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Local Corporate Social Responsibility, Media Coverage, and Shareholder Value[†]

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ABSTRACT

Using news articles covering firm's corporate social responsibility (CSR) activities, we find that publicized CSR activities are positively associated with shareholder value and improved future operating performance. Furthermore, we find that media coverage on CSR engagements with local impact on companies' communities and employees, rather than those with broader social impact on the general public, is the main driver in explaining higher shareholder value and operating performance. We also implement a two-stage least-squares regression (2SLS) and propensity score matching to establish a causal link between publicized local CSR activities and shareholder value. Our evidence is consistent with the notion that shareholders put positive value on locally-oriented CSR when it is also complemented with high level of stakeholder awareness.

JEL Classification: G14, G32, M14, L82.

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ABSTRACT

Using news articles covering firm's corporate social responsibility (CSR) activities, we find that publicized CSR activities are positively associated with shareholder value and improved future operating performance. Furthermore, we find that media coverage on CSR engagements with local impact on companies' communities and employees, rather than those with broader social impact on the general public, is the main driver in explaining higher shareholder value and operating performance. We also implement a two-stage least-squares regression (2SLS) and propensity score matching to establish a causal link between publicized local CSR activities and shareholder value. Our evidence is consistent with the notion that shareholders put positive value on locally-oriented CSR when it is also complemented with high level of stakeholder awareness.

I. Introduction

Corporate social responsibility (CSR) has become an important issue for corporations, with over 80% of publicly-traded companies reporting CSR activities online (PriceWaterhouseCooper, 2010). Despite its growing importance, there is little consensus among scholars concerning the motivation for CSR and its effect on shareholder value (e.g., Margolis, Elfenbein, and Walsh, 2007). A traditional view has been that CSR reflects managerial preferences and thus an agency cost (e.g., Hong, Kubik, and Scheinkman, 2012; Di Guili and Kostovetsky, 2013; Masulis and Reza, 2015; Cheng, Hong, and Shue, 2016) and that the responsibility of a business should only be to maximize business profits (Friedman, 1970). In contrast, others have argued that CSR adds value for shareholders by creating reputational capital among customers, employees, and other stakeholders (e.g., Bénabou and Tirole, 2010; Deng, Kang, and Low, 2013; Ferrell, Liang, and Renneboog, 2016).

Many existing papers have focused on the value of CSR investments, with an emphasis on the empirical challenges in addressing the causal impact of CSR. However, relatively little has been done empirically to examine the specific conditions in which CSR engagements create real impact on firm performance. In this paper, we depart from the existing studies by examining one specific channel in which CSR can generate real value for the firm: CSR activities that are publicized in the media. Furthermore, we also explore and try to answer whether the value of publicized CSR differs depending on whether CSR engagements have a direct benefit for firms' local stakeholders or have a broader social impact.

Publicized CSR activities directly address one important channel in the value-maximizing theory of CSR: CSR awareness. As pointed out by McWilliams and Siegel (2001), if CSR adds value by generating reputational capital, then the value of CSR should be increasing in stakeholders' awareness about CSR. We illustrate the importance of CSR awareness by considering the following news article from *The Wall Street Journal* following the September 11th terrorist attacks:

> After Sept. 11, Johnson & Johnson (J&J) sponsored a special issue of Newsweek magazine about the spirit of America, and donated the advertising space to various nonprofit organizations. "We don't take much to touting what we feel is a special obligation to the community since we're in the business of health care," says Willard Nielsen, corporate vice president of public affairs. *But Mr. Nielsen says J&J did send an advisory to the news media listing its donations of cash and products to the relief effort after investors and employees complained that they hadn't heard about anything J&J was doing to help survivors.*[1]

This anecdotal evidence demonstrates that a firm's CSR investments may not necessarily enhance the firm's reputational capital if the relevant stakeholders are not well aware of the firm's CSR activities.

Examining publicized CSR can capture stakeholder awareness of CSR that other existing measures overlook. The role of the media in affecting reputational capital has been well documented in Dyck, Volchkova, and Zingales (2008), among others:[2] to "collect, select, certify, and repackage information," thereby reducing the cost of obtaining information and reducing "rational ignorance" (Dyck, Volchkova, and Zingales 2008). Thus, the media can effectively provide information that caters to the interest of the relevant stakeholders (i.e., potential customers or employees) who can influence a firm's future cash flow.[3] Therefore, if the value of CSR comes from the stronger reputational capital, investors would more likely have higher expectations on a given firm's future cash flow when the stakeholders have more awareness of CSR.

Using CSR media coverage, we find strong evidence that publicized CSR activities have a significant and positive impact on shareholder value as measured by Tobin's q. Specifically, we show that a one-standard-deviation increase in CSR-related news articles published in a major U.S. newspaper is

[1] Ronald, Alsop, "Perils of Corporate Philanthropy - Touting Good Works Offends The Public, but Reticence Is Misperceived as Inaction," *The Wall Street Journal*, January 16, 2002.

[2] For example, Dyck, Moss, and Zingales (2013) and Liu and McConnell (2013) also rely on the argument that the role of media is to increase the reputational capital.

[3] At the same time, the information may not necessarily have the same focuses as CSR ratings. For example, a large amount of donations to the September 11th relief efforts from many corporations received record amount of attention from the media. However, the traditional CSR rating remains relatively flat during such event periods. Likewise, CVS in 2007 made a donation to the project of building a new playground at Harambee Park (Boston), which will be one of 112 Boundless Playgrounds around the country designed to allow disabled children full access. Another example is its $6 million workers-driven charity program for ALS (commonly called Lou Gehrig's Disease) Therapy Alliance in 2005 which has received a lot of good feedback from employees and customers. However, the traditional CSR rating does not incorporate these events as CVS's CSR activities.

associated with a 2.44% increase in shareholder value. The documented effect of publicized CSR activities is obtained after controlling for the extensive factors including a firms' overall level and the tone of general news coverage, and firms' own advertising efforts to promote their CSR activities.

Corroborating the positive relation between the publicized CSR and shareholder value, we show that publicized CSR activities are positively associated with a firm's future operating performance, such as ROA, profit margin (PM), employee productivity (as measured by profit per employee), and sales growth. The positive relation between the publicized CSR and operating performance suggests that increased stakeholder awareness has real impact on a firm's future cash flows. Taken together, our results are consistent with the notion that the publicized CSR activities enhance relevant stakeholders' awareness about firms' CSR engagements and thus increase the firm's shareholder value via higher expectations of firms' future cash flows.[4]

We next examine whether the value of stakeholder awareness depends on the types of CSR activities. Specifically, we explore which types of CSR engagements, if publicized, are actually creating real value. Recent studies have made a distinction between more stakeholder-oriented CSR (i.e., community engagements, employee relations, etc.) and more socially-oriented CSR (i.e., engaging in issues related to environmental and human rights outside U.S.) and find some evidence that more stakeholder-oriented CSR has stronger effect on shareholder value (e.g., Harrison, Bosse, and Phillips, 2010; Servaes and Tamayo, 2013). The different value implications based on different types of CSR in previous studies imply that the distinction comes from whether the benefits of firm's CSR investments are internalized by the firm's local stakeholders such as current and potential customers and employee ("locally-oriented CSR" hereafter), or are externalized in benefitting the general public ("socially-oriented CSR" hereafter).

[4] Focusing on different channel than ours, Dimson, Karakas, and Li (2015) use data on CSR engagement records of a large institutional investor to examine the rate of success and the impact of CSR engagements on accounting performance for U.S. public companies. They find that successful CSR engagements are associated with positive stock price reaction, and subsequent improvements in operating performance measured by ROA, profit margin, asset turnover, and sales over employees. In contrast, using a broader international data, Barko, Cremers, and Renneboog (2017) find that CSR engagements have little impact on subsequent operating performance, with the exception of sales growth rate, which suggests that CSR engagements with broader consumer appeal may generate value. While these studies do not focus on CSR awareness or media coverage, our results that publicized CSR activities, especially those that are likely to affect firms' direct stakeholders (e.g., consumers and employees), have positive impact on firm performance are consistent with their findings.

For example, a firm's efforts in solving human rights issues in developing countries, or efforts to implement high quality environmental standards in all of its operations, regardless of the (potentially lax) local environmental standards and regulations may not generate direct benefit for firm's key stakeholders who can directly influence the firm's cash flows. On the other hand, a firm's investments in employee-friendly practices, in promoting diversity in the workplace, and in philanthropic activities in local communities may help firms to retain talented employees and valuable customers, as well as attracting new potential employees and customers.

To test this, we differentiate CSR media coverage into locally-oriented CSR coverage that contains CSR-related news covering issues related to communities, diversity, and employee relations, and socially-oriented CSR coverage that contains news related to firm's environmental and human rights practices. When we examine the impact of these locally-oriented CSR coverage versus socially-oriented CSR coverage on shareholder value and operating performance, we find that the locally-oriented CSR coverage rather than the socially-oriented CSR coverage is positively and significantly associated with shareholder value and future operating performance.

We further implement various tests to rule out alternative hypotheses that can explain our results. For example, firms that are doing well may simply receive more favorable CSR media coverage, which can lead to reverse causality. To combat this potential endogeneity issue, we employ alternative identification strategies using the instrumental variables analysis and propensity score matching method. First, we utilize firm's headquarter proximity to the major U.S. newspapers, as well as industry propensity for CSR coverage, as instruments for publicized CSR activities. Second, we use media-coverage-related factors to match firms based on their propensity to receive CSR media coverage to control for other omitted factors that can drive CSR publicity, and use the matched groups between high and low CSR media coverage as exogenous variation in the CSR media coverage. Using these exogenous variations in CSR media coverage, we show that publicized CSR activities have a positive causal impact on the shareholder value. Furthermore, consistent with our baseline results, we find that the causal impact of publicized CSR on shareholder value is mainly driven by the media coverage on locally-oriented CSR engagements.

Our paper contributes to the existing studies on the impact of CSR on firm value by showing that the media coverage of firm's CSR activities plays a key role in the link between CSR investments and firm performance. Previous studies have generally used CSR rating from MSCI ESG Research (formerly KLD Research & Analytics, Inc.) to proxy for firm's CSR activities, which does not incorporate the extent to which information about firm's CSR activities are transmitted to firm's stakeholders (CSR awareness) (e.g., Hong, Kubik, and Scheinkman, 2012; Servaes and Tamayo, 2013; Deng, Kang, and Low, 2013; Di Giuli and Kostovetsky, 2014; Krüger, 2015; Cheng, Hong, and Shue, 2016). However, we depart from existing studies by introducing a measure for the stakeholder awareness of CSR that can actually create value for the shareholders. Furthermore, by distinguishing between locally-oriented CSR coverage and socially-oriented CSR coverage, we show that a firm's CSR investments that generate direct benefit for its local stakeholders, if publicized, seem to be more valuable for the shareholders and has greater impact on firm's future operating performance.

Our paper also contributes to the studies on the importance of CSR awareness (e.g., McWilliams and Siegel, 2001; Schuler and Cording, 2006; Fisman, Heal, and Nair, 2008; Du, Bhattacharya, and Sen, 2010; and Servaes and Tamayo, 2013). Closely related paper to ours is Servaes and Tamayo (2013) who also examine the role of CSR awareness by complementing the CSR ratings with a company's own advertising expense. Advertising expense, however, is motivated not just by a firm's intent to promote its CSR activities but, more importantly, by various other factors influencing the firm, such as a new product launch. In addition, how much to spend on advertising can be influenced by firm's profitability, making reverse causality a more likely explanation for the previously documented results. Finally, CSR-related media coverage provides an independent and relatively more trustworthy source of information than firms' own advertising effort, thereby allowing stakeholders to react relatively more to the media coverage than to the firm's own advertising (e.g., McWilliams and Siegel, 2001; Schuler and Cording, 2006). Therefore, by constructing a CSR media coverage measure, we add to the literature by providing direct and causal evidence for the value of CSR awareness in building reputational capital.

Finally, our paper is related to the recent work by Cahan, Chen, Chen, and Nguyen (2015), who find that firms that invest in CSR activities receive more favorable overall media coverage. However, they do not examine the effects of specific CSR-related news coverage on firm performance, which is the focus of our paper. Furthermore, we complement their findings by providing evidence to support that publicized CSR activities can add value not only by attracting investors through favorable media coverage but also can have real effects on firm performance by building reputational capital among its stakeholders. Such evidence is consistent with the stakeholder-demand view for CSR.

The rest of the paper is organized as follows. Section II discusses the related literature and our hypotheses. Section III discusses the data. Section IV presents the main results of the relation between publicized CSR activities and shareholder value. Section V presents alternative identification strategies for establishing the causal impact of publicized CSR activities on shareholder value. Section VI addresses alternative channels that may explain the relation between CSR coverage and shareholder value. Section VII concludes.

II. Related Literature and Hypotheses

A. Publicized CSR activities and stakeholder awareness

The stakeholder value maximization theory of CSR predicts that CSR activities create value for the shareholders by allowing companies to attract and retain best employees, customers, investors, and other key stakeholders that benefit from or care about firm's CSR activities (e.g., Bénabou and Tirole, 2010; Deng, Kang, and Low, 2013). The key channel of the stakeholder value maximization theory is the stakeholders' awareness of CSR (e.g., McWilliams and Siegel, 2001; Schuler and Cording, 2006; Fisman, Heal, and Nair, 2008; Du, Bhattacharya, and Sen, 2010; and Servaes and Tamayo, 2013): if the stakeholders are uninformed about a firm's investments in CSR, then such investments cannot influence the stakeholders' belief and behavior towards the firm. Since stakeholder awareness of CSR will likely to improve firms' cash flows (by more informed stakeholders behaving favorably), investors will likely put positive value on CSR activities when the stakeholder awareness on these activities is high.

One important aspect of stakeholder awareness of CSR that has been studied in the literature is the impact of the source of information. Schuler and Cording (2006) theorize that external sources (i.e., external rating agencies, media, etc.), as opposed to internal sources, are more reliable and credible sources of information for firm's stakeholders. Similarly, Du, Bhattacharya, and Sen (2010) focus on the trade-off between credibility and controllability of CSR communication, and argues that external communications of CSR (i.e., media, monitoring groups, consumer forum, etc.) that are not entirely controlled by the firm are more credible than the company-controlled CSR communication channels (i.e., firm advertising), thereby effectively increase stakeholders' awareness. These arguments are consistent with the proposed role of media in reducing the cost of obtaining information (Dyck, Volchkova, and Zingales 2008), which can increase the impact and the value of CSR engagements.

Thus, investors will likely to view media coverage on a firm's CSR activities as an increase in stakeholder awareness about the firm's CSR and hence will put positive value on the higher media coverage of CSR. Based on these arguments, we hypothesize that shareholders put positive value on favorable CSR media coverage:

H1: The level of a firm's (*favorable*) *CSR media coverage has a positive effect on shareholder value.*

To test this hypothesis, we construct a measure of CSR media coverage, *Net CSR Coverage*, by considering positive CSR media coverage but subtracting negative CSR media coverage since unfavorable CSR media coverage would have an opposite effect on shareholder value. The detailed explanations regarding the variables we use can be found in Section II.A and in Appendix A.

While shareholder value can increase via investors' higher expectations regarding the firm's cash flows (potentially via increased stakeholder awareness), it can also increase through some alternative channels. First, the shareholder value can also increase simply by improved transparency for the investors, rather than by increased awareness of the stakeholders. Specifically, investors that have preference for CSR will have better information about firms' CSR engagements via CSR media coverage and hence will buy the stocks. Previous studies have shown that media coverage of a firm can broaden firm's investor

base (e.g., Bushee and Miller, 2007; Fang and Peress, 2009; Engelberg and Parsons, 2011). In the context of CSR, CSR media coverage can increase the transparency of firms' CSR engagements to socially-minded investors (i.e., Socially Responsible Investing (SRI) funds), which in turn can broaden investor base and hence increase in the stock price without necessarily having a real impact on the firm's operating performance. This is consistent with the previous studies that have shown that investors seem to derive additional utility from investing in firms with positive CSR attributes (e.g., Bollen, 2007; Renneboog, Horst, and Zhang, 2011).

Alternatively, the impact of CSR media coverage on shareholder value can also be due to window dressing, which can mislead investors in the short-run (e.g., Solomon, 2012), thereby increasing stock price contemporaneously without any actual business improvements. Therefore, if shareholder value is increased by investors' expectations of improved operating performance (via stakeholders) but not simply by the transparency or the window dressing channel, we expect to see a positive relation between CSR media coverage and operating performance. However, if shareholder value is increased via the transparency or the window dressing channel, we would not necessarily expect to see a positive relation between CSR media coverage and operating performance. These arguments lead to the following hypotheses:

H2-a: The level of a firm's (favorable) CSR media coverage has a positive effect on future operating performance.

H2-b: The level of a firm's (favorable) CSR media coverage has no effect on future operating performance.

To test this hypothesis, we examine on ROA, profit margin (PM), profit per employee, and sales growth as proxies for firms' operating performance.

B. Locally oriented CSR and value-relevance

The first two hypotheses assume that all CSR-related news is of the similar interest to a firm's stakeholders, and therefore, has the same value implications for the shareholders. However, previous studies on CSR and value relations suggest that not all types of CSR engagements generate value for the shareholders. One way to classify different CSR types based on the value implications is to consider how tangible the benefits from CSR engagements are for firm's stakeholders. CSR engagements in community relations (e.g., philanthropy) and employee relations, for example, are likely to benefit the customers and employees more directly, which, through increased loyalty and reputational capital, may also benefit the firm. Indeed, previous studies have documented that corporate philanthropy enhances shareholder value via increased customer loyalty and satisfactions and employee morale and productivity (e.g., Navarro, 1988; Greening and Turban, 2000; Lev, Petrovits, and Radhakrishnan, 2010). Likewise, Edmans (2011 and 2012) documents that firm engaging in employee-related CSR activities, such as communication to employees, pay benefit programs, and diversity, enhances productivity and thus shareholder value.

On the other hand, CSR engagements that are more socially-oriented, such as a firm's engagements in environmental and human right issues in developing countries (i.e., South Africa, Burma, Mexico, etc.) may generate relatively less tangible benefits for a firm's stakeholders. For example, the environment-related aspects of CSR could involve, for example, an adoption of cleaner technology in all plants in the US or internationally, or voluntary reduction of CO_2 and chemical emissions above and beyond what is required by law, which are likely to generate positive externalities for third parties. Whether such socially-oriented CSR generates direct benefit for the firm is unclear; numerous studies show that that there is a negative link between a firm's environmental performance and financial performance (e.g., Jacobs, Singhal, and Subramanian, 2010; Keele and DeHart, 2011; Meric, Watson, and Meric, 2012). Jacobs et al. (2010), for example, have documented that the market does not react to a firm's announcements of Corporate Environmental Initiatives (CEIs) that provide information about self-reported corporate efforts to avoid, mitigate, or offset the environmental impacts of the firm's products, services, or processes. Moreover, the market reacts even negatively to the announcements of a firm's voluntary emission reductions.

These predictions are also consistent with the recent studies that distinguish between certain types of CSR engagements based on the value implication: Harrison, Bosse, and Phillips (2010) distinguishes socially-oriented CSR from other stakeholder-oriented CSR; Servaes and Tamayo (2013) separate out `third-party CSR,' which includes issues in environment and human rights categories, from 'stakeholder CSR,' which includes issues from diversity and employee relations categories, and find some evidence that stakeholder CSR has stronger effect on shareholder value.[5]

If CSR engagements that are more likely to benefit stakeholders more directly (the "locally-oriented CSR") have higher value implication, stakeholder awareness would matter the most for these types of CSR activities. This is consistent with the anecdotal evidence provided by Sears, Roebuck & Company that Sears' product donation of $50,000 for needy families, which was publicized on media, led to $13 million to $40 million increase in sales (Rochlin, Coutsoukis, and Carbone, 2001).

Based on these arguments and evidence, we hypothesize that shareholders put positive value on the favorable locally-oriented CSR coverage, rather than on socially-oriented CSR coverage:

H3: The level of a firm's (favorable) locally-oriented CSR media coverage has a positive effect on shareholder value and subsequent operating performance.

To test this hypothesis, we construct a second measure of CSR media coverage, *Net Local CSR Coverage*, by considering positive locally-oriented CSR media coverage but subtracting negative locally-oriented CSR media coverage (consistent with the *Net CSR Coverage*). The detailed explanations regarding the variables we use can be found in Section II.A and in Appendix A.

For CSR engagements that are less likely to directly benefit firms' stakeholders (the "socially-oriented CSR"), the increased stakeholder awareness of firms' socially-oriented CSR will have little impact on operating performance. Thus, shareholders will less likely to put positive value on the publicized socially-oriented CSR activities.

[5] Servaes and Tamayo (2013) also define the 'stakeholder CSR' alternatively by including the community category.

H4-a: The level of a firm's (favorable) socially-oriented CSR media coverage has no effect on shareholder value and subsequent operating performance.

Alternatively, however, while the media coverage on socially-oriented CSR activities may have little impact on real operating performance given the lack of direct benefits of socially-oriented CSR to the local stakeholders, it can still drive up a stock price by increasing investors' awareness. This channel is consistent with the arguments made for the *Hypothesis* 2, in which the increase in transparency may broaden investor base by attracting investors who have high preference for the socially-oriented CSR activities (i.e., caring for the environment or human rights in developing countries), without actually improving operating performance. Thus, the shareholder value may simply increase via enhanced transparency regarding a firm's socially-oriented CSR engagements. These arguments lead to the following hypothesis:

H4-b: The level of a firm's (favorable) socially-oriented CSR coverage has a positive effect on shareholder value but no impact on subsequent operating performance.

To test this hypothesis, we construct a third measure of CSR media coverage, *Net Social CSR Coverage*, by considering positive socially-oriented CSR media coverage but subtracting negative socially-oriented CSR media coverage (consistent with the *Net CSR Coverage*). The detailed explanations regarding the variables we use can be found in Section II.A and in Appendix A.

III. Data and Summary Statistics

A. Measures and Sample Construction

Our main focus is on firms' CSR news coverage. We build this proxy by searching for relevant news articles from the Lexis-Nexis database. A big challenge in collecting CSR-related news articles is that CSR covers wide-ranging array of activities. In determining the key words for our news search, we base our choices on the CSR database from the MSCI ESG Research (also formerly known as the KLD),

which has been widely used in numerous CSR studies to proxy for firm's overall level of CSR activities (e.g., Hong, Kubik, and Scheinkman, 2012; Servaes and Tamayo, 2013; Deng, Kang, and Low, 2013; Di Giuli and Kostovetsky, 2014; Krüger, 2015; Cheng, Hong, and Shue, 2013).

The database covers seven major areas related to socially responsible activities: community, corporate governance, diversity, employee relations, environment, human rights, and product. Of the seven, we focus on the six categories, excluding corporate governance, given the extensive line of research and measures developed to capture corporate governance in the finance literature. In the MSCI database, each category is composed of various detailed subcategories filled with a score of either one or zero, and these are aggregated to build CSR ratings. Additionally, subcategories are classified into two dimensions: strengths and concerns. The strengths category reflects the positive aspects of CSR activities (e.g., charitable giving, support for education, or pollution prevention), and the concerns category captures the negative aspects of CSR (e.g., employee health and safety concern, and hazardous waste).

To be consistent with the KLD data structure, we utilize the individual KLD's subcategories to come up with the key words in our search and count the number of news articles.[6] Additionally, we separate out the positive CSR-related news coverage related to firm's CSR strength versus negative CSR-related news coverage based on firm's CSR concerns. For example, "community - strength" consists of strength subcategories related to donations to charities, support for national housing initiatives, support for educational and job-training programs for youth, relationships with indigenous people, and whether the company runs a volunteer program. Based on this classification, our key words for the community category, for example, in Lexis-Nexis database is "(donat! OR charit! OR philanthrop! OR national equity fund OR housing initiative OR enterprise foundation or (youth and job training) OR (support and education) OR volunteer program)." Likewise, "community – concerns" consists of weakness subcategories related to controversies related to firm's impact on property values or quality of life, plant closings, community opposition or dispute, and tax disputes with local government. We implement this

[6] Cahan et al. (2015) also have used KLD classifications to search the CSR-related articles.

procedure for both strength and concerns in all six categories. The details of the exact key words are reported in Appendix B.

Based on our search, we count the number of news articles from major news publications in the United States with the matching key words in the same paragraph as the company's name.[7] In counting the news articles, we do not eliminate any duplicate events covered in various publications. For example, if the *Denver Post* and *New York Times* cover the exact same underlying events, our measure would count them separately to reflect that CSR activities receiving more coverage are likely to have greater stakeholder awareness. From this procedure, we obtain the number of positive and negative CSR-related news articles per firm-year for each of the six categories of CSR. Then, we aggregate the number of news articles from each category to construct the overall number of positive (negative) CSR news (*# of Pos. (Neg.) CSR Articles*).

In addition to the aggregate CSR news coverage, we also examine news articles that are locally-oriented versus socially-oriented to test our *Hypothesis* 3 and 4. Specifically, we separately count the number of CSR news coverage in the categories that are locally-oriented (*# of Pos. (Neg.) Local CSR Articles*), which is the sum of the number of news articles from Community, Diversity, and Employee-Relations categories. Likewise, we count the number of news articles from the categories that are more socially-oriented (*# of Pos. (Neg.) Social CSR Articles*), which is the sum of the number of news articles from Environment and Human Rights categories, which are unlikely to have direct impact on firm's local stakeholders. As shown subsequently in the summary statistics in Table 1, the number of news articles are highly right-skewed. We thus take the natural-log transformation of one plus the number of articles, following previous literature on media coverage. Specifically, we define *Pos.* (*Neg.*) *CSR Coverage* as the natural logarithm of one plus the *# of Pos. (Neg.) CSR Articles*, *Pos.* (*Neg.*) *Local CSR Coverage* as the natural logarithm of one plus the *# of Pos. (Neg.) Local CSR Articles*, and *Pos.* (*Neg.*) *Social CSR*

[7] The major U.S. newspapers covered in Factiva and Lexis-Nexis that we have used for our study are *The Atlantic*, *The Atlantic Journal-Constitution*, *The Christian Science Monitor*, *Newsweek*, *The Wall Street Journal*, *The Denver Post*, *Investor's Business Daily*, *New York Daily News*, *New York Post*, *The New York Times*, *The Philadelphia Daily News*, *The Philadelphia Inquirer*, *Pittsburgh Post-Gazett*, *St. Louis Post-Dispatch*, *Tampa Bay Times*, *USA Today*, and *The Washington Post*.

Coverage as the natural logarithm of one plus the *# of Pos. (Neg.) Social CSR Articles*. The detailed description of the CSR media coverage variables can be found in Appendix A.

We also build a control for firms' overall media exposure by counting the total number of news articles per year for each company in the Lexis-Nexis database (*# of Total News Articles*). We also supplement the total news coverage with a control variable for firm's overall news sentiment. We use Factiva's Expert Search News Sentiment function, which tags news articles as positive and negative sentiments, to construct *News Sentiment*. *News Sentiment* is defined as the number of positive news articles, minus the number of negative news articles for a given firm-year. We use this measure to control for the possibility that CSR news coverage measure may simply be capturing firm's overall media sentiment propensity or media favorability (e.g., Cahan et al. 2015).

To examine whether our proxy for publicized CSR activities overlaps with the existing measure of CSR rating, we also use the MSCI database to construct the CSR rating measure, which has been widely used in the previous studies. Specifically, following Deng, Kang, and Low (2013), we construct the *KLD Index* by dividing the strengths and concerns scores for each category by the respective total possible number of strengths and concerns for each category per year. We then sum all the subcategory scores for strengths and concerns and subtract the total concern score from the total strengths score. In addition, we also construct separate ratings for each of the six subcategories.

Lastly, we use the COMPUSTAT database to obtain firm-specific financial information. We use CRSP to collect data on stock returns. Data on the governance index (i.e., Entrenchment Index) and levels of insider ownership for equity shares outstanding are from RiskMetrics. Data on institutional ownership are from Thompson Financial. Appendix A contains a detailed description of the variables used in this paper. We winsorize all variables at the 1% level at both tails to mitigate the effects of potential outliers.

We merge these data sets together to construct our final sample. In constructing our sample, we limit our sample to S&P 500 firms, which allows for a longer sample period as KLD database initially covered only these firms until 2002, and to keep our data collection process manageable. We also exclude financials and utilities firms from our sample since they are affected by different sets of regulations, as

well as media-related firms that have a disproportionate amount of media coverage, mostly due to self-coverage. As a result, our final sample consists of 5,087 firm-year observations from 1992 to 2009 with 584 unique firms.

B. Summary Statistics

Table 1, Panel A, contains the summary statistics. The average number of positive CSR news articles *(# of Pos. CSR Articles*) is 15.61 per year, with a standard deviation of 33.90. *# of Pos. CSR Articles* is also highly right skewed, with around 25% of the observation having one coverage and with 75th percentile at 14.00. The average number of negative CSR news articles (*# of Neg. CSR Articles*) is 8.61 per year, with a standard deviation of 19.95. Likewise, the variable is also highly right skewed, with 75th percentile at 8.00. The mean and standard deviation of the number of positive (negative) locally-oriented CSR news articles *(# of Pos. (Neg.) Local CSR Articles*) are 14.31 and 31.21, respectively, with 75th percentile near the mean at 12.00. On the other hand, the number of positive (negative) socially-oriented CSR news articles *(# of Pos. (Neg.) Social CSR Articles*) are significantly lower at 1.31 and 3.37, respectively, with 75th percentile at 1.00. The number of total news articles *(# of Total News Articles*) has a mean of 357.2 articles per year.

Table 1, Panel B contains the summary statistics of CSR-related news coverage by six broad categories, separated by strengths and concerns. The categories with the highest positive CSR coverage are community (9.94), diversity (2.88), employee relations (1.49), and products (1.54), followed by human rights (1.15) and environment (0.16). On the other hand, the categories with the highest negative CSR coverage are employee relations (5.78), community (1.70), and environment (0.49), followed by human rights (0.42), and diversity (0.21). Overall, community and employee relation categories seem to receive most coverage.

IV. Publicized CSR and Shareholder Value

A. Main Results

We examine the relation between CSR new coverage and shareholder value to study the extent to which shareholders place value on firm's publicized CSR activities. To do so, we estimate the following multivariate regression:

$$\ln(Tobin's\ q_{\ i,t}) = \alpha_i + \alpha_t + \beta_1 KLD\ Index_{i,t} + \beta_2\ CSR\ Coverage_{i,t} + \beta_3 Z_{i,t} + \varepsilon_{i,t}, \quad (1)$$

where *Tobin's q* of firm *i* in year *t* is used to proxy for the shareholder value. $KLD\ Index$ is the overall CSR rating of firm *i* in year *t*. $CSRCoverage$ is the CSR media coverage related measures and we use three measures. We first consider the overall CSR media coverage (aggregated across all the CSR categories), *Net CSR Coverage*, which is the net of *Pos. CSR Coverage* and *Neg. CSR Coverage*. We next consider the two additional CSR media coverage measures: *Net Local CSR Coverage*, defined as net of *Pos. Local CSR Coverage* and *Neg. Local CSR Coverage*; and *Net Social CSR Coverage*, defined as net of *Pos. Social CSR Coverage* and *Neg. Social CSR Coverage*. As firm control variables, we include a vector $Z_{i,t}$, which contains media-related characteristics, as well as firm characteristics.[8] To control for the effect of a firm's general media exposure, we include *Total Media Coverage*, calculated as the log of one plus the total number of news articles covering firm *i* in year *t*. We also include *News Sentiment* to control for the overall tone of firms' media coverage. To control for various firm characteristics that may affect shareholder value, we follow previous studies (e.g., Gompers, Ishii, and Metrick, 2003; Bebchuk and Cohen, 2005; Bebchuk, Cohen, and Ferrell, 2009) and include various controls correlated with *Tobin's q*. Specifically, we include the inflation-adjusted firm size (*Firm Size*), firm age (*Firm Age*), EBIT to assets (*EBIT*), capital expenditure to assets (*CAPX*), book leverage (*Leverage*), advertising expense over assets (*Advertising Intensity*), research and development expense over assets (*R&D*), and a dummy for whether or not a firm is incorporated in Delaware (*Delaware*). We control for the effects of governance on shareholder value by also including the entrenchment index (*Entrenchment Index*) and the level of insider ownership (*Insider Ownership*) for equity shares outstanding, as well as the level of

[8] Our results are robust to utilizing industry-corrected measure of *CSR Media Coverage* and *KLD Index*.

institutional ownership (*Institutional Ownership*) for the firm.[9] In addition to the time-varying firm controls, we also include firm-fixed effects, α_i, in the model to control for time-invariant unobservable factors that are known to lead to spurious positive association between CSR and firm value (Servaes and Tamayo, 2013). Finally, α_t is a set of year fixed effects.[10]

We present the results in Table 2. In Column (1), we examine the relation between *Net CSR Coverage* and *Tobin's q* in a univariate setting. In Column (2), we include various controls to eliminate other confounding effects. In both models, we find that the estimates on *Net CSR Coverage* are positive and statistically significant at the 1% level in both Columns (1) and (2). These estimates are also economically meaningful: in Column (2) with full set of controls, a one standard deviation increase in *Net CSR Coverage* is associated with 2.44% increase in *Tobin's q*, holding all else constant. These results are consistent with *Hypothesis* 1 that publicized CSR engagements create value to the shareholders.

Next, we distinguish between locally-oriented CSR coverage versus socially-oriented CSR coverage in examining value relations (*Hypothesis* 3). In Column (3), we repeat our test from Column (1) by replacing *Net CSR Coverage* with *Net Local CSR Coverage*, which contains CSR-related news in community, diversity, and employee relations, and *Net Social CSR Coverage*, which contains number of news in environment and human rights categories. In Column (4), we add additional control variables to control for other potential confounding effects. In both models with and without additional controls in Columns (3) and (4), we find that *Net Local CSR Coverage* has positive and statistically significant association with *Tobin's q*. On the other hand, *Net Social CSR Coverage* exhibits negative but statistically insignificant relations to *Tobin's q*. The effect of *Net Local CSR Coverage* is also economically meaningful: a one standard deviation increase in *Net Local CSR Coverage* is associated with 2.82% increase in *Tobin's q*.

[9] Dimson, Karakas, and Li (2015) find that CSR engagements initiated by active ownership is associated with positive improvements in firm performance, and the possibility of such engagement is higher for firms with poor corporate governance.

[10] The inclusion of a lagged *Tobin's q* as a control does not change our results.

For completeness, we further break down CSR-related new coverage by examining six different categories of CSR coverage separately: *Net Com. Coverage*, *Net Div. Coverage*, *Net Emp. Coverage*, *Net Env. Coverage*, *Net Hum. Coverage*, and *Net Prod. Coverage*. Likewise, we also replace the aggregated KLD Index by their individual components: *Adj. Com. Index*, *Adj. Div. Index*, *Adj. Emp. Index*, *Adj. Env. Index*, *Adj. Hum. Index*, and *Adj. Prod. Index.* One disadvantage of examining individual components is that we lose the statistical power gained by combining the components into one aggregate measure, in a similar fashion to aggregating the governance or entrenchment index. However, focusing on the subcategories of CSR activities may help to provide further supports for our classifications of locally-oriented CSR media coverage and socially-oriented CSR media coverage.

The results are reported in Columns (1) – (6) of Table IA-1 in the internet appendix. Among the components of *Net CSR Coverage*, we find that news coverage related to *Community* and *Employee Relations* is positive and statistically significant. These components also have the strongest economic significance of the six components. The other components, *Diversity*, *Environment*, *Human Rights*, and *Product*, are statistically insignificant, with the estimates on *Diversity* and *Product* being positive, and *Environment* and *Human Rights* being negative. The results from the individual component analyses seem to be consistent with the *Net Local CSR Coverage* results. The estimates on the *KLD Index* components, on the other hand, are statistically significant and positive only for *Adj. Hum. Index*. On the other hand, locally-oriented categories such as *Adj. Com. Index* and *Adj. Emp. Index* components are not statistically significant or negatively correlated with *Tobin's q*.

Overall, results in this section are consistent with our *Hypothesis* 1 that publicized CSR activities add to shareholder value. Furthermore, our results suggest that when a firm's CSR activities are publicized, dimensions of CSR coverage that are more locally-oriented seem to matter the most in the relation between CSR media coverage and shareholder value, supporting our *Hypothesis* 3.

B. Robustness tests

One concern given the positive relation between CSR news and the *Tobin's q* is that CSR media coverage can simply reflect company's marketing efforts. Servaes and Tamayo (2013) document that a firm's CSR investments can enhance the shareholder value when its advertising intensity is high. They specifically use the interaction between *KLD Index* and advertising intensity and show that, as opposed to *KLD Index* alone, the combined interaction term is significantly related to higher *Tobin's q*. If publicized CSR activities simply capture a company's own marketing efforts, then we would expect the effect of *Net CSR Coverage* to be subsumed by including the interaction between *KLD Index* and advertising intensity. To test this, we include the interaction term *KLD Index * Advertising Intensity* in our shareholder value regression.

In addition, an alternative mechanism for our result is that a firm's CSR ratings (*KLD Index)* may exhibit complementary relations to *Net CSR Coverage*. The complementary relation between firm's CSR ratings and *Net CSR Coverage* may exist if firm's stakeholders are more likely to interpret CSR-related news coverage more favorably for companies that are certified to have good CSR performance (i.e., high *KLD Index*). To test this, we add an interaction between *Net CSR Coverage* and *KLD Index* to our model.

We report the results of these robustness tests in Appendix D. First, in Columns (1) and (2), we add the interaction term between advertising and *KLD Index* to our baseline model. Both *Net CSR Coverage* (Columns 1) and *Net Local CSR Coverage* (Column 2) remain positively and statistically significantly associated with Tobin's q, even after controlling for the interaction term *KLD Index * Advertising Intensity*. Both the statistical and economic significance remain the same compared to those in Table 2.

In Columns (3) and (4), we include an interaction between *Net CSR Coverage* and *KLD Index* in the *Tobin's q* regression, as well as the interaction term between *Net Local CSR Coverage* (*Net Social CSR Coverage*) and *KLD Index*. In Column (3), the relation between *Net CSR Coverage* and *Tobin's q* is positive, consistent with our main findings. On the other hand, the interaction term between *Net CSR Coverage* and *KLD Index* is statistically insignificant. Likewise, in Column (4), the relation between *Net Local CSR Coverage* and *Tobin's q* is again positive and significant, while the interaction term between

Net Local CSR Coverage and *KLD Index* is insignificant. These results are inconsistent with the existence of a contemporaneous complementary relationship.

Lastly, we also examine the possibility that CSR media coverage and CSR ratings may exhibit dynamic effects, rather than simply exhibiting contemporaneous relationship. For example, if higher KLD ratings lead to higher probability of CSR media coverage in the future, the effect of CSR media coverage on shareholder value may still be attributable to firm's KLD ratings. Likewise, if high CSR coverage can lead to higher CSR ratings in the future as the rating agency pays closer attention to the news coverage, the effect of CSR media coverage on shareholder value may be through the channel of CSR ratings.

To test this, we run a panel vector-autoregressive model between *Net CSR Coverage* and *KLD Index* to examine whether this year's CSR coverage may lead to higher KLD ratings in the future, and vice versa. We allow up to two lags of each variable in estimating the lag effects. Because the panel vector-autoregressive models require the panel data to be strongly balanced, we utilize firms with full 18 years of time-series observations in our sample. This filter leaves us with 115 firms and 1,840 firm-year observations with initial two years as a burn-in period for the two lags. We report the results of panel vector autoregressive regression in Appendix E. We find that the lags of *Net CSR Coverage* and the *KLD Index* have strong positive correlation with future *Net CSR Coverage* and future *KLD Index*, respectively; however, they do not seem to have much impact on each other: The estimates on the lags of *Net CSR Coverage* on *KLD Index* are statistically insignificant, and vice versa. Overall, the dynamic results, jointly with the contemporaneous interaction effects seem to suggest that the effects of CSR media coverage on *Tobin's q* do not seem to be explained by firm's CSR ratings.

C. Future Operating Performance

In this subsection, we complement our findings on shareholder value with the effects of CSR-related news coverage on firms' future operating performance. Specifically, we examine our *Hypothesis* 2 (as well as second part of *Hypothesis* 3 and 4) on whether the mechanism of CSR coverage is through the stakeholder awareness, or through investor awareness (transparency). We proceed to test the above

hypothesis by comparing the changes in operating performance of firms with different levels of CSR media coverage. We use growth on ROA, profit margin (PM), profit per employee, and sales as proxies for firms' operating performance, following Di Giuli and Kostovetsky (2014). We report the results in Table 3.

First, in Panel A of Table 3, we examine the effects of *Net CSR Coverage*. Similar to previous findings (e.g., Di Giuli and Kostovetsky, 2014), we do not find any statistically significant positive relation between contemporaneous and past *KLD Index* and all the operating performance measures. On the other hand, we find a positive relation between *Net CSR Coverage* and both contemporaneous and subsequent year's increase in ROA, profit margin, profit per employee, and sales growth, which supports our *Hypothesis* 2. In Panel B, we examine the effects of *Net Local CSR Coverage* and *Net Social CSR Coverage*. We find that *Net Local CSR Coverage* has positive and statistically significant association with both the contemporaneous and subsequent year's increase in ROA, profit margin, profit per employee, and sales growth, with the exception of contemporaneous sales growth, which is positive but statistically insignificant. On the other hand, *Net Social CSR Coverage* exhibits statistically insignificant correlation with future operating performance measures, and even negative correlation with contemporaneous ROA and profit margin. These results seem to support our *Hypothesis* 3 and 4-*a* in that publicized locally-oriented CSR, rather than socially-oriented CSR, generates real value for the firm.

V. Endogeneity

One of the strongest criticisms for the CSR-shareholder value relation has been that profitable firms tend to have more CSR activities ("doing good by doing well"). Likewise, a similar criticism for our results could be made by arguing that firms that do well are also likely to have more CSR activities; as a result, this can increase the instances of CSR being covered in the media. In this section, we further check the robustness of our results by applying alternative identification strategies to examine the relation between publicized CSR activities and shareholder value.

A. Instrumental Variables Analysis

To address the reverse causality concern, we first implement instrumental variables analysis. As our instrument for *Net CSR Coverage*, we use the proximity of corporate headquarters to a media outlet. First, we argue that this instrument meets the relevance criterion based on the previous studies on the determinants of media coverage, which have documented that a firm's headquarter proximity to a news outlet has positive relations to the level of media attention that the firm receives (e.g., Miller and Shanthikumar, 2010; Gurun and Butler, 2012). Furthermore, given that firm's CSR activities in philanthropy and employee relations are more likely to impact firm's surrounding communities, newspaper outlets are more likely to cover CSR activities of companies within the same community as the newspaper outlet itself.[11]

Second, we argue that our instrument meets the exclusion condition, which requires the instrument to be uncorrelated with the error term. While it is plausible that a company may choose the location of its headquarter to increase its firm value based on the considerations for local tax rates and proximity to the company's employees, the decision is unlikely to be driven by the consideration for the proximity to media outlets. Thus, whether or not a company's headquarter is located near a news outlet is unlikely to be correlated with shareholder value other than through firm's media coverage. However, with regards to CSR coverage specifically, the exclusion condition for the instrument could be violated since local media can affect shareholder value through the general level of media coverage (e.g. through local coverage on new product launch, CEO interviews, etc.), rather than through CSR media coverage, and hence increase firm value (e.g., Miller and Shanthikumar, 2010; Gurun and Butler, 2012). To overcome this issue, we utilize and carry over the control variable for firm's total media coverage in the IV regression that we utilized in our main analysis. Thus, conditional on controlling for a firm's total media coverage on any

[11] A study conducted by eNR Services, Inc. finds that news stories about local corporate philanthropy appear more in the local media than news stories about introduction of new products and services or new business announcements. Specifically, the study finds that "only 11 percent, of the 461 projects were cause-related engagements" but they "accounted for more than 34 percent of the resulting news stories, generating about 50 million local media impressions" (*Business Wire*, 2006).

news stories, we expect the variation in firms' proximity to the news outlet is less likely to be correlated with the error term, which satisfies the exclusion condition.

Following these intuitions, we construct a local proximity variable, *Local*, that equals one if a given firm's headquarter is located within 100 kilometers of the headquarter of one of the media outlets from our sample, and zero otherwise. We use the definition of locality as proximity within 100 kilometers; this definition is widely used in many previous studies (e.g., Coval and Moskowitz, 1999, 2001; Malloy, 2005; Gaspar and Massa, 2007; Baik, Kang, and Kim, 2010; Engelberg and Parsons, 2011).[12]

The 2SLS regression results are presented in Table 4, Panel A. As expected, our instrument *Local* is positively related to the *Net CSR Coverage* and the positive relation is also statistically significant. Furthermore, the F-statistics for the weak instrument test in our first-stage regression is 39.37, suggesting that our instrument is indeed relevant. The second-stage regression in Column (2) presents the effect of *Net CSR Coverage* on shareholder value. The coefficient on the predicted *Net CSR Coverage* is positive and statistically significant at 5% significance level, suggesting that the positive relation between shareholder value and *Net CSR Coverage* in our main results is unlikely to be driven by reverse causality.

We have shown in Section IV that the effect of publicized CSR on shareholder value is mainly driven by the publicized locally-oriented CSR engagements, but not by the publicity of socially-oriented CSR. Therefore, we test whether the causal effect of CSR media coverage is also driven mainly by the media coverage of locally-oriented CSR. Given the distinction between the locally-oriented and the socially-oriented CSR engagements documented in this paper, an interesting hypothesis regarding this test would be that our instrument *Local* will likely be strongly correlated with our variable *Net Local CSR Coverage* but not necessarily be correlated with *Net Social CSR Coverage* for our first-stage in the 2SLS regressions.[13]

[12] Our results remain similar whether we consider the definition of locality more conservatively (within 50 kilometers) or more broadly (within 150 kilometers).

[13] Our hypothesis would be consistent with the study by eNR Services that almost all firms' cause-related engagements are local, with local volunteers, local donations, local companies, helping local communities, resulting in almost 90 percent of cause-related event articles coming from local newspapers and journals.

Consistent with our baseline results in Section IV, we find that *Net Local CSR Coverage* has positive effect on *Tobin's q* while *Net Social CSR Coverage* has positive but statistically insignificant association with *Tobin's q*. Interestingly, we confirm our hypothesis regarding the relevance of the instruments for the *Net Local CSR Coverage* and the *Net Social CSR Coverage* by showing that the *Local* variable has strong positive effect on *Net Local CSR Coverage* in the first-stage regression, but an insignificant effect on *Net Social CSR Coverage*. These results seem to give some supports for the notion that the CSR categories that are predicted to be locally-oriented do indeed seem to be a function of local news coverage, while socially-oriented categories (i.e., environment and human rights) do not seem to exhibit much sensitivity to existence of local media outlet.

As an alternative test, we also use another instrument for CSR media coverage, the industry-specific propensity for CSR coverage. To implement this instrument, we compute the industry average CSR coverage in our sample (excluding firm's own CSR coverage), *Industry CSR Coverage*. The assumption is that each industry differs in the demand and propensity for CSR coverage, and the degree to which firms in a given industry are able to meet the demands through its operations. This variable differs from *Local* variable in that this instrument is CSR-coverage specific, rather than pertaining to the overall media coverage of the firm.

The results using *Industry CSR Coverage* are reported in Table 4, Panel B. In the first stage regression in Column (1), we find that, as expected, *Industry CSR Coverage* positively predicts firm's own CSR media coverage. Furthermore, the F-statistics for the weak instrument test is 26.81, rejecting the null hypothesis that *Industry CSR Coverage* is a weak instrument. In the second-stage (Column (2)), we estimate the effect of *instrumented Net CSR Coverage* on *Tobin's q*. The coefficient on *Net CSR Coverage* is positive and statistically significant, consistent with our hypothesis. In addition to *Net CSR Coverage*, we repeat our analyses by replacing *Net CSR Coverage* with *Net Local CSR Coverage* and *Net Social CSR Coverage*. Consistent with the IV regression results using local proximity, we find positive and significant estimate for *Net Local CSR Coverage* in the second stage, and insignificant estimate *for Net Social CSR Coverage*. Overall, the results from the instrumental variables regressions are consistent

with the hypothesis that CSR media coverage increases shareholder value, and the results are specifically driven by the locally-oriented CSR-related news coverage.

B. Propensity Score Matching

As an alternative to the instrument variables regressions, we also implement the propensity score matching model to establish causality between CSR media coverage and shareholder value. Since our data do not randomly assign subjects to treatment and control groups, the estimation of the treatment effect can be biased by the existence of confounding factors. Propensity score matching is a way to correct the estimation of treatment effects by controlling for the existence of these confounding factors based on the idea that bias is reduced when the outcome comparison is performed using treated and control groups that are as similar as possible. More specifically, since conditioning on all relevant covariates is limited in cases with a large number of control variables, we use a propensity score (i.e., the probability of being treated given the observed characteristics of the control variables) that reduces the dimensionality problem of matching treated and control units on the basis of the multidimensional covariate vector.

We first estimate the propensity score using a probit model to explain the likelihood of a firm having a high level of publicized CSR activities. *High Net CSR Coverage* is a dummy variable that equals one if firms are above the median level of *CSR Media Coverage* in our sample, and zero otherwise. At the same time, we try to estimate a propensity score that satisfies the balancing hypothesis; this is an important issue in implementing propensity score matching (e.g., Rosenbaum and Rubin, 1983). Specifically, we focus on matching each explanatory variable so that the means of each characteristic are as similar as possible between the treated and control groups after matching. We use a nearest-neighbor matching method with replacement to match the treated and control groups.[14] The *t*-test for the after-match equality

[14] When implementing kernel matching, we find our results are robust to different matching procedures, such as the kernel matching method, which uses Gaussian kernel with 500 bootstrap repetitions (e.g., Gurun and Butler, 2012), and different sets of fixed bandwidths (i.e., 0.03, 0.06, and 0.10).

of means in the treated and control groups reported in Column (6) of Panel A in Table 5 indicates we have achieved a fairly reasonable match.

We report the results of propensity score matching in Panel B of Table 5. Consistent with our findings in the previous section, we find a significantly positive average treatment effect on the treated group (ATT).[15] The average treatment effect is 4.3% of *Tobin*'*s q* and is significant at the 5% significance level.

We also repeat the propensity score matching model with *Net Local CSR Coverage* and *Net Social CSR Coverage* in place of *Net CSR Coverage*. We report the average treatment effects of *Net Local CSR Coverage* and *Net Social CSR Coverage* in Panel B. Consistent with our baseline results on *Tobin's q*, we find a significantly positive average treatment effect for *High Net Local CSR Coverage* group versus *Low Net Local CSR Coverage* group. In contrast, we do not find a significant average treatment effect for *High Net Social CSR Coverage* group. These results thus suggest that the positive relation between *Net CSR Coverage* and *Tobin*'*s q* is unlikely to be due to other confounding factors and hence provide more evidence (in addition to the instrumental variables analysis) of a causal link between publicized CSR activities and shareholder value. Furthermore, the causal effect of CSR media coverage seems to be driven mainly by the locally-oriented CSR media coverage.

VI. Robustness: testing alternative mechanisms

In this section we test some alternative mechanisms that can also explain the positive relation between the publicized CSR and firm value. One alternative explanation of our results is that the press may be biased, mainly reporting sensational CSR stories that have more salience than some CSR investments which are less interesting to a wider audience but are more value relevant. Consequently, publicized CSR may temporarily mislead investors and drive up the contemporaneous stock price even though the value is not actually created. While our findings that CSR media coverage not only leads to higher shareholder value, but better future operating performance suggest this is unlikely to be true, we proceed in this section to provide additional evidence by testing 1) whether the high publicized CSR has a real effect

[15] We also estimate the average treatment effect (ATE) and find qualitatively similar results.

even in a long-run (more than one year in the future); and 2) whether there is an ex-post (after receiving high publicized CSR) reversal in the future risk-adjusted stock returns in a long-run.

A. Long-Run Abnormal Operating Performance (AOP)

The positive relation between publicized CSR and shareholder value can be driven by the shareholder's revised expectation of firm's future cash flows. In section IV, we have shown that the publicized CSR has a positive association with a firm's operating performances in the subsequent year. However, there are still possibilities that such effect comes from window-dressing, and hence future operating performance in the long run to be reversed. Additionally, the results for the operating performance in Table 3 can still be suffered from omitted variable bias despite the fact that we control for the well-known factors from previous studies and also use changes as the explanatory variables. Furthermore, a firm's CSR investments can take long time (i.e., four to five years) to be fully realized into tangible outcomes (e.g., Edmans, 2011 and 2012), suggesting that examining only the contemporaneous and one-year time horizon may mask the true relation between the publicized CSR and firm profitability.

To mitigate these concerns, we consider a firm's long-term abnormal operating performance using five-year time horizon. To do so, we follow Eberhart, Maxwell, and Siddique (2004) to measure the firms' abnormal operating performance in five years following high publicized CSR. Specifically, we measure the abnormal operating performance of firms that receive high CSR media coverage as the firm's operating performance minus its matched firms' operating performance. At the time when a firm receives high CSR media coverage, we select a matched firm from a group of firms that do not receive high CSR media coverage and that are within the same industry by their two-digit SIC code. Additionally, the matched firm is defined as the firm with operating performance and size that are closest to a given firm's operating performance and size as of beginning of the year when it receive the high CSR media coverage. Following Eberhart et al. (2004), we use profit margin (PM) as the operating performance measure.

For each year, we form a portfolio consisting of firms that have received high CSR media coverage within the previous five years. Equal-weighted portfolio abnormal operating performance is calculated as

the time-series average of annual median abnormal operating performance.[16] Value-weighted portfolio abnormal operating performance is calculated as time-series average of annual value-weighted (using book value of asset) average of abnormal operating performance. Table 6 reports the long-term abnormal operating performance results. In Panel A of Table 6, we report the results using *Net CSR Coverage.* Both the equal-weighted and value-weighted abnormal profit margins are positive and statistically significant at 1% significance level. We next test whether the impact of high publicized CSR is mainly driven by the locally-oriented publicized CSR activities as in our previous sections. Panel B of Table 6 shows that firms with high *Net Local CSR Coverage* outperform firms with low *Net Local CSR Coverage*: the abnormal profit margins are positive and statistically significant at 1% level for both the equal- and value-weighted portfolios. In contrast, Panel C shows that the magnitudes of the abnormal operating performance are substantially lower for the firms that receive high *Net Social CSR Coverage* than firms that receive high *Net Local CSR Coverage*. Further, the abnormal operating performance measures are statistically insignificant for both the equal- and value-weighted portfolios.

Taken together, the results in Table 6 indicate that firms with high publicized CSR outperform firms with low publicized CSR even in the long-run. Moreover, the effects of publicized CSR on firm's long-run profitability are pronounced among firms that receive high CSR media coverage on locally-oriented CSR activities (i.e., donations, domestic employee-relations, etc.). These results suggest that part of shareholder's positive valuation of CSR media coverage can be attributed to the increased expectation of future cash flows, but not to the misled expectation of future profitability.

B. Testing Investor Sentiment: Long-Run Stock Returns

In this subsection, we examine whether the positive relation between increase in stock price and CSR media coverage is coming from investors' overreaction to the positive news contained in the CSR media coverage. Previous studies have shown that positive spin from news coverage increases investor's

[16] Following previous literature, we use median value rather than the equal-weighted average due to the skewness of the operating performance measures (e.g., Barber and Lyon, 1996; Loughran and Ritter, 1997; and Eberhart, Maxwell, and Siddique, 2004).

expectations, eventually leading to disappointment in the future when the investors' expectations are not met (e.g., Solomon, 2012). Thus, the positive stock price reaction to CSR media coverage can be due to the temporary increase in expectations of investors who are misled by a firm's highly publicized CSR activities. Therefore, under this alternative explanation, we expect to see negative abnormal returns following the year of media coverage. On the other hand, if publicized CSR actually generates value in the future, we do not expect to see reversals during future periods.

We examine the effects of CSR media coverage on investment sentiment by examining the long-run effects of CSR media coverage using a calendar-time portfolio regression approach (e.g., Deng, Kang, and Low, 2013). Specifically, we first form a portfolio every year at the end of June based on the level of CSR media coverage from the previous calendar year, and then calculate monthly returns in calendar time for value-weighted portfolios of high and low *Net CSR Coverage*. We assign firms to the High Coverage group if CSR media coverage variable is above the median, and assign comparable firms to the Low Coverage group if the CSR media coverage variable is below the median. Firms are added to the portfolios at the end of every June based on the previous calendar year's CSR media coverage. We therefore initially form a portfolio of High Coverage and Low Coverage firms at the end of June 1993 based on their CSR media coverage levels from 1992, and repeat this step every June. We then retain these firms in the same portfolio for the next one, three or five years. We rebalance the portfolio every year to drop firms that have reached the one-, three- or five-year holding periods and to add firms that have high CSR media coverage during previous calendar year. Finally, we obtain the Low and High Coverage portfolios' monthly abnormal returns by employing the Carhart (1997) four-factor model.

As in our analyses in previous sections, we use three measures for the CSR media coverage that include *Net CSR Coverage*, *Net Local CSR Coverage*, and *Net Social CSR Coverage*. Since previous studies have shown that general media coverage (total media coverage) affect future stock returns (e.g., Fang and Peress, 2009), we control for the effect of total media coverage by scaling total media coverage for each CSR media coverage measure.

Panel A, B, and C of Table 7 contain the four-factor alphas from the analysis of value-weighted portfolio returns for the next one-, three-, and five-year following CSR media coverage, respectively. For one-, three-, and five-year holding periods, we find alphas for the High CSR coverage portfolio and the Low CSR coverage portfolio are both small and similar in magnitudes.[17] Specifically, the differences in the four-factor alphas between the High and Low CSR coverage portfolios are statistically insignificant across all the analyses. The fact that the subsequent stock performances are similar for both the high and the low coverage groups implies that the positive contemporaneous stock price reaction to CSR news coverage does not arise from the temporary increase in sentiment by the investors who are misled by the high publicized CSR activities that do not create value going forward.

VII. Conclusion

Do shareholders value corporate social responsibility? Our study sheds light on this long-standing debate by examining a specific channel of CSR media coverage through which CSR activities can have a real impact on firm value. We show that shareholders place positive value on CSR coverage in the media, and the effect is concentrated among news coverage on locally-oriented CSR activities, which are likely to generate tangible benefits for firms' stakeholders, than on socially-oriented CSR activities, which generate externalities involving the general public. Our findings thus highlight the important role that CSR news coverage and CSR awareness plays in realizing the value of CSR engagements.

[17] The alphas for the equal-weighted portfolios of High and Low Coverage show similar results.

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Table 1: Descriptive Statistics

This table provides descriptive statistics on media-related variables, as well as the firm characteristics used in our analyses. Panel A reports the summary statistics. The sample consists of yearly observations of S&P 500 firms for the period 1992 to 2009. *Tobin's q* is the ratio of the market value of assets to the book value of assets. *KLD Index* is firms' CSR ratings from MSCI ESG Research (formerly KLD Research & Analytics, Inc.). The *# of Pos. (Neg.) CSR Articles* is number of positive (negative) news articles covering companies' CSR activities from major newspapers in the United States. The *# of Pos. (Neg.) Local CSR Articles* is the number of positive (negative) news articles covering firm's CSR activities only related to community, diversity, and employees categories. The *# of Pos. (Neg.) Social CSR Articles* is the number of positive (negative) news articles covering firm's CSR activities only related to environment and human rights categories. *Pos.* (*Neg.*) *CSR Coverage* is the natural logarithm of one plus the *# of Pos. (Neg.) CSR Articles*. *Pos.* (*Neg.*) *Local CSR Coverage* is the natural logarithm of one plus the *# of Pos. (Neg.) Local CSR Articles*, and *Pos.* (*Neg.*) *Social CSR Coverage* is the natural logarithm of one plus the *# of Pos. (Neg.) Social CSR Articles*. *Total Media Coverage* is the natural logarithm of one plus the *# of Total Media Articles*. *# of Total Media Articles* is the number of overall news articles referencing each company from the Lexis-Nexis database. *News Sentiment* is the number of positive news articles, minus the number of negative news articles for a given firm-year. A detailed description of the variables used is provided in Appendix A. Panel B reports the number of CSR-related news articles (both positive and negative) by each category.

Panel A: Summary statistics

	Obs.	Mean	Std. Dev.	25th %	75th %
Tobins q	5,087	2.18	1.40	1.33	2.51
# of Pos. CSR Articles	5,087	15.61	33.90	1.00	14.00
Pos. CSR Coverage	5,087	1.78	1.44	0.69	2.77
# of Neg. CSR Articles	5,087	8.61	19.95	0.00	8.00
Neg. CSR Coverage	5,087	1.41	1.21	0.00	2.30
# of Pos. Local CSR Articles	5,087	14.31	31.21	0.00	12.00
Pos. Local CSR Coverage	5,087	1.63	1.40	0.00	2.56
# of Neg. Local CSR Articles	5,087	7.69	18.05	0.00	7.00
Neg. Local CSR Coverage	5,087	1.32	1.18	0.00	2.08
# of Pos. Social CSR Articles	5,087	1.31	3.37	0.00	1.00
Pos. Social CSR Coverage	5,087	0.43	0.73	0.00	0.69
# of Neg. Social CSR Articles	5,087	0.92	2.68	0.00	1.00
Neg. Social CSR Coverage	5,087	0.43	0.73	0.00	0.69
KLD Index	5,087	-0.20	0.59	-0.53	0.17
# of Total Media Articles	5,087	357.2	562.7	41.0	405.0
Total Media Coverage	5,087	4.87	1.49	3.74	6.01
News Sentiment	5,087	0.01	0.05	0.00	0.01
Entrenchment Index	5,087	2.51	1.37	2.00	3.00
Firm Size	5,087	8.65	1.12	7.85	9.43
Firm Age	5,087	3.43	0.60	3.04	3.87
Delaware	5,087	0.61	0.49	0.00	1.00
Insider Ownership	5,087	0.01	0.03	0.00	0.00
EBIT	5,087	0.00	0.01	0.00	0.00
CAPX	5,087	0.16	0.08	0.11	0.20
Leverage	5,087	0.06	0.04	0.03	0.08
Advertising	5,087	0.23	0.13	0.13	0.33
R&D	5,087	0.02	0.03	0.00	0.02
Inst. Ownership	5,087	0.03	0.05	0.00	0.04

Panel B: CSR Coverage by Components

	Obs.	Mean	Std. Dev.	25th %	75th %
# of Pos. CSR Articles - Community	5,087	9.94	23.67	0.00	8.00
# of Neg. CSR Articles - Community	5,087	1.70	4.94	0.00	1.00
# of Pos. CSR Articles - Diversity	5,087	2.88	6.15	0.00	3.00
# of Neg. CSR Articles - Diversity	5,087	0.21	0.77	0.00	0.00
# of Pos. CSR Articles - Employee	5,087	1.49	3.40	0.00	2.00
# of Neg. CSR Articles - Employee	5,087	5.78	13.18	0.00	6.00
# of Pos. CSR Articles - Environment	5,087	0.16	0.57	0.00	0.00
# of Neg. CSR Articles - Environment	5,087	0.49	1.67	0.00	0.00
# of Pos. CSR Articles - Human Rights	5,087	1.15	3.10	0.00	1.00
# of Neg. CSR Articles - Human Rights	5,087	0.42	1.45	0.00	0.00
# of Pos. CSR Articles - Product	5,087	1.54	3.28	0.00	1.00
# of Neg. CSR Articles - Product	5,087	0.25	0.84	0.00	0.00

Table 2: Publicized CSR Activities and Shareholder Value

This table reports panel regressions of shareholder value on CSR-related media coverage of S&P 500 companies from 1992 to 2009. The dependent variable in each column is the log of *Tobin's q*, where *Tobin's q* is the ratio of the market value of assets to the book value of assets. *Net CSR Coverage* is the difference between *Pos. CSR Coverage* and *Neg. CSR Coverage*. *Net Local CSR Coverage* is the subset of *Net CSR Coverage* only related to news articles in the categories of community, diversity, and employees, and is defined as the difference between *Pos. Local CSR Coverage* and *Neg. Local CSR Coverage*. *Net Social CSR Coverage* covers only the news articles from environment and human rights categories, and is defined as the difference between *Pos. Social CSR Coverage* and *Neg. Social CSR Coverage*. *Pos. CSR Coverage*, *Neg. CSR Coverage*, *Pos. Local CSR Coverage*, *Neg. Local CSR Coverage*, *Pos. Social CSR Coverage*, and *Neg. Social CSR Coverage* are defined same as in Table 1. Important controls include the log of one plus the number of total news articles in Lexis-Nexis (*Total Media Coverage*), companies' *KLD Index* from KLD Research & Analytics, Inc., and the ratio of firms' advertising expense to total assets (*Advertising Intensity*). *News Sentiment* is the number of positive news articles, minus the number of negative news articles for a given firm-year. A detailed description of all other variables used is provided in Appendix A. *t*-statistics, based on robust standard errors clustered by firm, are in parentheses. *, **, and *** represent significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable = log(Tobin's q)			
	(1)	(2)	(3)	(4)
Net CSR Coverage	0.0542***	0.0185***		
	(7.36)	(3.56)		
Net Local CSR Coverage			0.0551***	0.0207***
			(7.51)	(3.79)
Net Social CSR Coverage			-0.00566	-0.00831
			(-0.64)	(-1.30)
KLD Index		0.00173		0.00168
		(0.12)		(0.11)
Total Media Coverage		0.0630***		0.0634***
		(5.32)		(5.36)
News Sentiment		0.132		0.132
		(0.69)		(0.69)
Entrenchment Index		0.00480		0.00512
		(0.52)		(0.55)
Firm Size		-0.0961***		-0.0958***
		(-5.31)		(-5.29)
Firm Age		-0.102		-0.104
		(-1.17)		(-1.20)
Insider Own.		1.597***		1.604***
		(3.00)		(3.02)
(Insider Own.)^2		-3.549**		-3.545**
		(-2.04)		(-2.03)
EBIT		2.384***		2.381***
		(16.34)		(16.23)
CAPEX		0.597**		0.596**
		(2.35)		(2.35)
Leverage		-0.359***		-0.358***
		(-4.60)		(-4.58)
Advertising		-0.388		-0.388
		(-1.09)		(-1.09)
R&D		0.133		0.139
		(0.29)		(0.30)
Institutional Own.		0.103*		0.100*
		(1.81)		(1.77)
Year and Firm FE	Yes	Yes	Yes	Yes
Observations	5,087	5,087	5,087	5,087
Adj-R^2	0.191	0.456	0.192	0.456

Table 3: Publicized CSR Activities and Future Operating Performance

This table reports panel regressions of changes in operating performance on contemporaneous and lagged changes in publicized CSR activities and on various firm control variables of S&P 500 companies. The sample is from 1992 to 2009. Return on assets (*ROA*) is measured by ratio of income before extraordinary items, plus interest expenses to lagged total book value of assets. Profit margin (*PM*) is firms' earnings before interest and taxes (*EBIT*), divided by sales. $(Sales\ Growth)_t$ is the difference in sales ($Sale_t$ - $Sale_{t-1}$), divided by $Sale_{t-1}$. *(Profit / Emp.)* is measured as income before extraordinary items, divided by the number of employees. In Panel A, we examine the effects of *Net CSR Coverage*. In Panel B, we examine the effects of *Net Local CSR Coverage* and of *Net Social CSR Coverage*. *Net CSR Coverage* is the difference between *Pos. CSR Coverage* and *Neg. CSR Coverage*. *Net Local CSR Coverage* is the subset of *Net CSR Coverage* only related to news articles in the categories of community, diversity, and employees, and is defined as the difference between *Pos. Local CSR Coverage* and *Neg. Local CSR Coverage*. *Net Social CSR Coverage* covers only the news articles from environment and human rights categories, and is defined as the difference between *Pos. Social CSR Coverage* and *Neg. Social CSR Coverage*. *Pos. CSR Coverage*, *Neg. CSR Coverage*, *Pos. Local CSR Coverage*, *Neg. Local CSR Coverage*, *Pos. Social CSR Coverage*, and *Neg. Social CSR Coverage* are defined same as in Table 1. *KLD Index* is companies' overall CSR score provided by MSCI ESG Research (formerly, KLD Research & Analytics, Inc.). Firm control variables include changes in the log of one plus the number of total news articles from Lexis-Nexis regarding each company Δ(*Total Media Coverage*), firm size, advertising expense to total assets, R&D expense to total assets, and one-year lagged operating performance measure. A detailed description of all other variables used is provided in Appendix A. *t*-statistics, based on robust standard errors clustered by firm, are in parentheses. *, **, and *** represent significance at the 10%, 5%, and 1% level, respectively.

Panel A: CSR media coverage results

	(1) ΔROA_t	(2) ΔPM_t	(3) Δ(Profit / Emp.)$_t$	(4) (Sales Growth)$_t$
Δ(KLD Index)$_t$	-0.002	-0.001	0.097	-0.019*
	(-0.70)	(-0.25)	(0.12)	(-1.86)
Δ(KLD Index)$_{t-1}$	0.003	0.002	-0.348	0.002
	(1.36)	(0.65)	(-0.37)	(0.18)
Δ(Net CSR Coverage)$_t$	0.003**	0.003**	1.008*	0.005
	(2.59)	(2.23)	(1.81)	(1.05)
Δ(Net CSR Coverage)$_{t-1}$	0.004***	0.003***	0.905**	0.012***
	(3.59)	(2.92)	(2.20)	(3.02)
Δ(Total Media Coverage)$_t$	-0.001	-0.002	-0.766	0.019***
	(-0.49)	(-1.43)	(-1.09)	(3.08)
Δ(Total Media Coverage)$_{t-1}$	-0.002	-0.002	-0.897	0.017***
	(-1.35)	(-1.26)	(-1.08)	(2.81)
Δ(News Sentiment)$_t$	0.236***	0.155*	42.614**	0.942***
	(3.48)	(1.94)	(2.03)	(3.81)
Δ(News Sentiment)$_{t-1}$	0.135***	0.121**	7.280	0.427*
	(2.63)	(2.16)	(0.35)	(1.88)
Firm Size	-0.003***	0.001	-0.197	0.003
	(-4.20)	(0.84)	(-0.76)	(0.57)
Advertising Intensity	0.116***	0.042*	3.356	-0.139
	(4.36)	(1.82)	(0.57)	(-1.25)
R&D Intensity	0.128***	0.168***	5.781	0.096
	(3.63)	(4.29)	(0.49)	(0.68)
ΔROA$_{t-1}$	-0.246***			
	(-8.86)			
ΔPM$_{t-1}$		-0.254***		
		(-10.48)		
Δ(Profit / Emp.)$_{t-1}$			-4.183	
			(-1.45)	
(Sales Growth)$_{t-1}$				-0.000
				(-1.21)
Constant	0.063***	0.048***	15.062***	0.170**
	(5.79)	(3.86)	(3.24)	(2.17)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	2,764	2,764	2,764	2,764
Adj-R^2	0.143	0.155	0.052	0.168

Panel B: Local CSR Coverage vs. Social CSR Coverage

	(1) Δ ROA$_t$	(2) Δ PM$_t$	(3) Δ (Profit / Emp.)$_t$	(4) (Sales Growth)$_t$
Δ(KLD Index)$_t$	-0.001	-0.000	0.146	-0.019*
	(-0.63)	(-0.21)	(0.17)	(-1.87)
Δ(KLD Index)$_{t-1}$	0.004	0.002	-0.268	0.002
	(1.48)	(0.78)	(-0.28)	(0.19)
Δ(Net Local CSR Coverage)$_t$	0.004***	0.003***	1.469**	0.006
	(3.25)	(2.69)	(2.31)	(1.47)
Δ(Net Local CSR Coverage)$_{t-1}$	0.004***	0.003***	0.749*	0.013***
	(3.45)	(2.86)	(1.69)	(3.10)
Δ(Net Social CSR Coverage)$_t$	-0.004**	-0.003*	-0.592	0.001
	(-2.58)	(-1.86)	(-0.78)	(0.21)
Δ(Net Social CSR Coverage)$_{t-1}$	-0.001	-0.002	0.076	0.002
	(-0.89)	(-1.27)	(0.09)	(0.40)
Δ(Total Media Coverage)$_t$	-0.001	-0.002	-0.756	0.019***
	(-0.44)	(-1.39)	(-1.07)	(3.08)
Δ(Total Media Coverage)$_{t-1}$	-0.002	-0.002	-0.905	0.017***
	(-1.35)	(-1.25)	(-1.09)	(2.81)
Δ(News Sentiment)$_t$	0.229***	0.148*	40.533**	0.937***
	(3.44)	(1.89)	(1.99)	(3.80)
Δ(News Sentiment)$_{t-1}$	0.136***	0.122**	7.285	0.422*
	(2.65)	(2.16)	(0.35)	(1.85)
Firm Size	-0.003***	0.001	-0.183	0.003
	(-4.13)	(0.91)	(-0.71)	(0.59)
Advertising Intensity	0.115***	0.041*	3.210	-0.139
	(4.32)	(1.78)	(0.54)	(-1.26)
R&D Intensity	0.128***	0.168***	5.787	0.096
	(3.62)	(4.27)	(0.50)	(0.68)
ΔROA$_{t-1}$	-0.245***			
	(-8.87)			
ΔPM$_{t-1}$		-0.253***		
		(-10.42)		
Δ(Profit / Emp.)$_{t-1}$			-3.919	
			(-1.34)	
(Sales Growth)$_{t-1}$				-0.000
				(-1.22)
Constant	0.064***	0.048***	15.468***	0.169**
	(6.30)	(4.05)	(3.46)	(2.14)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	2,764	2,764	2,764	2,764
Adj-R^2	0.145	0.156	0.053	0.169

Table 4: Instrumental variable analysis

This table reports the results from the two-stage least-squares regressions (2SLS). In Panel A, we instrument for CSR media coverage measures in the first-stage with a dummy variable *Local*, which equals one if the company has a major newspaper outlet within 100 kilometers of its headquarter, and zero otherwise. In the second stage, we run the Tobin's q regression with Tobin's q as the dependent variable. Tobin's *q* is the ratio of the market value of assets to the book value of assets. *Net CSR Coverage* is the difference between *Pos. CSR Coverage* and *Neg. CSR Coverage*. *Net Local CSR Coverage* is the subset of *Net CSR Coverage* only related to news articles in the categories of community, diversity, and employees, and is defined as the difference between *Pos. Local CSR Coverage* and *Neg. Local CSR Coverage*. *Net Social CSR Coverage* covers only the news articles from environment and human rights categories, and is defined as the difference between *Pos. Social CSR Coverage* and *Neg. Social CSR Coverage*. *Pos. CSR Coverage*, *Neg. CSR Coverage*, *Pos. Local CSR Coverage*, *Neg. Local CSR Coverage*, *Pos. Social CSR Coverage*, and *Neg. Social CSR Coverage* are defined same as in Table 1. Other controls include the log of one, plus the number of total news articles from Lexis-Nexis covering each company (*Total Media Coverage*), companies' overall CSR rating provided by MSCI ESG Research (formerly, KLD Research & Analytics, Inc.), and the ratio of firms' advertising expense to total assets (*Advertising Intensity*). *News Sentiment* is the number of positive news articles, minus the number of negative news articles for a given firm-year. In Panel B, we instrument for the three CSR media coverage measures (*Net CSR Coverage*, *Net Local CSR Coverage*, and *Net Social CSR Coverage*) in the first-stage with a *Industry CSR Media Coverage*, which is the average CSR media coverage measures in firm's given industry defined by the two-digit SIC codes, excluding firm's own media coverage. A detailed description of all other variables used is provided in Appendix A. *t*-statistics, based on robust standard errors clustered by firm, are in parentheses. *, **, and *** represent significance at the 10%, 5%, and 1% level, respectively.

Panel A: Local Media Outlet

	1st-stage	2nd-stage	1st-stage	2nd-stage	1st-stage	2nd-stage
	(1)	(2)	(3)	(4)	(5)	(6)
Local	0.174**		0.165**		0.060	
	(2.28)		(2.20)		(1.28)	
Net CSR Coverage		0.467**				
		(2.08)				
Net Local CSR Coverage				0.474**		
				(2.00)		
Net Social CSR Coverage						1.355
						(1.24)
KLD Index	0.042	0.016	0.057	0.008	-0.011	0.049
	(0.97)	(0.60)	(1.32)	(0.31)	(-0.38)	(1.09)
Total Media Coverage	0.156***	-0.058	0.155***	-0.059	0.100***	-0.121
	(7.22)	(-1.56)	(7.20)	(-1.52)	(7.29)	(-1.10)
News Sentiment	0.374***	-0.135	0.409***	-0.162	0.708***	-0.920
	(2.64)	(-0.98)	(3.25)	(-1.21)	(3.61)	(-1.15)
Entrenchment Index	0.027	-0.029**	0.023	-0.027**	0.009	-0.029
	(1.21)	(-2.10)	(1.05)	(-2.02)	(0.70)	(-1.46)
Firm Size	0.137***	-0.079**	0.119***	-0.071**	0.083***	-0.127
	(3.77)	(-2.17)	(3.29)	(-2.07)	(4.06)	(-1.32)
Firm Age	0.044	-0.088***	0.044	-0.089***	-0.011	-0.052
	(0.77)	(-2.64)	(0.77)	(-2.65)	(-0.32)	(-1.03)
Delaware Dummy	-0.268***	0.128*	-0.260***	0.125*	-0.100**	0.138
	(-3.86)	(1.87)	(-3.73)	(1.79)	(-2.32)	(1.21)
Insider Ownership	0.863	0.234	0.370	0.441	-0.020	0.663
	(0.67)	(0.27)	(0.30)	(0.52)	(-0.02)	(0.39)
(Insider Ownership)^2	4.605	-1.760	6.051	-2.440	6.583*	-8.556
	(1.15)	(-0.61)	(1.63)	(-0.84)	(1.65)	(-0.83)
Institutional Ownership	-0.322*	0.034	-0.290	0.017	-0.319***	0.317
	(-1.76)	(0.25)	(-1.60)	(0.13)	(-2.70)	(0.83)
EBIT	0.668**	3.095***	0.576*	3.134***	0.313*	2.977***
	(1.96)	(12.45)	(1.69)	(12.94)	(1.67)	(7.13)
CAPX	-0.042	-0.477	0.055	-0.528	0.285	-0.882
	(-0.06)	(-1.14)	(0.08)	(-1.28)	(0.61)	(-1.22)
Leverage	0.151	-0.555***	0.175	-0.570***	-0.029	-0.444**
	(0.70)	(-4.06)	(0.81)	(-4.07)	(-0.23)	(-2.31)
Advertising	3.168***	-0.925	2.849***	-0.790	1.257**	-1.138
	(3.61)	(-1.06)	(3.25)	(-0.94)	(2.07)	(-0.70)
R&D	-1.191	2.234***	-1.175	2.241***	-0.651	2.561***
	(-1.51)	(4.93)	(-1.50)	(4.92)	(-1.46)	(3.16)
Weak Instrument Test (F-stat)	39.373		36.258		11.180	
Year and Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,087	5,087	5,087	5,087	5,087	5,087

Panel B: Industry and Local CSR Propensity

	1st-stage	2nd-stage	1st-stage	2nd-stage	1st-stage	2nd-stage
	(1)	(2)	(3)	(4)	(5)	(6)
Ind. Net CSR Coverage	0.761***		0.775***		0.588***	
	(5.18)		(5.68)		(3.31)	
Net CSR Coverage		0.197**				
		(2.22)				
Net Local CSR Coverage				0.134*		
				(1.87)		
Net Social CSR Coverage						-0.033
						(-0.32)
KLD Index	0.053	0.024	0.083**	0.025	-0.012	0.035**
	(1.28)	(1.35)	(2.00)	(1.52)	(-0.41)	(2.30)
Total Media Coverage	0.171***	-0.015	0.174***	-0.004	0.107***	0.025*
	(7.99)	(-0.81)	(8.17)	(-0.23)	(7.75)	(1.79)
News Sentiment	0.304**	0.025	0.391***	0.036	0.722***	0.116
	(2.15)	(0.29)	(3.38)	(0.48)	(3.88)	(1.05)
Entrenchment Index	0.023	-0.025***	0.018	-0.024***	0.015	-0.021***
	(1.00)	(-2.83)	(0.81)	(-2.86)	(1.04)	(-2.66)
Firm Size	0.131***	-0.047***	0.108***	-0.038***	0.074***	-0.024*
	(4.03)	(-3.17)	(3.32)	(-3.11)	(3.70)	(-1.96)
Firm Age	0.039	-0.080***	0.028	-0.078***	-0.001	-0.076***
	(0.75)	(-4.03)	(0.53)	(-4.22)	(-0.02)	(-4.36)
Delaware Dummy	-0.238***	0.080**	-0.226***	0.063**	-0.105**	0.021
	(-3.52)	(2.50)	(-3.33)	(2.28)	(-2.50)	(0.95)
Insider Ownership	0.763	0.246	0.130	0.331	-0.113	0.328
	(0.58)	(0.32)	(0.11)	(0.45)	(-0.10)	(0.49)
(Insider Ownership)^2	5.773	-1.118	7.531**	-0.815	7.929**	0.513
	(1.60)	(-0.44)	(2.20)	(-0.34)	(2.01)	(0.21)
Institutional Ownership	-0.199	-0.128*	-0.160	-0.143**	-0.283**	-0.171***
	(-1.15)	(-1.69)	(-0.93)	(-2.09)	(-2.44)	(-2.60)
EBIT	0.457	3.433***	0.356	3.481***	0.249	3.579***
	(1.41)	(21.81)	(1.09)	(24.00)	(1.33)	(25.12)
CAPX	0.326	-1.112***	-0.029	-1.053***	0.971**	-1.002***
	(0.50)	(-3.71)	(-0.05)	(-3.73)	(2.05)	(-3.42)
Leverage	-0.032	-0.481***	0.018	-0.484***	-0.094	-0.470***
	(-0.16)	(-5.42)	(0.09)	(-5.85)	(-0.70)	(-6.08)
Advertising	2.782***	0.138	2.194***	0.404	0.831	0.894**
	(3.34)	(0.27)	(2.70)	(0.93)	(1.54)	(2.48)
R&D	-1.029	2.457***	-0.746	2.381***	-0.694*	2.168***
	(-1.63)	(8.05)	(-1.17)	(8.17)	(-1.90)	(7.29)
Weak Instrument Test (F-stat)	26.813		32.229		10.953	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,087	5,087	5,087	5,087	5,087	5,087

Table 5: Propensity Score Matching Estimates (Treatment Effect of *Publicized CSR* Activities)

This table examines the treatment effect of CSR media coverage on shareholder value. Panel A, Column 1, provides a probit model of CSR media coverage with *KLD Index*, *Total Media Coverage*, *Advertising*, and other firm controls. Columns 2 and 3 of Panel A are before-matched sample means of treated and control groups respectively. Columns 4 and 5 of Panel B are after-matched sample means of treated and control groups, respectively. Column 6 reports the *p*-values of the difference in means after the match. Robust standard errors clustered by firm are in parentheses. A detailed description of other variables is provided in Appendix A. Panel B reports the average treatment effects on treated group (ATT) on Tobin's q for high CSR media coverage group. For CSR media coverage measures, we use three measures as in previous tables (*Net CSR Coverage*, *Net Local CSR Coverage*, and *Net Social CSR Coverage*). The treatment is whether or not a firm receives high CSR media coverage based on *Net CSR Coverage*. We also repeat our analyses based on *Net Local CSR Coverage* and *Net Social CSR Coverage*. Nearest-neighbor matching method (with replacement) is used to calculate the average treatment effect on the treated (ATT). *t*-statistics, based on standard errors clustered by firm level, are in parenthesis. *, **, and *** represent significance at the 10%, 5% and 1% level, respectively.

Panel A: Propensity to Have High Publicized CSR

		Unmatched		Matched		
Variables	Pr(High *Publicized CSR* = 1)	Treat	Control	Treat	Control	p > | t |
KLD Index	0.085	-0.172	-0.204	-0.201	-0.214	0.561
	(1.26)					
Total Media Coverage	0.261***	4.770	3.719	4.406	4.347	0.236
	(6.47)					
News Sentiment	-0.259	0.025	0.009	0.019	0.018	0.677
	(-0.30)					
Advertising	4.972***	0.024	0.012	0.018	0.018	0.627
	(3.32)					
R&D	-0.709	0.028	0.034	0.030	0.031	0.595
	(-0.56)					
Firm Size	0.210**	9.169	8.367	8.880	8.868	0.77
	(2.38)					
ROA	0.285	0.062	0.054	0.059	0.057	0.519
	(0.68)					
Sales Growth	0.012	0.081	0.072	0.081	0.085	0.493
	(0.08)					
Leverage	0.442	0.236	0.220	0.231	0.227	0.379
	(1.32)					
Insider Ownership	2.637*	0.011	0.008	0.009	0.009	0.817
	(1.89)					
Institutional Ownership	-0.373	0.678	0.717	0.696	0.692	0.486
	(-1.20)					
Stock Return	0.064	0.129	0.114	0.128	0.114	0.291
	(1.10)					
Employee	0.092	3.618	2.820	3.325	3.386	0.143
	(1.21)					
Industry fixed effect	Yes					
Year fixed effect	Yes					
Number of treated	1,467					
Number of untreated	2,643					

Panel B: Average Treatment Effect (ATT) on Tobin's q

	ATT
Difference in Tobin's Q (High *Net CSR Coverage* vs. Low *Net CSR Coverage*)	0.043**
	(2.01)
Difference in Tobin's Q (High *Net Local CSR Coverage* vs. Low *Net Local CSR Coverage*)	0.045**
	(2.16)
Difference in Tobin's Q (High *Net Social CSR Coverage* vs. Low *Net Social CSR Coverage*)	0.002
	(0.08)

Table 6: Long-run Abnormal Operating Performance

This table reports firms' long-run abnormal operating performance following high CSR media coverage. We measure long-run abnormal operating performance by forming a portfolio of firms which receive high CSR media coverage at year *t* and calculate portfolio's abnormal operating performances over the five years following portfolio formation. Each firm's abnormal operating performance is measured as a given firm's operating performance minus its matched firm's operating performance. At the time when a given firm receives high CSR media coverage, we select matched firms from a group of firms that do not receive high CSR media coverage and that are within the same industry by their two-digit SIC code. Additionally, the matched firm is defined as the firm with operating performance and CSR level (as measured by KLD index) that are closest to a given firm's operating performance and firm size as of beginning of the year when it receives the high CSR media coverage. For each year, we form a portfolio consisting of firms that have received high CSR media coverage within the previous five years. Following Eberhart, Maxwell, and Siddique (2004), equal-weighted portfolio abnormal operating performance is calculated as the time-series average of annual median abnormal operating performance, and value-weighted portfolio abnormal operating performance is calculated as time-series average of annual value-weighted (using market capitalization) average of abnormal operating performance. We use profit margin (PM) as the operating performance measure (Eberhart et al., 2004), defined as firm's earnings before interest and taxes (EBIT) divided by sales. Firms are divided into high CSR media coverage group if they receive CSR media coverage that is above the sample median and into low CSR media coverage group otherwise. CSR media coverage measures are defined in three ways as in previous tables (*Net CSR Coverage*, *Net Local CSR Coverage*, and *Net Social CSR Coverage*). *t*-statistics are in parentheses. *, **, and *** represent significance at the 10%, 5% and 1% levels, respectively.

Panel A: Net CSR Coverage (*Net CSR Coverage* High vs. *Net CSR Coverage* Low)

	Equal-Weight	Value-Weight
AOP	0.727***	2.252***
	(10.83)	(5.33)

Panel B: Net Local CSR Coverage (*Net Local CSR Coverage* High vs. *Net Local CSR Coverage* Low)

	Equal-Weight	Value-Weight
AOP	0.704***	1.599***
	(6.84)	(3.30)

Panel C: Net Social CSR Coverage (*Net Social CSR Coverage* High vs. *Net Social CSR Coverage* Low)

	Equal-Weight	Value-Weight
AOP	0.206	0.773
	(1.44)	(1.43)

Table 7: Publicized CSR and Future Stock Returns

In Panel A, we report the four-factor alphas from monthly returns of portfolio formed by sorting on the levels of the CSR media coverage. At the end of June in year *t*, we form value-weighted portfolios by sorting firms by their CSR media coverage of the fiscal year ending in the previous calendar year (*t*-1) and assign firms as Low Media Coverage group if their CSR coverage is below median and into High Media Coverage group otherwise. Then, we keep these groups for one year (12 months) until the end of June in year *t*+1. We do this process every year in our sample period. CSR media coverage are defined in three ways: 1) *Net CSR Coverage*, which is the difference between *Pos. CSR Coverage* and *Neg CSR Coverage*, scaled by total media coverage; 2) *Net Local CSR Coverage*, which is the difference between *Pos. Local CSR Coverage* and *Neg. Local CSR Coverage*, scaled by total media coverage; and 3) *Net Social CSR Coverage*, which is the difference between *Pos. Social CSR Coverage* and *Neg. Social CSR Coverage*, scaled by total media coverage. *Pos. CSR Coverage*, *Neg. CSR Coverage*, *Pos. Local CSR Coverage*, *Neg. Local CSR Coverage*, *Pos. Social CSR Coverage*, and *Neg. Social CSR Coverage* are defined same as in Table 1. We examine the alphas from Cahart (1997) four-factor of market excess return, SMB, HML, and momentum. The excess monthly returns are computed using monthly returns over risk-free rate. Panel B (Panel C) reports the results of keeping the firms within the same portfolio for three (five) years after the portfolio formation to examine whether there is any long-term abnormal performance. We report the t-statistic using Newey-West adjusted standard errors. *, **, and *** represent significance at the 10%, 5% and 1% levels, respectively.

One-year holding period

	Net CSR media		Spread	Net Local CSR media		Spread	Net Social CSR media		Spread
	Low (L)	High (H)	H - L	Low (L)	High (H)	H - L	Low (L)	High (H)	H - L
α	0.101	0.072	-0.030	0.137	0.086	-0.051	0.178	0.055	-0.122
	(0.89)	(0.54)	(-0.15)	(1.18)	(0.65)	(-0.27)	(1.41)	(0.54)	(-0.74)
β_{MKT}	1.006***	0.815***		0.980***	0.802***		0.927***	0.909***	
	(32.87)	(23.79)		(30.47)	(24.35)		(28.72)	(31.97)	
β_{SMB}	-0.198***	-0.223***		-0.219***	-0.222***		-0.064	-0.285***	
	(-5.45)	(-5.80)		(-6.01)	(-6.13)		(-1.39)	(-10.50)	
β_{HML}	-0.158***	0.141***		-0.166***	0.134***		0.038	-0.025	
	(-3.55)	(2.76)		(-3.63)	(2.73)		(0.62)	(-0.67)	
β_{UMD}	-0.024	0.001		-0.002	-0.014		0.038	-0.008	
	(-1.00)	(0.04)		(-0.06)	(-0.44)		(1.13)	(-0.36)	

Three-year holding period

	Net CSR media		Spread	Net Local CSR media		Spread	Net Social CSR media		Spread
	Low (L)	High (H)	H - L	Low (L)	High (H)	H - L	Low (L)	High (H)	H - L
α	0.079	-0.031	-0.110	0.117	0.017	-0.100	0.061	-0.052	-0.112
	(0.46)	(-0.20)	(-0.46)	(0.72)	(0.11)	(-0.42)	(0.38)	(-0.36)	(-0.60)

Five-year holding period

	Net CSR media		Spread	Net Local CSR media		Spread	Net Social CSR media		Spread
	Low (L)	High (H)	H - L	Low (L)	High (H)	H - L	Low (L)	High (H)	H - L
α	0.075	-0.101	-0.176	0.174	-0.075	-0.250	0.032	-0.171	-0.203
	(0.33)	(-0.52)	(-0.56)	(0.78)	(-0.40)	(-0.80)	(0.17)	(-0.87)	(-0.79)

Appendix A: Variable Definitions

Description	Name	Definition
Total media coverage of firm	*Total Media Coverage*	The natural log of one plus the total number of articles, by year, from Factiva that are related to a given firm. We search by the company's name without the words "incorporated" or "corporation" in most cases. When the company's name is generic, for example, Target, we search for the entire firm name, that is, "Target Corp."
Firm's overall news sentiment	*News Sentiment*	Net number of firm-related news tagged positive sentiment, minus the number of negative sentiment. We use Factiva's Expert Search News Sentiment function, which tags news as positive news or negative news from the words in the news articles
Positive CSR News Coverage	*Pos. CSR Coverage*	The natural log of one plus the total number of positive news articles by year from Lexis-Nexis that covers firm's corporate socially responsible (CSR) activity. We first search by firm, as well as the key words for each of the six areas of CSR: community, diversity, employee relations, environment, human rights, and product (The details of the key words are contained in Appendix B).
Negative CSR News Coverage	*Neg. CSR Coverage*	The natural log of one plus the total number of negative news articles by year from Lexis-Nexis that covers firm's corporate socially responsible (CSR) activity. We first search by firm, as well as the key words for each of the six areas of CSR: community, diversity, employee relations, environment, human rights, and product (The details of the key words are contained in Appendix B).
Net CSR News Coverage	*Net CSR Coverage*	*Pos. CSR Coverage* minus *Neg. CSR Coverage*
Positive Local CSR News Coverage	*Pos. Local CSR Coverage*	The natural log of one plus the total number of positive CSR-related news articles covering topics in community, diversity, and employee relations. This variable is a subset of *Pos. CSR Coverage*.
Negative Local CSR News Coverage	*Neg. Local CSR Coverage*	The natural log of one plus the total number of negative CSR-related news articles covering topics in community, diversity, and employee relations. This variable is a subset of *neg. CSR Coverage*.
Net Local CSR News Coverage	*Net Local CSR Coverage*	*Pos. Local CSR Coverage* minus *Neg. Local CSR Coverage*
Firm's level of CSR activity	*KLD Index*	MSCI ESG Research (formerly KLD Research Analytic) score of corporate social responsibility of firms from 1991 to 2009. In each category, we calculate the total scores for strengths and weaknesses separately. We then scale the sum of strengths (weaknesses) by the total possible scores for strengths (weaknesses) in each category. We then subtract the scaled total of weaknesses from the scaled total of strengths. We do this for each category in KLD data and then sum all the calculated scores for all categories
Tobin's q	*Tobin's q*	Total book value of assets (at) + market value of equity (csho * prcc_f) – book value of equity (ceq), divided by total book value of assets (at)
Firm size	*Firm Size*	Natural log of inflation-adjusted (normalized to year 2000) book value of assets (at)
Firm age	*Firm Age*	Natural log of firm age, which is defined to be the years since company's first reporting on Compustat

EBIT to total assets	*EBIT*	Operating income before depreciation (oibdp), divided by total assets (at)
Capital expenditure to total assets	*CAPX*	Capital expenditure (capx), divided by total assets (at)
Book leverage	*Leverage*	Long-term debt (dltt), plus short-term debt (dlc), divided by total assets (at)
Advertising expense to total assets	*Advertising*	Advertising expense (xad), divided by total assets (at)
R&D expense to total assets	*R&D*	R&D expense (xrd), divided by total assets
A dummy variable for whether firm is incorporated in Delaware	*Delaware*	Equals one if firm is incorporated in Delaware and zero otherwise
Entrenchment Index (E-Index)	*Entrenchment Index*	Entrenchment Index from Bebchuk, Cohen, and Ferrell's (2009) study. It redefines the governance index by looking at only six out of twenty-four provisions in Gompers, Ishii, and Metrick (2003). These provisons are staggered boards, limits to shareholder bylaw amendments, poison pills, golden parachutes, and supermajority requirements for mergers and charter amendments.
% of insider ownership of commons shares outstanding	*Insider Ownership*	Total number of shares owned by the executives (shrown_excl_opts) from Execucomp, divided by total number of common shares outstanding (csho)
% of insider ownership squared	*(Insider Ownership)*^{2}	Square of *Insider Ownership*
ROA	*ROA*	Common shares used to calculate earnings per share (cshfd), scaled by total asset (at)
Sales Growth	*Sales Growth*	The percentage change in sales (sale) compared to prior year's sales
Institutional Ownership	*Institutional Ownership*	Number of shares owned by institutional investors, divided by total number of outstanding shares at the end of the calendar year prior to month *t*
Stock Return	*Stock Return*	Return of common stock in month *t*
Idiosyncratic Volatility	*Idiosyncratic Volatility*	The standard deviation of monthly returns for the two years before month *t*
Employee	*Employee*	Log of number of employees (emp) in the firm in the most current annual financial statement reported prior to month *t*

Appendix B: CSR Media Coverage Search Terms

CSR Category	Search Terms
Community - Strength	'('+company + ' w/p (donat! OR charit! OR philanthrop! OR national equity fund OR housing initiative OR enterprise foundation or (youth and job training) OR (support and education) OR volunteer program))'
Diversity - Strength	'('+company + ' w/p (((women or minority) AND (CEO or promotion or board of director or work benefits or life benefits or contracting)) OR (disab! and employment) OR ((gay and lesbian) AND (policy or employee))))'
Employee Relations - Strength	'('+company + ' w/p (no-layoff OR profit! shar! OR employee involvement OR ((union relation! OR retirement benefit! OR (health and safety and program)) AND (CSR OR social responsib! OR social benefit!)))'
Environment - Strength	'('+company + ' w/p (environment! friend! OR environment! benefit! OR eco! friend! OR pollution prevent! OR clean! energy!))'
Human Rights - Strength	'('+company + ' w/p (human rights OR ((POSITIVE OR GOOD) AND SOUTH AFRICA) OR (indigenous people AND (sovereignty OR land OR culture OR human rights OR relations) OR ((labor rights OR union relation) AND (foreign OR overseas)) AND NOT (controversy OR concern)))'
Product - Strength	'('+company + ' w/p (((innovative product or (leader AND (innovation OR R&D or research and development))) AND (social! benefit! OR CSR OR social respons! OR economically disadvant!)) OR (product AND economical! disadvantag!) OR (product! AND social! benefit!)))'
Community - Concerns	'('+company + ' w\p (plant closing OR ((quality of life OR tax base OR property values!) AND (negative OR advers! OR bad OR controvers!)) OR (indigenous people! AND controvers!) OR (tax AND disput! Or controvers!) OR (community opposition) OR (stop* fund* or stop* support*))'

Diversity - Concerns	'('+company + ' w/p ((affirmative action AND (controver! or (fines AND NOT art) or penalt!)) OR (diversity AND (controver! or (fines AND NOT art) or penalt!)))'
Employee Relations - Concerns	'('+company + ' w/p (((union relation! or (employee and (health or safety))) AND (worsen or deteriorat! or poor or concern! or controvers! or voilation! or fines or penalt!)) or (layoff or lay-off or workforce reduc* or staff* reduc*) or (pension AND (under funded or concerns or controvers!)))'
Environment - Concerns	'('+company + ' w/p ((hazardous waste or clean air act or clean water action or environmental regulation! or toxic chemical! or agricultural chemical! or climate change) AND (fines or penalt! or violation! or controvers! or neg!) OR oil spill!)'
Human Rights - Concerns	'('+company + ' w/p ((south africa or northern ireland or burma or mexico or international labor) AND controvers!) OR (human rights AND controvers!))'
Product - Concerns	'('+company + ' w/p (product safety or antitrust violation or consumer fraud or defective product or product recall)'

Appendix C: CSR Coverage Propensity by Industry

This table reports the average CSR news coverage for each two-digit SIC code industry. The sample consists of yearly observations of S&P 500 firms for the period 1992 to 2009. *Net CSR Coverage* is the difference between *Pos. CSR Coverage* and *Neg. CSR Coverage*. *Net Local CSR Coverage* is the subset of *Net CSR Coverage* only related to news articles in the categories of community, diversity, and employees, and is defined as the difference between *Pos. Local CSR Coverage* and *Neg. Local CSR Coverage*. *Net Social CSR Coverage* covers only the news articles from environment and human rights categories, and is defined as the difference between *Pos. Social CSR Coverage* and *Neg. Social CSR Coverage*. *Pos. CSR Coverage*, *Neg. CSR Coverage*, *Pos. Local CSR Coverage*, *Neg. Local CSR Coverage*, *Pos. Social CSR Coverage*, and *Neg. Social CSR Coverage* are defined same as in Table 1.

Two Digit SIC	Industry	Avg. Net CSR Cov.	Avg. Net Local CSR Cov.	Avg. Net Social CSR Cov.
1	Agricultural Production	44.3	46.9	-2.6
10	Metal, Mining	0.4	0.1	0.3
12	Coal Mining	16.0	15.0	1.0
13	Oil & Gas Extraction	6.9	6.2	0.7
14	Nonmetallic Minerals, Except Fuels	2.3	2.3	0.0
15	General Building Contractors	0.8	0.8	0.0
16	Heavy Construction, Except Building	-0.2	-0.1	-0.1
17	Special Trade Contractors	0.0	0.0	0.0
20	Food & Kindred Products	14.0	13.3	0.7
21	Tobacco Products	11.1	10.9	0.2
22	Textile Mill Products	32.4	31.0	1.4
23	Apparel & Other Textile Products	1.6	1.5	0.1
24	Lumber & Wood Products	-1.1	-0.4	-0.7
25	Furniture & Fixtures	1.2	1.0	0.2
26	Paper & Allied Products	8.9	8.4	0.5
27	Printing & Publishing	6.5	6.2	0.3
28	Chemical & Allied Products	4.8	4.7	0.1
29	Petroleum & Coal Products	-0.3	1.8	-2.1
30	Rubber & Miscellaneous Plastics	11.9	10.1	1.8

	Products			
31	Leather & Leather Products	17.2	14.0	3.2
32	Stone, Clay, & Glass Products	-1.0	-0.5	-0.5
33	Primary Metal Industries	5.8	5.8	0.0
34	Fabricated Metal Products	26.8	25.3	1.5
35	Industrial Machinery & Equipment	8.3	7.7	0.6
36	Electronic & Other Electric Equipment	1.9	1.8	0.0
37	Transportation Equipment	2.8	2.1	0.7
38	Instruments & Related Products	4.9	4.8	0.2
39	Miscellaneous Manufacturing Industries	2.4	2.1	0.3
40	Railroad Transportation	8.5	9.0	-0.5
42	Trucking & Warehousing	13.0	13.8	-0.8
45	Transportation by Air	-0.4	-1.1	0.7
47	Transportation Services	0.0	0.0	0.0
48	Communications	2.3	1.9	0.4
50	Wholesale Trade - Durable Goods	18.1	17.2	0.9
51	Wholesale Trade - Nondurable Goods	2.7	2.8	-0.1
52	Building Materials & Gardening Supplies	14.7	14.2	0.5
53	General Merchandise Stores	2.7	2.3	0.3
54	Food Stores	2.6	2.6	-0.1
55	Automotive Dealers & Service Stations	0.1	0.1	0.0
56	Apparel & Accessory Stores	16.9	14.6	2.3
57	Furniture & Home Furnishings Stores	2.6	2.4	0.2
58	Eating & Drinking Places	38.0	36.2	1.9
59	Miscellaneous Retail	15.4	14.1	1.3
70	Hotels & Other Lodging Places	65.4	61.3	4.2
72	Personal Services	5.8	6.3	-0.4
73	Business Services	6.2	5.8	0.4
75	Auto Repair, Services, & Parking	23.9	20.7	3.2

78	Motion Pictures	6.8	6.5	0.3
79	Amusement & Recreation Services	4.2	3.5	0.6
80	Health Services	3.8	3.1	0.7
82	Educational Services	1.4	1.4	0.0
87	Engineering & Management Services	0.4	0.3	0.1
99	Non-Classifiable Establishments	2.2	1.8	0.4

Appendix D: Heterogeneous Effects of Publicized CSR Activities

This table reports panel regressions of shareholder value on CSR-related media coverage of S&P 500 companies from 1992 to 2009. The dependent variable in each column is the log of *Tobin's q*. *Tobin's q* is the ratio of the market value of assets to the book value of assets. *Net CSR Coverage* is the difference between *Pos. CSR Coverage* and *Neg. CSR Coverage*. *Net Local CSR Coverage* is the subset of *Net CSR Coverage* only related to news articles in the categories of community, diversity, and employees, and is defined as the difference between *Pos. Local CSR Coverage* and *Neg. Local CSR Coverage*. *Net Social CSR Coverage* covers only the news articles from environment and human rights categories, and is defined as the difference between *Pos. Social CSR Coverage* and *Neg. Social CSR Coverage*. *Pos. CSR Coverage*, *Neg. CSR Coverage*, *Pos. Local CSR Coverage*, *Neg. Local CSR Coverage*, *Pos. Social CSR Coverage*, and *Neg. Social CSR Coverage* are defined same as in Table 1. Important controls include the log of one, plus the number of total news articles in Lexis-Nexis regarding each company (*Total Media Coverage*), companies' overall CSR score provided by MSCI ESG Research (formerly, KLD Research & Analytics, Inc.), and the ratio of firms' advertising expense to total assets (*Advertising Intensity*). *News Sentiment* is the number of positive news articles, minus the number of negative news articles for a given firm-year. A detailed description of all other variables used is provided in Appendix A. *t*-statistics, based on robust standard errors clustered by firm, are in parentheses. *, **, and *** represent significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable = log(Tobin's q)				
	(1)	(2)	(3)	(4)
Net CSR Coverage	0.0187***		0.0183***	
	(3.58)		(3.29)	
*Net CSR Coverage * KLD Index*			-0.00230	
			(-0.27)	
Net Local CSR Coverage		0.0208***		0.0206***
		(3.82)		(3.52)
*Net Local CSR Coverage * KLD Index*				-0.00699
				(-1.04)
Net Social CSR Coverage		-0.00818		-0.00111
		(-1.28)		(-0.13)
*Net Social CSR Coverage * KLD Index*				0.00545
				(0.66)
KLD Index	-0.00428	-0.00429	-0.00371	-0.00440
	(-0.28)	(-0.28)	(-0.24)	(-0.29)
*KLD Index * Advertising*	0.328	0.325	0.337	0.314
	(1.01)	(1.00)	(1.04)	(0.97)
Total Media Coverage	0.0630***	0.0634***	0.0630***	0.0634***
	(5.32)	(5.36)	(5.32)	(5.35)
News Sentiment	0.150	0.150	0.150	0.150
	(0.82)	(0.82)	(0.82)	(0.83)
Entrenchment Index	0.00486	0.00518	0.00489	0.00519
	(0.52)	(0.56)	(0.53)	(0.56)
Firm Size	-0.0973***	-0.0969***	-0.0973***	-0.0970***
	(-5.37)	(-5.35)	(-5.37)	(-5.35)
Firm Age	-0.101	-0.104	-0.101	-0.104
	(-1.17)	(-1.19)	(-1.16)	(-1.20)
Insider Own.	1.563***	1.570***	1.562***	1.569***
	(2.96)	(2.98)	(2.96)	(2.98)
(Insider Own.)^2	-3.300*	-3.298*	-3.307*	-3.297*
	(-1.93)	(-1.93)	(-1.94)	(-1.92)
EBIT	2.382***	2.380***	2.383***	2.380***
	(16.34)	(16.23)	(16.34)	(16.23)
CAPEX	0.599**	0.597**	0.598**	0.597**
	(2.35)	(2.35)	(2.34)	(2.35)
Leverage	-0.359***	-0.358***	-0.359***	-0.359***
	(-4.60)	(-4.59)	(-4.59)	(-4.59)

Advertising	-0.410	-0.411	-0.411	-0.410
	(-1.11)	(-1.11)	(-1.11)	(-1.11)
R&D	0.128	0.134	0.125	0.130
	(0.28)	(0.29)	(0.27)	(0.28)
Institutional Own.	0.105*	0.102*	0.105*	0.103*
	(1.84)	(1.80)	(1.84)	(1.81)
Year and Firm FE	Yes	Yes	Yes	Yes
Observations	5,087	5,087	5,087	5,087
Adj-R^2	0.456	0.456	0.456	0.456

Appendix E: Dynamic Effects of Publicized CSR and CSR Ratings

This table reports the result of estimating the panel vector auto-regressive (VAR) model between *Net CSR Coverage* and *KLD Index* with two lags. *Net CSR Coverage* is the difference between *Pos. CSR Coverage* and *Neg. CSR Coverage*. *Pos. CSR Coverage* and *Neg. CSR Coverage* are defined same as in Table 1. *KLD Index* is from the adjusted CSR performance scores provided by the KLD Research & Analytics, Inc. Because panel VAR model requires the panel data to be strongly balanced, we utilize only the firms with full eighteen years of time-series observations in our main sample, which results in 115 firms and 1,840 firm-year observations (with initial two years as a burn-in for the two lags).

	(1)	(2)
VARIABLES	*Net CSR Coverage*	*KLD Index*
Net CSR Coverage $_{t-1}$	0.185***	-0.009
	(7.93)	(-0.83)
Net CSR Coverage $_{t-2}$	0.121***	0.006
	(5.06)	(0.56)
KLD Index $_{t-1}$	0.012	0.669***
	(0.24)	(28.51)
KLD Index $_{t-2}$	-0.032	-0.007
	(-0.63)	(-0.32)
Observations	1,840	1,840