2006) where the press is playing a socially accountable “watchdog” role, additional coverage of certain retail industries suggests a more marketing based approach to what the press chooses to cover.

4.2 News Unexpectedness

Table IV examines how the level of news unexpectedness influences coverage. The dependent variables and regression types are the same as Table III (*wire*, *lnum_wires*, *paper* and *lnum_papers*). The independent variables are measures of the difference between actual earnings per share and the median analyst forecast, *asup* is the absolute value of the earnings surprise (regressions (1), (3), (5) and (7)), and *surprise_quintile₁₋₅* are dummy variables for quintiles of the absolute value of earnings surprise (regressions (2), (4), (6) and (8)). Additional controls are included for log market capitalization and industry dummies.

Regression (1) suggests that the absolute level of earnings surprise does not have a large impact on the probability of receiving wire coverage. When the surprise is divided into quintiles, two surprise quintiles are statistically significant. However, the magnitude is limited to approximately 2%. Consequently, surprise does not appear to particularly influence whether any wires cover the release. In contrast, more surprising news significantly affects the amount of wire coverage in an economically and statistically significant way. The most surprising news in the fifth quintile receives nearly 13% more wire articles. For newspapers, more surprising news has a higher probability of receiving some coverage, and also a greater amount of

coverage. This effect increases in the surprise of the news as seen in the quintile regressions (6) and (8).

The fact that unexpectedness increases the quantity of newswire articles, but has less effect on the probability of any newswire article (a pattern observed elsewhere in the paper) seems at first to be paradoxical. However this pattern can be understood by distinguishing between initial coverage (a newswire deciding to write about a press release they might have otherwise ignored) and follow-up coverage (a newswire deciding to write a subsequent article exploring in detail a previous story that they wrote about).

Our results are consistent with unexpected news primarily affecting the likelihood of follow-up articles for releases that the newswire had already decided to cover, but having a smaller impact on the decision to cover the release in the first place. This is consistent with the aims of newswires to cover stories in a very timely manner, often within minutes. Releasing a written summary within this time frame does not allow long for the journalist to decide whether to cover the story or not. As a result, this decision appears more sensitive to fixed factors of the firm examined above, where the journalist has decided in advance to cover stories by a given firm. Unexpectedness does seem to play a role when the journalist decides to revisit the story with a follow-up article, with surprising news being more likely to generate subsequent analysis. For newspaper journalists, however, our results are consistent with having a longer time frame in which to decide whether to write about a story. In doing so, paper journalists are able to be more sensitive to the unexpectedness of the news in deciding whether the story warrants coverage.

4.3 Negative News

In Table V, we investigate the relationship between reporting bad news on the likelihood and amount of press coverage. The regressions are the same as in Table IV, but we also include a dummy variable that equals one for negative surprises, and zero otherwise. In odd numbered regressions, we regress a measure of press coverage on size, surprise, and a bad news indicator. Under this specification, we do not find that bad news broadly is covered more often by wires or papers. In even numbered regressions, we include surprise quintile and bad news surprise interactions terms. As in the prior analysis, more surprising news creates more wire coverage and an increased likelihood and quantity of paper coverage. We also find for newspapers, but not newswires, evidence that extreme negative news is more likely to be covered and with a greater amount of coverage. Specifically, firms with a negative surprise in the fifth (i.e. greatest negative surprise) quintile are 14% more likely to receive coverage by a paper (i.e. the likelihood of coverage rises from 13% to 28%).⁹

The coverage of extreme negative news by papers in Table V offers two possible interpretations. Papers, unlike newswires, are sold to a broad readership base. To the extent that extreme negative news is more sensational and appeals to a non-financial reader base, this divergence in coverage between wires and papers is consistent with media sensationalism. An alternative explanation is that papers are not seeking to cover more sensational news in covering very negative events, but rather there is more newsworthy economic information for readers contained in these events. For example, firms that experience significantly negative news may be more likely to go into default. This information would be of interest to both bond

⁹ Utilizing a specialized news database, Green et al. (2011) offer an alternative explanation for a negative news bias by arguing that bad news receive greater dissemination because of its attention grabbing effect on journalists.

holders and creditors. However, this information based view seems less plausible given that newswire services do not also increase the likelihood of covering these events. This explanation would require that wire services do not understand the information content of these events despite being focused on providing news to financial professionals. Given this, the sensationalism theory provides a more compelling explanation.

4.4 Timing of Release

Tables 6 examines whether the timing of releases influences the amount of press coverage. Panel A provides univariate analysis supporting the hypothesis that evening releases are less likely to be covered. Specifically, evening releases are 8% less likely to be covered by a wire and 14% less likely to be covered by a paper. In both cases, these differences are statistically significant.

One explanation for these differences in coverage is that the firms releasing in the evening have differences in size and the level of news unexpectedness. In Tables III and IV, we found that the size and the significance of news significantly influence coverage. In Table VI Panel B, we control for these factors in OLS regressions. We continue to find that disclosing in the evening is associated with lower coverage. In particular, we find that firms disclosing in the evening reduces the likelihood of wire coverage by 5% and the amount of wire coverage by 15%. In addition, the likelihood of paper coverage reduces by 11% (i.e. the probability of coverage declines from 20% to 9%).

The fact that news released in the evening has a significant impact on the probability of newswire coverage (not just the amount) is consistent with newswires having fewer journalists present in the evening. The concern that evening news is simply different in content in ways

that are not being measured is lessened by the fact that other forms of different news (i.e. more unexpected, more negative) in previous cases did not impact the probability of wire coverage.

In terms of the economic size of evening coverage, the timing of the release in Table VI offers some additional explanatory power about what the press chooses to cover. As one indication, the R-squared of the likelihood of wire coverage regression increases from .18 to .21 after including the evening release indicator (from Table III to Table VI Panel B). On the other hand, this is significantly less than the combined impact of firm size and industry effects. In addition, the magnitude of the effects is less – moving from the 1st to the 5th quintile of size increases the probability of newspaper coverage by 53%, but switching to evening disclosures reduces the probability of newspaper coverage by 11%. This is a significant amount, but still considerably less than variation from factors outside managerial control.

4.5 Firm Contacts

Table VII examines the relationship between the number of firm contacts and coverage. Panel A offers a univariate comparison of press coverage between releases with one contact and multiple contacts. Releases with multiple contacts have statistically more wire and newspaper coverage with the difference in newspaper coverage being more economically significant at nearly 7%.

To control for variation across firms and releases with different numbers of contacts, we examine levels regressions in Panel B. Having multiple contacts is associated with more wire coverage and a greater likelihood of paper coverage. The magnitude of the effects in both cases is 6% and 3% respectively. For newswires, having multiple contacts appears to have a more consistent effect on the total amount of coverage (coefficient of 0.0581, significant at a 1% level)

than on the probability of coverage (coefficient of 0.0667, significant at a 10% level). This is again consistent with multiple contacts having a larger effect on the probability of follow-up articles (after the initial coverage decision has been made), rather than the initial coverage of the article. For newspapers, the effect of multiple contacts is significant at the 1% level for both the probability of coverage and the amount of coverage.

4.6 Press Wire Service

Finally, Table VIII examines a firm's choice of press wire service. As the vast majority of firms utilize PR Newswire or Business Wire (Table I, Panel A), we create three press wire service indicator variables- PR Newswire, Business Wire, and other (i.e. Marketwire and GlobeNewswire). Panel A provides a univariate comparison of the press coverage utilizing the different press wire services. For both, newswires and newspapers we find statistically significant evidence supporting PR Newswire's claim that firms utilizing their service garner more coverage. However, the difference in coverage between PR Newswire and Business Wire is approximately 1% in both cases and not statistically significant, which suggests that this difference is of limited economic value.

In Table VIII, Panel B, we investigate the relationship between press wire choice and coverage through probit and OLS regressions. Once we control for firm size, industry, and news significance, we no longer find any difference in coverage between the different press wire services.

The lack of any relationship between the press wire service choice and the amount of press coverage contradicts claims by PR Newswire. The evidence provided to clients shows that firms using PR Newswire garner statistically greater press coverage. Although we also find this

evidence weakly at the univariate level, after controlling for other factors that influence coverage, we no longer find any relationship. This suggests that while PR Newswire claims are accurate, they may be misleading to clients since more careful analysis which controls for differences in clients and releases across the different press wires services would no longer support such an argument.

5. Strategic Behavior and Omitted Characteristics

One potential concern raised by the results in section 4 is whether the results are causal in nature. Each of the three types of factors (fixed characteristics of the firm, characteristics of the news, and factors under managerial control) present different limitations that could affect inferences.

The fixed firm characteristics (market capitalization, industry) and news characteristics (surprise, negative news) regressions are most susceptible to omitted characteristics. Although omitted variables may affect the precise magnitude of the effect, our primary inferences about the direction and relative size of the effect should not be affected due to the strong economic and institutional reasons supporting why each of these variables are likely to affect coverage.

The case where the results require the most additional investigation are those relating to factors under managerial control – timing of disclosures, ease of access, and the choice of press wire service. The reason for this is that the observed variation may be related to other variables under managerial discretion, particularly related to strategic firm behavior. For example, managers could choose to release news at night when they deliberately desire the news to receive less coverage. Although we can measure most of the important information content in

our sample news events because we focus on earnings announcements, there may be other actions that managers take that could be simultaneously correlated with our variable of interest. In addition, even if managers are *not* acting strategically, there remains the question of what economic factors are driving the variation in choice of disclosure times. They may be fixed characteristics of the firm, or they may be driven by other, potentially non-strategic, choices.

We attempt to address both of these concerns. For the question of strategic behavior, we have some ability to directly examine the issue. Seeking to suppress coverage of negative earnings news would be the most likely strategic disclosure choice. The reduced media coverage could lead investors to react less to the negative news, thus increasing the share price in the short run (Peress (2008)). If bad news is a significant motivation for strategic attempts to reduce coverage, we can examine whether the variables under managerial control vary according to the sign of the news.

Table II indicates that there is little evidence of managers strategically changing announcement practices according to the sign of the earnings announcement. The correlation between bad news and evening release is 0.0035, and statistically insignificant. This evidence is consistent with Doyle and Magilke (2009), who similarly find no relationship between evening announcements and negative news. The correlation between bad news and having multiple contacts is -0.0013, and also statistically insignificant. Similarly, there is no statistically significant correlation between bad news and the choice of the press wire circuit. This should reduce the concern that the results in Tables VI, VII, and VIII are driven by strategic behavior.

The other question is whether the variation in managerial actions may be driven by omitted firm characteristics. This would be a particular concern if the variation was only

between firms – in other words, some firms disclose only in the evening, and some firms disclose only in the daytime. In this case, the question arises whether evening disclosures are proxying for some unmeasured characteristic of the firm. Although we attempt to control directly for the most important factors affecting coverage, it is conceivable that other correlated variables may significantly affect coverage.

We attempt to address this concern in two ways. The first is to examine whether firms with variation in timing appear different to firms with constant timing along other measures of disclosure practices. We examine the likelihood of firm management issuing a forecast about earnings, another disclosure choice faced by the firm, using the First Call database of historical management forecasts. We find that firms that always release earnings during the day have a 58.4% chance of issuing a management forecast, firms that always release earnings during the evening have a 59.4% chance of issuing a management forecast, and firms that switch at some point between evening and daytime have a 59.3% chance of issuing a management forecast. In other words, we find that variable and fixed choice firms nonetheless appear similar along other measures of disclosure choice. This should lessen the concern that we are simply picking up omitted variables related to disclosure.

In addition, we also employ an econometric solution to address the question of omitted characteristics. The first way we do this is to include firm fixed effects. This has the effect of controlling for any omitted firm characteristics that remain constant over the sample. The identification in such a case is coming only from firms that switch between (for instance) daytime and evening announcements. We examine this in Table IX. The regressions are similar to those in Table VI and Table VII, with Table IX Panel A corresponding to the timing of news

regressions and Panel B corresponding to the number of contacts regressions. For regressions that use *wire* and *paper* as dependent variables, we use fixed effect logit regressions, and for those using quantities (*lnumwires* and *lnum_papers*) we use OLS regressions with firm fixed effects. All standard errors are clustered by firm and date.

Since the fixed effects regressions rely on variation within a firm, it is important to understand how much within-firm variation there actually is for timing and contact detail. In the data, 34.4% of the firms in our sample exhibit some variation in the timing of their disclosure (i.e. they sometimes release earnings in the evening and sometimes release during the day). For contact details, 63.5% of firms have some variation over time in the number of contacts that they list. In addition, in 7.2% of the releases the number of phone numbers increases and in 7.3% of the releases the number of phone numbers goes down from one release to the next (for the same firm). This suggests that there are reasonable levels of within-firm variation (without which the tests would lack any power), but also a large number of firms that exhibit only a single choice of timing, making the test an important one.

Table IX Panel A shows that releasing in the evening reduces coverage in both newspapers and newswires, even after controlling for firm fixed effects. As noted in Wooldridge (2003), we can multiply logit coefficients by .625 to compare them to probit estimates in Table VI. In doing so, we find that the magnitude of the coefficient in (1) (with the dependent variable being the dummy variable *wire*) is somewhat smaller than in Table VI. For the probability of newspaper coverage, the magnitude of an evening release is larger with the addition of fixed effects in column (3) (which uses the dummy variable *paper*). In terms of the total amount of coverage, in regressions (2) and (4), we continue to find that releasing in the

evening reduces the amount of newswire and newspaper coverage conditional on receiving some coverage. Specifically, evening releases receive 12% and 6% less wire and newspaper coverage respectively.

Panel B examines whether the effects of having multiple contacts persist after controlling for firm fixed effects. In this case, the evidence is weaker. In column (1), multiple contacts are associated with a higher probability of being covered in newswires, but this effect is not apparent when examining the total amount of newswire coverage. For newspapers, having multiple contacts does not show a statistically significant effect on coverage once firm fixed effects are added. As a result, having multiple contacts on press releases has an association with greater coverage, but this relationship seems to be linked to fixed firm characteristics and may not be a direct effect of the multiple contacts.

For the case of evening releases, which seem to show an effect in Table IX, we also examine whether the effect of evening releases on coverage is evident when using change regressions. The dependent variable is the change in wire or newspaper coverage between the current earnings release and the release before the switch. The dependent variable in the change in wire and paper regressions take on a value of -1 if it is no longer covered, 0 if coverage is the same, and 1 if the release is now covered. The number of wires and papers regressions indicate the difference in the amount of coverage between the releases. The independent variables of interest are two indicator variables showing whether a firm switched its release to the evening (from a prior release in the morning) or switched its release to the morning (from a prior release in the evening).

Table X presents the results of the change regressions. We find that changing the time affects whether the firm will receive some wire coverage and the amount of wire coverage. In particular, firms switching to the evening receive nearly one less article. Similarly, for papers, we find evidence that switching affects the likelihood and amount of coverage. A firm switching to a morning release improves the likelihood of paper coverage by approximately 6%.

These results provide fairly robust evidence that the timing of press releases can impact coverage and that this is unlikely to be driven by selection effects or firm characteristics. The impact of evening coverage occurs when examining firms that change their disclosure policies and when adding in firm fixed effects to control for omitted fixed firm characteristics. In terms of the possibility of omitted time-varying variables, particularly those relating to strategic disclosure, we are able to exclude the most obvious motivations for strategic timing, namely good versus bad news. Overall, our results are consistent with disclosing during the evening having a causal impact on reducing coverage.

6. Regional Paper Coverage

Our analysis and discussion in sections 3, 4 and 5 focused on national newspapers and electronic newswire services. Regional publications also play a role in covering firms and may act as a substitute or complement to national/wire coverage. In particular, given their closer proximity to local firms and the interest of their readers, we may suspect that local firms would provide greater coverage of local firms (e.g Miller and Shanthikumar (2009)). At the same time, investors are located around the country and therefore national papers and newswire services still have an interest in covering these firms to satisfy investors demand for timely reporting.

Therefore, in this section, we seek to examine whether regional papers are likely to supplement national/wire coverage as a complementary product or fill in a gap for local coverage that may be missing from other publication types.

One obstacle in empirically investigating regional coverage is the limited availability of local papers on academic news databases.¹⁰ As a result, one might incorrectly conclude that the local press does not cover a particular set of local firms not do a true lack of coverage, but rather data selection created by the available research database.

To overcome this limitation, we focus on our analysis on one specific major market, Boston that has many publicly traded firms and several major papers all with availability on Factiva (i.e. Boston Globe and Boston Herald). This choice improves our identification and mitigates any concern that our inferences might be biased by missing local news data. Following the same procedure in section 3 of the paper, we download all articles from the Boston papers and search for names of all firms.¹¹ Since our analysis focuses on local firms, we designate a firm as local if its headquarters (as defined by the zip code on Compustat) is located within 100 miles of the paper's headquarters.¹²

Figure I displays a Venn diagram of our analysis of coverage between different publications for local Boston firms. It shows that 84% of firms receive coverage by some source with newswires providing the majority of this coverage. National papers provide .4% of coverage not included by wires. Boston papers provide very little incremental coverage over

¹⁰ Factiva, for example, excludes 220 regional papers from its academic version. Many of these excluded papers represent the primary local paper for their market (e.g. Chicago Tribune, Los Angeles Times).

¹¹ Because of some restrictions by Dow Jones on the amount of articles were able to download, our analysis of Boston news articles is from 2001-2005.

¹² The distance from a firm's headquarters to the paper's headquarters was calculated using the Haversine formula that calculates the straight line distance between two points using the longitude and latitude of the locations.

national newspaper or newswires services. Virtually all Boston firms that receive any media coverage will receive either wire or national paper coverage. If neither of these sources offer the story, our analysis suggests that it is unlikely to be picked up by one of the two Boston regional papers. Ultimately, this suggests that the regional papers act as a complement, rather than substitute for national/wire publications for at least earnings news for Boston firms. Thus, this provides some level of assurance that our analysis of binary coverage (i.e. coverage/no coverage) in prior sections is a reasonable comprehensive analysis of coverage.

7. Conclusion

The growing literature on the economic effects of press coverage in financial markets shows that coverage by the financial press significantly affects both the trading and pricing of securities. However, there is limited research on the factors that influence the amount of coverage. We investigate variables including size, industry, level of unexpectedness, negativity of news, timing, press wire service choice, and ease of firm access. We find that the largest determinants of coverage are fixed firm characteristics, namely size and industry. We also show that unexpected news is more likely to be covered, as is negative news (specifically by newspapers). We find evidence that releasing news during the evening significantly reduces the probability of receiving newswire and newspaper coverage. However, we do not find compelling evidence that a greater number of contacts or the choice of press wire service significantly impacts the amount of wire or newspaper coverage in an economically meaningful way. Ultimately, our results suggest that firm characteristics and the information contained in

the release primarily determine coverage, with factors about how the release is issued playing a smaller role.

These results are not to suggest that managers do not have choices available that can influence coverage over a longer time horizon. In particular, evidence supports that firms engaging an external investor relations firms receive differential coverage (Solomon (2010), Bushee and Miller (2011)). However, our results suggest that this engagement is not simply a strategic change in the way a firm issues a single release. Rather this is a more sustained set of interactions that changes a firm's relationship with the press.

As the economics of the media business continue to change, we anticipate that managers' ability to influence the amount of coverage their firm receives will also evolve. On the wire side, newswire services are increasingly using research desks located around the world. This permits greater staffing at all times of the day. Moreover, outsourcing work to lower cost locations permits services to grow their staff and increase the amount of coverage. Following in the steps of newswires, print publications are increasingly distributing information electronically too. Thus, the differences between newswires and "print" publications are shrinking.

Our study offers several areas for potential future research. First, our analysis focuses on earnings releases, but firms issue many other types of releases. It would be worthwhile to understand whether the same forces influence coverage of other releases in the same predictable way. One significant hurdle in exploring other types of releases is controlling for the heterogeneity in the disclosures. Second, the emergence of alternative forms of coverage, like blogs, continues to gain greater credence as an alternative form of journalism to mainstream

newswires and newspapers. Investigating how these new mediums differ from the traditional press may offer timely insights into the influence of the press in the financial markets.

Regional publications provide a further area for additional study. Interestingly, at least in our specific context, our analysis suggests that the demise of local publications will not significantly affect investor's information set about firms. However, additional analysis on other types of firm disclosures and the type of analysis conveyed by the media would be useful to fully assess the external validity of such an inference. Moreover, examining other regions and cities would provide a useful robustness test to understand the extent with which this conclusion holds.

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Figure I: Venn Diagram of Press Coverage

This figure displays the percentage of earnings announcements by Boston firms (i.e. located within 100 miles of newspaper headquarters) that received coverage by publication type from 2001-2005. The Venn diagram shows the percentage of coverage within each group. The intersection of groups represents announcements coverage by more than one publication type. National Papers include the *Wall Street Journal*, *USA Today*, *New York Times*, and *Washington Post* Wires include Dow Jones and Reuters. Boston papers include the *Boston Globe* and *Boston Herald*.

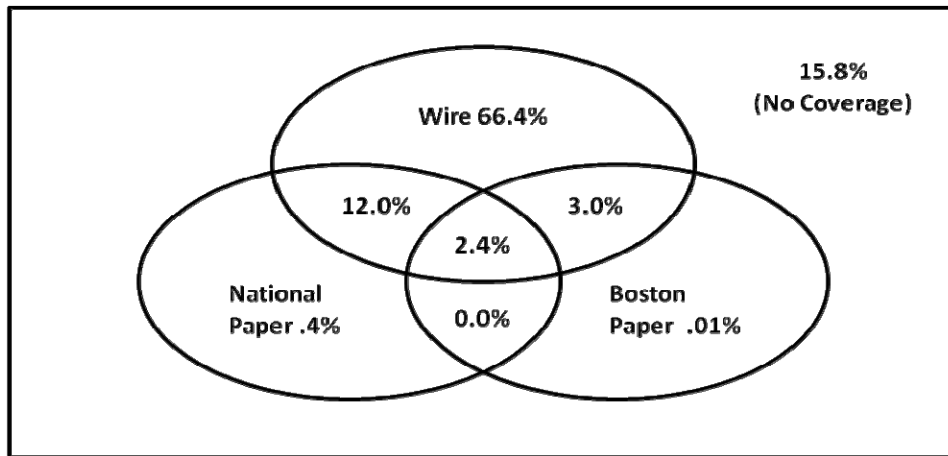


Table I: Firm Summary Statistics

This table provides descriptive statistics for firm and press coverage variables. Panel A provides statistics at the firm level. Market capitalization is calculated as the price multiplied by shares outstanding on CRSP. Absolute surprise is the average absolute deviation of analyst forecasts from actual earnings within ninety days of the earnings announcement. Bad news is an indicator variable which is equal to 1 if the deviation from actual is less than zero. Evening is an indicator variable which is equal to 1 if the release was issued after the market close. PR Newswire and Business Wire are indicators equal to 1 if the release was issued on PR Newswire or Business Wire respectively. Multiple contacts is an indicator which is equal to 1 if the firms provides more than one phone number in the contact information of the release. Panel B contains data on the amount of press coverage. Wire is a binary (0/1) of whether the release is covered by Dow Jones or Reuters. Paper is a binary (0/1) of whether the release is covered by either the *Wall Street Journal*, *USA Today*, *New York Times*, or *Washington Post*. Number wires and number papers provide counts of the number of wire or newspaper articles respectively.

Panel A: Firm and Release Descriptive

	mean	sd	q1	median	q3
Market Cap ('000)	4,244,836	17,479,135	306,752	879,300	2,728,881
Absolute Surprise	0.04	0.11	0.00	0.01	0.03
Bad News	0.31	0.46	0.00	0.00	1.00
Evening	0.39	0.49	0.00	0.00	1.00
PR Newswire	0.54	0.50	0.00	1.00	1.00
Business Wire	0.45	0.50	0.00	0.00	1.00
Multiple Contacts	0.44	0.50	0.00	0.00	1.00

Panel B: Press Coverage

	mean	sd	q1	median	q3
Wire Coverage	0.87	0.34	1	1	1
Number Wires	3.56	4.16	1	2	4
Paper Coverage	0.18	0.39	0	0	0
Number Papers	0.26	0.63	0	0	0

Table II: Correlation Matrix

This table provides a correlation matrix of all variables used in the analysis. See Table I for descriptions. Spearman correlations that are significant at the 5% level are indicated with a *.

Panel A: Firm and Release Variables

	lmcap	asup	Bad News	Evening	Business Wire	Other Press Wire	Multiple Contacts
lmcap	1						
asup	-0.4145*	1					
Bad News	-0.1578*	0.0851*	1				
Evening	-0.1128*	0.0791*	0.0035	1			
Business Wire	-0.0253*	0.0097	0.0011	0.0116	1		
Other Press Wire	-0.0193*	0.0289*	0.0054	0.0145	-0.0770*	1	
Multiple Contacts	0.0837*	0.0106	-0.0013	-0.0059	-0.0681*	-0.0420*	1

Panel B: Press Coverage Variables

	Wire	# Wires (log)	Paper	# Papers
Wire Coverage	1.000			
# Wires (log)	0.5958*	1.000		
Paper Coverage	0.1445*	0.4263*	1.000	
# Papers (log)	0.1427*	0.4324*	0.9956*	1.000

Table III: Size and Industry Regressions

This table examines how press coverage of earnings press releases is affected by firm size and industry. For dependent variables, wire is a binary (0/1) of whether the release is covered by Dow Jones or Reuters. Paper is a binary (0/1) of whether the release is covered by either the *Wall Street Journal*, *USA Today*, *New York Times*, or *Washington Post*. The wire and paper models are probit regressions and the *Inum_wires* and *Inum_papers* are OLS regressions. *lncap* is the log of the firm's market capitalization, and *size quintile* are dummy variables for whether the firm was in that quintile of market capitalization (with 5 being the largest firms, and 1 being the omitted category). Industry controls are 48 dummy variables for industries as determined by their SIC code, with the classifications being those of Fama and French (1997). Standard errors are in parentheses and clustered two-way, by day and firm. *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	wire	wire	lnum_wires	lnum_wires	paper	paper	lnum_papers	lnum_papers
lncap	0.422*** (0.0279)		0.270*** (0.00749)		0.435*** (0.0221)		0.0934*** (0.00585)	
mcap quintile 2		0.456*** (0.0647)		0.228*** (0.0283)		0.230* (0.131)		0.00714 (0.00848)
mcap quintile 3		0.873*** (0.0681)		0.462*** (0.0303)		0.362*** (0.138)		0.0195** (0.00878)
mcap quintile 4		1.447*** (0.0734)		0.765*** (0.0321)		0.752*** (0.142)		0.0681*** (0.0114)
mcap quintile 5		2.073*** (0.112)		1.283*** (0.0381)		1.632*** (0.142)		0.318*** (0.0208)
constant	-4.757*** (0.541)	-0.316 (0.373)	-2.645*** (0.255)	0.308 (0.241)	-7.151*** (0.597)	-1.938*** (0.556)	-1.204*** (0.112)	-0.00168 (0.0844)
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# Observations	27,482	27,482	27,482	27,482	27,482	27,482	27,482	27,482
R ²	0.18	0.18	0.41	0.36	0.24	0.20	0.26	0.21

Table IV: Surprise Regressions

This table examines how press coverage of earnings press releases is affected by the level of unexpectedness (i.e. surprise). For dependent variables, wire is a binary (0/1) of whether the release is covered by Dow Jones or Reuters. Paper is a binary (0/1) of whether the release is covered by either the *Wall Street Journal*, *USA Today*, *New York Times*, or *Washington Post*. The wire and paper models are probit regressions and the lnum_wires and lnum_papers are OLS regressions. For independent variables, *asup* is the absolute difference between the earnings per share and the median analyst forecast of earnings per share. *Surprise quintile* refers to quintiles of *asup*, with 5 being the largest surprises and 1 being the omitted category. Standard errors are in parentheses and clustered two-way, by day and firm.. *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	wire	wire	lnum_wires	lnum_wires	paper	paper	lnum_papers	lnum_papers
asup	0.235 (0.178)		0.399*** (0.0670)		1.627*** (0.162)		0.359*** (0.0346)	
lmcap	0.430*** (0.0328)	0.423*** (0.0281)	0.278*** (0.00824)	0.271*** (0.00761)	0.467*** (0.0227)	0.443*** (0.0223)	0.101*** (0.00615)	0.0940*** (0.00584)
surprise quintile 2		0.0415 (0.0373)		-0.00205 (0.0131)		-0.0258 (0.0458)		-0.00538 (0.00846)
surprise quintile 3		0.0880** (0.0388)		0.0483*** (0.0145)		0.101** (0.0495)		0.0194** (0.00972)
surprise quintile 4		0.126*** (0.0419)		0.0668*** (0.0158)		0.136*** (0.0471)		0.0266*** (0.00912)
surprise quintile 5		0.0910 (0.0695)		0.128*** (0.0253)		0.406*** (0.0604)		0.0771*** (0.0140)
constant	-4.870*** (0.597)	-4.825*** (0.553)	-2.772*** (0.259)	-2.700*** (0.251)	-7.635*** (0.594)	-7.392*** (0.577)	-1.318*** (0.113)	-1.231*** (0.107)
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# Observations	27,482	27,482	27,482	27,482	27,482	27,482	27,482	27,482
R ²	0.18	0.18	0.42	0.42	0.25	0.25	0.27	0.26

Table V: Negative News

This table examines how press coverage of earnings press releases is affected by the negativity of news. For dependent variables, wire is a binary (0/1) of whether the release is covered by Dow Jones or Reuters. Paper is a binary (0/1) of whether the release is covered by either the *Wall Street Journal*, *USA Today*, *New York Times*, or *Washington Post*. The wire and paper models are probit regressions and the *Inum_wires* and *Inum_papers* are OLS regressions. Bad news is an indicator that is equal to one if the surprise is negative. For independent variables, *asup* is the absolute value of the earnings surprise, namely the absolute value of the difference between the earnings per share and the median analyst forecast of earnings per share. *Surprise quintile* refers to quintiles of *asup*, with 5 being the largest surprises and 1 being the omitted category. *Bad news* is a dummy variable that equals 1 if earnings per share are below the median analyst forecast, and zero otherwise. *Bad quintile* is quintiles of earnings surprise when the surprise is negative, with 5 being the most negative surprises. Standard errors are in parentheses and clustered two-ways, by day and firm. *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	wire	wire	Inum_wires	Inum_wires	paper	paper	Inum_papers	Inum_papers
lncap	0.431*** (0.0329)	0.423*** (0.0281)	0.279*** (0.00826)	0.273*** (0.00770)	0.469*** (0.0229)	0.451*** (0.0226)	0.102*** (0.00619)	0.0958*** (0.00591)
bad news	0.0148 (0.0253)	0.0270 (0.0502)	0.0207** (0.00991)	0.0204 (0.0180)	0.0557* (0.0324)	-0.0405 (0.0588)	0.0160*** (0.00582)	-0.00165 (0.0108)
asup	0.228 (0.177)		0.389*** (0.0667)		1.606*** (0.161)		0.351*** (0.0342)	
surprise quintile 2		0.0194 (0.0463)		-0.00512 (0.0157)		-0.0443 (0.0522)		-0.0103 (0.00948)
surprise quintile 3		0.0921** (0.0466)		0.0513*** (0.0168)		0.0716 (0.0557)		0.0127 (0.0105)
surprise quintile 4		0.142*** (0.0481)		0.0671*** (0.0174)		0.108** (0.0515)		0.0200** (0.00984)
surprise quintile 5		0.102 (0.0863)		0.116*** (0.0286)		0.308*** (0.0676)		0.0575*** (0.0155)
bad quintile 2		0.0605 (0.0787)		0.00944 (0.0258)		0.0617 (0.0815)		0.0156 (0.0138)
bad quintile 3		-0.0150 (0.0759)		-0.00692 (0.0264)		0.118 (0.0868)		0.0249 (0.0151)
bad quintile 4		-0.0507 (0.0863)		0.00471 (0.0298)		0.126 (0.0880)		0.0267* (0.0148)
bad quintile 5		-0.0347 (0.0826)		0.0324 (0.0314)		0.314*** (0.0855)		0.0548*** (0.0170)
constant	-4.882*** (0.598)	-4.833*** (0.551)	-2.788*** (0.257)	-2.727*** (0.249)	-7.676*** (0.596)	-7.484*** (0.586)	-1.330*** (0.114)	-1.252*** (0.109)
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# Observations	27,482	27,482	27,482	27,482	27,482	27,482	27,482	27,482
R ²	0.18	0.18	0.42	0.42	0.25	0.25	0.27	0.26

Table VI: Timing

This table examines how press coverage of earnings press releases is affected by the timing of the release. For dependent variables, *wire* is a binary (0/1) of whether the release is covered by Dow Jones or Reuters. *Paper* is a binary (0/1) of whether the release is covered by either the *Wall Street Journal*, *USA Today*, *New York Times*, or *Washington Post*. The main independent variable is *evening*, a dummy variable equal to one if the firm discloses after market hours. Panel A presents univariate comparisons of *evening* and press coverage. Panel B presents multivariate regressions of coverage on *evening*, with *asup* being the same as in Table V and *lmcap* the same as Table III. All regressions include industry controls that are designated by 48 dummy variables for industries as determined by their SIC code, with the classifications being those of Fama and French (1997). Standard errors are in parentheses and clustered two-ways, by day and firm. *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Univariate Statistics

Panel A: Univariate Statistics				
<i>Wire Coverage</i>	mean	sd	diff:	t-stat:
Morning	0.91	0.29	0.08	14.9
Evening	0.83	0.38		
<i>Newspaper Coverage</i>	mean	sd	diff:	t-stat:
Morning	0.26	0.44	0.14	22.3
Evening	0.11	0.32		

Panel B: Levels Regression

	(1)	(2)	(3)	(4)
	wire	lnum_wires	paper	lnum_papers
<i>evening</i>	-0.315*** (0.0476)	-0.147*** (0.0209)	-0.443*** (0.0638)	-0.0793*** (0.0112)
<i>asup</i>	0.457*** (0.177)	0.560*** (0.0808)	1.702*** (0.220)	0.363*** (0.0425)
<i>lmcap</i>	0.511*** (0.0209)	0.310*** (0.00759)	0.472*** (0.0278)	0.107*** (0.00707)
Constant	-6.269*** (0.403)	-3.318*** (0.285)	-11.38*** (0.420)	-1.446*** (0.0987)
# Observations	15,856	15,856	15,856	15,856
R ²	0.21	0.46	0.26	0.27

Table VII: Ease of Access

This table examines how press coverage of earnings press releases is affected by the ease of firm access. For dependent variables, *wire* is a binary (0/1) of whether the release is covered by Dow Jones or Reuters. *Paper* is a binary (0/1) of whether the release is covered by either the *Wall Street Journal*, *USA Today*, *New York Times*, or *Washington Post*. For independent variables, *multiple contacts* is a dummy variable that equals one if the firm provides more than one contact phone number in the release. The *wire* and *paper* models are probit regressions and the *lnum_wires* and *lnum_papers* are OLS regressions. Panel A presents univariate comparisons of *multiple contacts* and press coverage. Panel B presents multivariate regressions of coverage on *multiple contacts*, with *asup* being the same as in Table V and *lmcap* the same as Table III. All regressions include industry controls that are designated by 48 dummy variables for industries as determined by their SIC code, with the classifications being those of Fama and French (1997). Standard errors are in parentheses and clustered two-ways, by day and firm. *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Univariate Statistics

<i>Wire Coverage</i>	mean	sd	diff:	t-stat:
Single Contact	0.86	0.35	0.021	5.1
Multiple Contacts	0.88	0.33		
<i>Newspaper Coverage</i>	mean	sd	diff:	t-stat:
Single Contact	0.15	0.36	0.069	14.8
Multiple Contacts	0.22	0.42		

Panel B: Levels Regressions

	(1)	(2)	(3)	(4)
	wire	lnum_wires	paper	lnum_papers
multiple contacts	0.0667* (0.0347)	0.0581*** (0.0136)	0.157*** (0.0417)	0.0337*** (0.00811)
asup	0.225 (0.178)	0.387*** (0.0667)	1.595*** (0.162)	0.351*** (0.0344)
lmcap	0.429*** (0.0329)	0.276*** (0.00821)	0.461*** (0.0226)	0.1000*** (0.00613)
Constant	-4.884*** (0.595)	-2.769*** (0.250)	-7.612*** (0.589)	-1.316*** (0.112)
# Observations	27,482	27,482	27,482	27,482
R ²	0.18	0.42	0.25	0.27

Table VIII: Press wire Service

This table examines how press coverage of earnings press releases is affected by the choice of press wire service. For dependent variables, wire is a binary (0/1) of whether the release is covered by Dow Jones or Reuters. Paper is a binary (0/1) of whether the release is covered by either the *Wall Street Journal*, *USA Today*, *New York Times*, or *Washington Post*. For independent variables, *Business wire* and *Other Press wire* are dummy variables equal to one for the choice of press wire service from the contact information in the release, with *PR Newswire* being the omitted category. The wire and paper models are probit regressions and the *lnum_wires* and *lnum_papers* are OLS regressions Panel A presents univariate comparisons of press release service and press coverage. Panel B presents multivariate regressions of coverage on *Business wire* and *Other Press wire*, with *asup* being the same as in Table V and *lmcap* the same as Table III. All regressions include industry controls that are designated by 48 dummy variables for industries as determined by their SIC code, with the classifications being those of Fama and French (1997). Standard errors are in parentheses and clustered two-ways, by day and firm. *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Univariate Statistics

<i>Wire Coverage</i>	mean	sd	comparison		diff:	t-stat:
PR Newswire	0.87	0.34	PR Newswire	Business Wire	0.01	0.7
Business Wire	0.86	0.34	PR Newswire	Other	0.06	3.1
Other	0.81	0.40	Business Wire	Other	0.05	3.0
<i>Newspaper Coverage</i>	mean	sd	comparison		diff:	t-stat:
PR Newswire	0.19	0.39	PR Newswire	Business Wire	0.01	1.3
Business Wire	0.18	0.39	PR Newswire	Other	0.07	2.8
Other	0.12	0.33	Business Wire	Other	0.06	2.5

Panel B: Levels Regressions

	(1)	(2)	(3)	(4)
	wire	lnum_wires	paper	lnum_papers
Business Wire	0.00463 (0.0359)	-0.0208 (0.0161)	-0.00932 (0.0526)	0.00821 (0.0103)
Other Presswire	-0.107 (0.136)	-0.0334 (0.0536)	-0.125 (0.153)	-0.0110 (0.0215)
asup	0.239 (0.179)	0.401*** (0.0672)	1.631*** (0.161)	0.358*** (0.0346)
lmcap	0.430*** (0.0328)	0.278*** (0.00824)	0.467*** (0.0227)	0.101*** (0.00615)
constant	-4.874*** (0.596)	-2.759*** (0.255)	-7.629*** (0.596)	-1.323*** (0.114)
# Observations	27,482	27,482	27,482	27,482
R ²	0.18	0.42	0.25	0.27

Table IX: Fixed Effects Regressions for Timing and Ease of Access

This table examines how press coverage of earnings press releases is affected by the timing of the release and ease of access after controlling for firm fixed effects. For dependent variables, *wire* is a binary (0/1) of whether the release is covered by Dow Jones or Reuters. *Paper* is a binary (0/1) of whether the release is covered by either the *Wall Street Journal*, *USA Today*, *New York Times*, or *Washington Post*. The regressions are the same as in Table VI Panel B (corresponding to Panel A in this Table) and Table VII Panel B (corresponding to Panel B in this Table), but with the inclusion of firm fixed effects. For independent variables, *evening* is a dummy variable equal to one if the firm discloses after market hours. *multiple contacts* is a dummy variable that equals one if the firm provides more than one contact phone number in the release. The *wire* and *paper* models are logit regressions and the *lnum_wires* and *lnum_papers* are OLS regressions. All regressions include industry controls that are designated by 48 dummy variables for industries as determined by their SIC code, with the classifications being those of Fama and French (1997). Standard errors are in parentheses and clustered two-ways, by day and firm. *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Timing of Releases

	(1)	(2)	(3)	(4)
	wire	lnum_wires	paper	lnum_papers
evening	-0.477*** (0.109)	-0.119*** (0.0180)	-1.125*** (0.132)	-0.0557*** (0.00884)
asup	0.288 (0.338)	0.0727 (0.0577)	1.138** (0.491)	0.0355 (0.0246)
lmcap	0.444*** (0.0809)	0.0152 (0.0156)	0.169* (0.0907)	0.00924 (0.00628)
Constant		1.143*** (0.218)		0.0609 (0.0879)
# Observations	15,856	15,856	15,856	15,856

Panel B: Ease of Access

	(1)	(2)	(3)	(4)
	wire	lnum_wires	paper	lnum_papers
multiple contacts	0.132** (0.0674)	-0.00495 (0.00944)	0.108 (0.0710)	0.00572 (0.00413)
asup	0.503** (0.213)	0.0657* (0.0369)	1.438*** (0.312)	0.0593*** (0.0162)
lmcap	0.722*** (0.0521)	0.0560*** (0.0106)	0.117* (0.0626)	0.00440 (0.00397)
Constant		0.469*** (0.146)		0.0899* (0.0546)
# Observations	27,482	27,482	27,482	27,482

Table X: Change Regressions for Timing

This table examines how press coverage of earnings press releases is affected by the timing of the release under a change regression specification. For dependent variables, $\Delta wire$ describes whether the release is covered by Dow Jones or Reuters in the current earnings release compared with the prior release and takes on a value of -1 (no longer covered), 0 (same coverage), or 1 (now covered). $\Delta Paper$ describes whether the release is covered by either the *Wall Street Journal*, *USA Today*, *New York Times*, or *Washington Post* in the current earnings release compared with the prior release and takes on a value of -1, 0, or 1. Δnum_wires and Δnum_papers indicate the difference in the amount of coverage between the releases. All regressions are OLS regressions clustered two-ways, by day and firm. Switch evening and switch morning are indicator variables equal to one if the firm changes to evening or morning respectively in the current earnings release. All regressions include industry controls that are designated by 48 dummy variables for industries as determined by their SIC code, with the classifications being those of Fama and French (1997). *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)
	$\Delta wire$	Δnum_wires	$\Delta paper$	Δnum_papers
switch evening	-0.0394** (0.0171)	-0.754*** (0.118)	-0.0541*** (0.0140)	-0.0838*** (0.0175)
switch morning	0.0343** (0.0170)	0.443*** (0.102)	0.0596*** (0.0161)	0.0774*** (0.0216)
$\Delta asup$	-0.0115 (0.0428)	0.276 (0.198)	0.0334 (0.0274)	0.0199 (0.0338)
$\Delta lncap$	0.0388*** (0.0142)	0.0262 (0.0778)	0.00491 (0.0113)	-0.00743 (0.0185)
constant	-0.00343 (0.0111)	-0.0554 (0.0226)	-0.000490 (0.00107)	0.000628 (0.00169)
# Observations	15,856	15,856	15,856	15,856