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Corporate socially responsible investments: CEO altruism, reputation, and shareholder interests ☆

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ABSTRACT

Corporate managers often invest in activities that are deemed to be socially responsible. In some instances, these investments enhance shareholder value. However, in other cases, altruistic managers or managers who privately benefit from the positive attention arising from these activities may choose to make socially responsible investments even if they are not value enhancing. Given this backdrop, we investigate the various factors that motivate firm managers to make socially responsible investments. We find that larger firms, firms with greater free cash flow, and higher advertising outlays demonstrate higher levels of corporate social responsibility (CSR). We also find that companies with stronger institutional ownership are less likely to invest in CSR — which casts doubt on the argument that these investments are designed to promote shareholder value. Consistent with the literature that explores how CEO personal attributes influence corporate decision making, we find that female CEOs, younger CEOs, and managers who donate to both Republican and Democratic parties are significantly more likely to invest in CSR. This latter result suggests that CSR investments may not be driven solely for altruistic reasons, but instead may be part of a broader strategy to create goodwill and/or help maintain good political relations. Finally, we find a strong positive connection between the level of media scrutiny surrounding the firm and its CEO, and the level of CSR investment. This finding suggests that media attention helps induce firms to make socially responsible investments.

1. Introduction

Apart from their financial obligation to create value for their investors, companies also often face pressure from various stakeholders to invest in activities that are deemed to be socially responsible. Anecdotally, most large companies routinely stress the importance of corporate social responsibility (CSR) and take steps to highlight their investment in these activities.[1] Whether or not these activities come at the expense of investors, and if so, whether managers should place stakeholder concerns above stockholders have been hotly debated issues for at least several decades.[2]

☆ Earlier versions of this paper were titled, "What motivates corporate managers to make socially responsible investments?".

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[1] From examining some company websites and annual reports, it is clear that many top corporations highlight their various attempts to operate in a socially responsible manner. As some examples, see the websites of Starbucks, Johnson and Johnson, and Duke Energy, where each of these companies prominently emphasizes their social outreach.

[2] See, for example, Drucker (1968), Friedman (1970) and Handy (2002). Lougee and Wallace (2008) also provide a nice summary of key philosophers' views regarding CSR.

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Clearly, the interests of stockholders and stakeholders are not always aligned.[3] Nevertheless, some studies provide some evidence of a positive link between investments in CSR and measures of financial performance — suggesting that in some cases "doing good" may also be good for business.[4] While these findings are illuminating, there remain questions regarding causality — do investments in social responsibility make companies more profitable, or is it the case that profitable companies are more willing or able to divert resources towards investments in CSR? Moreover, the evidence suggests that corporate investments in CSR vary widely (even among companies within the same industry) — which is something that we might not expect to see if investments in CSR were universally beneficial to investors and non-financial stakeholders.

Given this backdrop, in this paper we investigate the factors that spur firms to invest in CSR. Recent theoretical work by Baron (2008), and Bénabou and Tirole (2010) highlights the various reasons that corporate managers may invest in CSR, and they also consider the various channels in which CSR investments may lead to enhanced financial performance. Borrowing from their theoretical framework, we conduct an empirical analysis where we conjecture that there are at least three different reasons why corporate managers may invest in CSR. One reason is altruism. Corporate managers may personally believe that they (and their company) have a moral imperative to invest in CSR activities such as environmental protection, employee welfare, and other humanitarian and community-based investments. A second motivation is that managers undertake these investments because they are consistent with the firm's financial interests. For example, providing generous benefits to employees and establishing a reputation for being socially responsible may help companies attract and keep high-quality employees, attract and maintain loyal customers, and mitigate legal, political and tax risk (to the extent these CSR investments reduce the likelihood of being sued and/or regulated).[5]

As a possible final motivation, we argue that managers pursue CSR activities because they believe it enhances their professional and/or personal reputation. Barnea and Rubin (2010) similarly highlight the potential agency problem that arises when managers over-invest in CSR to enhance their own private reputations. This "halo effect" may help them avoid the negative attention that can arise from inside the firm (e.g., disgruntled employees) or outside the firm (e.g., protests from consumer groups and unwanted media attention).

Obviously, these three motivations are not necessarily mutually exclusive, and the combination of specific factors that precisely lead managers to invest in CSR is difficult to completely disentangle.[6] However, we develop an empirical strategy that enables us to provide further insights into the various factors that create cross-sectional differences in the level of CSR investment. Most notably, we control for a wide range of firm-level and CEO-level characteristics, including the age and gender of the CEO, the CEO's political contributions (which provide insights into the manager's political leanings and/or desire to be politically connected), and the level of media scrutiny jointly surrounding the firm and its CEO (which is often influenced by the CEO's desire to strike a public posture). To the extent that these factors influence CSR investment, it suggests that these investments are not always made for pure economic reasons, and that the CEO's background, personal attitudes, and incentives play an important role.

While different CEOs may have different thoughts regarding the optimality of socially responsible investments, their ability to undertake these investments also depends on the attitudes of the firm's investors and the level of corporate governance. Specifically, we argue that the manager's investments in CSR are determined in large part by important interactions between the manager's true beliefs and the level of corporate governance.[7] Thus, in our analysis we also incorporate traditional proxies for the strength of corporate governance (the percentage of insider and institutional ownership, as well as the Governance Index (G-Index) developed by Gompers et al. (2003)).

To measure CSR, we employ data from KLD Research & Analytics. KLD uses a proprietary research process to classify both the strengths and concerns within six primary categories related to different aspects of social responsibility (*Community*, *Diversity*, *Employee*, *Environment*, *Humanitarian*, and *Product*). KLD considers a variety of sub-category measures within each of these six primary measures, and they assign dummy variables to indicate if a particular area is either a strength or concern. From these measures, we calculate an overall CSR index for each company in our sample by summing up all of the various strengths and subtracting all of the concerns. Using a sample of 11,711 firm years from 1992 to 2006, we find that the calculated indices for the firms in our sample range from a minimum value of −9 to a maximum value of +15. To conduct our empirical tests, we merge the KLD-related data with corporate governance data, data on CEO characteristics, information about the political contributions of the firms' CEOs, the CEOs media coverage, and CRSP/Compustat data regarding firm characteristics.

As one might expect, the calculated CSR measures vary considerably across industries. For example, companies in the Consumer goods, Computer hardware, and Banking industries tend to have above-average CSR measures, whereas companies in

[3] In a survey of the literature, Margolis and Elfenbein (2008) note that while CSR behavior may not impose large financial costs, there are many other ways to spend the money that could deliver a greater return on investment. At the same time, they argue that framing a societal investment in terms of shareholder interests may be misguided and that leaders can and should explore their own motivations such that doing good may be its own reward.

[4] See for example, the recent work by Gillan et al. (2010).

[5] Huseynov and Klamm (2012) provide evidence on the influence of CSR activities on tax avoidance. Karpoff et al. (2005) explore in detail the effects that environmental violations have on stockholder value. They demonstrate that shareholders bear the cost of imposed penalties, but they do not typically face any additional costs resulting from damages to the firm's reputation. Their results indicate that shareholders suffer when firms are socially irresponsible, which as we suggest, provides managers with an incentive to make CSR investments. While we also look at reputation effects, our emphasis instead concentrates on the impact that CSR investments have on CEO reputation.

[6] For example, it is particularly difficult to distinguish between managerial investments in CSR that are truly altruistic and those that are designed to enhance their reputation and career concerns. More broadly, recent work by DellaVigna et al. (2012) develop an interesting experiment to tease out whether individual charitable donations are motivated by altruism or social pressure.

[7] Adams et al. (2005) make a similar point in their study of "powerful" CEOs, where they suggest that interactions between CEO and firm characteristics have an important influence on firm performance.

the Aircraft, Chemicals, and Petroleum and Natural Gas industries tend to have below-average CSR levels. In our subsequent regression analysis, we employ two main econometric approaches to account for these differences. One approach is to do industry fixed effects, while the other approach is to run regressions where the dependent variable is the net-of-industry average CSR measure.[8]

Apart from industry effects, we find that larger firms and companies with stronger operating performance and greater free cash flow are more likely to invest in CSR. Furthermore, firms that focus on fewer lines of business tend to have larger CSR investments, as do firms that are more globally oriented. While there is no consistent link between the G-Index and CSR, we do consistently find that firms with larger institutional ownership are significantly less likely to invest in CSR.[9] This suggests that institutional owners (who arguably are more concerned with the interests of shareholders) are less inclined to favor CSR investments, which implies that at least some managers pursue CSR investments for non-economic reasons.[10]

We also find that female CEOs and younger CEOs are significantly more likely to invest in CSR. These findings add to a growing literature that explores how CEO characteristics and life experiences influence corporate decision-making. This related literature includes recent work documenting that CEO gender and/or gender diversity among board members influences corporate investment and risk-taking (e.g., Adams and Ferreira, 2009; Ahern and Dittmar, 2012; Faccio et al., 2011; Weber and Zulehner, 2010), as well as other studies that investigate the decisions made by CEOs with a military background and/or who grow up during the Great Depression (Malmendier and Nagel, 2011; Malmendier et al., 2011).[11]

Altogether, our results make an important contribution to at least four diverse literatures. First, and perhaps most notably, our evidence relates to the literature focusing on the causes and effects of CSR (e.g., Cheng et al., 2012; DiGiuli and Kostovetsky, 2011; Gillan et al., 2010). Second, it contributes to the growing literature that explores how managerial characteristics (such as age, gender and life experiences) influence corporate decisions (e.g., Faccio et al., 2011). Third, our paper contributes to the literature that focuses on the importance of political contributions among corporate managers, and the resulting effects of their political connections (e.g., Faccio, 2006; Faccio et al., 2006; Hutton et al., 2010). Fourth, our paper adds to the recent literature regarding the important interactions between media coverage and corporate decision-making (e.g., Malmendier and Tate, 2009; Milbourn, 2003). From a broader perspective, our paper uniquely brings together measures of corporate governance, political contributions, and media coverage.

In looking at the causes and effects of CSR investments, our work is most closely related to three recent studies. Somewhat in contrast to our findings, DiGiuli and Kostovetsky (2011) argue that firms with Democratic CEOs and board members are more likely to invest in CSR. While we also find that CEOs donating to Democrats are more likely to invest in CSR, this result is not statistically significant after controlling for CEOs who give to both parties. In another interesting paper, Gillan et al. (2010) look at the effects of an alternative measure of corporate social responsibility (the ESG rating) has on firm performance and find that companies with higher ESG ratings have higher operating performance, efficiency, and firm value. Compared to Gillan et al. (2010), our findings provide a different (but not completely inconsistent) interpretation of CSR investments. In a third study, Cheng et al. (2012) explore how the links between insider ownership and CSR activity evolved following the 2003 dividend tax cut. Similar to our findings, they find that managerial incentives and governance play important roles in CSR activity.

Relatedly, recent work by Hutton et al. (2010) finds that a manager's political orientation can have important influences on his or her decision-making. In particular, they find that Republican managers (as defined by their political contributions) adopt more conservative operating policies (including for example, lower debt levels, lower investment levels, lower R&D levels, and less risky investments). Similarly, DiGiuli and Kostovetsky (2011) also argue that a manager's political leanings might also affect his or her willingness to invest in CSR. In our analysis, we find that CSR investments are not significantly higher for firms whose CEOs routinely donate to either Republicans or Democrats. Interestingly, however, we find that managers who have donated to candidates of both parties are significantly more likely to invest in CSR. This result suggests that some managers investing in CSR are not necessarily "true believers" with a specific social or political agenda. Rather, it may imply that managers who find it in either the firm's or their own personal interest to maintain good favor with both parties are more likely to invest in CSR. In this regard, CSR investments may enhance the firm/manager's political connections.[12]

Finally, we argue that the level of media scrutiny could also have an important influence on managerial decisions to invest in CSR. In most cases, the level of media coverage surrounding a firm and its CEO is driven by both external news factors and the firm's willingness to be open to the press.[13] Previous work suggests that media coverage may have a number of important influences on firm policy and economic development. For example, Milbourn (2003) treats media exposure as one of many proxies for managerial reputation and demonstrates a positive link between media coverage and the efficiency of stock-based compensation.

[8] We use both approaches as a robustness check. Gormley and Matsa (2012) also argue that industry fixed effects provide consistent estimates, while industry-adjusted methods can provide inconsistent coefficients and lead researchers to incorrect inferences.

[9] This conflicts with Barnea and Rubin (2010), who find a negative link between insider stock ownership and CSR but no correlation between CSR and institutional ownership, and Harjoto and Jo (2011), who find a positive link between institutional ownership and CSR. These conflicting results suggest that the effects of corporate governance may vary over time and/or are sensitive to the inclusion of other control variables.

[10] There is a broad literature illustrating the important effects that institutional investors have on corporate governance and performance (e.g., Brav et al., 2008, 2010). It is important to acknowledge, however, that institutional investors are not monolithic in their incentives and their ability to affect change. While many institutional funds are clearly operating as fiduciaries for the economic interests of their underlying investors, other institutions may view their objectives as also including the interest of stakeholders. It may also be the case that firms with high levels of CSR have other characteristics and that make them less attractive to institutional investors. We address this concern in our subsequent analysis by controlling for a wide range of firm and industry characteristics.

[11] From a theoretical perspective, Hackbarth (2008) shows that managerial traits influence corporate financial policy and firm value.

[12] A number of recent papers (e.g., Faccio, 2006; Faccio et al., 2006; Houston et al., 2012) have explored various effects related to political connections.

[13] Solomon and Soltes (2011) explore in more detail the factors influencing the level of media coverage among the US firms.

In a very different context, Malmendier and Tate (2009) provide evidence that media coverage surrounding "superstar" CEOs may help transfer power from the firm to its managers.

In the context of our study, we argue that increased media scrutiny may serve as an alternative control device to induce managers to act either in the interests of stockholders or stakeholders. At the same time, CEOs who are particularly sensitive to their public reputations may be more responsive in the face of media scrutiny and/or may be more inclined to encourage media coverage. With these issues in mind we collect an extensive sample of media coverage in which the name of the firm and its CEO are jointly reported. Our results show that firms with a higher level of media coverage are significantly more inclined to invest in CSR. One interpretation is that media scrutiny induces managers to emphasize the interests of stakeholders (perhaps at the expense of its stockholders). An alternative explanation is that CEOs with greater press coverage view CSR investments as a way of promoting their own reputations and career concerns (once again, this may occur at the expense of stockholders).

Our reported results are also robust to alternative specifications, time varying estimates, econometric procedures that correct for potential clustering of errors, and endogeneity problems, among other robustness checks discussed in the paper.

Putting the various results together, we provide some important insights into the factors influencing CSR investments. While it is not the primary focus of our paper, we find that there is a negative relation between CSR investments and yearly stock returns.[14] These results suggest that stockholders do not always expect to achieve higher returns from CSR investments, similar to the recent findings of Albuquerque et al. (2013) and Humphrey et al. (2012). Consistent with this interpretation, our evidence shows that CSR investment is lower for firms with greater scrutiny from institutional investors (who presumably are more likely to care about the interests of stockholders), but higher for firms with more scrutiny from the media (which may be more inclined to promote the interests of stakeholders). More broadly, if CSR investments were solely pursued with stockholders' interests in mind, we might not expect to find a significant correlation between CEO characteristics and these CSR investments. The fact that we find certain types of managers are more inclined to invest in CSR suggests instead that these investments are heavily influenced by the personal desires of the CEO.

On balance, our findings suggest that at least some CSR investments are pursued for either what managers perceive as moral reasons or as a vehicle to promote managers' career concerns. These explanations are not mutually exclusive, and distinguishing between these motives is difficult. However, our results showing that managers contributing to both political parties are more inclined to invest in CSR suggest that these investments are often driven by those who are interested in maintaining good standing with both political parties. While not definitive, this result is more in the spirit of promoting career concerns and less motivated by purely altruistic reasons. Interestingly, these findings dovetail with the recent work of DellaVigna et al. (2012) who provide an enlightening experiment that suggests that some charitable contributions by individuals are driven by social pressure (rather than pure altruism).

The rest of the paper proceeds as follows: Section 2 describes the data used and the sample construction. Section 3 reports the main summary statistics. Section 5 presents the initial empirical results regarding the determinants of CSR. We also describe our various strategies to control for potential endogeneity problems. In Section 6, we extend the analysis by also including various controls related to media exposure. Section 7 presents results where we disaggregate the overall CSR measure and consider the determinants of investments for each of the sub-aggregates related to the six primary categories (*Community*, *Diversity*, *Employee*, *Environment*, *Humanitarian*, and *Product*). Digging deeper into the types of social investments confirms many of the main results, but also yields some additional interesting insights. Section 7 concludes.

2. Data and sample construction

2.1. Measures of corporate social responsibility

To measure CSR, we employ data from KLD Research & Analytics. KLD uses a proprietary research process to assign social responsibility scores across six primary categories. Those primary categories are *Community*, *Diversity*, *Employee*, *Environment*, *Humanitarian*, and *Product*. Within each primary category are a number of strength and concern subcategories. For example, within the community category, there are eight subcategories of potential strengths (*Charitable Giving*, *Innovative Giving*, *Non-U.S. Charitable Giving*, *Support for Housing*, *Support for Education*, *Indigenous Peoples Relations*, *Volunteer Programs*, and *Other Strength*). Each subcategory takes a value of one if the firm is strong in that area, and zero otherwise. Likewise, within the community category, there are five subcategories of concerns (*Investment Controversies*, *Negative Economic Impact*, *Indigenous Peoples Relations*, *Tax Disputes*, and *Other Concerns*). Here, each subcategory takes a value of one if the firm is weak in that area, and zero otherwise.

As our first measure of corporate social responsibility, we calculate a CSR_{Index} for each firm in our sample. To generate this index, we first sum the firm's strength subcategory terms minus the sum of its weakness subcategory terms for each of the six primary categories:

$$CSR(X_i) = \sum CSR(X_i)_{S,Y,} - \sum CSR(X_i)_{W,Y}, \tag{1}$$

where X_i is a primary category (*Community*, *Diversity*, *Employee*, *Environment*, *Humanitarian*, and *Product*) for firm i, and subscripts *S* and *W* denote the various strength and weakness within each subcategory *Y*. This produces a net (ordinal) value for each of the

[14] These results are summarized in the Appendix.

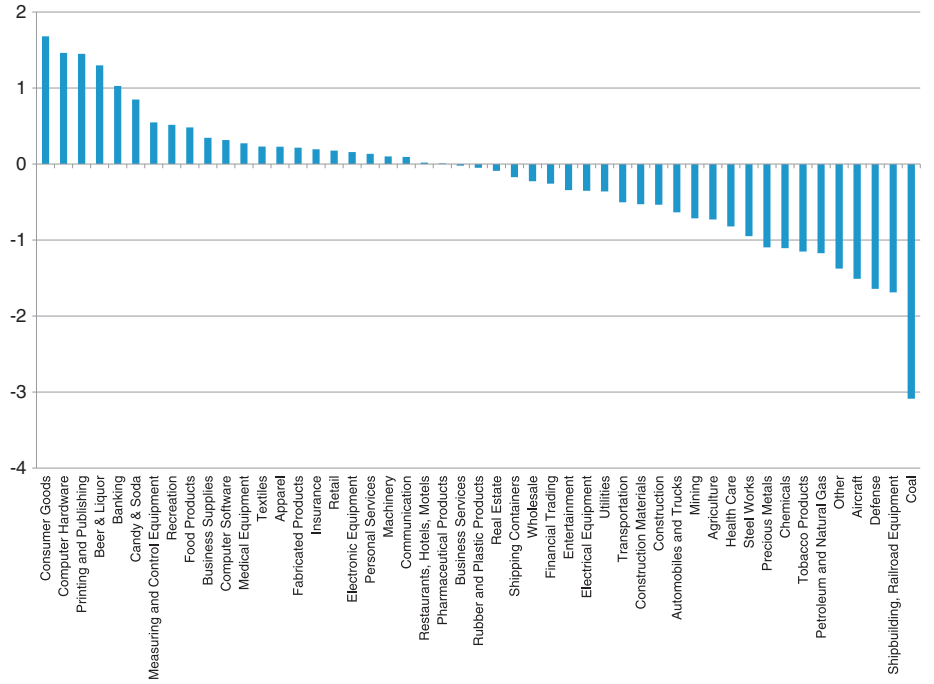

Fig. 1. CSR by industry, 1992–2006.

six primary categories. We then calculate an overall CSR index for each firm by summing up these measures for each of the six categories:

$$CSR(X_i) = \sum CSR(X_i). \tag{2}$$

There are good reasons to believe that the CSR index will vary considerably across different industries and across time. Because of the nature of their operations, some industries may find it more difficult to obtain a high CSR_{Index}. To confirm this hypothesis, we calculated the mean level of CSR for each of the 49 Fama–French industry categories. These results are plotted in Fig. 1. As hypothesized, we find considerable differences in average CSR among industries. Firms in the Consumer Goods, Computer Hardware, and Printing and Publishing industries have the highest CSR levels, while we find the lowest levels for firms in the Coal, Shipbuilding/Railroad Equipment, and Defense industries. We also report similar results in Figs. 2 and 3, where we break the sample down into earlier (1992–1998) and later (1999–2006) time periods. Looking at these figures, it is clear that there are both time and industry effects in CSR activity.

In this regard, it is appropriate to judge a company's investments in social responsibility relative to other firms in the same industry and to also control for time effects. Consequently, we use industry and time fixed effects. We also develop an industry-adjusted measure, $CSR_{Industry\text{-}Adjusted}$, which is calculated as the firm's *CSR* index less the median *CSR* index for all firms in the same industry in a given fiscal year. Firms are classified into different industries using the Fama–French 49-industry categories.[15] As an alternative measure of industry-adjusted CSR, we also calculate whether the firm exceeds the industry average within each of the six primary categories with qualitatively similar results.[16]

2.2. Firm characteristics

We collect a variety of firm-level control variables from the CRSP/Compustat database. These measures include firm size, age, profitability, and capital structure. We hypothesize that larger firms, firms with a lower debt ratio, and firms that generate higher profits and cash have more resources to invest in socially responsible activities. We also expect that higher profile firms (which include larger firms and highly profitable firms) are more likely to have higher levels of CSR.

[15] For firms operating across more than one industry, we compare that firm's *CSR* index to the sales-based weighted average *CSR* index across all industries in which the firm operates.

[16] Here, we assign a value of one if its CSR within the category exceeds the industry average and a value of zero if the level of CSR is equal to or less than the industry average. Summing these dummy variables across the six categories, we end up with an integer value that ranges from zero to six. To conserve space, the results using this alternative dummy-based measure of industry-adjusted CSR are not reported in the text, but they are available from the authors on request.

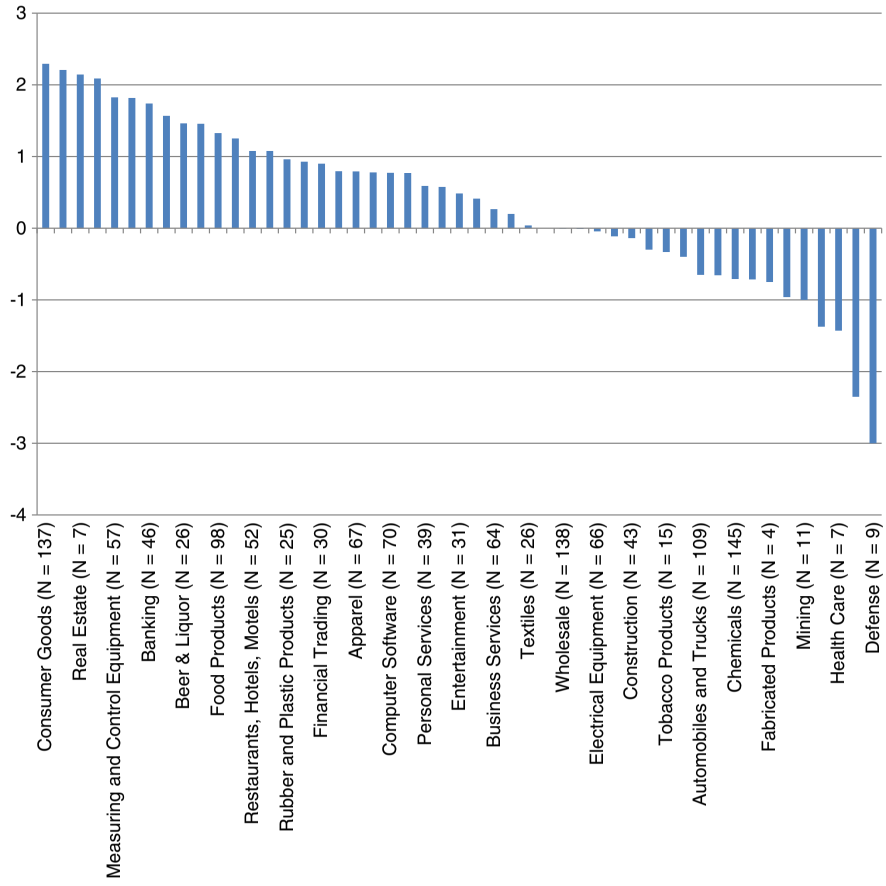

Fig. 2. CSR by industry, 1992–1998.

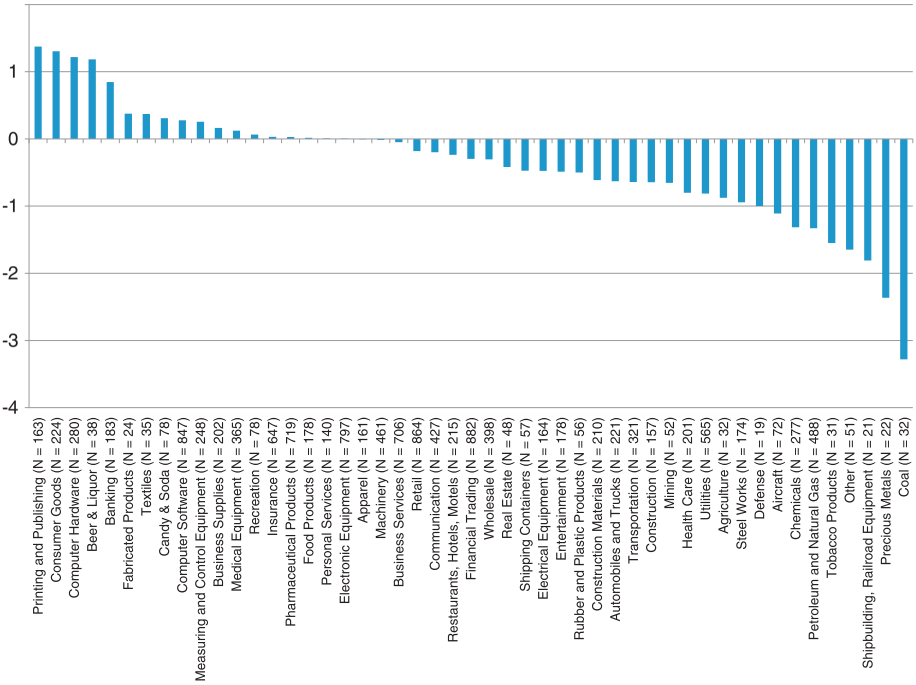

Fig. 3. Net CSR by industry, 1999–2006.

We also hypothesize a positive relation between CSR investments and firm advertising expenditures to the extent that CSR investments serve as a complementary firm exposure channel that further increases a firm's corporate image and brand. Firms with more well established brands are also more likely to be concerned with maintaining or enhancing their public image. These concerns arguably would lead them to also be more inclined to have higher levels of CSR, with the alternative hypothesis being that CSR serves as a substitute for advertising.

We further hypothesize that firms that are more diversified, more global, and that operate in less competitive industries would have greater ability/incentives to invest in socially responsible activities. Consequently, using information from the COMPUSTAT Segment database, we also construct measures of corporate product diversification (*Sales Herfindahl*), corporate geographic diversification (*Geographic Herfindahl*), and industry competitiveness (*Competitiveness*). More specifically, the degree of product diversification for a firm is calculated as a sales-based Herfindahl:

$$Sales\,Herfindahl = \frac{\sum Sales_I^2}{\left(\sum Sales_I\right)^2}, \tag{3}$$

where $Sales_I$ is the firm sales within industry I (a high value implies that sales are highly concentrated within a single industry).

Likewise, the *Geographic Herfindahl* calculation, $Sales_G$ is the firm sales within geographic segment G (a high value implies that sales are highly concentrated within a single geographical location):

$$Geographic\,Herfindahl = \frac{\sum Sales_G^2}{\left(\sum Sales_G\right)^2}. \tag{4}$$

Finally, the measure of industry *Competitiveness* captures the extent to which the sales in that industry are dominated by a single firm:

$$Compitiveness = \frac{\sum Sales_F^2}{\left(\sum Sales_F\right)^2}. \tag{5}$$

Here, $Sales_F$ is the total sales of a given firm within a particular industry I.

2.3. Measures of corporate governance

Some CSR investments might be expected to enhance shareholder value, whereas others are more likely motivated by altruism or the manager's own self-interest. Arguably, a manager's ability/willingness to engage in non-shareholder-enhancing CSR investments depends critically on the firm's corporate governance. Our primary measures are the *Governance Index*, and the percentage of insider and institutional ownership.[17]

2.4. CEO characteristics

We might also expect that CEO characteristics influence a company's willingness to engage in socially responsible investments. Thus, for each of the firms in our sample, we also collect a wide range of data from the ExecuComp database. This database reports details on each firm's top executives, and includes data on their age, title, gender, and number of years worked at the company. We also collect data regarding executive compensation.

2.5. Political contributions

To help gauge the political orientation of the firm and its managers, we collect data on political contributions from the Federal Election Committee (FEC) website.[18] Three separate datasets are used — an individual contribution file, a candidate file, and a committee file. The individual contribution file contains the name and employer of the contributor, the dollar value of each contribution, and an identifier that enables matching to the candidate and party files.[19] We match these data with the candidate and committee datasets via the identifier and obtain the party affiliation associated with each individual donation.

From these datasets, we construct a series of variables to help explain variations in corporate CSR. We examine contributions of CEOs to Republicans and Democrats in raw dollars and as a percentage of total contributions. Similar to Houston et al. (2011),

[17] See http://faculty.som.yale.edu/andrewmetrick/data.html for the G-Index. We also utilize Lucian Bebchuk's *Entrenchment Index* (http://www.law.harvard.edu/faculty/bebchuk/data.shtml) as a robustness test. As a third robustness test, we employ our own *Monitoring Index*, which we calculate as the sum of a series of 0/1 dummy variables including *High Entrenchment*, *Low Insider*, *Low Institutional*, *Low Sales-to-Assets*, and *High FCF-to-Assets*. Each high (low) term is set to one when its value is greater (less) than the median across all firms, and zero otherwise. Thus, the higher the *Monitoring Index*, the more severe the potential agency problems. Our results are qualitatively similar using these alternative measures of corporate governance and monitoring.

[18] http://www.fec.gov/finance/disclosure/ftpdet.shtml.

[19] Contributions less than $200 are not recorded by the FEC.

we construct a measure *Relrep*, which is the percentage of contributions to Republicans relative to total contributions to both Democrats and Republicans. We also create a series of dummy variables: *Polarize* (which is set to one if all contributions go to either Republicans or to Democrats, and zero otherwise), *Rep* (which equals one if all contributions go to Republicans and zero otherwise), *Dem* (which equals one if all contributions go to Democrats and zero otherwise), and *Both* (a portion of contributions go to Republicans and a portion to Democrats).[20]

2.6. Media exposure

Similar to Milbourn (2003) and others, we identify CEO media coverage by counting the number of news hits that the CEO receives in Factiva in a given year.[21] We create two alternative measures for the CEO's media coverage. In one approach, we use a narrower list of publications consisting of three key sources: Major News and Business Publications, Top US Newspapers, and Wires. We also do a wider search using all of Factiva's publication sources as an additional robustness check. Presumably, the narrower search highlights the CEO's media exposure among a set of news sources that have a stronger business-related component, whereas the wider search provides the broader scope of the CEO's media coverage.

Because media coverage for the CEO is often linked to the firm's size with larger firms providing more media coverage, we adjust the number of hits by firm size. We also test several additional adjustments whereby we derive an industry adjusted media coverage measure as well as a measure where we calculate unexpected media coverage based on a regression that includes size, industry, and year effects as well as advertising and return performance effects.

3. Summary statistics

Table 1 reports the summary statistics for the two CSR measures used in our main empirical analysis. Table 2 shows the summary statistics regarding the firm, governance, and CEO characteristic for the 11,711 firm years in our final sample. Along with the main summary statistics, we also show how firm and governance characteristics, CEO characteristics and political contributions of key executives vary among those firms with high and low levels of CSR.

3.1. The level of corporate social responsibility (CSR)

The results in reported Table 1 show that the total CSR index ranges from −9 to +15, and that among the firms in our sample the mean level of CSR is slightly positive (0.04). Within the six primary categories, we see that the mean CSR measure is positive for three of the categories (*Community*, *Diversity* and *Employee*) — which indicates that within these categories, the average firm has more strengths than weaknesses. In contrast, we find that the average measure is negative for the other three categories (*Environmental*, *Humanitarian*, and *Product*). Looking at the industry-adjusted CSR measures, we see that the mean level of industry-adjusted CSR is slightly positive (0.03), while the median is negative (−0.08), which suggests that there is some slight skewness in the industry-adjusted numbers.

3.2. Firm and governance characteristics

The first panel in Table 2 reports the summary statistics for a broad range of firm and governance measures. The mean firm in our sample has total assets of approximately $5.924 billion, and the mean age of the sample firms (measured as the number of the years since the firm went public) is 24.36 years. The average operating profit margin (measured as EBIT divided by total assets) is 9%, the average annual stock return is 21% (median 12.9%), and free cash flow and Tobin's Q average are $140 million and 2.67 respectively. On a book value basis, the average firm has a little less than 20% debt (measured as debt to total assets). The mean Sales Herfindahl measure is 0.88, while the mean Geographic Herfindahl is 0.71. The competitiveness measure has a mean of 0.05.

14.5% of the firms report a positive advertising expenditure. Among those firms, the mean level of advertising is $258 million, and the median is $55 million. In our baseline model, we assume that the advertising expenditure is zero for the firms that do not report an advertising expenditure.[22] Given this assumption, the mean advertising expenditure for the full sample is $38 million, and the median is $0.

The Governance Index measuring the degree of shareholder rights among public corporations is from Gompers et al. (2003). The measure ranges from 0 to 24 — with higher measures indicating a greater level of shareholder protection. For the firms in our

[20] We also introduce five other measures that illustrate political 'leanings.' *Conservative* is set to one if *Relrep* > 0.6, *Leaning Conservative* is set to one if 0.6 ≥ *Relrep* > 0.2, *Neutral* is set to one if 0.2 ≥ *Relrep* > −0.2, *Leaning Liberal* is set to one if −0.2 ≥ *Relrep* > −0.6, and *Liberal* is set to one if −0.6 ≥ *Relrep*. Each is set to 0 otherwise. The results using these alternative measures are not tabulated, but they are qualitatively similar and available from the authors on request.

[21] The Dow Jones interactive services are now a part of Factiva. We also tried several approaches, including using the preceding 5 years, search criteria that only included the CEO's name, and alternative selected publications. In analyzing the results using these approaches, we found significant error rates in the hits. That is, in reviewing the individual hits, many were not the CEO in question. To minimize the error rate, we linked the CEO and company names in the search criteria. Including the CEO's name and firm resulted in much more accurate hit rates as the correct CEO names were rarely mentioned without their firms — even for non-business related news such as charity or other events related news.

[22] Because of the incompleteness of the data, in our subsequent tests we use three approaches. Our main approach (described above) is to assign a zero value for those firms that do not report advertising. A second approach is to report baseline results only for the sub-sample of firms that report advertising and a third approach is to exclude the advertising variable from the estimated model. Our results are qualitatively similar across each of these approaches.

Table 1
Descriptive statistics on firm corporate social responsibility.
This table contains descriptive statistics for the 11,711 firm years in our 1992–2006 sample period. We quantify each firm's social responsibility within each of the six major CSR categories — community, diversity, employee, environment, humanitarian, and product. Each of these major categories contains a variety of subcategory terms, some of which are strengths and other weaknesses. For example, there are seven community strength subcategory terms; each takes a value of 1 (strong) or 0 (not strong). There are also four community concern subcategory terms; each takes a value of 1 (concern) or 0 (no concern). We obtain CSR community by summing the strength subcategory terms and then subtracting the concern subcategory terms. Thus the value for CSR community ranges from seven to minus four. To calculate the Industry-adjusted CSR terms, we take each firm's CSR (the sum of firm strengths minus the sum of firm weaknesses) and subtract the industry-weighted (the sum of mean industry strengths minus the sum of mean industry weaknesses).

	Mean	Median	Min	Max
CSR				
CSR community	0.14	0.00	−2.00	4.00
CSR diversity	0.22	0.00	−2.00	6.00
CSR employee	0.02	0.00	−4.00	5.00
CSR environmental	−0.13	0.00	−5.00	4.00
CSR humanitarian	−0.07	0.00	−3.00	1.00
CSR product	−0.12	0.00	−4.00	3.00
CSR total	0.04	0.00	−9.00	15.00
Industry-adjusted CSR				
Industry-adjusted CSR community	0.00	−0.05	−1.94	3.92
Industry-adjusted CSR diversity	0.01	−0.10	−3.09	5.85
Industry-adjusted CSR employee	0.01	0.08	−3.92	5.24
Industry-adjusted CSR environmental	0.00	0.00	−4.38	4.01
Industry-adjusted CSR humanitarian	0.00	0.03	−2.90	1.33
Industry-adjusted CSR product	0.00	0.06	−3.73	2.95
Industry-adjusted CSR	0.03	−0.08	−8.64	14.00

sample, the mean G-Index is 9.57, which is very similar to the numbers reported by Gompers et al. (2003). As alternative measures of corporate governance, we also use the percentage of stock held by insiders and by institutions. The mean insider holdings is 4%, and the mean institutional holdings is 66%.

In Table 2, we also report the mean levels of these various measures for the sub-sample of firms with relatively high and relatively low levels of CSR. More specifically, we provide means and tests for differences in those means across the highest and lowest quartiles of CSR ranking using both of our CSR measures. These results strongly indicate that there are many significant differences between firms with high and low levels of CSR. Most notably, firms with higher CSR tend to be larger and more profitable firms with higher free cash flows, higher advertising expenditures, and lower debt. Interestingly, however, firms with higher CSR levels tend to have lower annual stock returns. This result suggests that at the least CSR investments are not in shareholder's interests, and may instead be motivated by either the manager's moral or career concerns.[23]

We also find that firms with higher CSR levels tend to be more focused in terms of their line of business, but more diversified geographically. The average competitiveness measure is also significantly lower for the higher CSR firms — which suggest that these firms operate in slightly more competitive industries. Finally, the high CSR group has slightly lower mean levels of insider and institutional ownership, and these differences are statistically significant. However, when we look at the industry-adjusted measures, none of the corporate governance indicators vary significantly among the high and low CSR groups.

3.3. CEO characteristics

In our sample, the average CEO is 56 years old and has been with the company slightly less than 20 years. 98% of the CEOs are male. Their mean annual total compensation is about $5.4 million. Once again, we find that there are many significant differences between the high and low CSR groups. Most notably, we find that the higher CSR group tends to be younger and to more likely have a female CEO.

3.4. Political contributions

Table 2 also summarizes the political contributions of the executives in the sample. 18% of the CEOs have a reported political contribution. Among these contributors, the average contribution slightly exceeds $4100. 13% of the CEOs give exclusively to one political party (the Polarizers), and among those who give to both parties, they are more likely to contribute to Republican candidates (RelRep > 0). We also find some evidence that CEOs of high CSR firms are more likely to contribute and also more likely to contribute to a single party. However, the statistical significance of these results disappears when we look at the industry-

[23] In the Appendix, we run a simple return performance model with our CSR measures and the Fama–French factors augmented with momentum. Again, we find that CSR is negatively related to stock returns, and the significance levels of the estimated CSR coefficients vary across the various specifications from being significant in several specifications to insignificant in others. While this is not the primary emphasis of this paper, it again provides some confirmatory evidence that CSR investments are not universally pursued solely for the benefit of shareholders.

Table 2
Descriptive statistics on firm, governance, and CEO characteristics, political giving, and media exposure by corporate social responsibility.
This table contains descriptive statistics for the 11,711 firm years in our sample period, which ranges from 1992 to 2006. Competitiveness is the Herfindahl–Hirschman industry index (low means many competitors and high means more monopolistic). The Governance index is the greatest when shareholders have the least rights. The Monitor index is the sum of five monitoring variables (high entrenchment, high insider, low institutional, low sales-to-assets, and high FCF-to-assets). Each high (low) variable is set to one when the firm is higher (lower) than the median industry value. Relrep is the contributions to republicans minus the contributions to democrats divided by total contributions. Polarizer is set one when Relrep is +1 or −1, and 0 otherwise. We identify CEO media coverage by counting the number of news hits that the CEO receives in Factiva in a given year. We create two alternative measures for the CEO's media coverage. In one approach, we use a narrower list of publications consisting of three key sources: Major news and Business publications, Top US newspapers, and Wires. We also do a wider search using all of Factiva's publication sources.

	CSR					Industry-adjusted CSR		
	Full sample		Upper quartile	Lower quartile		Upper quartile	Lower quartile	
	Mean	Median	Mean	Mean	p-Values diff qrts	Mean	Mean	p-Values diff qrts
Firm:								
Total assets (000,000s)	5293.054	1458.142	9022.359	7054.090	0.000	8210.326	6021.758	0.000
Firm age	24.353	18.000	28.547	28.017	0.424	26.738	27.335	0.288
EBIT/assets	0.092	0.092	0.121	0.078	0.000	0.111	0.083	0.000
Stock returns	0.209	0.129	0.153	0.238	0.000	0.172	0.216	0.002
Tobin's Q	2.665	2.071	2.705	2.229	0.506	2.616	2.468	0.793
Free cash flow (000,000s)	140.423	15.424	386.533	156.238	0.000	303.890	124.422	0.000
Debt/assets	0.186	0.163	0.165	0.227	0.000	0.175	0.208	0.000
Sales Herfindahl	0.879	1.000	0.882	0.858	0.000	0.889	0.863	0.000
Geographic Herfindahl	0.711	0.722	0.667	0.719	0.000	0.683	0.713	0.000
Competitiveness	0.045	0.038	0.045	0.048	0.001	0.044	0.045	0.024
Advertising expense (000,000s)	248.357	49.450	461.062	201.847	0.000	423.507	192.383	0.000
Advertising/sales	0.005	0.000	0.009	0.003	0.000	0.007	0.003	0.000
Media:								
Three sources	68.395	28.000	97.077	80.932	0.036	90.586	73.694	0.014
Three sources/assets	0.030	0.008	0.029	0.033	0.391	0.029	0.031	0.640
All sources	115.162	41.000	156.656	144.340	0.427	150.902	129.638	0.121
All sources/assets	0.049	0.011	0.046	0.055	0.311	0.050	0.050	0.917
Governance:								
Governance index	9.564	10.000	9.684	9.585	0.249	9.725	9.643	0.291
Monitor index	2.134	2.000	2.165	2.076	0.004	2.166	2.108	0.033
% insider	4.2	0.9	3.6	4.1	0.040	3.7	3.9	0.193
% institutional	66.0	68.4	62.7	66.8	0.000	65.1	65.6	0.441
CEO characteristics:								
CEO age	56.114	56.000	55.951	56.733	0.004	55.899	56.608	0.003
% CEO male	98.4	100	95.4	99.6	0.000	0.957	0.997	0.000
CEO years at company	19.633	19.000	21.289	19.968	0.027	20.582	20.129	0.374
CEO total compensation (000s)	5400.056	2983.040	7018.966	5560.835	0.002	6581.185	5868.453	0.109
CEO political contributions:								
% CEO donor	17.9	0.0	25.3	18.4	0.000	21.7	20.4	0.218
CEO total contributions	4177.935	2000.000	5759.362	3457.373	0.000	5470.096	3336.463	0.000
CEO rep/dem contributions	3003.583	1500.000	3928.508	2755.184	0.001	3924.938	2481.178	0.000
CEO 3rd party contributions	4565.623	2250.000	6158.805	3058.127	0.003	5504.298	3441.720	0.037
CEO relrep	0.057	0.000	0.062	0.065	0.778	0.054	0.075	0.043
CEO polarizer	0.129	0.000	0.165	0.134	0.003	0.145	0.154	0.346

adjusted CSR levels. Indeed, one would expect that political contributions would vary considerably across industries and among different types of firms. In this regard, while somewhat suggestive, the unconditional summary statistics presented in Table 2 are potentially misleading to the extent that they do not fully control for all of the other various factors that are likely to influence investments in CSR. With this concern in mind, we consider in the next section, a more complete model of the determinants of CSR investment.

4. The factors influencing corporate investments in CSR

4.1. Baseline results

As a baseline, we estimate the following regression model:

$$\text{CSR} = f(\text{Firm}, \text{Governance Characteristics}, \text{Industry and Year fixed-effects}). \quad (6)$$

Table 3
Do firm, governance and CEO characteristics explain corporate social investments?
This table contains regression results of firm and governance characteristics on corporate social responsibility, both CSR and CSR Industry-adjusted. We quantify each firm's social responsibility within each of the six major CSR categories — community, diversity, employee, environment, humanitarian, and product. Each of these major categories contains a variety of subcategory terms, some of which are strengths and other weaknesses. For example, there are seven community strength subcategory terms; each takes a value of 1 (strong) or 0 (not strong). There are also four community concern subcategory terms; each takes a value of 1 (concern) or 0 (no concern). We obtain CSR community by summing the strength subcategory terms and then subtracting the concern subcategory terms. Thus the value for CSR community ranges from seven to minus four. To calculate the Industry-adjusted CSR terms, we take each firm's CSR (the sum of firm strengths minus the sum of firm weaknesses) and subtract the industry-weighted net (the sum of mean industry strengths minus the sum of mean industry weaknesses). Firm and governance characteristic variables are defined in Table 2. Each regression contains year fixed-effects and standard errors are clustered by firm. We use Fama and French's 49 industry classifications for the industry fixed-effects.

	CSR						CSR industry-adjusted					
	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value
Firm:												
Intercept	−2.693	0.000	−2.699	0.001	0.367	0.737	−1.034	0.004	−0.658	0.223	2.555	0.005
Log assets	0.134	0.003	0.232	0.000	0.351	0.000	0.149	0.000	0.219	0.000	0.306	0.000
Age	−0.005	0.105	−0.009	0.034	−0.010	0.043	−0.005	0.131	−0.009	0.017	−0.010	0.029
EBIT/assets	1.226	0.000	2.343	0.000	2.686	0.001	1.049	0.000	1.851	0.001	2.035	0.004
Log FCF	0.007	0.323	0.000	0.952	−0.003	0.746	0.007	0.288	0.001	0.921	0.001	0.882
Debt/assets	−0.779	0.000	−0.819	0.010	−0.693	0.090	−0.787	0.000	−1.072	0.000	−0.942	0.014
Sales Herfindahl	0.540	0.026	0.439	0.138	0.537	0.115	0.438	0.052	0.334	0.227	0.302	0.333
Geo Herfindahl	−0.347	0.068	−0.434	0.088	−0.509	0.068	−0.312	0.054	−0.554	0.009	−0.724	0.001
Competitiveness	−0.897	0.564	−3.103	0.104	−3.834	0.099	−1.303	0.229	−1.527	0.296	−1.711	0.309
Advertising/sales	10.607	0.000	10.983	0.001	8.535	0.008	10.100	0.000	10.836	0.001	8.965	0.004
Governance:												
Governance index			0.013	0.621	0.018	0.543			0.017	0.499	0.018	0.530
% insider			−1.009	0.101	−0.470	0.528			−1.183	0.036	−0.762	0.260
% institutional			−0.781	0.014	−1.221	0.002			−0.674	0.023	−1.097	0.003
CEO:												
CEO age					−0.013	0.076					−0.009	0.220
CEO male					−2.437	0.000					−2.380	0.000
Log CEO total comp					−0.074	0.157					−0.069	0.199
CEO rep polarizer					−0.179	0.101					−0.177	0.096
CEO dem polarizer					−0.054	0.761					−0.038	0.828
CEO non-polarizer					0.575	0.035					0.584	0.032
Industry fixed-effects	Yes		Yes		Yes		No		No		No	
Observations	11,711		7533		5551		11,711		7533		5551	
R-square	0.1770		0.1894		0.2300		0.0355		0.0570		0.0960	

The first three columns of Table 3 report the baseline regression results using the overall CSR index as the dependent variable. The reported p-values are based on standard errors that are corrected for heteroscedasticity and clustered at the firm level.[24] Among the results reported in the first column of Table 3, we find that the level of CSR is positively related to firm size, operating profitability, and the advertising to sales ratio. Geographically localized firms and those firms with higher debt ratios tend to have lower CSR levels. We also find that firms focus on fewer lines of business (those with higher Sales Herfindahl measures) have higher CSR levels.

These baseline results include industry fixed-effects. As an alternative method for controlling for industry, we run the same baseline regressions using the industry-adjusted CSR as the dependent variable. These results, reported in Column 4 of Table 3, are qualitatively very similar to those reported in Column 1, suggesting that our results are robust to alternative industry adjustment methods.

4.2. Does corporate governance influence CSR investment?

Next, we augment the baseline model by also including the corporate governance measures as additional explanatory variables. These results are reported in Column 2 (where CSR is used as the dependent variable) and in Column 5 (where the industry-adjusted CSR is used as the dependent variable). In both cases, the main baseline findings continue to hold, although we now also find that older firms are significantly less likely to invest in CSR.

Interestingly, we find that while there is no statistical link between the G-Index and the level of CSR investment, the level of insider and institutional ownership is negatively related to both CSR and industry-adjusted CSR. While not definitive, the finding that CSR levels are higher when the firm's managers own less stock and/or face less pressure from institutional investors, suggests that at least some CSR investment may not be in the best interest of shareholders and that the managers may be pursuing these investments for their own reasons (which may be a perceived moral responsibility or their own career concerns).

[24] See Petersen (2009) for a discussion of the various approaches used to estimate standard errors in panel data.

4.3. Disentangling CEO motives: are certain types of CEOs more likely to invest in CSR?

To test for the influence of other factors motivating firms to invest in CSR, we also examine several important CEO characteristics. These results are reported in Columns 3 and 6 of Table 3.

We find that the main baseline results continue to hold after adding these additional CEO-related variables. We also find that while the links between insider ownership and CSR disappear after including these additional variables, the effects related to institutional ownership become even stronger — confirming the notion that firms that face outside pressure on behalf of shareholders are less likely to invest in CSR.

Looking at the coefficients related to the CEO-related variables, we see a couple of interesting results. First, after controlling for other factors, the CEO's age has an influence on their willingness to invest in CSR, and female CEOs are significantly more likely to make socially responsible investments. These findings lend support to the existing literature documenting that gender has an important influence on key corporate decisions (e.g., Faccio et al., 2011).

Second, we find that there are important links between the type of political contributions and the level of CSR. Specifically, we find that there is a negative (but not statistically significant link) between the CSR measures and dummy variables indicating that the CEO gave exclusively to either the Republican or Democratic Party. However, most notably, we find that firms having CEOs that give to both parties are significantly more likely to invest in CSR. Put another way, we find that CEOs with strong political leanings one way or the other are no more inclined to invest in CSR (indeed the correlation is negative), which suggests that their firm investments do not completely reflect the CEO's personal beliefs. At the same time, the fact that we find that CEOs who give to both parties are more likely to invest in CSR raises the possibility that both the contributions and the investments in CSR may be occurring for strategic reasons (and not necessarily altruistic reasons).

Arguably, these types of "strategic" investments might be consistent with the interests of shareholders. However, the fact that we find that firms with less pressure from outside investors are more likely to invest in CSR leads one to conclude that corporate managers may be undertaking these investments for their own strategic reasons (e.g., conflict avoidance, enhancing their reputation within their social communities and/or simply doing what they think is "right"), but that these investments may not always be consistent with shareholder interests.

4.4. A further examination of the connection between corporate social investments and CEO motives: controlling for potential endogeneity problems

While we provide evidence consistent with corporate managers undertaking CSR investments for their own strategic reasons, it may be the case that managers of varying political leanings seek employment in firms who invest more in CSR activities. To correct for this potential endogeneity problem, we use an instrumental variable 2SLS approach similar to DiGiuli and Kostovetsky's (2011) approach. In the first-stage, we instrument for the political giving variables. We then use the predicted values of each political giving variable as explanatory variables in a second-stage regression.

As identifying variables in the first-stage regression, following an approach similar to DiGiuli and Kostovetsky's (2011) approach, we use the political affiliation of the state in which the founder(s) went to college.[25] DiGiuli and Kostovetsky (2011) argue that this instrument is likely to be correlated with our political variables because founders who go to college in states of certain political leanings are more likely to be of the same political leanings themselves and start their companies in those same states where they went to college. This homophily principle of similarity inducing connections is well founded in many social network studies (e.g., McPherson et al., 2001). This instrument is also a reasonable a priori exogenous determinant of our political giving variables and uncorrelated with CSR investments (i.e., it satisfies the exclusion requirement as it is unlikely that founders go to college expecting to found any firm at all or firms with certain CSR orientations).

In untabulated results to conserve space (available on request from the authors), we find that the first-stage F-statistics are all significant, satisfying any weak instrument concerns. Similar to our previous findings in Table 3, we find in the second-stage estimates that non-polarizer CEOs continue to make larger CSR investments, while Republican polarizer CEOs continue to make smaller CSR investments. However, in contrast to our earlier managerial donation results in Table 3, we now observe in our second-stage results that Democratic polarizer CEOs make larger CSR investments, consistent with the findings in DiGiuli and Kostovetsky (2011). In our earlier analysis, the significance of Republican CEO giving effects was marginally significant at the 10% level, whereas each of the effects using the IV approach is significant at the 1% level. Overall, our IV 2SLS results suggest that, our results are robust to controlling for endogeneity effects.

5. Does CEO media coverage influence CEO invest in CSR?

Previous literature has demonstrated that the news media plays an important role in influencing a broad range of economic and political outcomes.[26] More specifically related to our study, Milbourn (2003) explores the effects that a CEO's external reputation has on corporate policy. He employs a measure of media coverage as one measure of reputation and demonstrates that

[25] We measure the political affiliation as the proportion of the vote received by each respective party candidate for president in the last election in the state where the firm is headquartered. For non-polarizer, we include both founders state % democrat and founders state % republican. The founder's college is gathered from the BoardEx database.

[26] See for example, Djankov et al. (2003), Besley and Prat (2006), Leeson (2008), and Houston et al. (2011).

there is a strong link between CEO reputation and the efficiency of stock-based compensation. Looking at things from a somewhat different angle, Malmendier and Tate (2009) focus on a sample of CEOs who receive an inordinate amount of media focus. They provide evidence that these "Superstar CEOs" are able to extract rents from their firm and that they may in turn, pursue policies that are in their own personal interests to the detriment to shareholders and other investors.

We consider two possible channels in which media coverage may influence a CEOs willingness to invest in CSR. In one respect, the increased media exposure puts a spotlight on the firm, and this additional scrutiny may in turn influence managerial decisions (including the level of CSR investment). It remains an open question, however, whether this enhanced scrutiny encourages managers to act in the interests of shareholders, or in the broader interests of stakeholders inside and outside the firm. For example, enhanced media scrutiny may put pressure on managers to limit wasteful perquisite consumption and pet projects (which may include CSR investments) to the benefit of stockholders. Alternatively, the media scrutiny may induce managers to make investments that are in the interests of society but detrimental to the firm's stockholders.

The second channel through which media exposure may influence CSR is through its effects on the manager's reputation. Heightened media coverage may further induce managers to act in their own interests. Moreover, to the extent that managers can themselves influence media coverage through enhanced accessibility, we might expect that managers who view CSR as a means of enhancing their own private reputation and career concerns may try to promote these activities by cooperating with the media.

In our empirical analysis, we extend our baseline model by also including the level of media exposure. Evidence of a negative link between media coverage and CSR would suggest that enhanced media scrutiny works as an additional corporate governance mechanism to limit managerial over-investment in CSR. Evidence of a positive link would instead suggest that either the media works to promote the interests of stakeholders relative to stockholders and/or that enhanced media exposure induces managers to promote their own reputations and career interests ahead of shareholders.

From a product market perspective, Albuquerque et al. (2013) model CSR as a product differentiation strategy. If product differentiation was a significant factor in a firm's CSR decision, one would expect firms in the consumer goods industry to have relatively high CSR score on average. Our earlier findings confirmed this conjecture, and indeed this is part of our broader motivation to control for industry-effects. One would also expect media coverage in general to be important if product differentiation was a major reason for CSR. Similarly, advertising should be positively correlated with CSR when product differentiation is important.

In our empirical model, we also allow for the possibility that CEO media exposure effects may have a differential influence on different types of CEOs and on different types of firms with different governance mechanisms. Consequently, we also interact our media measure with a many of the other key control variables.

These results are reported in Table 4. Once again the first three models are estimated using CSR as the dependent variable and controlling for industry fixed-effects in the regression. The next three models in columns 4–6 use the industry-adjusted CSR as the dependent variable. As measures of media coverage, we use the three methods described in Section 2 (a measure using the three key business sources, a broader measure using all available sources in Factiva, and the residuals from a model of expected coverage — which we label as "Excess Media").

We find across all six models, strong evidence of a positive and statistically significant link between media coverage and CSR investment. Once again, these finding suggests that the media may exert pressure on the firm managers to act in the broader interests of society (perhaps to the detriment of stockholders). Alternatively, these finding may indicate that managers with broader media coverage have a greater incentive and/or interest in promoting their own reputations and career concerns and that they view CSR investments as one vehicle for accomplishing these goals.

After controlling for media coverage, it is important to also note that the other main results summarized in the previous section continue to hold. And, for the most part, the interactive variables are not statistically significant.[27]

6. A closer look at the various components of CSR

The above analysis shows that a variety of CEO characteristics is correlated with the firm's overall level of CSR investment. Next, we disaggregate the overall CSR measure and consider the determinants of investments for each of the six primary categories (*Community*, *Diversity*, *Employee*, *Environment*, *Humanitarian* and *Product*). These results are presented in Table 5. The results in Panel A use the series of category measures as the dependent variables, in each case controlling for industry fixed-effects. Panel B reports the parallel using the industry-adjusted category measures as the dependent variables.

For the most part, the results in Panels A and B are qualitatively similar, suggesting once again that the results are robust to the approach used to control for industry differences. Beyond this result, a few of the other findings are worth highlighting. Looking first at the main firm-level controls, we see that while the estimated coefficients vary quite a bit across the six categories, the signs of the coefficients and the statistical significance are often similar to our earlier results where the overall CSR measure was used as the dependent variable. Larger firms are more likely to have higher levels of *Community*, *Diversity*, and *Employee* CSR investments, but conditionally lower *Environmental*, *Humanitarian*, and *Product* CSR investments. Firm age is not correlated with the levels invested in *Community*, *Diversity* and *Employee*, but older firms are significantly less inclined to invest in the *Environmental*, *Humanitarian* and *Product* categories. Moreover, global firms (those with a lower level of the Geographic Herfindahl measure) are more likely to invest in the *Community*, *Diversity*, and *Environmental* categories, and less likely to invest in the *Humanitarian* category.

[27] In some further reverse causality and endogeneity tests, we did not find evidence consistent with CSR investments causing excess media.

Table 4
The role of CEO media coverage.
We identify CEO media coverage by counting the number of news hits that the CEO receives in Factiva in a given year. We create two alternative measures for the CEO's media coverage. In one approach, we use a narrower list of publications consisting of three key sources: Major news and Business publications, Top US newspapers, and Wires. We also do a wider search using all of Factiva's publication sources. Because media coverage for the CEO is often linked to the firm's size with larger firms providing more media coverage, we adjust the number of hits by firm size. We also calculate an unexpected CEO media coverage variable (Excess media) from a regression using the 3 media source hits and industry, year, advertising, and return performance as explanatory variables. Each regression contains year fixed-effects and standard errors are clustered by firm. We use Fama and French's 49 industry classifications for the industry fixed-effects.

	CSR						CSR industry-adjusted					
	Media 3 sources		Media all sources		Excess media		Media 3 sources		Media all sources		Excess media	
	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value
Firm:												
Intercept	−0.039	0.973	0.047	0.967	0.216	0.844	2.137	0.031	2.235	0.021	2.380	0.010
Log assets	0.352	0.000	0.348	0.000	0.363	0.000	0.308	0.000	0.304	0.000	0.317	0.000
Age	−0.010	0.039	−0.010	0.042	−0.010	0.030	−0.010	0.026	−0.010	0.028	−0.010	0.021
EBIT/assets	3.159	0.000	2.964	0.000	3.087	0.000	2.422	0.000	2.264	0.000	2.352	0.000
Log FCF	−0.006	0.517	−0.005	0.602	−0.006	0.513	−0.001	0.915	0.000	0.989	−0.001	0.930
Debt/assets	−0.828	0.026	−0.771	0.041	−0.836	0.026	−1.064	0.003	−1.020	0.005	−1.069	0.003
Sales Herfindahl	0.511	0.133	0.519	0.126	0.511	0.131	0.280	0.372	0.286	0.361	0.281	0.367
Geo Herfindahl	−0.509	0.068	−0.509	0.069	−0.505	0.071	−0.726	0.001	−0.726	0.001	−0.728	0.001
Competitiveness	−4.073	0.079	−3.964	0.088	−3.951	0.086	−1.824	0.284	−1.777	0.295	−1.769	0.298
Advertising/sales	8.730	0.006	8.765	0.006	7.667	0.016	9.112	0.004	9.135	0.004	8.271	0.009
Media coverage:												
Media/assets	12.000	0.032	6.520	0.047	13.324	0.019	10.447	0.043	5.863	0.046	12.062	0.022
Governance:												
Governance index	0.026	0.435	0.028	0.390	0.020	0.503	0.023	0.471	0.026	0.402	0.020	0.489
% insider	−0.412	0.597	−0.430	0.578	−0.483	0.523	−0.706	0.317	−0.734	0.294	−0.794	0.247
% institutional	−1.150	0.005	−1.218	0.002	−1.170	0.003	−1.019	0.010	−1.084	0.005	−1.054	0.005
Gov. index * media	−0.227	0.454	−0.215	0.204	−0.137	0.667	−0.142	0.613	−0.182	0.244	−0.038	0.904
% insider * media	−2.621	0.217	−1.087	0.228	−2.436	0.260	−2.350	0.247	−0.905	0.300	−1.439	0.462
% institutional * media	−0.847	0.680	0.284	0.775	−0.902	0.670	−0.910	0.642	0.212	0.825	−0.570	0.765
CEO:												
CEO age	−0.012	0.147	−0.013	0.101	−0.013	0.073	−0.008	0.335	−0.009	0.260	−0.009	0.228
CEO male	−2.295	0.000	−2.303	0.000	−2.353	0.000	−2.277	0.001	−2.284	0.000	−2.307	0.000
Log CEO total comp	−0.057	0.326	−0.053	0.340	−0.073	0.157	−0.049	0.417	−0.045	0.427	−0.067	0.212
CEO rep polarizer	−0.145	0.265	−0.187	0.134	−0.182	0.094	−0.163	0.204	−0.190	0.121	−0.179	0.094
CEO dem polarizer	−0.063	0.740	−0.064	0.730	−0.061	0.737	−0.050	0.787	−0.051	0.780	−0.045	0.802
CEO non-polarizer	0.650	0.019	0.616	0.026	0.556	0.040	0.661	0.016	0.619	0.024	0.567	0.036
CEO age * media	−0.049	0.420	−0.012	0.695	−0.037	0.546	−0.039	0.500	−0.007	0.802	−0.040	0.496
CEO male * *media	−1.950	0.307	−0.929	0.299	−1.597	0.378	−1.220	0.506	−0.554	0.509	−1.229	0.457
Log CEO comp * media	−0.639	0.180	−0.445	0.037	−1.042	0.040	−0.689	0.150	−0.473	0.022	−1.044	0.035
CEO rep pol * media	−1.672	0.509	0.160	0.904	−1.017	0.767	−0.708	0.781	0.351	0.793	−1.046	0.693
CEO dem pol * media	−0.134	0.853	0.046	0.909	0.067	0.929	0.051	0.940	0.134	0.716	0.151	0.831
CEO non-pol * media	−3.924	0.074	−1.291	0.047	−3.302	0.428	−3.806	0.125	−1.073	0.090	−3.038	0.470
Industry fixed-effects	Yes		Yes		Yes		No		No		No	
Observations	5551		5551		5551		5551		5551		5551	
R-square	0.2327		0.2321		0.2330		0.0986		0.0982		0.0991	

It is also interesting to note that firms with higher levels of free cash flow are more likely to invest in the *Community* and *Diversity* categories, and less likely to invest in the *Environmental*, *Humanitarian* and *Product* categories.[28] One interpretation is that the first two measures are more discretionary (and therefore possibly less correlated with firm value). Our findings that large firms, firms with high free cash flow, and more global firms tend to invest more in *Community* and *Diversity* CSR can also be viewed as being consistent with CSR spending related to boosting employee morale (see, for example, Gillan et al. (2010) for employee motivation for CSR).

Focusing on the governance measures, in the overall results presented in Table 4 we showed that the correlation between the G-Index and overall CSR was insignificant, but that firms with a higher percentage of institutional investors were less likely to invest in CSR. Looking at the sub-aggregates, we see that the G-Index is positively correlated (at the 10% level or better) with the *Environmental* and *Humanitarian* categories, and negatively correlated with the *Employee* categories. Recalling that a higher G-Index indicates a firm where the stockholders have less power and managers have relatively more power, these results suggest that stockholders may be most comfortable with *Employee*-related investments. However, firms with greater institutional holdings are less likely to invest in the *Employee* category — indicating that the overall effects between the governance measures and the *Employee* investment are mixed. Firms with greater institutional holdings are also less inclined to invest in the *Community* and *Environmental* categories.

[28] The results for the *Humanitarian* category are significant at the 10% level in Panel B and have a p-value of 12% in Panel A.

Table 5
Are there differences in CSR activity by CSR type? Regressions using six major CSR categories.
This table contains regression results of firm, governance, and CEO characteristics on the six major corporate social responsibility categories using CSR net in Panel A and CSR industry-adjusted in Panel B. We quantify each firm's social responsibility within each of the six major CSR categories — community, diversity, employee, environment, humanitarian, and product. Each of these major categories contains a variety of subcategory terms, some of which are strengths and other weaknesses. For example, there are seven community strength subcategory terms; each takes a value of 1 (strong) or 0 (not strong). There are also four community concern subcategory terms; each takes a value of 1 (concern) or 0 (no concern). We obtain Net CSR community by summing the strength subcategory terms and then subtracting the concern subcategory terms. Thus the value for Net CSR community ranges from seven to minus four. To calculate the industry-adjusted net CSR terms, we take each firm's net CSR (the sum of firm strengths minus the sum of firm weaknesses) and subtract the industry-weighted net (the sum of mean industry strengths minus the sum of mean industry weaknesses). Firm, governance, and CEO characteristic variables are defined in Table 2. Media coverage is based on 3 sources. Each regression contains year fixed-effects and standard errors are clustered by firm. Each CSR specification, without industry adjustments, includes industry fixed-effects.

	Community		Diversity		Employee		Environmental		Humanitarian		Product	
	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value
Panel A: CSR												
Firm:												
Intercept	−0.331	0.369	−0.216	0.646	−0.352	0.427	0.335	0.440	0.132	0.430	0.377	0.210
Log assets	0.099	0.000	0.307	0.000	0.164	0.000	−0.076	0.001	−0.040	0.000	−0.099	0.000
Age	0.000	0.812	0.002	0.198	−0.001	0.502	−0.006	0.000	−0.001	0.008	−0.003	0.014
EBIT/assets	0.377	0.009	0.321	0.234	1.691	0.000	0.342	0.017	−0.014	0.811	0.461	0.013
Log FCF	0.006	0.015	0.007	0.051	−0.002	0.633	−0.007	0.028	−0.002	0.120	−0.007	0.009
Debt/assets	−0.061	0.510	−0.338	0.022	−0.511	0.001	0.249	0.017	0.051	0.185	−0.224	0.034
Sales Herfindahl	0.057	0.530	0.134	0.269	0.180	0.169	−0.021	0.877	0.035	0.453	0.136	0.131
Geo Herfindahl	−0.214	0.003	−0.362	0.000	0.071	0.565	−0.239	0.012	0.093	0.007	0.124	0.110
Competitiveness	−0.676	0.298	−1.531	0.098	−1.966	0.074	0.964	0.309	−0.146	0.679	−0.754	0.315
Advertising/sales	2.525	0.006	3.763	0.001	3.191	0.016	0.564	0.431	−0.501	0.174	−0.918	0.351
Media coverage:												
Media/assets	2.976	0.008	4.926	0.029	4.363	0.096	−1.457	0.382	0.025	0.967	1.281	0.319
Governance:												
Governance index	0.010	0.318	0.010	0.386	−0.021	0.103	0.024	0.046	0.006	0.078	−0.002	0.841
% insider	0.035	0.876	−0.304	0.320	−0.113	0.754	−0.178	0.398	0.013	0.888	0.119	0.630
% institutional	−0.340	0.004	−0.231	0.124	−0.449	0.008	−0.196	0.103	0.034	0.403	0.024	0.819
Gov. index * media	−0.112	0.072	−0.076	0.516	0.133	0.262	−0.123	0.289	−0.040	0.245	−0.017	0.813
% insider * media	0.185	0.740	−1.139	0.176	−0.021	0.983	−0.632	0.238	−0.670	0.118	−0.375	0.443
% institutional * media	0.703	0.064	0.520	0.584	−1.378	0.075	−0.342	0.548	−0.118	0.602	−0.224	0.660
CEO:												
CEO age	−0.001	0.423	−0.007	0.036	−0.001	0.701	−0.003	0.273	−0.002	0.014	0.003	0.167
CEO male	−0.326	0.009	−1.729	0.000	−0.028	0.883	−0.177	0.225	0.049	0.539	−0.083	0.549
Log CEO total comp	0.004	0.811	0.027	0.260	−0.048	0.065	−0.027	0.152	−0.004	0.611	−0.009	0.598
CEO rep polarizer	−0.047	0.197	−0.055	0.289	0.093	0.123	−0.090	0.072	0.016	0.390	−0.064	0.151
CEO dem polarizer	0.012	0.821	0.037	0.572	0.097	0.191	−0.115	0.104	0.010	0.749	−0.092	0.052
CEO non-polarizer	0.069	0.409	0.119	0.269	0.354	0.002	0.098	0.220	0.048	0.069	−0.034	0.658
CEO age * media	−0.007	0.553	0.002	0.953	−0.058	0.026	0.023	0.167	0.010	0.071	−0.018	0.299
CEO male * media	−0.323	0.383	−1.168	0.171	−1.275	0.063	0.665	0.184	0.222	0.191	−0.078	0.884
Log CEO comp * media	−0.241	0.037	−0.437	0.056	0.017	0.936	0.075	0.620	−0.060	0.394	0.000	1.000
CEO rep pol * media	0.310	0.636	0.342	0.773	−1.930	0.096	−0.238	0.786	−0.571	0.202	0.500	0.441
CEO dem pol * media	0.008	0.957	−0.044	0.893	−0.681	0.021	0.446	0.047	0.156	0.073	−0.026	0.902
CEO non-pol * media	−1.496	0.122	−0.136	0.921	−1.766	0.210	−0.942	0.206	−0.181	0.351	0.549	0.394
Industry fixed-effects	Yes		Yes		Yes		Yes		Yes		Yes	
Observations	5292		5551		5551		5551		5278		5551	
R-square	0.2068		0.3464		0.1923		0.2381		0.1821		0.2659	
Panel B: industry-adjusted CSR												
Firm:												
Intercept	−0.031	0.902	0.058	0.883	−0.044	0.909	1.204	0.000	0.275	0.029	0.669	0.010
Log assets	0.093	0.000	0.276	0.000	0.144	0.000	−0.066	0.002	−0.039	0.000	−0.096	0.000
Age	0.000	0.762	0.002	0.236	−0.002	0.346	−0.006	0.000	−0.001	0.012	−0.003	0.035
EBIT/assets	0.273	0.083	0.300	0.241	1.353	0.000	0.312	0.020	0.027	0.684	0.172	0.310
Log FCF	0.006	0.009	0.009	0.013	−0.001	0.780	−0.007	0.020	−0.002	0.090	−0.005	0.070
Debt/assets	−0.126	0.179	−0.361	0.009	−0.572	0.000	0.153	0.128	0.034	0.329	−0.196	0.048
Sales Herfindahl	0.040	0.652	0.085	0.473	0.142	0.256	−0.064	0.601	0.026	0.515	0.060	0.511
Geo Herfindahl	−0.223	0.000	−0.400	0.000	−0.084	0.417	−0.185	0.013	0.077	0.001	0.081	0.205
Competitiveness	−0.648	0.399	−1.139	0.046	−0.818	0.359	0.654	0.230	0.238	0.343	−0.130	0.822
Advertising/sales	2.751	0.008	3.911	0.001	3.318	0.012	0.810	0.287	−0.629	0.098	−1.061	0.249
Media coverage:												
Media/assets	2.482	0.024	5.058	0.022	3.756	0.113	−1.287	0.415	0.334	0.551	0.207	0.861
Governance:												
Governance index	0.010	0.299	0.009	0.411	−0.024	0.055	0.021	0.078	0.006	0.070	0.002	0.823
% insider	0.011	0.960	−0.314	0.262	−0.182	0.573	−0.276	0.149	−0.056	0.529	0.107	0.676

Table 5 (*continued*)

	Community		Diversity		Employee		Environmental		Humanitarian		Product	
	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value
Panel B: industrydjusted CSR												
Governance:												
% institutional	−0.294	0.007	−0.183	0.207	−0.402	0.015	−0.193	0.110	0.010	0.809	0.035	0.738
Gov. index ∗ media	−0.111	0.060	−0.046	0.690	0.145	0.189	−0.086	0.447	−0.017	0.605	−0.034	0.629
% insider ∗ media	0.043	0.935	−0.922	0.314	0.208	0.814	−0.660	0.239	−0.566	0.082	−0.472	0.388
% institutional ∗ media	0.644	0.061	0.495	0.594	−1.159	0.087	−0.522	0.391	−0.205	0.357	−0.145	0.756
CEO:												
CEO age	−0.001	0.351	−0.006	0.050	−0.001	0.753	−0.001	0.705	−0.002	0.050	0.004	0.068
CEO male	−0.362	0.005	−1.675	0.000	−0.033	0.868	−0.178	0.256	0.045	0.555	−0.078	0.606
Log CEO total comp	0.006	0.683	0.041	0.096	−0.043	0.097	−0.028	0.126	−0.005	0.533	−0.021	0.195
CEO rep polarizer	−0.034	0.338	−0.054	0.327	0.095	0.124	−0.100	0.044	0.007	0.706	−0.079	0.120
CEO dem polarizer	0.009	0.865	0.060	0.368	0.121	0.102	−0.108	0.130	0.004	0.887	−0.131	0.004
CEO non-polarizer	0.109	0.160	0.124	0.263	0.326	0.005	0.102	0.246	0.046	0.049	−0.036	0.618
CEO age ∗ media	0.000	0.992	0.003	0.901	−0.056	0.026	0.020	0.177	0.003	0.510	−0.010	0.564
CEO male ∗ media	−0.033	0.924	−0.916	0.240	−1.093	0.092	0.632	0.188	0.035	0.831	0.143	0.792
Log CEO comp ∗ media	−0.256	0.016	−0.529	0.030	0.023	0.909	0.055	0.690	−0.045	0.557	0.059	0.677
CEO rep pol ∗ media	−0.004	0.995	0.186	0.881	−1.730	0.143	0.363	0.657	−0.248	0.586	0.772	0.256
CEO dem pol ∗ media	0.043	0.760	0.076	0.817	−0.611	0.027	0.393	0.072	0.073	0.408	0.068	0.733
CEO non-pol ∗ media	−1.837	0.013	−0.503	0.663	−1.247	0.515	−0.475	0.566	−0.469	0.002	0.656	0.221
Industry fixed-effects	No		No		No		No		No		No	
Observations	5292		5551		5551		5551		5278		5551	
R-square	0.1061		0.2597		0.0818		0.0630		0.0809		0.0980	

The overall results in Tables 3 and 4 also showed consistently that older CEOs and male CEOs are significantly less likely to invest in CSR. Looking at Table 5, we see that these findings do not hold for each of the sub-aggregate measures. While older CEOs are less likely to invest in the *Diversity* and *Humanitarian* categories, there is no significant link between CEO age and the other four categories. Also, while male CEOs are less likely to invest in the *Community* and *Diversity* categories, there is no significant link between CEO gender and the other four categories. Lastly, in our earlier aggregate CSR results we did not find a significant link between CEO total compensation and CSR investments, but at the CSR category level we now find a negative conditional relation between total CEO compensation and *Employee* CSR investment.

The results in Tables 3 and 4 also showed that CEOs who donated exclusively to either Republicans or Democrats (the "polarizers") were no more likely to invest in CSR, but firms whose CEO donated to both parties (the "non-polarizers") were significantly more likely to invest in CSR. With two exceptions, the results in Table 5 continue to show that the polarized CEOs are not more (or less) likely to invest in the various categories — the exceptions are Republican CEOs are less likely to invest in the *Environmental* category, and Democrat CEOs are less likely to invest in the *Product* category. The non-polarizers are more likely to invest in the *Employee* and *Humanitarian* categories.

Finally, the positive correlation we showed earlier between media exposure and overall CSR holds for three of the categories (*Community*, *Diversity* and *Employee*). This finding suggests that either media scrutiny is particularly focused on these areas, and/or that managers view investments in these areas as a fruitful way to enhance their reputation.

7. Conclusions

Like all investments, socially responsible investments are made for a variety of reasons. Perhaps naively, some may view socially responsible investments as being inconsistent with the interests of shareholders. However, in many cases, investors receive specific benefits from socially responsible investments. For example, socially responsible investments may help the company recruit and retain better employees and foster better relations with customers, both of which enhance the company's intrinsic value. In other cases, socially responsible investments may be designed to enhance relations with government officials to potentially reduce regulatory and/or litigation costs.

All of this might suggest that companies look at socially responsible investments much like they do all other investments — they are undertaken if they create value for investors, and/or if managers perceive a personal benefit from the investment. In the case of socially responsible investments, managers might undertake these investments because they are consistent with their personal values or their career concerns, which may be enhanced in some circles by having a reputation for championing socially responsible investments.

With these issues in mind, this study explores the various factors that motivate managers to make socially responsible investments. As expected, we find that these investments vary considerably across industries and are correlated with a variety of firm characteristics. At the same time, we find that a number of CEO personal characteristics also have a significant influence on CSR investment. Most notably, after controlling for other factors, we find that younger CEOs, female CEOs, CEOs who donate to both major political parties, and CEOs who appear in the media more frequently are significantly more likely to invest in CSR. These results strongly suggest that these types of CEOs either receive greater private benefits from these investments or they view

them as being more consistent with shareholder value. Our results are robust to correct for potential endogeneity problems and a battery of other potential econometric issues.

While not the primary focus of this paper, we also show that there is a negative correlation between the level of industry-adjusted CSR and stockholder returns (after controlling for the usual Fama–French factors). Further, we find consistent evidence that those companies with larger institutional holdings (who are presumably more concerned with shareholder interests) are less likely to invest in CSR.

On balance, our results suggest that many CSR investments are not aligned with shareholder interests and they are instead made for the private benefit of firm managers — either because they believe they have a moral obligation or they believe these investments enhance their personal reputation. While these findings provide interesting insights into the factors motivating CSR investments, we hasten to add that whether or not one views these findings as positive or negative depends critically on one's perspective on the larger question regarding how managers should trade off the interests of stockholders and stakeholders.

Appendix. Returns and CSR activity

This table contains the regression results of a Fama–French 4-factor model and corporate CSR measures on annual stock return premiums ($R_i - R_f$) from 1992 to 2006. The units for Intercept, MKT-R_f, SMB, HML, and Momentum are in basis points.

	CSR				CSR industry-adjusted			
	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value
Firm:								
Intercept	0.063	0.000	0.060	0.001	0.064	0.000	0.060	0.001
MKT-Rf	0.778	0.000	0.797	0.000	0.775	0.000	0.802	0.000
SMB	0.606	0.000	0.645	0.000	0.604	0.000	0.638	0.000
HML	−0.001	0.991	0.025	0.787	−0.003	0.967	0.021	0.827
Momentum	−0.111	0.030	−0.064	0.369	−0.118	0.021	−0.073	0.306
CSR	−0.002	0.199			−0.004	0.096		
CSR-community			0.008	0.312			0.003	0.757
CSR-diversity			−0.012	0.026			−0.012	0.040
CSR-employee			−0.003	0.584			−0.008	0.162
CSR-environment			0.000	0.974			0.000	0.959
CSR-humanitarian			−0.009	0.584			−0.003	0.856
CSR-product			0.009	0.167			0.014	0.066
Observations	5549		5017		5549		5017	
R-square	0.1418		0.1442		0.1420		0.1448	

Correlations:

Variable	Firm returns
CSR	−0.03379
Community	−0.00994
Diversity	−0.04058
Employee	−0.04767
Environment	0.006975
Humanitarian	−0.00958
Product	0.020618
Industry-Adjusted CSR	−0.01805
Community	−0.00897
Diversity	−0.02472
Employee	−0.02025
Environment	0.000264
Humanitarian	−0.00217
Product	0.016826

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