Do Acquirers Announce Better Deals after Disclosing Bad News?

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Abstract

We examine whether negative corporate news affects a manager's decision to announce value-enhancing merger and acquisitions (M&As) attempts. Using an archive of electronically disseminated company press releases, we show that the percentage of negative firm-specific news before an M&A announcement is positively associated with the acquirer's three-day cumulative abnormal returns (CARs) around the merger announcement. Also, CARs are more favorable for cash deals involving large and privately owned targets when the announcements are made after a large percentage of negative news. These results are consistent with the notion that managers are more inclined to undertake value-enhancing acquisitions when investors monitoring activities and managers' career concerns are heightened following negative news disclosures.

Keywords: mergers and acquisitions, news analytics, press releases, voluntary disclosures

JEL Classification: G34, G14

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1. Introduction

A large body of research suggests that negative news stories about a firm influence managers to take corrective actions to enhance shareholder wealth (e.g., Dyck & Zingales, 2002, 2004; Dyck, Morse, & Zingales, 2010; Dyck, Volchkova, & Zingales, 2008; Joe, Henock, & Robinson, 2009; Bushee, Core, Guay, & Hamm, 2010; Miller, 2006). For instance, Liu and McConnell (2013) show that when deciding whether to abandon a value-reducing acquisition attempt, managers' sensitivity to the negative firm's stock price reaction at the announcement is influenced by the level and the tone of media attention over the 10 calendar days following the announcement of the proposed transaction. The authors argue that for a given decline in stock price at acquisition announcement, the manager of the acquiring firm incurs a greater loss in reputational capital when the proposed transaction is widely covered by the media. When the announcement is greeted by a more negative tone in the media coverage, managers are especially likely to abandon the proposed transaction.

Surprisingly, little work has examined how negative corporate news prior to the announcements of acquisitions affects managers' decisions to undertake the value-enhancing acquisition in the first place. Moreover, although scholars have conducted extensive academic research on the determinants of mergers and acquisitions (M&As) outcomes, little empirical evidence exists regarding the effects that prior negative news disclosures by the firm have on the market response to M&A announcements. These effects are the focus of this study. We argue that to the extent that negative corporate news before an M&A event is associated with a higher likelihood that managers will attempt a value-creating acquisition (i.e., an acquisition accompanied by a positive stock market reaction at the announcement), our study provides additional evidence for the roles of investors' monitoring efforts and managers' reputational capital in aligning their interests in an M&A setting.

To measure the effects of negative company news on M&A outcomes, we use an archive of company press releases disseminated by firms using electronic wire services. Boulland, Degeorge, and Ginglinger (2017) recently show that firms that use such wire services are likely to attract more attention from investors. They argue that the effect of wire services on investor attention results from the news electronic format, which effectively converts raw company news into tradeable information. Our news data come from Thomson Reuters News Analytics (TRNA), which transforms unstructured, real-time news into a machine-readable feed that traders can use to develop quantitative strategies. The advantage of this data set is that it contains press releases that have appeared on the screens of professional traders; therefore, it may be a better and more direct source of data to proxy for the information arrival rates to professional investors than other news databases.

We begin our investigation by examining whether the fraction of negative press releases disclosure by the acquirer before an M&A announcement is significantly associated with the market's reaction to the announcement. We find that the percentage of company news with a negative tone one year before the M&A announcement positively impacts cumulative abnormal returns (CARs) over a three-day interval (days –1 to +1) around the announcement. This result indicates that firms with high levels of negative news disclosures before an acquisition announcement experience substantial increases in their stock prices around the announcement date. These results suggest that negative news regarding the acquirer before the acquisition announcement plays a significant role in influencing managers' decisions to undertake value-enhancing acquisitions.

We also find that, on average, the effect of pre-announcement negative news on acquirers' abnormal returns is more positive for announcements of large deals involving privately owned

targets and when the means of payment is all cash. The pre-announcement negative news effect is robust to controlling for the various factors that can potentially affect the market's reaction to the merger announcement. Our results remain robust when we use a matching procedure to control for omitted firm characteristics that can bias the estimated impact of pre-announcement negative news disclosures on short-term market reaction.

We interpret our results as consistent with the notion that managers are more inclined to undertake value-enhancing acquisitions when investors' attention and monitoring efforts are increased due to the disclosure of negative news in the past year. We also hypothesize that career concerns related to the release of bad news affect managers' decision to announce value-enhancing M&A deals. The announcement of a good deal ensures managers with continued employment and can boost their wealth connected to firm value. In contrast, managers who engage in value-destroying M&As may be quickly terminated and thus their wealth reduced. When managers are fired, they suffer an important loss of future income from their current employer, the loss of post-retirement benefits (including directorships), and diminished future employment opportunities.

Our results relate to those of Dutta, John, Saadi, and Zhu (2014) who show that if a firm makes an acquisition despite prevalent negative media coverage, the market reacts negatively the M&A announcement. Our approach differs from Dutta et al. in two ways. First, they use Factiva database for their news article search, and, second, they perform content analysis for many words based on Loughran and McDonald (2011) and Malmendier and Tate (2008). We argue that the use of dictionaries to measure tone has several limitations. For instance, modifiers (e.g., negative construction, adjectives, or adverbs) alter the meaning of words. In contrast Dutta et al., we estimate the effect of the negative tone of news on the market reaction by using firm-originated press releases in the TRNA database. TRNA also uses a more deeply parsed procedure for

contextual meaning by using a neural network to construct measures of news sentiment for each news story at the sentence level. Sinha (2012) and Infonic (2008) provide further discussion of TRNA's text processing. In addition, the information communicated in press releases is credibly than media news articles, and company disclosures are widely followed by investors and analysts.

Our study is also related to Ahern and Sosyura (2014), who show that firms originate and disseminate information to the media to influence their stock prices during M&A negotiations, particularly when two companies are in the process of determining the stock exchange ratio. Ahern and Sosyura call this strategy *active media management*. This strategy generates a temporary run-up in bidders' stock prices during the period when the exchange ratio is being negotiated, which substantially impacts the takeover price. Their results demonstrate that the timing and content of financial media coverage may be biased by firms seeking to manipulate their stock price. Unlike Ahern and Sosyura, who examine the exchange ratio only, we estimate the effect of media coverage on stockholder wealth by calculating the cumulative abnormal returns around the M&A announcement.

We contribute to the financial literature in several ways. First, we augment the research on behavioral finance by introducing and testing a firm-specific measure of investor attention using a novel database of press releases disseminated via electronic wire services from a news analytics provider. Second, we contribute to the sparse literature that examines the effects of news disclosure in corporate events (e.g., Ahern & Sosyura, 2014; Liu, Sherman, & Zhang, 2014). Third, we contribute to the growing literature on news sentiment and its influence on stock prices (e.g., Tetlock, 2007; Tetlock, Saar-Tsechansky, & Macskassy, 2008). In contrast to previous literature that uses news articles published in major newspapers, we focus on the firm-originated news that professional traders receive in real time. Also, we are among the first to study the impact of pre-

deal announcement news disclosures on the acquisitions of both privately and publicly traded targets.

The remainder of the paper is structured as follows. Section 2 develops the working hypothesis. Section 3 presents the data sets that we use in the empirical analysis. Section 4 establishes the key empirical results. Section 5 offers some additional analysis. Finally, Section 6 provides a summary and our concluding remarks.

2. Hypothesis development

Our discussion suggests that negative news disclosures have two major consequences: increased investors monitoring efforts and a loss of managers' reputational capital. Recent literature shows that the amount of a firm's news stories published by the press play a monitoring role in corporate governance. Dyck and Zingales (2002) find that media coverage influences corporate behavior by affecting manager reputation in the labor market (Fama, 1980; Fama & Jensen, 1983), and negative news stories can force managers to take corrective action (e.g. Dyck et al., 2008, 2010; Joe et al., 2009; Liu & McConnell, 2013). Several authors have also suggested that managers tend to accumulate and withhold bad news up to a certain threshold but immediately reveal good news to investors. Thus, negative news disclosures are particularly informative (relative to positive or neutral news items). Kothari, Shu, and Wysocki (2009) argue that management compensation and career concerns can motivate managers to withhold bad news and gamble that subsequent corporate events will allow them to bury the bad news. Career concerns broadly encompass the effects of disclosure on the long-horizon effects including the impact on the manager's career (e.g., promotion, employment opportunities within and outside the firm, and potential termination) and the potential loss of post-retirement benefits, including directorships. Consequently, investors pay more attention to negative news, and the market's reaction to negative

news is significantly larger than its reaction to positive news (e.g., Kothari et al., 2009; Sletten, 2012).

We hypothesis that increased investors' attention and managers' career concerns following bad news affect managers' decisions to announce value-enhancing M&A deals (i.e., acquisitions accompanied by a positive stock market reaction at the announcement). The announcement of a good deal ensures managers with continued employment and can also boost their wealth connected to firm value. In contrast, managers who engage in value-destroying M&As may be quickly terminated and thus their wealth reduced. When managers are fired, they suffer an important loss of future income from their current employer, the loss of post-retirement benefits (including directorships), and diminished future employment opportunities. Managers also bear costs arising from explicit contracts such as bonus plans tied to earnings performance or from reduced stock option grants. Managers' career concerns are especially heightened when a firm approaches a state of financial distress (DeAngelo, 1988; Gilson, 1989; Weisbach, 1988). The link between financial distress and management turnover provides managers with incentives to announce a value-creating deal in the hope of an eventual turnaround. Given this discussion, we propose our first hypothesis:

> ***Hypothesis 1****: The magnitude of the short-term market reaction to an M&A announcement is positively related to the degree of bad news disclosures (measured by the percentage of negative press releases) prior to the announcement.*

Yet another interpretation of the positive relation between negative news wires and M&A market reactions is that negative news causes increased awareness of firms by investors (Merton, 1987). In other words, negative news attracts investors' attention, and thus the reaction of stock prices to the announcement of corporate events is larger. For instance, Louis and Sun (2010) examine the differential market response to Friday and non-Friday stock swap M&A

announcements given the evidence that investors are distracted on Fridays (e.g., Bagnoli, Clement, & Watts, 2005; DellaVigna & Pollet, 2009; Patell & Wolfson, 1982; Penman, 1987). Consistent with an investor inattention hypothesis, they find that the market reaction to Friday announcements is less negative (more positive) for acquisitions involving publicly owned (privately owned) targets.

To test this hypothesis, we estimate regression results separately for announcements involving privately and publicly owned targets. If the investor attention hypothesis holds, deals involving publicly owned (privately owned) targets should generate a more negative (positive) market reaction after high levels of negative news (e.g., Louis & Sun, 2010). Instead, if managers' career concerns are heightened following negative news disclosures, market participants will only perceive deals involving private targets as value-enhancing acquisitions because investors know that a target's private status is an important determinant of acquirers' abnormal returns at announcements (Fuller, Netter, & Stegemoller, 2002; Masulis, Wang, & Xie, 2007; Moeller, Schlingemann, & Stulz, 2004). This discussion leads us to our second hypothesis, stated in two parts.

> ***Hypothesis 2a****: The market reaction to announcements after significantly negative news disclosures is more negative (more positive) for acquisitions involving publicly owned (privately owned) targets.*
>
> ***Hypothesis 2b****: The magnitude of the positive relation between bad news disclosures and the short-term market reactions to an M&A announcement is less (more) pronounced for deals involving a publicly owned (privately owned) target.*

Managers' career concerns are especially heightened when a firm approaches a state of financial distress (DeAngelo, 1988; Gilson, 1989; Weisbach, 1988) or when it is falling behind its

competitors. In fact, Wang (2016) argues that one of bidders' primary strategic motives for takeover is their desire to catch up with competitors. If acquisitions are driven by negative shocks that compel the firms to attempt acquisitions to catch up with their competitors, then the market will only perceive large acquisitions as value-enhancing. A similar argument applies to acquisitions launched by managers to recover their lost reputational capital. As such, we state our next hypothesis.

Hypothesis 3*: The magnitude of the positive relation between bad news disclosures and the short-term market reactions to an M&A announcement is more (less) pronounced for large (small) acquisitions.*

Finally, a series of negative news releases decreases the acquirer's stock price. In a stock swap acquisition, the acquiring company exchanges its stock in return for the stock of the target company. The exchange ratio, which determines how many shares are exchanged, is influenced by either the actual stock price or the appraised stock price of the acquirer. The lower the (actual or appraised) stock price is, the more shares need to be issued by the acquirer to purchase the target (Ge & Lennox, 2011). Thus, acquirers with bad news prior to the acquisition create the most value for shareholders if they finance the deal using cash instead of stocks. Given this discussion, we state our last hypothesis.

Hypothesis 4*: Compared with stock swap acquirers, the magnitude of the positive relationship between bad news disclosures and the short-term market reactions to an M&A announcement is most pronounced for cash acquirers.*

3. Data

We start by collecting all company press releases from TRNA. TRNA is a comprehensive archive that contains all news that companies publish via newswire services. TRNA uses a neural network to construct measures of news sentiment for each news story. The analysis of each news item is conducted at the sentence level rather than the word level, which is a significant improvement over a simple dictionary approach that counts positive and negative words. Sinha (2010), Kyle, Obizhaeva, Sinha, and Tuzun (2012), Cahan, Chen, and Nguyen (2013), and Hendershott, Livdan, & Schürhoff (2015) describe the data set in detail. For this study, the sample covers all press releases Reuters sent to its clients from January 2003 through December 2012.

We only consider news items for U.S. common stocks listed on the New York Stock Exchange (NYSE), the American Stock Exchange (Amex), and the Nasdaq National Market (NASDAQ). In total, TRNA contains about 1.9 million press releases for the stocks listed on these exchanges from January 2003 to December 2012. The average number of firms the database covered during this period was 3,820. We then merge the TRNA data set with stock prices from the Center for Research in Security Prices (CRSP) and firms' financial information, taken from COMPUSTAT. After merging the databases, we identify 1,447,656 press releases from January 2003 to December 2012 on 3,392 companies. The sources and contents of press releases in our final sample are presented in Appendix A and B. Appendix A shows that more than 80% of press releases in our sample are published by PR Newswire, Business Wire, and Regulatory News Services. Appendix B shows that almost 25% of press releases in our sample relate to corporate financial results such as dividends, annual reports, forecasts and estimates of future earnings, and corporate insolvencies and bankruptcies.

Next, we collect data on M&As from the Thomson Reuter's SDC Platinum Financial Securities database. Thomson Reuter's SDC manages all M&A transactions in the United States that involve at least 5% of the ownership change of a company. We apply several filters to the M&A data. We download all U.S. M&A transactions from 2003 to 2012. We exclude restructuring activities labeled as recapitalizations, leveraged buyouts, repurchases, spin-offs, acquisitions of a partial interest, acquisitions of remaining interest, buybacks, and exchange offers because these restructuring activities do not consist of an ownership change as in the merger of two or more companies. We exclude acquirers with a nonpositive market value of assets, computed by summing the book value of long-term debt, the market value of equity, and the total value of preferred stocks. To be included in the sample, the acquirer must purchase 100% of the target's asset. Due to the possibly nonmaterial impact of asset transfer, deals with a value of less than $10 million are also excluded. Finally, only deals worth more than 1% of the acquirer's market capitalization, measured as the market value of shares outstanding multiplied with the year-end closing stock price of the acquirer before the announcement, are included in the sample. After applying these filters and merging the resulting repurchases with the TRNA, CRSP, and COMPUSTAT databases, we identify 6,666 M&A announcements from January 2003 to December 2012.

We provide the descriptive statistics for the final sample in Tables 1 and 2. We winsorize all control variables defined as ratios at the upper and lower 1% levels. This approach is the standard procedure scholars use in the finance literature to minimize the influence of extreme outliers. We also winsorize news item variables defined as ratios at the upper and lower 1% levels to ensure that extreme values of the key independent variable do not drive the results. Appendix C provide definitions of all the variables.

[TABLE 1 ABOUT HERE]

[TABLE 2 ABOUT HERE]

Panels A and B of Table 1 present the number of M&A announcements, CAR (–1,1), number of news articles, and percentage of negative news articles in our sample, categorized by year and industry, respectively. Table 2 provides the descriptive statistics for press releases data, M&A deals details, and the acquirers' characteristics. The results show that, an average, an acquiring firm publishes 40.12 press releases during the 365 days before the announcement date of the merger. The average percentage of negative news items during 365 days before the announcement date is 16 percent. The average announced deal value over the market equity of an acquirer is 12%. The average CAR for the buyer over the three-day interval around M&As is 0.69%. The median acquirer's market capitalization is $1,594.9 million (not tabulated), and thus these CARs represent about $11 million more in shareholders' wealth.

4. Empirical Results

In the analyses that follow, we examine the relation between the degree of the negative tone of companies' news disclosed by the acquirers and the market reaction to M&A announcements. We first report the results of a univariate analysis, followed by multivariate regressions. We also perform a set of robustness checks.

4.1. Univariate Analysis

First, we establish the relation between mean values for the three-day (–1,1) acquisition announcement period CARs of acquirers. We perform this test for the full sample and for the samples based the deal size, measured as the ratio of transaction value to buyer's market value of equity at the end of the last fiscal year prior to announcement; the public/private status of the target;

and the mode of payment (either 100% cash or non-100% cash). Each of the subsamples is further partitioned by the high or low negative tone of news disclosure. More specifically, we form groups of acquirers by dividing the firms into above- and below-median values for the percentage of negative press releases over the total number of news articles 365 days before the announcements.

Panel A of Table 3 reports means acquisition announcement period three-day CAR for acquirers with a high negative tone of news items and acquirers with a low negative tone of news items 365 days before the announcement of the merger. The mean CAR for the high (low) negative company news subsample is 1.07% (0.34), significant at the 1% level. The difference between the mean CARs for the two groups is statistically significant at the 1% level. These results are consistent with the prediction that if negative news about the company is high, managers make value-maximizing acquisitions, and the market reaction to the acquisition announcement is more positive.

[TABLE 3 ABOUT HERE]

Panel B of Table 3 provides the CARs based on the degree of negative sentiment of news disclosures and, respectively, high and low deal value, ownership status of the target, and method of payment. First, the median deal value over the acquirer market value is measured at the year-end preceding the acquisition. Column 3 shows that the market perceives high-value acquisitions more positively (CAR = 1.22%) than low-value acquisitions, with a value-enhancing effect based on the mean three-day CAR of 0.14%. However, more important, the market does not perceive all high-value acquisitions equally; rather, acquisitions made by management with high negative news disclosures have a significantly higher announcement period abnormal return (1.65%) than low negative news deals (0.55%). The difference in means between the low and high news groups is statistically significant at the 1% level. For low-value acquisitions, stockholders acquiring firms

with high negative news disclosure enjoy positive mean abnormal returns of 0.44%, whereas acquirers with low negative news disclosure experience a gain of 0.18%. However, the difference in gains for the two groups is not statistically significant. Overall, only the positive wealth effect of high-value acquisitions can be attributed to negative news prior to the M&A announcement.

Second, the results based on the ownership status of the target (Table 3, Panel B) support our hypothesis that pre-announcement negative news disclosures align managers' and shareholders' interests. Only the privately owned targets subgroup show a difference between the announcement period CARs of low and high negative firm-originated news. For instance, the mean CARs for low and high negative press release firms are 0.67% and1.41%, respectively, for privately owned targets. The difference between the means of the two groups is statistically significant at the 1% level. The difference in the stockholder wealth effect between the low and high negative news subgroups for firms involved in the acquisition of public targets is insignificant.

Finally, based on the mean three-day CAR, both 100% cash and non-100% cash transactions are value-enhancing with mean CARs of 0.62% and 0.8%, respectively. The differences in shareholders' value gains between the low and high negative news disclosure subgroups for buyers involved in cash or non-cash acquisitions is not statistically significant.

4.2. Negative Media Coverage and Short-Term Returns around M&A Announcements

Next, we use a multivariate setting to examine how negative news disclosure affects the response of bidder shares around corporate acquisition announcements. We regress the CARs for the interval of (–1, +1) days around the M&As on the volume of negative press releases before merger announcements using the following specification:

$$\widehat{CAR}(-1,+1)_i = \alpha + \beta * Negative\ PR_i + \gamma' X_i + T_i + I_i + \epsilon_i, \qquad (1)$$

where $\widehat{CAR_i}$ is the CAR for the acquirer company i, and *Negative* PR_i is the percentage of negative press releases of the total news disclosure items 365 days before the M&A announcement. We use 365 days before the announcements because we want to measure the extent to which negative news influences firms' announcement of value-enhancing acquisition attempts. Shorter windows of news items are less likely to affect managers' motivations, especially because evaluating the merit of M&A deals takes a significant amount of time.

The vector X_i contains control variables. At the firm level, we use the natural logarithm of the assets of the acquirer as a proxy for firm size. We include firm size as a control variable because prior literature shows that the market reaction to corporate announcements is larger for small firms because little information is produced for such stocks outside announcement periods (Bajaj & Vijh, 1995). We also control for leverage, measured as the ratio of the sum of long-term debt and debt in current liabilities over the book value of assets; market-to-book ratios; and return on assets. We also control for deal characteristics. We use the ratio of deal value, reported as "Value" by SDC, to the acquirer's market value of equity at the end of the last fiscal year prior to announcement (Deal Value/MVE). We also employ a dummy variable that takes equals 1 if more than one acquirer bids for the target, and zero otherwise (N Bidders > 1); a dummy variable that equals 1 if a buyer's offer to the target's shareholders is tender, and zero otherwise (Tender); a dummy variable that equals 1 if the acquirer's attitude toward the target is unfriendly, and zero otherwise (Unfriendly); and a dummy variable that equals f 1 if the target is a publicly held company, and zero otherwise (Public). Finally, we include both year (T_i) and industry (I_i) fixed-effects in all regressions.

Table 4 provides the ordinary least squares regression estimates. The *t*-statistics are calculated using White's (1980) correction for heteroskedasticity. Our primary hypothesis is that

firms with a higher degree of negative news disclosures better align managerial interests with those of shareholders. As such, we expect these firms to undertake value-enhancing deals that benefit the acquiring-firm shareholders. Therefore, the acquirer's three-day CAR around the acquisition announcement should be positively related to percentage of negative press releases, *Negative PR*$_i$, our focus variable.

Table 4 shows the results when we regress the CARs over the three days around the announcement date, CAR(–1,+1), on the percentage of negative company news 365 days before the announcement and the control variables. Model 1shows that, for the whole sample of M&A announcements, the coefficient for *Negative Press Releases* is statistically significant with a coefficient of 1.9813. Model 2 excludes acquisitions by financial firms. We exclude these announcements to minimize the influence of regulatory issues. After imposing this filter, the sample size is reduced by 25%. In this model, the coefficients for *Negative Press Releases* remain statistically significant at the 1% level. Consistent with the notion that negative news lessens managers' reputational capital and that investors and market participants pay attention to media coverage while reacting to M&A announcement, this finding further suggests that managers are likely to be influenced by the tone of prior news. To the extent that the degree of negative investor attention amplifies the impact of a value-destroying acquisition on the managers' reputational capital, our results suggest that value-enhancing acquisition are more likely to be announced when negative news and investor attention is high.

[TABLE 4 ABOUT HERE]

In all models of Table 4, many control variables show meaningful results. Consistent with the literature, public ownership of the target has a significant and adverse effect (Fuller et al. 2002; Masulis et al., 2007; Moeller et al., 2004). Tender offer also has a positive effect on CARs. Tender

offers are associated with the implementation of a higher-valued operating strategy in the acquired firm (Bradley, Desai, & Kim, 1983), and tender offers are often paid for with cash (Moeller et al., 2004). The regression analyses provide similar results (Table 4). Consistent with Masulis et al. (2007), firm leverage has a significant and positive effect on abnormal returns. Leverage can limit managerial discretion and force management to make better acquisitions. Our proxy for market-to-book ratio shows a negative and significant coefficient at the 1% level, which is in line with Moeller et al. (2004) and Dong, Hirshleifer, Richardson, and Teoh (2006). Transaction size does not have significant effect. Finally, as in Moeller et al., we find that larger firms destroy more shareholder wealth around the announcement dates. Masulis et al. posit that managers of larger companies are more entrenched and may make bad acquisitions.

Yet another interpretation of our results is that negative news wires increase investors' awareness of firms (Merton, 1987). In this interpretation, negative news attracts investors' attention, and thus the reaction of stock prices to the announcement of corporate events is larger. For instance, Louis and Sun (2010) examine the differential market response to Friday and non-Friday stock swap M&A announcements based on evidence that investors are distracted on Fridays (e.g., Bagnoli et al., 2005; DellaVigna & Pollet, 2009; Patell & Wolfson, 1982; Penman, 1987). Consistent with an investor inattention hypothesis, they find that the market reaction to Friday announcements is less negative for acquisitions involving publicly owned targets and more positive for those involving privately owned targets.

To test this hypothesis, in Table 5, we report the regression results separately for announcements involving only privately owned or publicly owned targets.[4] Models 1 and 4 of Table 6 show that the coefficient for negative news is statistically significant only for the sample

[4] Prior studies show that targets' private status is the single most important determinant of acquirers' abnormal returns at announcements (Fuller et al. 2002; Masulis et al., 2007; Moeller et al., 2004).

of M&A announcements involving privately owned targets. If we assume that negative news increase investor attention, then our finding that the market reaction is more positive for announcements involving privately owned targets but insignificant for announcements involving publicly owned targets allows us to reject the investor attention hypothesis. If the investor attention hypothesis were in play, we should expect a more positive (negative) reaction for deals involving privately owned (publicly owned) targets after high levels of negative news and thereby high levels of attention. Instead, the effect of negative news is statistically significant only for privately held targets.

[TABLE 5 ABOUT HERE]

[TABLE 6 ABOUT HERE]

We also report the regression results separately for announcements involving small and large deal value groups based on the median deal value over the acquirer market value, measured at the year-end preceding the acquisition. If acquisitions are driven by negative shocks that compel the firms to attempt acquisitions to catch up with their competitors, then only large acquisition will be perceived as value-enhancing by the market. The same argument holds if acquisitions are launched by managers to recover their lost reputational capital. Table 6 shows that although the negative news positively influences the market reaction around the M&A announcement for both large and small deals, the coefficients are significantly larger for large deals (columns 2 and 4).

Finally, Table 7 partitions the sample firms by the method of payment: 100% cash or non-100% cash (i.e., a mix of cash and stocks). Prior literature shows that companies that use their own stock to finance acquisitions have incentives to increase their market values prior to the acquisition (Ge & Lennox, 2011). Therefore, acquirers with bad news prior the acquisition create the most value for shareholders if they finance the deal using cash. The results in Table 6 confirm this

expectation. Although the negative news positively influences the market reaction around the M&A announcement for both 100% cash and non-100% cash (cash and stock) deals, the coefficients are significantly larger for all-cash deals (columns 2 and 4).

[TABLE 7 ABOUT HERE]

4.3. Robustness Tests

4.3.1 Serial acquirers I

In this section, we conduct a set of robustness tests for our primary findings. First, to address the endogeneity relating to the fact that some unobservable variables can simultaneously drive both the volume of negative news press releases and M&A market reactions, we use a matching procedure to control for firm characteristics in assessing the impact of pre-announcement negative news disclosures. We identify acquisition announcements made by the same company in our sample, with the same relative size, and the same ownership status of the target. Next, from these announcements, we compare an announcement that has high negative news disclosure with a matching announcement that has low negative media news disclosure. Similar to Peress (2008), we compare M&A announcements made by the same firm that differ in the amount of negative attention they attract. Specifically, we form pairs of announcements that satisfy the following criteria:

1. The announcements are made by the same firm.
2. The announcements belong to the same half (higher or lower) of relative deal size. We divide the companies into above- and below-median values regarding the ratio of transaction value to acquirer's market value of equity at the end of the fiscal year before the announcement.
3. The matching pair of mergers involve targets with the same ownership status (public or

private).

4. In each pair, one announcement has a high percentage of negative news disclosures while the other has a low proportion of negative disclosures.

Requirement 1 guarantees that the paired announcements correspond to the same firm. Requirement 2 ensures that the paired announcements are similar in deal value. Requirement 3 provides that the paired announcements involve either public or private targets. Requirement 4 introduces differences in negative news disclosures across the paired announcements. If we find more than two announcements satisfying these requirements, then we chose the announcements that have the maximum and minimum percentage of negative news items. The final sample includes 502 paired announcements.

The top panel of Table 8 provides some descriptive statistics for news articles on the matches. First, matched announcements have a similar number of press releases 365 days before the announcements. An average M&A firm appears in 29 press releases in the year before the announcements. The differences in volume of press releases show that each pair of announcements disclose news items that is not statistically different. More important, the middle panel shows that matched firms have a different percentage of news items with negative sentiment before the announcements. Companies with low (high) negative news disclosure have, on average, 11% (45%) of their press releases with a negative tone. The difference in negative news disclosure is highly statistically different from zero.

[TABLE 8 ABOUT HERE]

Next, we analyze CARs over the three days around the announcement dates between paired observations. The bottom panel of Table 8 splits the sample of matched announcements into high and low negative news disclosure groups based on the percentage of negative press releases in the

365 days before the announcements. Announcements by companies with high negative news are received more favorably by the market (with a value-enhancing effect based on the mean three-day CAR of 1.56%) compared to the low negative news disclosure acquisitions (with an average three-day CAR not statistically different from zero). The difference in CARs between the low and high negative news disclosure groups is statistically significant at the 5% level. These results are consistent with the pattern observed in Table 4 for unmatched announcements. Overall, the positive relation we reported earlier between the market reaction to M&A announcements and the negativity of press releases before the announcement remains qualitatively similar after we control for potential endogeneity issues.

4.3.2. Serial Acquirers II

Our sample contains 2.743 announcements made by the same firms within a calendar year. The inclusion of the same acquirer firm characteristics multiple times per year can bias our results in the regressions of M&A outcomes if the same acquirer has either multiple successes or multiple failures. To address that concern, we repeat the regressions in Table 4 with only one announcement per acquirer per year. We retain the first announced acquisition per firm per year and discard the others. Table 9 summarizes the results. After controlling for this potential bias, we confirm the hypothesis that negative news disclosures by the acquirer before an M&A will positively affect the immediate market reaction to the deal.

[TABLE 9 ABOUT HERE]

4.3.3. Sample selection bias

Another issue that may affect our findings is related to the fact that TRNA does not cover the universe of acquisitions. For instance, TRNA may choose to cover bigger, more profitable, and more attention-grabbing news stories to increase their readership. In addition, not all companies

use electronic wire services to disseminate company news. Consequently, as an additional robustness check, we examine the robustness of our findings when we control for selection biases. We employ the Heckman selection model to correct the potential estimate bias. The first stage of our Heckman selection model consists of a broad set of firm characteristics that should impact the likelihood of using electronic wire services (Heckman, 1979). To begin, we estimate a probit regression model to derive the inverse Mills ratio; the dependent variable is a dummy indicating whether the acquirer has any press release before the M&A announcement. Next, we replicate Model 1 in Table 4 and include the inverse Mills ratio as an additional control variable. Our variable of interest, percentage of negative press releases, remains positive and significant. Moreover, the coefficient of the inverse Mills ratios is insignificant at conventional levels, indicating that the concern of a nonrandom sample is possibly not relevant in the context of M&As. As such, the economic and statistical significance of the relationship between the ratio of negative company news before M&A announcements and CAR surrounding the announcement remains unaffected, suggesting that potential selection bias does not drive our primary findings.

5. Conclusion

We show how prior negative company news affects managers' decision to announce value-enhancing M&A attempts. To measure negative news, we use the percentage of negative press releases disclosed by firms in the TRNA database, a comprehensive archive of news stories that covers thousands of companies in the United States.

We find that the degree of negativity of news disclosures is positively and significantly related to firms' CARs around M&A announcements. This result is consistent with the hypothesis that prior negative news affects corporate actions. In particular, we interpret our results as consistent with the notion that managers are more inclined to undertake value-enhancing

acquisitions when the company is under increased monitoring by investors as a result of the prior negative corporate news.

As the positive association between prior negative news and market reaction to M&A announcements may suffer from endogeneity concerns, we compare announcements made by the same firm, with the same relative size and same public status of the target when one announcement has high negative news disclosures and the other has low negative news disclosures. After we compare M&A announcements that are made by the same firm but that differ in the amount of negative news they disclosure, our results still hold.

Overall, despite some possible endogeneity concerns, this paper identifies another role that news disclosures and investor attention plays in financial markets. More important, this article sheds light on the degree to which negative news before announcements significantly affect M&A outcomes.

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Appendix A: News Wires Sources

This appendix shows the news wires sources for press releases we use in our final sample. We collect press releases from Thomson Reuters News Analytics for the period January 2003 to December 2012.

News wire service	No. of news items	% of total
PR Newswire	502,907	35
Business Wire	455,688	31
Regulatory News Services	221,257	15
Maekyung News Services	88,268	6
Global Newswire	55,048	4
Thailand Stock Exchange	35,007	2
Canada Newswire	28,589	2
Thomson Reuters One	11,924	1
Others	48,968	3
Total	1,447,656	100

Appendix B: TRNA News Categories

The table provides a brief description of the major news categories related to individual stocks in the TRNA database. We collect press releases from Thomson Reuters News Analytics for the period January 2003 to December 2012.

	Mentions		
Code	*N*	%	Description
RES	47,496	23	All corporate financial results; tabular and textual reports; dividends; accounts, annual reports; forecasts and estimates of future earnings; corporate insolvencies and bankruptcies.
WWW	26,666	13	New developments in, and issues affecting, the internet / world wide web, such as viruses, domain names, freedom of access and censorship.
REG	21,106	10	Contains corporate information whose speedy disclosure is required by market exchange regulators.
MRG	13,348	7	Includes news of any actual or possible purchase of a company, combination or unification of two or more companies, units, subsidiaries, major assets, or complete product lines, be it one company completely acquiring another or both companies joining equally, generally by offering the stockholders of one company securities in the acquiring company in exchange for the surrender of their stock. Also includes a company or party gaining more than a 50% stake in another company, or a company realizing a 100% stake.
DIV	10,780	5	Dividend forecasts, declarations and payments. Announcements or projections of payment of a dividend and any major increases or decreases to its dividend.
LAW	9,947	5	The formulation of legislation by supranational, national, subnational or local parliaments and the legislative decisions of courts of law.
STX	5,899	3	Share market trading news, including the performance of share market indexes and individual shares.
MNGISS	5,702	3	Management issues including internal controls, executive pay, bonuses. Also includes news about corporate litigation and accounting issues.
PROD	5,041	2	Production, transport, processing, trading / broking, demand for and use of refined oil products including fuel oil, naphtha, gasoline, petroleum, gas oil, jet kerosene and petrochemicals. News on refineries and on policy affecting petroleum products, such as new specifications for Sulphur content.
DEAL1	4,339	2	A contract or arrangement between two or more corporate entities.
RCH	4,005	2	The issuing of an investment opinion by a broker / analyst about whether a given stock is a ‘buy’, ‘sell’ or a ‘hold’, or giving a target share price.
RESF	3,681	2	Forecasts or "guidance" given by a company about its future results, including profit warnings.
ENV	3,388	2	Conservation; green issues; recycling; energy saving; alternative energy; natural world; environmental disasters; environmental politics; natural resources; waste; government policy.
JOB	3,070	2	Labor issues, employment, unemployment, work relations, labor disputes, strikes, legislation, unions, job related issues, working conditions, employment discrimination, government employment policy and labor market reform.
Others	18,872	9	

Appendix C: Variable definitions

Variable name	Definition
CAR (–1,1)	Cumulative abnormal return for the acquirer firm over the three-day event window around the announcement date. The market-adjusted cumulative abnormal return is calculated from market model regressions for each announcing firm and is subtracted from returns of the firm. The market model estimation window starts 250 trading days before the offering and ends five trading days before the announcements. Firms that have no returns for at least 30 trading days are dropped.
Total press releases (–365,–1)	Accumulated volume of press releases for the acquirer firm 365 days prior to the M&A announcement.
% of negative press releases (–356,–1)	Negative Press Releases (–365, –1) / Total Press Releases (–365, –1). where *Negative Press Releases (–365, –1)* is the total number of negative press releases 365 days prior to the M&A announcement. TRNA provides sentiment scores for each company press releases. The scores show how likely each news story for firm is to be positive, neutral, or negative. TRNA labels each news items as positive, neutral, or negative, according to the highest score probability.
Market-to-book ratio (M/B)	Market Equity / Book Value of Equity, where Market Equity=Price* Common Shares Outstanding, and Book Equity= Stockholders Equity + Deferred Taxes + Investment Tax Credit–Preferred Stock.
Leverage	(Debt in Current Liabilities + Long-Term Debt) / Total Assets.
Return on assets	Income Before Extraordinary Items / Total Assets.
Log sales	Natural logarithm of Sales.
Operating cash flow	Operating Income Before Depreciation / Total Assets.
Log market value	Natural log of Market Equity, where Market Equity=Price* Common Shares Outstanding.
Log (1 + No. analysts)	Natural logarithm of 1 plus the number of analysis following the acquirer.
Deal value/MVE	Ratio of deal value (reported as Value by SDC) to acquirer's market value of equity at the end of the last fiscal year prior to announcement.
No. bidders > 1	A dummy variable that takes the value of 1 if more than one acquirer bid for the target, and 0 otherwise.
Public target	A dummy variable that takes the value of 1 if the target is a publicly held company, and 0 otherwise.
Tender	A dummy variable that takes the value of 1 if acquirer's offer to target's shareholders is tender, and 0 otherwise.
Unfriendly	A dummy variable that takes the value of 1 if acquirer's attitude toward target is unfriendly, and 0 otherwise.
Different three-digit SIC	Dummy variable taking the value of 1 if the acquiring firm and the target firm do not share the same SIC code at 3- SIC digit level, and zero otherwise.

Table 1. Distribution of M&A Announcements by Year and Industry

This table presents the number of announcements, average deal value, CAR(–1,1), average number of news articles, and percentage of negative news, categorized by year (Panel A) and industry (Panel B), for firms in our sample of M&A announcements. We only consider announcements made from U.S. acquirers with common stocks listed in the New York Stock Exchange, the American Stock Exchange, and the Nasdaq National Market. We apply several other filters to the news data.

Panel A: Distribution of M&A announcements by year

Year	No. deals	% of sample	Average deal value ($millions)	CAR(–1,1) (%)	Total press releases (–365, –1)	% negative press releases (–365,–1)
2003	628	9.3	245.4	0.6	18.2	0.15
2004	701	10.4	338.6	0.2	34.7	0.14
2005	795	11.8	416.0	0.7	38.8	0.13
2006	853	12.7	433.4	0.3	40.3	0.14
2007	811	12.0	370.8	0.5	43.7	0.14
2008	585	8.7	422.2	0.9	45.3	0.17
2009	399	5.9	506.1	1.9	52.5	0.18
2010	628	9.3	428.7	0.5	42.6	0.17
2011	617	9.2	402.2	0.9	43.6	0.18
2012	723	10.7	326.5	1.0	45.5	0.16

Panel B: Distribution of M&A announcements by Fama–French industry classification

Fama–French industry code (12 industries)	Number of deals	% of sample	Average deal value ($millions)	CAR(–1,1) (%)	Total press releases (–365, –1)	% negative press releases (–365,–1)
Consumer non-durables	225	3.3	413.7	2.6	28.9	0.14
Consumer durables	92	1.4	214.8	2.1	21.2	0.18
Manufacturing	588	8.7	337.8	1.2	32.3	0.16
Oil, gas, and coal Extraction and products	416	6.2	587.8	1.0	21.9	0.22
Chemicals and allied products	86	1.3	659.5	1.0	30.7	0.16
Business equipment	1429	21.2	276.9	0.3	66.9	0.13
Telephone and television transmission	243	3.6	736.5	–0.4	78.6	0.11
Utilities	159	2.4	926.6	–0.2	36.8	0.13
Wholesale, retail, and some services	460	6.8	270.2	1.5	26.6	0.13
Healthcare, medical equipment, and drugs	626	9.3	421.1	0.5	42.3	0.28
Finance	1776	26.4	368.0	0.1	31.2	0.12
Other	640	9.5	342.0	1.6	25.7	0.20

Table 2. Descriptive Statistics of Key Variables

This table reports descriptive statistics for dependent and independent variables. We collect news articles from Thomson Reuters News Analytics (TRNA) for the period January 2003 to December 2012. We take data on firms' characteristics from COMPUSTAT. We collect data on merger and acquisition announcements from SDC Platinum database. The table presents the number of observations, mean, median, standard deviation (SD), min, max, and 25th and 75th percentiles. All variables are defined in Appendix C.

Variable	N	Mean	Median	SD	Min	Max	P25	P75
TRNA								
Total press releases (–365, –1)	6,740	40.12	23.00	74.62	0.00	1519.00	5.00	42.00
% negative press releases (–365,–1)	5,338	0.16	0.10	0.18	0.00	0.89	0.03	0.21
Deal characteristics								
CAR(–1,1) (%)	6,543	0.69	0.19	6.79	–55.44	127.32	–1.81	2.54
Acquisition premium 4 weeks (%)	1,030	42.00	33.13	40.90	–27.65	231.33	18.93	54.73
CAR(2,60) (%)	6,643	–2.01	–1.18	19.62	–278.08	151.67	–10.87	7.26
Deal value/Acquirer Market value	6,735	0.12	0.04	0.22	0.00	1.34	0.01	0.12
Different three-digit SIC	6,740	0.55	1.00	0.50	0.00	1.00	0.00	1.00
All cash	6,740	0.38	0.00	0.49	0.00	1.00	0.00	1.00
All stock	6,740	0.06	0.00	0.23	0.00	1.00	0.00	0.00
N bidders > 1	6,740	0.01	0.00	0.11	0.00	1.00	0.00	0.00
Tender offers	6,740	0.02	0.00	0.15	0.00	1.00	0.00	0.00
Unfriendly	6,740	0.00	0.00	0.05	0.00	1.00	0.00	0.00
Completed	6,740	0.92	1.00	0.28	0.00	1.00	1.00	1.00
Acquirer characteristics								
Ln(Assets)	6,736	7.24	7.17	1.98	–0.22	14.60	6.03	8.41
Operating cash flow	6,713	0.06	0.07	0.11	–0.51	0.29	0.02	0.12
Market-to-book ratio	6,731	0.76	0.71	0.65	–0.77	2.76	0.32	1.14
Leverage	6,721	0.24	0.20	0.21	0.00	0.82	0.06	0.37
Return on assets	6,713	0.03	0.04	0.11	–0.58	0.25	0.01	0.08

Table 3. Univariate analysis for CARs, Categorized by Degree of Media Coverage

This table shows the univariate results regarding the relation of negative media coverage with cumulative returns of bidders estimated over the three-day period around the merger announcement (–1,+1). Panel A shows the difference of means tests of cumulative abnormal returns (CAR) three-day around the announcements, CAR(–1,+1), between firms with low and high negative media coverage. The market-adjusted CAR is calculated from market model regressions for each announcing firm and is subtracted from returns of the firm. We form portfolios of merger and acquisition announcements by dividing acquirers into above and below median values for the percentage of negative news articles 90 days prior to the announcements (high and low negative media, respectively). Panel B splits the sample by the public status of the target, the mode of acquisition (mergers vs. tender offers), and by the method of payment. ***, **, and ** indicate the coefficient is significantly different from zero at the 1%, 5%, and 10% significance level, respectively.

Panel A: CAR (–1,1) categorized by degree of negative media coverage

Attribute	Full sample	Low negative PR	High negative PR	High – Low
Mean	0.69***	0.34***	1.07***	0.72***
p-value	0.00	0.00	0.00	0.00
N	6543	2590	2607	

Panel B: CARs

	All firms	Low negative PR	High negative PR	High – Low
Ownership status				
Privately owned targets				
Mean	1.04***	0.67***	1.41***	0.74***
p-value	0.00	0.00	0.00	0.00
N	5,424	2,155	2,160	
Publicly owned targets				
Mean	–1.02***	–1.29***	–0.58*	0.710
p-value	0.00	0.00	0.06	0.10
N	1,119	435	447	
Deal value				
Small deal				
Mean	0.14*	0.18*	0.44***	0.260
p-value	0.05	0.07	0.00	0.10
N	3,249	1,431	1,252	
Large deal				
Mean	1.22***	0.55***	1.65***	1.10***
p-value	0.00	0.00	0.00	0.00
N	3,290	1,158	1,352	
Means of payment				
Cash and stock				
Mean	0.62***	0.38**	0.93***	0.55**
p-value	0.00	0.01	0.00	0.01
N	4,039	1,552	1,620	
100% cash				
Mean	0.80***	0.29**	1.29***	1.00***
p-value	0.00	0.03	0.00	0.00
N	2,504	1,038	987	

Table 4. Negative Media Coverage and Acquirer Announcement CARs

This table explores whether the relation between negative media coverage and bidder returns holds after adjusting for control variables. The dependent variable in all columns is the percentage cumulative abnormal returns (CARs) estimated three-day around the merger announcement, CAR(–1,+1). The market-adjusted CAR is calculated from market model regressions for each announcing firm and is subtracted from returns of the firm. The main independent variable under consideration is the percentage of negative news articles, which is estimated in the interval period between 1 and 90 days before the merger announcement. Acquirer-level control variables are calculated on a yearly basis. Control variables are defined in Appendix C. We also include Fama–French 49 industries fixed effects and year fixed effects. Column 1 of this table shows the estimated results for the whole sample of merger announcements. Column 2 excludes announcements by bidders in the financial sector. Robust standard errors are in parentheses. *, **, and *** indicate the coefficient is significantly different from zero at the 10%, 5%, and 1% significance level, respectively.

Dependent variable: CAR(–1,1)	All sample	Excluding financial
	(1)	(2)
% Negative press releases (–365, –1)	1.9813***	2.4246***
	(3.2148)	(3.1307)
Controls		
Acquirer log assets	–0.1861***	–0.2101***
	(3.1524)	(2.9010)
Acquirer operating cash flow	–2.2462	–2.5839
	(0.6326)	(0.6943)
Acquirer M/B	–0.3052	–0.4194
	(1.3935)	(1.5994)
Acquirer leverage	1.3247**	1.8429**
	(2.1191)	(2.3455)
Acquirer return on assets	1.2340	1.7760
	(0.3550)	(0.4870)
Deal value/Acquirer MVE)	1.8465**	2.0363**
	(2.1242)	(1.9938)
Different three-digit SIC	–0.0230	0.1542
	(0.1134)	(0.6652)
No. bidders > 1	0.6671	0.4864
	(0.8104)	(0.5315)
Tender offer	1.2277*	1.5634**
	(1.9212)	(2.2835)
Unfriendly	0.2172	0.3275
	(0.1281)	(0.1821)
Public target	–2.2700***	–2.4623***
	(7.6815)	(6.2272)
CAR(–30, –2)	–0.0121	–0.0124
	(0.9601)	(0.8712)
Constant	4.9091	4.9051
	(1.4725)	(1.4663)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
N	5,125	3,838
Adjusted R^2	0.0508	0.0498

Table 5. Negative Media Coverage and Acquirer Announcement CARs, Categorized by Private Status of Targets

This table explores within a multivariate analysis the relation of negative media coverage with bidder cumulative abnormal returns (CARs) within privately owned and publicly owned targets. The dependent variable is the percentage CARs estimated over the three-day period around the merger announcement. The market-adjusted CAR is calculated from market model regressions for each announcing firm and is subtracted from returns of the firm. Other explanatory variables are defined in Appendix C. We also include Fama–French 49 industries fixed effects and year fixed effects. Columns 1 and 3 show the estimated results for the whole sample of merger announcements. Columns 2 and 4 exclude announcements by bidders in the financial sector. Robust standard errors are in parentheses. *, **, and *** indicate the coefficient is significantly different from zero at the 10%, 5%, and 1% significance level, respectively.

	Privately owned targets		Publicly owned targets	
Dependent variable: CAR(–1,1)	All sample	Excluding financial	All sample	Excluding financial
	(1)	(2)	(3)	(4)
% negative news articles (–90, –1)	1.8424***	2.2097***	1.4286	2.1389
	(2.8407)	(2.8029)	(0.9022)	(0.8915)
Controls				
Acquirer log assets	–0.1836***	–0.2141***	–0.0416	0.1349
	(2.8909)	(2.7682)	(0.2716)	(0.6933)
Acquirer operating cash flow	–2.9070	–3.0884	2.5541	0.7396
	(0.8602)	(0.8666)	(0.2495)	(0.0710)
Acquirer M/B	–0.2379	–0.3136	–0.2484	–0.3536
	(1.0121)	(1.1126)	(0.5023)	(0.5958)
Acquirer leverage	0.8943	1.2256	5.2859***	7.2005***
	(1.3647)	(1.5206)	(2.9112)	(3.0426)
Acquirer return on assets	0.7710	1.1813	3.1217	4.0945
	(0.2262)	(0.3293)	(0.3070)	(0.3883)
Deal value/Acquirer MVE)	5.7608***	6.2321***	–4.1991***	–4.0880***
	(5.1666)	(4.7811)	(3.3852)	(2.7824)
Different three-digit SIC	0.0998	0.2715	–0.6983	–1.1466*
	(0.4455)	(1.1039)	(1.5116)	(1.8596)
No. bidders >1	1.3746	0.9768	0.7722	0.3152
	(0.5431)	(0.4945)	(0.8220)	(0.2877)
Tender offer	2.2023***	2.2810***	0.4316	0.8150
	(2.7335)	(2.6540)	(0.6918)	(1.2995)
Unfriendly	.	.	1.3576	1.1431
	.	.	(0.9009)	(0.7254)
Public target	.	.	.	.
	.	.	.	.
CAR(–30, –2)	–0.0045	–0.0047	–0.0651***	–0.0679**
	(0.3348)	(0.3127)	(2.6920)	(2.4857)
Constant	5.2220	5.2480	–2.8451**	–4.5785***
	(1.4267)	(1.4346)	(1.9907)	(2.6166)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
N	4,259	3,251	866	587
Adjusted R^2	0.0688	0.0691	0.0999	0.1327

Table 6. Negative Media Coverage and Acquirer Announcement CARs, Categorized by Deal Size

This table explores within a multivariate analysis the relation of negative media coverage with bidder cumulative abnormal returns (CARs) within small and large deals. We split the sample into large and small deal value groups based on the median deal value over the acquirer market value measured at the year-end preceding the acquisition. The dependent variable is the percentage CARs estimated over the three-day period around the merger announcement. The market-adjusted CAR is calculated from market model regressions for each announcing firm and is subtracted from returns of the firm. Other explanatory variables defined in Appendix C. We also include Fama–French 49 industries fixed effects and year fixed effects. Columns (1) and (3) of this table show the estimated results for the whole sample of merger announcements. Columns (2) and (4) exclude announcements by bidders in the financial sector. Robust standard errors are in parentheses. *, **, and *** indicate the coefficient is significantly different from zero at the 10%, 5%, and 1% significance level, respectively.

	Small deals		Large deals	
Dependent variable: CAR(–1,1)	All sample	Excluding financial	All sample	Excluding financial
	(1)	(2)	(3)	(4)
% negative press releases (–365, –1)	1.4622**	1.9130*	2.0117**	2.5291**
	(1.9653)	(1.9515)	(2.1765)	(2.2503)
Controls				
Acquirer log assets	–0.0181	–0.0650	–0.4617***	–0.4886***
	(0.3370)	(0.9509)	(3.6858)	(3.2145)
Acquirer operating cash flow	4.7071	5.0152	–7.7668	–8.2949
	(1.0673)	(1.0701)	(1.5856)	(1.6037)
Acquirer M/B	–0.1241	–0.2759	–0.5692	–0.7240
	(0.6070)	(1.1475)	(1.4836)	(1.5492)
Acquirer leverage	0.1299	0.4826	3.0771***	3.9519***
	(0.2026)	(0.6051)	(2.6581)	(2.6796)
Acquirer return on assets	–5.4152	–5.4962	6.2936	7.1267
	(1.2245)	(1.1929)	(1.3004)	(1.3754)
Different three-digit SIC	–0.0076	0.1704	–0.1905	0.0655
	(0.0359)	(0.6893)	(0.5525)	(0.1612)
No. bidders > 1	1.8737	0.9151	1.0091	0.9686
	(1.3126)	(0.7653)	(1.1465)	(0.9705)
Tender offer	–0.8980**	–0.6159	1.9991**	2.3105**
	(2.1159)	(1.3889)	(2.0835)	(2.3042)
Unfriendly	0.7614	1.1770	0.3410	0.1034
	(0.5531)	(1.0264)	(0.1762)	(0.0493)
Public target	–0.2076	–0.2318	–2.8680***	–2.9823***
	(0.8200)	(0.7113)	(6.2594)	(5.1551)
CAR(–30, –2)	–0.0032	–0.0017	–0.0151	–0.0178
	(0.1556)	(0.0726)	(0.9927)	(1.0513)
Constant	0.1702	0.2949	7.2616*	7.1529*
	(0.3243)	(0.4652)	(1.8911)	(1.8134)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
N	2,656	1,982	2,469	1,856
Adjusted R^2	0.0187	0.0153	0.0779	0.0713

Table 7. Negative Media Coverage and Acquirer Announcement CARs, Categorized by Means of Payment of Targets

This table explores within a multivariate analysis the relation of negative media coverage with bidder cumulative abnormal returns (CARs) within means of payment: 100% cash and non-100% cash payment of targets. The dependent variable is the percentage cumulative average returns (CARs) estimated over the three-day period around the merger announcement. The market-adjusted CAR is calculated from market model regressions for each announcing firm and is subtracted from returns of the firm. Other explanatory variables defined in Appendix C. We also include Fama–French 49 industries fixed effects and year fixed effects. Columns 1 and 3 show the estimated results for the whole sample of merger announcements. Columns 2 and 4 exclude announcements by bidders in the financial sector. Robust standard errors are in parentheses. *, **, and *** indicate the coefficient is significantly different from zero at the 10%, 5%, and 1% significance level, respectively.

	100% cash deals		Non-100% cash deals	
Dependent variable: CAR(–1,1)	Full sample	Excluding financial	Full sample	Excluding financial
	(1)	(2)	(3)	(4)
% negative press releases (–365, –1)	2.7135**	2.8625**	1.6970**	2.3254**
	(2.5794)	(2.4279)	(2.4020)	(2.4757)
Controls:				
Acquirer log assets	–0.1568*	–0.2053**	–0.2102***	–0.2109**
	(1.6870)	(1.9786)	(2.9336)	(2.2927)
Acquirer operating cash flow	–6.1904	–6.3463	–2.0709	–2.3017
	(1.3137)	(1.2769)	(0.4352)	(0.4585)
Acquirer M/B	–0.7537**	–0.7842**	–0.0344	–0.1673
	(2.4258)	(2.2626)	(0.1232)	(0.4888)
Acquirer leverage	0.8005	0.9859	1.7259*	2.6250**
	(1.1293)	(1.1393)	(1.8796)	(2.2340)
Acquirer return on assets	5.9007	5.9921	0.4669	0.9892
	(1.2959)	(1.2523)	(0.0996)	(0.1995)
Deal value/Acq MVE)	1.0559	0.5509	2.5712***	3.2767***
	(0.5312)	(0.2455)	(2.6888)	(2.8524)
Different three-digit SIC	0.2879	0.4561	–0.2815	–0.1256
	(0.9892)	(1.4377)	(1.0279)	(0.3900)
No. bidders > 1	0.2842	0.4089	0.7487	0.5732
	(0.3957)	(0.5125)	(0.5151)	(0.3324)
Tender offer	–0.6891	–0.4283	1.8881	2.7121*
	(1.0889)	(0.6620)	(1.2999)	(1.7168)
Unfriendly	–1.2597	–1.2699	2.0546	2.6291
	(0.5306)	(0.5278)	(0.9468)	(1.0762)
Public target	–0.1924	–0.1931	–3.6650***	–4.6214***
	(0.5609)	(0.5278)	(8.4430)	(7.0274)
CAR(–30, –2)	–0.0014	0.0034	–0.0131	–0.0150
	(0.0567)	(0.1262)	(0.9080)	(0.9040)
Constant	2.1773**	2.4080**	22.2469***	22.0040***
	(2.4358)	(2.3608)	(17.9758)	(16.9668)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
N	1,999	1,682	3,126	2,156
Adjusted R^2	0.0430	0.0431	0.0771	0.0784

Table 8. Robustness Check: Serial Acquirers I

This table reports the results of a matching procedure to control for firm determinants in assessing the impact of preannouncement negative the media coverage. Each announcement pair consists of a high and a low negative media coverage announcement such that they are made by the same firm in the same calendar year, belong to the same relative size, and have the same public status of the target. Panel A reports the total number of news articles and the percentage of negative news articles, which are estimated in the interval period between 1 and 90 days before the merger announcement. Panel B reports the average difference in mean CARs (–1,+1) across matched announcements (high negative media minus low negative media). CARs (+1,1) are defined as the cumulative abnormal return (CAR) over the three-day event window around the offer date. The market-adjusted CAR is calculated from market model regressions for each announcing firm and is subtracted from returns of the firm.

	Full sample	Low negative PR	High negative PR	High – Low
Total number of press releases				
(–365,–1)	29.38***	30.24***	28.52***	1.730
p-value	0.00	0.00	0.00	0.64
N	502	251	251	
% negative press releases	0.28***	0.11***	0.45***	–0.34***
p-value	0.00	0.00	0.00	0.00
N	502	251	251	
CAR(–1,1)	1.05***	0.550	1.56***	–1.01**
p-value	0.00	0.11	0.00	0.05
N	502	251	251	

Table 9. Robustness Check: Serial Acquirers II

This table explores whether the relation between negative media coverage and bidder returns holds after adjusting for control variables with only one announcement per acquirer per year. We retain the first announced acquisition per firm per year and discard the others. The dependent variable in all columns is the percentage cumulative abnormal returns (CARs) estimated three-day around the merger announcement, CAR(–1,+1). The market-adjusted CAR is calculated from market model regressions for each announcing firm and is subtracted from returns of the firm. The main independent variable under consideration is the percentage of negative news articles, which is estimated in the interval period between 1 and 90 days before the merger announcement. Acquirer-level control variables are calculated on a yearly basis. Control variables are defined in Appendix C. We also include Fama–French 49 industries fixed effects and year fixed effects. Column 1shows the estimated results for the whole sample of merger announcements, and column 2 excludes announcements by bidders in the financial sector. Robust standard errors are in parentheses. *, **, and *** indicate the coefficient is significantly different from zero at the 10%, 5%, and 1% significant level, respectively.

Dependent variable: CAR(–1,1)	Full sample	Excluding financial
	(1)	(2)
% negative press releases (–365, –1)	2.9544***	3.5624***
	(3.4204)	(3.3649)
Controls		
Acquirer log assets	–0.1940**	–0.2223**
	(2.3765)	(2.2200)
Acquirer operating cash flow	–2.5433	–3.2117
	(0.5302)	(0.6378)
Acquirer M/B	–0.2788	–0.2803
	(1.0483)	(0.9011)
Acquirer leverage	1.3188	1.9398*
	(1.4955)	(1.7320)
Acquirer return on assets	–0.3640	0.5342
	(0.0778)	(0.1086)
Deal value/Acq MVE)	1.9879*	2.2541*
	(1.8697)	(1.8608)
Different three-digit SIC	–0.1765	–0.0490
	(0.6581)	(0.1562)
No. bidders > 1	1.3733	1.4331
	(1.2651)	(1.1907)
Tender offer	1.8748*	2.3347**
	(1.9590)	(2.2792)
Unfriendly	–0.8182	–0.8690
	(0.3912)	(0.4154)
Public target	–2.8743***	–3.2264***
	(7.2043)	(5.9487)
CAR(–30, –2)	–0.0139	–0.0157
	(0.7714)	(0.7792)
Constant	5.7939	5.7289
	(1.5372)	(1.5123)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
N	3,043	2,368
Adjusted R^2	0.0567	0.0577

Table 10. Robustness Check: Heckman Model

This table reports the coefficient estimations on the relationship between negative media coverage and cumulative returns of bidders estimated over the three-day period around the merger announcement, CARs (–1,+1), using a Heckman two-stage regression model. The first stage obtains inverse Mill's ratio from the probit regression (column 1). The second stage estimates with ordinary least squares (OLS) and adds inverse Mill's ratio as an additional control to obtain consistent estimates on the remaining variables (column 2). The dependent variable of the first stage is a media dummy, indicating whether the firm is covered by Thomson Reuters News Analytics prior to the merger announcements. The dependent variable of the second stage is CARs (–1,+1). The percentage of negative news articles during 90 days prior to the merger and acquisition announcement is the main explanatory variable. Other variables included in regressions are defined in the Appendix C. Year fixed effects and industry fixed effects are included in all regressions. Robust standard errors are in parentheses. *, **, and *** indicate the coefficient is significantly different from zero at the 10%, 5%, and 1% significance level, respectively.

	First-stage regression Dependent variable:	Pooled OLS regressions Dependent variable: CAR(–1,1)	
	Coverage dummy	Full sample	Excluding financial
% negative press releases (–365, –1)		1.9164***	2.3792***
		(3.1083)	(3.0707)
Inverse Mills ratio (lambda)		2.3426	1.5843
		(1.1964)	(0.7241)
Acquirer log assets	0.017	–0.0962	–0.1455
	(0.25)	(1.1991)	(1.5054)
Acquirer operating cash flow	–0.667	–2.8499	–2.9626
	(1.15)	(0.7701)	(0.7614)
Acquirer M/B	–0.008	–0.3052	–0.4473*
	(0.16)	(1.4228)	(1.7334)
Acquirer Leverage	–0.261**	1.1118*	1.7373**
	(2.26)	(1.6606)	(2.0598)
Acquirer return on assets	1.380**	2.9164	3.0415
	(2.56)	(0.8013)	(0.7918)
Deal value/Acq MVE		1.6118*	1.7704*
		(1.8500)	(1.7261)
Different three-digit SIC		1.6118*	1.7704*
		(1.8500)	(1.7261)
No. bidders > 1		0.3161	0.0463
		(0.4121)	(0.0551)
Tender offer		1.1406*	1.4722**
		(1.8078)	(2.1780)
Unfriendly		–0.1060	0.0413
		(0.0596)	(0.0218)
Public target		–2.2085***	–2.3881***
		(7.5311)	(6.0910)
CAR(–30, –2)		–0.0110	–0.0114
		(0.8579)	(0.7899)
Acquirer log market value	0.107*		
	(1.74)		
Acquirer log sales	–0.043*		
	(1.66)		
Acquirer Ln (1 + No. Analysts)	0.134***		
	(6.83)		
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
N	6,608	5,063	3,777
Adjusted R^2	0.08	0.0492	0.0479