# 机构投资者与企业社会责任

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Abstract: This paper investigates the impact of institutional shareholders on portfolio firms' corporate social responsibility (CSR) investments using two distinct quasi-natural experiments: 1) exogenous changes in institutional holdings in Russell Index reconstitutions; 2) exogenous shocks to shareholder attention. We find consistent evidence that both higher institutional ownership and more concentrated shareholder attention induce corporate managers to invest more in CSR activities. The effects are more pronounced in consumer oriented industries, in financially constrained firms, and in firms with inferior corporate governance. Further, we show that institutional shareholders influence CSR investments through shareholder activism, as evidenced by the increased amount and likelihood of CSR-related shareholder proposals.

Keywords: Institutional Ownership: Indexing: Shareholder Attention: Corporate Social Responsibility

"Through their investment decisions, institutional investors have the potential to influence company behavior: As these investors assess and value companies on their environmental, social and governance performance, this can lead companies in all sectors to take more actions in line with sustainable development" (Mistra<sup>2</sup>, 2008)

#### 1. Introduction

Institutional shareholders have become more active to influence the social and environmental aspects of corporate strategies and operations, as witnessed by the significantly more frequent communications on sustainability topics between investors and their portfolio firms. For instance, from 2012 to 2014, 175 institutional investors and 27 investment management firms with total assets of \$1.72 trillion filed socially responsible related shareholder proposals to annual meetings of U.S. companies (SIF, 2014), while in 1970 only two such proposals were submitted. At the same time, more and more institutional investors have incorporated socially responsible investment (SRI) strategies. In 2014, the overall total of U.S. assets tied to SRI has amounted to \$6.57 trillion, representing nearly 18% of the \$36.8 trillion in total assets under management. This number has increased tenfold, or 929%, a compound annual rate of 13.1% since 1995 (SIF, 2014). As of 2015, over 1,400 signatories representing \$59 trillion assets under management have signed up to the United Nations-supported Principles for Responsible Investing (UNPRI) Initiative. Despite the amount of money and attention that institutional

http://2xjmlj8428u1a2k5o34l1m71.wpengine.netdna-cdn.com/wp-content/uploads/PRI\_AnnualReport20 15.pdf (UNPRI, 2016)

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<sup>&</sup>lt;sup>3</sup>See 2015 UNPRI Annual Report.

investors are giving to portfolio firms' corporate social responsibility (CSR) investments, few attempts have been made to answer the most basic question: whether institutional shareholders are in fact having the influence on such corporation investments.

Institutional investors and corporate managers are expected to weight the potential benefits of CSR investments against the costs from their own perspectives. Specifically, institutional investors are often termed "universal owners", as they often have highly-diversified and long-term portfolios that are representative of the whole capital market. Their portfolios are inevitably exposed to risks from corporate negative externalities. For example, the UNPRI estimates that the total cost of environmental externalities for listed companies exceeded \$2.5 trillion in 2008<sup>4</sup>. Therefore, it is in their best interest to positively influence portfolio firms'CSR investmentsand minimize their overall exposure to these costs (Chakravarthy, DeHaan, and Rajgopal, 2014; Freeman, Harrison, and Wicks, 2007; Hillman and Keim, 2001).

Anecdotally, shareholder pressure is one of the top motivations for corporations to address CSR (Arlbjorn, Rasmussen, Liempd, and Mikkelsen, 2008), as evidenced by the increased shareholder activism and growing engagement between investors and corporations<sup>5</sup> on CSR issues, such as the increasing dialogues with executives, public announcements, and regulatory filings (Goldstein, 2014). For example, McCahery, Sautner and Starks (2016) survey 143 institutional investors, and find that socially "irresponsible" corporate behavior is considered by 72% of the respondents as very important triggers of shareholder activism.

Corporate managers, on the other hand, have significant individual effects on CSR investments (Borghesi, Houston, and Naranjo, 2014; Cheng, Hong, and Shue, 2016; Di Giuli and Kostovetsky, 2014). Since CSR spending represents a significant expenseand its benefits are usually visible in the long run (Deng, Kang, and Low, 2013; Edmans, 2011), its immediate effect is to reduce interim profits. If such investments do not pay out for purely stochastic reasons, managers risk being fired. As a result, managers may be reluctant to invest in CSR without financial slack (Hong, Kubik, and Scheinkman, 2016) or due to career concerns. Consistently, Graham, Harvey, and Rajgopal (2005) provide survey evidence that more than three-fourths of executives would give up long-term value for current earnings targets.

Based on the prior research, it is likely that shareholders' assessment of the cost-benefit tradeoff is different from managers' private assessment. In this paper, we take a first attempt to study whether changes in ownership structure hold any explanatory power for corporate investments in CSR.We explore this question in two aspects:First, does institutional shareholders' stake, i.e. the level of institutional ownership, influence portfolio firms' CSR investments? Second, the amount of stakes does not preciselyrepresent the attention paid by investors. Given the level of ownership, institutional shareholders may allocate different level of attention to specific firms. Does different level of shareholder attention matter for firms' CSR investments? To show that the effect is not primarily due to self-selection, we use two quasi-natural experiments as our identification strategy.

To answerthe first question, we use the annual Russell index reconstitutions as exogenous shocks to institutional holdings. Russell 1000 and 2000 indices are constructed based on the end-of-May market capitalization ranks each year. Since there are only very small differences in market values surrounding the 1000/2000 threshold and firms cannot control their rankings precisely, firms being assigned to the left or right of the cutoff is quasi-random. Because Russell indices are value-weighted, the random assignment leads to significant differences in the portfolio weights, and further in institutional ownership.

<sup>5</sup>See 2015 Responsible Investment Report. <a href="https://www.tiaa.org/public/pdf/sri\_2015\_report.pdf">https://www.tiaa.org/public/pdf/sri\_2015\_report.pdf</a> (TIAA, 2016).

<sup>&</sup>lt;sup>4</sup>Universal Ownership: why environmental externalities matter to institutional investors, PRI and Trucost, October 2010.

around the threshold. In our sample, we find that total institutional ownership jumps up by 8.6% at the 1000/2000 cutoff point. The random index assignment provides a good instrument for institutional ownership, since the increase in institutional ownership around the cutoff is a function of the composition of the benchmarks and is orthogonal to firm level characteristics such as CSR policy. We conduct the test using two-stage least-square specifications, in which we first instrument institutional ownership as exogenous variations around 1000/2000 threshold and then we test the effects of instrumented ownership on CSR engagements.

We find that the exogenous increase in institutional ownership leads to more investments in CSR, and the effect is robust to different bandwidths and varying polynomial orders. Specifically, the index assignment could on average cause a firm to increase its CSR rating by 0.3 points, which can be translated into an extra spending of \$13.26 million in SG&A expenses, or a 7% fraction of the net income.

Further, we investigate the channels through which ownership structure influence CSR investments. Our cross-sectional results show that the effects are reinforced if companies belong to consumer-oriented industries when CSR investments could produce more benefits for shareholder values (Servaes and Tamayo, 2012), if companies are more financially constrained, i.e., with less financial slack, and if companies have inferior corporate governance when managers are more likely to be myopic.

With regard to the second question, institutional investors do not monitor all their holdings in an equal way (Fich, Harford, and Tran, 2013). The attention that institutional shareholders allocate across firms is subject to a limited constraint, since monitoring capacity is a scarce resource. For example, a mutual fund manager decides every day how many hours to spend on gathering information on different industries in her portfolio, or specific stocks within each industry. Shareholder's attention might be distracted to "hot" or "crisis" industries. Kempf, Manconi, and Spalt(2015) show that distracted shareholders are less likely to participate in conference calls or to initiate a governance-related proposal in general meetings. And managers are able to exploit temporal variation in attention by maximizing private benefits.

We build on Kempf, Manconi, and Spalt(2015) and use exogenous shocks to unrelated industries held by a given firm's institutional shareholders to identify periods where shareholders are likely to shift attention away from the firm and thus loosen monitoring. We then construct firm-level monitoring intensity measures by aggregating monitoring intensity measure across all institutional investors for each firm each year. The distraction of shareholder attention is measured by the inverse of monitoring intensity. We find that if institutional shareholders shift attention away, managers react to the distracted attention by reducing CSR investments. For example, one standard deviation decrease in shareholder attention results in a 0.328 decrease in CSR rating, which can be further translated into a less spending of\$12.08 million in SG&A expenses, or a 5% fraction of the net income. And we find similar cross-sectional effects.

At last, we provide evidence on the CSR-related shareholder activism, through which institutional investors influence firms' CSR spending. If institutional shareholders are engaged in monitoring their portfolio firms, we should observe that both a higher level of ownership and more concentrated shareholder attention would lead to an increase in shareholder proposals in CSR issues. Our results confirm the hypothesis that there are increased amount and probability of SRI shareholder proposals for firms at the top of the Russell 2000 index, and for firms with less shareholder attention distraction.

This study complements and extends previous research in a number of ways. First, our paper is related to the large volume of studies that investigate the role of institutional investors in shaping various aspects of corporate decisions, such as executive compensation (e.g., Hartzell and Starks, 2003), governance indices (e.g., Aggarwal, Erel, Ferreira, and Matos, 2001; Chung and Zhang, 2011), management voluntary disclosure (e.g., Baginski, Clinton, and Mcguire, 2014; Bird and Karolyi, 2016b),

acquisition decisions (e.g., Chen, Harford, and Li, 2007), and so force. To our knowledge, our paper is the first to comprehensively investigate the effect of institutional shareholder on corporate investment policies in CSR. We add to this literature by showing that not only the ownership stake but also the level of attention that institutional shareholders exert on specific firms affect their portfolio firms' CSR investments.

Second, our paper contributes to the literature that investigates the shareholder activism on sustainability issues, or ESG (environment, social, and governance) activism. DimsonKarakaş, and Li (2015) provide evidence for ESG activism by examining how institutional investors target firms and successfully execute CSR engagements. Grewal, Serafeim, and Yoon (2016) investigate shareholder activism on both financially material and immaterial ESG issues. And Dyck, Lins, Roth, and Wagner (2015) exploit international evidence on institutional ownership and CSR performance. This paper documents that both the higher institutional ownership and more concentrated shareholders' attention could result in increased ESG activism, as evidenced by the increased amount and likelihood of SRI shareholder proposals.

This paper is also related to Borghesi, Houston, and Naranjo (2014) who examine the relation between institutional ownership and CSR investments, but is distinct in two different ways: (i) Our empirical identification strategy exploits an exogenous shock to institutional ownership to overcome concerns about endogeneity; and, (ii) Using more powerful tests we find a positive relation between institutional ownership and CSR investments, in contrast to the negative relation documented in Borghesi, Houston, and Naranjo (2014).

Finally, the results of this paperprovide new insights into the determinants of corporate investment policies in CSR. By showing that institutional investors foster such investments, it expands on earlier research that tries to identify the factors that affect corporate policies on social goodness (e.g., Cheng, Hong, and Shue, 2014; Di Giuli and Kostovetsky, 2014; Ferrell, Liang, and Renneboog, 2016; Flammer, 2013; Hong, Kubik, and Scheinkman, 2016).

The remainder of the paper is organized as follows. Section 2 outlines our data and sample construction. Section 3 presents the identification strategy and results for the impact of institutional ownershipon CSRinvestments. Section 4 presents the identification strategy and results for the effect of shareholder attention on CSRinvestments. Section 5 further discusses the monitoring channel through shareholder activism. Section 6 concludes.

#### 2. Data and Sample Construction

We describe the key variables used in our identification strategy and the sample constructions in the two quasi-natural experiments.

## 2.1. Variable Measurement and Data Source

Our data on institutional ownership come from SEC 13-F filings in the Thomson Reuters Institutional Holdings database. We calculate the total institutional ownership (*IO*) as the institutional holdings in a stock as a percent of its market capitalization.

We obtain firms' CSR performance measures from the Kinder, Lydenberg, and Domini (KLD) database, which is widely used in literature that investigates the determinants and consequences of firms' CSR performance (Deng, Kang, and Low, 2013; Flammer, 2014). The KLD provides the most comprehensive firm-level social ratings along several dimensions including community, workforce diversity, employee relations, human rights, environment impact, product quality, corporate governance, and whether firms' operations are related to alcohol, gaming, firearms, military contracting, nuclear, and tobacco. Within each of the first seven dimensions, if the firm has conducted a socially good (bad) deed, it would gain one score in "Strengths" ("Concerns"). For the last six aspects, the database only considers

the scores in "Concerns".

In this paper, we choose the KLD rating scores of the five dimensions: Community (*Com*), Diversity (*Div*), Employee Relation (*Emp*), Environment (*Env*), and Product (*Pro*). We exclude the dimension of corporate governance because the effect of institutional ownership and corporate governance has been separately studied by other papers (e.g. Appel,Gormley, and Keim, 2016). We exclude the dimension of Human Rights because most of the categories in this issue (e.g., Indigenous people relations) are only applicable to the small number of firms in our sample that operate overseas or have overseas suppliers, and thus lack of variations. We exclude the last six dimensions (i.e., whether firms' operations are related to alcohol, gaming, firearms, military contracting, nuclear, and tobacco) because they are mainly industry level measures and only have "Concerns".

Totally we use the ratings of 53 different categories (29 strengths and 24 concerns) in the five dimensions to calculate CSR score of a company. KLD ratings are available for 55 categories for our sample period. We exclude categories of the community-related "Volunteer Programs Strength" (available since 2005) and the environment-related "Management Systems Strength" (available since 2006) because they are not rated for the entire sample period. Detailed description of different categories is reported in Appendix. We first obtain the CSR score for each dimension using the number of strengths minus the number of concerns in that dimension. Then, we sum up the CSR scores across the five dimensions to get the total *CSR* score. We also add up the total number of strengths to calculate *Strengths* score and add up the total number of concerns to calculate the *Concerns* score.

We also include control variables that have been used in prior literature (Ferrell, Liang, and Renneboog, 2016; Flammer. 2014). Firm size (*Size*) is measured by the natural logarithm of the total assets at the end of the fiscal year. *Leverage* is defined as long-term debt plus current liabilities deflated by total assets. *ROA* is operating income before depreciation divided by total assets. *M/B* is the ratio of the market value of equity measured as absolute value of price times shares outstanding over the book value of the equity. *Cash Holdings* is the ratio of cash and short-term investments to the book value of total assets. *Sales Growth* is the change in sales scaled by lagged total assets. *Advertising* is the ratio of advertising expenses divided by total assets. *R&D Intensity* is the annual dollar spent on R&D scaled by total assets. *Dividends* is an indicator that equals one if the firm has a non-zero dividend in the observation year and zero otherwise. To mitigate the impact of outliers, all ratios are winsorized at the 5th and 95th percentiles of their empirical distribution.

#### 2.2. Sample Construction and Descriptive Statistics

First, we introduce the sample construction for our first experiment: Russell index reconstructions. We take all 3,000 firms in the Russell 3000 index and calculate the total market capitalization of each firm at the end of May to predict the ranks of Russell 1000 and 2000 indices. Follow Chang, Hong, and Liskovich (2015), we calculate the total market cap using adjusted Compustat quarterly shares outstanding multiplied by CRSP share prices at the last trading day in May. The data of Russell index are merged with firm level financial data, institutional holding data, and CSR data. We choose our sample period to be between 2003 and 2006. We start the sample at 2003 because this is the year KLD includes the full coverage of Russell 3000. And we end the sample prior to 2007, which is when Russell implemented the "banding" methodology for reconstitution such that they no longer necessarily reflect the 1,000 and subsequent 2,000 largest stocks by market capitalization. At last, our sample consists of 2,511 firms with 9,851 firm-year observations.

Panel A of Table 1 reports summary statistics of the key variables used in our first experiment,

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<sup>&</sup>lt;sup>6</sup>In un-tabulated analysis, we show that our baseline results do not change quantitatively if we include dimensions of corporate governance and human rights into the CSR measures.

winsorized at 5% and 95% level. It provides statistical description for firms in Russell 1000 and 2000, respectively, and the *p*-value of their mean differences. Comparing with Russell 2000 firms, firms in Russell 1000 have better CSR performance, evidenced by the significantly higher scores in *CSR*. When we decompose the total CSR into *Strengths* and *Concerns*, we find that Russell 1000 firms engage in both significantly more positive and negative social activities. With respect to the five dimensions, firms in Russell 1000 perform better in social activities such as Community, Diversity, and Employee satisfaction, but worse in Environment and Product issues. For firm-level characteristics, it shows that Russell 1000 firms have significantly higher institutional ownership and larger size, use more leverage, are more profitable (*ROA*), have better growth opportunity (*M/B*), while they tend to hold less cash, comparing with Russell 2000 firms. Also, firms in the 1000 index tend to spend more on advertising andR&D, have higher sales growth, and are more likely to pay dividends, than firms in the 2000 index

[Insert Table 1 here]

The validity of the random index assignment relies on the verification that differences in CSR can only be attributed to variations in institutional ownership instead of discontinuities in other pre-assignment firm characteristics. In Panel B, we present pre-assignment sample means and test for differences within two bandwidths (±50 and ±150) on each side of the threshold cutoff. The results show that our sample firms have similar characteristics before the index assignment, as measured by *Size*, *Leverage*, *ROA*, *M/B*, *Cash Holdings*, *Sales Growth*, *Advertising*, *R&D Intensity*, and *Dividends*. These examinations confirm that the random assignment is valid because firms are like-randomized around the 1000/2000 cutoff.

Then we describe the sample construction for our second experiment: Shareholder distraction. We construct our exogenous measure of monitoring intensity measure following Kempf, Manconi, and Splat (2015). We first use exogenous shocks to unrelated industries held by a given firm's institutional shareholders to identify time periods where shareholders are likely to be distracted and shift their attention away from the firm. Motivated directly by Barberand Odean(2008), we define an industry shock if an industry has the highest or lowest return across all 12 Fama-French industries in a given quarter. We then construct firm-level monitoring intensity measures by aggregating monitoring intensity measure across all institutional investors for each firm each year. Here shareholder distraction is an inverse measure of monitoring intensity. Higher value of shareholder distraction implies lower level of monitoring intensity from shareholders.

We report our summary statistics in Panel C of Table 1. We start our sample in 1991 when KLD data is available, and we have 27,243 firm-year observations in total. We find that an average firm has the monitoring intensity measure as 0.164, which is in line with Kempf, Manconi, and Splat (2015). We find that the mean value of total assets is 6.807 million. We also find that the mean ROA and the mean market to book ratio is 0.116 and 2.037, respectively. About 16.8% of the total assets are cash and short-term investments and that average firm use 22.4% debt in its assets. We further find that on average institutional ownership is about 42.5%. The significant level of institutional ownership of a typical firm highlights the important monitoring role that the institutional investors could potentially play.

## 3. Institutional Ownership and CSR Investments

#### 3.1. Identification Strategy

Identifying the impact of institutional ownership on firms' CSR investments can be challenging because the institutional ownership is likely to be endogenous. To overcome the potential endogeneity concern, we use the Russell index assignment as an exogenous shock to institutional holdingsto establish the causality from institutional ownership to firms' CSR policy. In the following, we first introduce the methodology for constructing the Russell 1000 and 2000 indices, and the randomness of the index

assignment. Then we discuss how it results in a discontinuity in institutional ownership that is plausibly exogenous to a firm's CSR policy.

#### 3.1.1. Random Assignment of Russell Index

Each year Russell Inc. constructs the Russell indices based on the end-of-May closing price implied market capitalization ranks. Firms with the 1000th largest market values (i.e. firms ranked between 1 and 1000) that day become members of Russell 1000 index and the subsequent 2000th largest firms (i.e. firms ranked between 1001 and 3000) constitute the Russell 2000 index.<sup>7</sup> The formal membership list will be available at the end of June, after Russell makes float adjustments based on proprietary methods.

Since index assignment is based solely on very small differences in market capitalization surrounding the 1000/2000 threshold, stocks being assigned to the left or right of the cutoff point is quasi-random and within a certain range should be orthogonal to firm characteristics prior to the assignment. For example, a firm ranked 1000 on May 30th might be ranked 1001 on May 31st, which would lead to a different index assignment. And this switch is unlikely to be based on future expectations of the firm's CSR performance. Moreover, the underlying market value cutoff varies year to year, making it hard for firms to precisely control their rankings relative to other firms at the threshold prior to the assignment date. The random assignment of stocks around the threshold validates the exogenous shocks of our experiment and allows us to make causative inferences in the effect of index inclusion.

## 3.1.2 Discontinuities in Index Weights and Institutional Ownership

A stock's index assignment has important impact on its portfolio weight in that index, since each Russell index is value weighted such that firms in the top of their index receive the highest weight. Therefore, the 1000th largest stock at the end of May just included in Russell 1000 will have only trivial portfolio weight while the 1001st largest stock just included in Russell 2000 will be given a large index weight.

The significant jump in index weights gives rise to a large discontinuity in institutional ownership around the threshold because Russell index membership is closely followed by institutional investors. To minimize the tracking errors, index funds pay more attention to match the weights of stocks at the top of the index than the ones at the bottom, since deviations from benchmark weights for the largest stocks tend to have real impact on performance measured relative to the benchmark. More specifically, the largest firms in Russell 2000 are likely to be widely held by any funds tracking Russell 2000, while funds tracking Russell 1000 would hold none of the smallest firms in the Russell 1000.

As shown in Figure 1, consistent with the literature we find that the total institutional ownership increases by 9% at the 1000/2000 cutoff point in our sample. The discontinuity in institutional ownership is due to the composition of the benchmarks, which is exogenous to firm characteristics. As a result, our identification strategy enables us to identify a causal impact of institutional ownership on firms' CSR investments.

### 3.2. Research Design

We use a two-stage least-squares regression method to examine the causal impact of institutional ownership on firms' CSR investments. Specifically, we estimate the following two stage models similar as in Crane, Michenaud, and Weston (2016):

$$IO_{i,t} = \alpha + \tau D_{i,t} + f(R_{i,t}) + \beta_1 X_{i,t} + \beta_2 FloatAdj_{i,t} + u_i + v_t + \epsilon_{i,t}$$
 (1)

<sup>&</sup>lt;sup>7</sup>Only U.S. common stocks with end-of-May closing price above \$1.00 listed on major U.S. exchanges are considered for Russell indices. Stocks ADR, ADS, preferred stocks, redeemable shares, warrants, rights, and trust receipts are excluded.

$$Y_{i,t} = \beta_0 + \beta_1 \widehat{IO}_{i,t} + g(R_{i,t}) + \beta_2 X_{i,t} + \beta_3 FloatAdj_{i,t} + u_i + v_t + \xi_{i,t}$$
 (2)

where  $D_{i,t}$  is a dummy variable that equals one if firm i is a Russell 2000 index member in year t, and zero otherwise;  $R_{i,t}$  represents the market capitalization rank of firm i in year t minus 1000;  $IO_{i,t}$  represents the institutional ownership fraction of firm i's shares outstanding in the next available quarter after index assignment in year t. In the second-stage regression, we estimate the effect of instrumented IO on CSR measures.  $Y_{i,t}$  represents different measures of CSR (CSR, Strengths, and Concerns) in the next available fiscal year-end after index reconstitution.  $X_{i,t}$  includes a set of time-varying firm characteristics as controls, such as Size, Leverage, ROA, M/B, Cash Holdings, Sales Growth, Advertising, R&D Intensity, and Dividends.  $u_i$  and  $v_t$  represents industry and year fixed effects, respectively, which are included to resolve the concern that the results are driven by different industries or secular changes in CSR. The function f (and likewise for g) is parameterized as a  $\kappa$ -th order polynomial to allow the functional form of the relation between  $R_{i,t}$  and  $IO_{i,t}$  ( $Y_{i,t}$  for g) to vary on either side of the Russell 1000/2000 threshold. Specifically, f takes the following form:

$$\sum\nolimits_{j = 0}^k {{\delta _j}\,R_{i,t}^j} + \sum\nolimits_{j = 0}^k {{\gamma _j}\,D_{i,t}R_{i,t}^j}$$

### 3.3. Main Results

We first verify that a large discontinuity in institutional ownership arises from the discontinuity in index weights around Russell 1000/2000 threshold. Then we identify that the exogenous variation in ownership has a causal impact on firms' CSR performance.

The discontinuity in institutional ownership around the cutoff is essential to our identification strategy because it enables us to identify a causal relation between ownership and CSR policy. Figure 1 graph institutional ownership relative to the end-of-May market capitalizations for Russell 1000 and 2000 indices, which reveals a large discontinuity in the percentage of total institutional holdings (about 9.5%) around the 1000/2000 threshold.

#### [Insert Figure 1 here]

We report estimates of our first-stage regression as in Model (1) of institutional ownership on index ranks in Panel A of Table 2. To ensure the robustness of RD estimation, we test results using firms within different bandwidths around the threshold ( $\pm 50$ ,  $\pm 150$ , and  $\pm 250$ ) and varying polynomial orders ( $\kappa$ = 2 and 3). Consistently, we find significantly positive coefficients of  $D_{i,t}$ , which suggest that comparing with firms at the bottom of Russell 1000, firms at the top of Russell 2000 have a significantly higher institutional ownership after the index reconstitution. For example, the significant coefficient on  $D_{i,t}$  in Column (5) shows that switching from Russell 1000 to 2000 could exogenously increase firms' institutional ownership by 8.6%, which is comparable with the results in previous papers which find the 10% increase (Bird and Karolyi, 2016a; 2016b; Chang, Hong, and Liskovich, 2015; Crane, Michenaud, and Weston, 2016). In each column, we control firm-level variables such as *Size*, *Leverage*, *ROA*, *M/B*, *Cash Holdings*, *Sales Growth*, *Advertising*, *R&D Intensity*, and *Dividends*. We also include *FloatAdj*, a proxy for the float adjustment by Russell, computed as the difference between the rank implied by the May 31st market capitalization and the actual rank assigned by Russell in June.Industry and year fixed effects are included and the standard errors are clustered at the firm level.

## [Insert Table 2 here]

Both the figures and estimates show consistently that firms in the top of the Russell 2000 display significantly higher institutional ownership than firms in the bottom of the Russell 1000, since institutions need to minimize the tracking errors when weighting their holdings based on the index weights.

Then, we test the impact of institutional ownership on CSR (CSR, Strengths, and Concerns, respectively) by estimating the second stage regression in Model (2). Results show that institutional

holdings have a significant impact to increase firms' CSR performance, evidenced by the significantly positive coefficients of  $\widehat{10}_{i,t}$ . And the impact is robust when we use different bandwidths and varying polynomial orders. Specifically, as shown in Column (5), one percentage point increase in IO could result in 3.151% more CSR ratings. Given that switching index from Russell 1000 to Russell 2000 result in an increase in IO by 8.6%, the inclusion in Russell 2000 could on average cause firms to engage in 0.3 higher CSR ratings (i.e. averagely, firms engage in 0.3 more number of positive than negative social activities). The increased rating of CSR performance is significant, comparing with the sample average rating of only around 0.2 point for firms in Russell 1000.

When we further investigate the *Strengths* and *Concerns*, we find that the increased CSR performance around the 1000/2000 threshold is generated by the reduced *Concerns*. For example, results in Column (5) show that the inclusion in Russell 2000 causally leads firms to involve in 0.28 less negative social engagement. Comparing the 0.3 more rating points in CSR performance, the better CSR ratings for firms at the top of Russell 2000 than those at the bottom of Russell 1000 are mainly driven by the reduction in negative social activities.

Although we have documented a strong statistical causal impact between institutional ownership and CSR rating, it has few economic implications, since the CSR measures are unit-less. We follow the method provided by Di Giuli and Kostovetsky (2014) to translate the statistical effect into dollars to evaluate the economic significance. The reference interprets the economic implications using SG&A expenses and argues that a firm would have higher level of SG&A expenses if it implements more social activities, since money spending in programs such as charitable giving and pollution prevention would show up in SG&A. We report the results in Panel B and C.

In Panel B, we report the results by regression the natural log of SG&A expenses on firms' total *CSR* in the same year. We control for firm-level characteristics, and industry and year fixed effects. We find that a one score increase in CSR score is significantly associated with a 7.2% more spending in SG&A. Then, we convert *CSR* score into SG&A dollars. Panel C presents the summary statistics for SG&A expenses and net income for our sample firms. For example, a one-score increase in *CSR* is associated with a 7.2% more costs in SG&A, which represents a \$44.21 million (7.2% \* \$614 million) increase for the mean firm. Since the inclusion in Russell 2000 could on average cause firms to increase the CSR rating by 0.3 point more (as discussed above), the index reconstitution would cause a firm to spend an extra of \$13.26 million in SG&A expenses. Comparing with the net income of \$189 million for the mean firm, this effect accounts for a 7% fraction of the net income. The results suggest that due to the index assignment and the consequent increase in institutional ownership,managers increase CSR investments, which represent an important amount for shareholder value.

### 3.4. Institutional Ownership and Dimensions of CSR Performance

Prior literature finds that certain SRI screen strategies improve returns higher than the benchmark: good employee satisfactions, efficient environment protection strategies, and competitive products (Derwall, Guenster, Bauer, and Keodijk, 2005; Edmans, 2011; Luck and Pilotte, 1993; Moskowitz, 1972). From the perspective that certain CSR strategies create positive abnormal returns, institutional investors would encourage firms to engage in activities of these CSR dimensions.

To better understand what aspects of the social issues institutional investors value the most, in the following we extend the baseline specification to study the effect of institutional ownership on the five different dimensions of CSR activities. Estimations are reported in Table 3, in which Panel A, B, and C

<sup>&</sup>lt;sup>8</sup>Although there are several caveats about this estimation as discussed in Di Giuli and Kostovetsky (2014), which tends to understate the full costs of CSR, it is a reasonable and intuitive method to interpret the economic significance of our results.

presents the impact of IO on the *CSR* score in each dimension with different bandwidths. We show that the large stake of institutional shareholders pay more attention to firms' CSR activities in dimensions of employee satisfaction, environment protection, and product quality.

#### [Insert Table 3 here]

First, human capital related theories view employees as key organizational assets and a source of sustained competitive advantage, who can create substantial value by more productive innovations or building client relationships (Hertzberg, 1959; Maslow, 1943; McGregor, 1960). However, it is very difficult to design effective pecuniary incentives to retain knowledge employees (Larkin, Pierce, and Gino, 2012). If knowledge workers walk to rival firms with their valuable skills, it will undermine the focal firm's competitive advantage and performance (Campbell,Coff, and Kryscynski, 2012). To deal with this managerial challenge, Flammer and Kacperczyk (2015) find that firms' social responsible practices can help retain employees with valuable skills and knowledge by enhancing employees' loyalty with the firm. Other empirical evidence also shows that employee satisfactions lead to significant long-term stock returns (Edmans, 2011). As the essential role played by CSR related activities in sustaining competitive advantage and increasing firm values, consistently we find that institutional investors would have incentives to influence managers to improve the employee satisfactions.

Secondly, both anecdotal and empirical evidence indicate that firm values are sensitive to firms' environmental issues. For example, the stock price had dropped more than a half in the two month after the oil spill incidence of British Petroleum, which contaminated a large area of marine environment along the Gulf of Mexico. Based on the environmental related events covered in the Wall Street Journal, Flammer (2013) suggest that investors reward corporations for eco-friendly behavior and penalize firms for the irresponsible activities. Also, Konar and Cohen (2001) study the market value of S&P 500 firms relative to environmental performance and find that with a 10% reduction in emissions of toxic chemicals resulting in a \$34 million increase in market value of firm's intangible assets. Moreover, Heinkel, Kraus, and Zechner (2001) show that polluting firms are associated with higher cost of capital because of a "lack of risk sharing among non-green investors". And in their model, "more than 20% green investors are required to induce any polluting firms to reform". Consistent with the literature, we show that the exogenous increase in institutional ownership leads to better protection of environment.

Lastly, product quality matters for firm values because it is the main determinant for firms' sales and future cash flows. Firms with CSR initiatives focused on improving product quality tend to have enhanced consumer loyalty, and consumers are willing to pay a higher price for "ethical" goods (Baron, 2008; Sen and Bhattacharya, 2001; Luo and Bhattacharya, 2006). For example, as Luo and Bhattacharya (2006) point out, CSR could improve long-term financial performance by satisfying customers through high quality and innovative products. Similarly, Flammer (2015) find that the dimension of product quality is a driving factor in KLD CSR ratings to benefit companies with competitive advantages when market competitions increase. As addressed in LG's sustainability report, product quality is the center of "customer value creation", and thus "must be ensured under any circumstance..." with "...the highest priority". The significantly positive coefficients show that firms at the top of Russell 2000 have better performance in product quality dimension than those at the bottom of Russell 1000 due to increased institutional ownership.

## 3.5. Cross-sectional Analysis and Robustness

So far, we have identified that the index reconstitution and the resulted exogenous increase in institutional ownership have a significant impact to increase CSR investments. In this section, we further investigate the possible channels through which institutional ownership impact such investments. Also, we investigate whether our main results hold in various sensitivity tests.

#### 3.5.1. Cross-sectional Tests

We first examine whether the impact of institutional ownership on firms' CSR investments is more pronounced for firms in consumer related industries, as Servaes and Tamayo (2012) provide that CSR could increase more shareholder values with more consumer awareness. We define consumer oriented industries if the firms' SIC code falls in 5200 to 5999. Results in Panel A of Table 4 show that the positive effect of institutional ownership on firms' *CSR* performance is more pronounced in the subsample firms in consumer oriented industries. We further test the equality of the estimated coefficients in the two subsamples using the Wald tests, and find that they are statistically significant as well. Also, we find similar patterns in the negative effect of institutional holdings on *Concerns*.

#### [Insert Table 4 here]

In Panel B, we examine whether the level of financial constraints drive the documented effect, as managers are more reluctant to spend on social goodness less financial slack. We measure the financial constraints by using firm's investment grade and dividend payout. More specifically, firms with creditratings no below BBB and firms that paid out dividends are the financially *Unconstrained* ones; and *Constrained* ones otherwise. Our results shows that the coefficients of *CSR* and *Concerns* are both statistically and economically significant for firms with initially financial constraints and are not significant for unconstrained firms. The Wald tests suggest that the differences are statistically significant.

At last, we test whether inferiorcorporate governance could reinforce the effect when managers are more likely to be short-term oriented. We use board independence and analyst coverage the year before the index reconstitution to measure the initial level of corporate governance. Firms with higher board independence and analyst coverage than the cross-sectional median belong to the ones with *high* CG; and *low*CG otherwise. Panel C shows that the coefficients of *CSR* and *Concerns* are both statistically and economically significant for firms with initially *low*corporate governance and are not significant for other firms.

#### 3.5.2. Robustness Tests

As discussed in Section 2, there are multiple ways in research exploring Russell index reconstitutions. In Table 5we provide evidence that our main results hold in various sensitivity tests.

#### [Insert Table 5 here]

In Panel A, we investigate firms within bandwidth of  $\pm 250$  around the 1000/2000 threshold and polynomial order  $\kappa=2$ . We find that the causal effect holds for both *CSR* and *Concerns* when we include controls of firm fixed effects, use institutional holdings by quasi-indexer only, and switch to End-of-May ranking compositions provided by Russell.

If the positive effects we document are due to the discontinuity of institutional ownership around the 1000/2000 threshold, we should find no such effects around other arbitrary thresholds in market capitalization rankings. Panel B reports the falsification tests using other placebo thresholds of 500, 750, 1250, and 1500. We find no significant effects in any of these tests.

At last, we test whether the effect of institutional ownership and CSR investments is robust under different model methods. First, we conduct the two-stage IV estimation method as Appel, Gormley, and Keim (2016). Moreover, we switch to sharp RD design, and test the impact of index assignment on CSR measures using the Rule of Thumb bandwidth. We find that our results do not change significantly under these alternative estimation methods.

 $<sup>^{9}</sup>$ In unreported tests, we use the sharp RD design to test the fixed bandwidths of  $\pm 50$ ,  $\pm 150$ ,  $\pm 250$ , and  $\pm 500$ , and our results generally hold.

#### 4. Shareholder Attention and CSR Investments

From the above analysis, we have yielded encouraging results that firms with more institutional holdings invest more in CSR activities. In this section we make a further step by looking at the concentration of shareholder attention conditional on the level of their ownership in the firms.

#### 4.1. Identification Strategy

Like institutional ownership, shareholder attention is likely to be endogenous as well. It is possible that monitoring attentions might be attracted to firms with certain characteristics that might be correlated with CSR activities. To cope with such a concern, we adopt a natural experiment by measuring exogenous shocks to the concentration of shareholder attention to a particular firm.

Specifically, we construct our shareholder attention measure following Kempf, Manconi, and Splat(2015), and use an inverse measure of *monitoring intensity* to represent it. First, we use exogenous shocks to unrelated industries held by a given firm's institutional shareholders to identify time periods where shareholders are likely to be distracted and shift their attention away from the firm. We define an industry shock if an industry has the highest or lowest return across all 12 Fama-French industries in a given quarter. We then construct firm-level monitoring intensity measures by aggregating monitoring intensity measure across all institutional investors for each firm. Lower *monitoring intensity* implieshigher value of attention distraction from shareholders.

The summary statistics are reported in Panel C of Table 1. We start our sample in 1991 when KLD data is available, and we have 27,243 firm-year observations in total. We find that an average firm has the *monitoring intensity* measure as 0.164, which is in line with Kempf, Manconi, and Splat (2015). We find that the mean value of total assets is 6.807 million. We also find that the mean ROA and the mean market to book ratio is 0.116 and 2.037, respectively. About 16.8% of the total assets are cash and short-term investments and that average firm use 22.4% debt in its assets. We further find that on average institutional ownership is about 42.5%. The significant level of institutional ownership of a typical firm highlights the important monitoring role that the institutional investors could potentially play.

#### 4.2. Shareholder Attention and CSR Investments: Baseline Results

We firstly examine the effect of attention distraction on CSR performance. We construct the following model:

$$CSR_{i,t} = \alpha + \beta_1 Distraction_{i,t} + \beta_2 IO_{i,t} + \beta_3 X_{i,t} + u_i + v_t + \xi_{i,t}$$

Where  $CSR_{i,t}$  is our measure of CSR performance. As in the previous section, we use three main measures of CSR performance: 1) total CSR score (CSR); 2) Strengths; 3) Concerns. Distraction is our inverse measure of institutional investors' monitoring intensity. IO is the level of institutional ownership.  $X_{i,t}$  includes a set of time-varying firm characteristics as controls, such as Size, Leverage, ROA,M/B,Cash Holdings, Advertising, Sales Growth, R&D Intensity, and Dividends. $u_i$  and  $v_t$  represents industry (or firm) and year fixed effects, respectively, which are included to resolve the concern that the results are driven by different industries (or firm) or secular changes in CSR.

Since *Distraction* is an inverse measure of monitoring intensity, a statistically significant and negative (positive)  $\beta_1$  for *CSR* or *Strengths* (*Concerns*) would indicate the positive effect of monitoring intensity on firms' CSR performance. We report our baseline regression results in Panel A of Table 6.

### [Insert Table 6 here]

In Columns (1) to (3), we include Industry  $\times$  year fixed effects following Kempf, Manconi, and Splat (2015). As expected, we find a negative and significant  $\beta_1$  for *CSR* and *Strengths*, and a positive and

significant  $\beta_1$  for *Concerns*. The results are all significant at 1% level. Take Column (1) for an example, a standard deviation decrease in *Distraction* results in a 0.328 (=7.28×0.045) increase in CSR score, which is 15% of one standard deviation of CSR. The result is therefore not only statistically significant, but economically significant. We further add firm fixed effects rather than Industry × year in Columns (4) to (6), and our results are robust. The economic magnitudes are even larger, nearly doubling the results in terms of *CSR*.

To more precisely capture the economic implications of our results, we adopt the same strategy as in the previous section by looking at the dollar value of SG&A. In Panel B of Table 6, we regress the natural log of SG&A expenses on firms' CSR performance in the same year. We control for the same firm-level characteristics, and industry (firm) and year fixed effects as in Panel A. In Column (1), we study the total *CSR* and find that a one score increase in CSR score is significantly associated with a 4.1% more spending in SG&A.

Then, we translate *CSR* score into SG&A dollars. Panel C presents the summary statistics for SG&A expenses and net income for our sample firms. For example, a one-score increase in *CSR* is associated with a 4.1% more costs in SG&A, which represents a \$36.82 million (4.1% \* \$898 million) increase for an average firm. Since one standard deviation increase in monitoring intensity on average causes firms to increase the CSR performance by 0.328 point more, it would cause a firm to spend an extra of \$12.08 million in SG&A expenses. Relative to the net income of \$260 million for the mean firm, this effect accounts for about a 5% fraction of the net income.

#### 4.3. Shareholder Attention and Dimensions of CSR Performance

To better understand what aspects of the CSR issues shareholder attention matters the most, as in the previous section we extend the baseline specification to study the effect of attention distraction on the five different dimensions of CSR activities. Specifically, we use the five dimensions of CSR activities instead of the total CSR score in the regressions. We report the results in Table 7.

## [Insert Table 7 here]

As can be seen from Table 7, *Distraction* negatively affects *Community, Diversity, Environment, and Product.* It implies that as shareholder attention increases, firms tend to invest more in these dimensions.

#### 4.4. Shareholder Attention and CSR Investments: Cross-Sectional Tests

So far, we have obtained encouraging results that conditional on levels of institutional ownership, shareholder attention positively affects firms' CSR investments. In this section, we further investigate the potential factors that affect the relationship between shareholder attention and CSR. Following the previous section, we look at consumer oriented industries vs. other industries, financial constraints and corporate governance. The results are presented in table 8.

#### [Insert Table 8 here]

In Panel A, we divide the whole sample into consumer oriented industries and other industries. We expect that the effects of shareholder attention on CSR are more pronounced in consumer oriented industries, whose customers' perception of the firm is more important. We define consumer oriented industries if the firm's SIC code falls in range of 5200 to 5999. Across all the measures of CSR performance, we consistently find that the estimated coefficients of *Distraction* are larger in consumer oriented industries, nearly doubling the coefficients in other industries. We further test the equality of the estimated coefficients in the two subsamples using the Wald tests, and find that they are statistically significant as well.

In Panel B, we look at financial constraints. CSR is a luxury good for a firm, particularly true for financially constrained firms. Firms with financial constraints might decrease expenditures dramatically in

CSR if they find distracted attention from institutional investors. Therefore, the effect of shareholder attention is likely to be stronger in firms with financial constraints. We divide into subsamples according to whether the firm has an investment grade or not, and whether the firm pays dividend in the year. Firms that do not have investment grade and do not pay dividend are generally regarded as financially constrained firms. In Panel B, for both the two measures, we find that our previous results are much stronger in the subsample of firms with financial constraints.

Finally, we look at corporate governance in Panel C. Since external monitoring from institutional investors could substitute for internal corporate governance to attenuate managerial myopia, we expect the effect of shareholder attention to be stronger in firms with inferior internal corporate governance. We measure internal corporate governance using board independence and analyst coverage (e.g., Chen, Harford, and Lin, 2015). We divide the sample according to terciles of the sample. As expected, we find that the estimated coefficients of *Distraction* are only significant in the subsample of firms with inferior corporate governance. The magnitudes are much larger in poorly-governed firms as well.

#### 5. Further Evidence on CSR-related Shareholder Activism

If institutional shareholders induce corporate managers to invest more in CSR, we should observe that both higher institutional ownership and shareholder attention would lead to an increase in CSR shareholder proposals. Flammer (2015) find that CSR proposals could improve firm values. The use of "voice", or the mere threat of voting can increase shareholders' power to influence firm policies. To verify this potential channel, we collect data from the ISS Risk Metrics Shareholder Proposal and Vote Results database.

We test both the number and probability of SRI shareholder proposals in Table 9. Panel A presents results of the difference in SRI shareholder proposals for firm around the Russell 1000/2000 threshold. We estimate the first stage model RD model using the SRI proposals as the dependent variable. Our results show that, consistent with our expectation, firms in the top of Russell 2000 tend to receive more SRI proposals from institutional shareholders, than firms in the bottom of Russell 1000. Also, the probability of SRI proposals is higher for firms just included in Russell 2000.

In Panel B we examine the difference in the number and probability of SRI proposals when institutional shareholders exert different monitoring intensity. Our results show that if institutional shareholders shift their attention away to other industries or firms, they tend to initiate less SRI proposals, and the initiating probability is also lower. The results are consistent with Kempf, Manconi, and Splat (2015) for the change in governance related proposals for shareholder distraction.

Our results on SRI shareholder proposals provide a potential channel for shareholder activism to push firm to invest more insocial goodness.

#### 6. Conclusion

This paper investigates whether institutional shareholder could induce corporate manager to invest more in social goodness, measured by CSR ratings provided by KLD database. We exploit the question using two quasi-natural experiments. First, utilizing the random index assignment which takes place on the last trading day of May, we find that higher level of institutional ownership leads to more CSR investments, which is accounted for 7% of average net income. Secondly, we use exogenous shocks to unrelated industries held by a given firm's institutional shareholders to identify periods where shareholders are likely to shift attention away from the firm. We find that when shareholders are distracted, firms are less motivated to be socially responsible and reduce a significant amount in CSR investments. Further, we show that the effects of institutional shareholderson CSR are more pronounced for firms in consumer oriented industries, with higher financial constraints and inferior corporate

governance. At last, we investigate the underlying mechanism of "voice". We find that shareholders initiate more SRI proposals to increase the power to influence CSR investments. Our paper belongs to the literature to discuss institutional shareholders' activism in influencing firms' corporate policies. And we contribute to the literature by providing comprehensive evidence that institutional shareholders could lead to more corporate investments in social goodness.

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## **Appendix. Variable Definitions**

CSR Score	Strengths Score - Concerns Score
CSR Score	Source: KLD database
	The sum of community activities, diversity, employee relationship, environmental record,
Strengths	and product quality and safety strengths.
	Source: KLD database
	The sum of community activities, diversity, employee relationship, environmental record,
Concerns	and product quality and safety concerns.
	Source: KLD database
Community	Investment Controversies, Community Impact, Tax Disputes, and Other Concern.
Concerns (4)	Source: KLD database
Community	Charitable Giving, Innovative Giving, Non-US Charitable Giving, Support for Housing,
Community	Support for Education, and Other Strength.
Strengths (6)	Source: KLD database
Diversity	Controversies, Non-Representation, Board Diversity, and Other Concern.

Concerns (4)	Source: KLD database
Diversity	CEO, Promotion, Board of Directors, Work/Life Benefits, Women & Minority Contracting,
Strengths (8)	Employment of the Disabled, Gay & Lesbian Policies, and Other Strength.
Strengths (6)	Source: KLD database
Employee	Union Relations, Health and Safety Concern, Workforce Reductions, Retirement
relationship	Benefits Concern, and Other Concern.
Concerns (5)	Source: KLD database
Employee	Union Relations, Cash Profit Sharing, Employee Involvement, Retirement Benefits
relationship	Strength, Health and Safety Strength, and Other Strength.
Strengths (6)	Source: KLD database
Environment	Hazardous Waste, Regulatory Problems, Ozone Depleting Chemicals, Substantial
	Emissions, Agricultural Chemicals, Climate Change, and Other Concern.
Concerns (7)	Source: KLD database
Environment	Beneficial Products and Services, Pollution Prevention, Recycling, Clean Energy, and
	Other Strength.
Strengths (5)	Source: KLD database
Product	Product Safety, Marketing/ Contracting, Antitrust, and Other Concern.
Concerns (4)	Source: KLD database
Product	Quality, R&D/Innovation, Benefits to Economically Disadvantaged, and Other Strength.
Strengths (4)	Source: KLD database
Institutional	The percentage of common shares held by institutional investors.
Ownership	Source: Spectrum Institutional 13(f) fillings
Size	Log of total assets (AT) of a firm.
Size	Source: Compustat
Lovorago	All debt (DLTT + DLC)/Total assets (AT).
Leverage	Source: Compustat
ROA	ROA is calculated as (OIBDP/AT).
NOA	Source: Compustat
M/B	Market value of assets over book value of assets: (AT - CEQ + PRCC_F*CSHO)/AT.
IV// D	Source: Compustat
BoardIndep	The percentage of independent directors on the board.
Воагипиер	Source: ISS (former RiskMetrics)
Cook Holdings	The percentage of current assets over total assets.
Cash Holdings	Source: Compustat
Adverticing	Annual firm dollars spent on advertising (XAD) scaled by total sales (AT).
Advertising	Source: Compustat
DOD Interests	Annual firm dollars spent on R&D (XRD) scaled by total assets (AT)
R&D Intensity	Source: Compustat
0-1 0	Change in sales (SALE) scaled by lagged total sales (AT).
Sales Growth	Source: Compustat
	An indicator variable that equals one if the firm has a non-zero dividend (DVC) this year
Dividends	and zero otherwise.
	Source: Compustat

## **Table 1. Summary Statistics**

This table provides summary statistics for our key variables. Panel A reports the summary statistics separately for the firms in the Russell 1000 and Russell 2000 indices between 2003 and 2006. And the last column reports the p-value of their mean differences. The sample consists of 2,511 firms with 9,851 firm-year observations. Panel B reports the firm characteristics for the firms in the Russell 1000 and Russell 2000 indices before the index assignment within the bandwidth of  $\pm 50$  and  $\pm 150$  around the 1000/2000 cutoff, respectively. Panel C presents the summary statistics for the firms used in the setting of shareholder distraction. The sample consists of 27,243 firm-year observations between 1991 to 2012. Definitions for all variables are provided in the Appendix.

Panel A. Main Va	ariables in R	ussell Index A	Assignment				
		Russell 1000		1	Russell 2000	)	Mean Diff
	Mean	Median	StDev	Mean	Median	StDev	(p-value)
CSR	0.175	0.000	2.637	-0.477	-1.000	1.443	0.000
Strengths	2.164	1.000	2.631	0.577	0.000	0.966	0.000
Concerns	1.989	1.000	1.967	1.054	1.000	0.975	0.000
Com	0.114	0.000	0.716	0.002	0.000	0.331	0.000
Div	0.803	1.000	1.478	-0.081	0.000	0.956	0.000
Emp	-0.168	0.000	1.022	-0.290	0.000	0.673	0.000
Env	-0.193	0.000	0.903	-0.046	0.000	0.388	0.000
Pro	-0.381	0.000	0.824	-0.061	0.000	0.330	0.000
IO	0.674	0.691	0.243	0.537	0.556	0.279	0.000
Size	8.063	8.147	1.431	6.310	6.372	1.164	0.000
Leverage	0.236	0.218	0.211	0.200	0.193	0.177	0.000
ROA	0.134	0.137	0.157	0.067	0.086	0.163	0.000
M/B	1.808	2.094	2.053	1.710	2.009	2.164	0.016
Cash Holdings	0.128	0.057	0.168	0.189	0.085	0.234	0.000
Advertising	0.017	0.000	0.034	0.011	0.000	0.041	0.079
R&D Intensity	0.044	0.000	0.064	0.036	0.000	0.073	0.000
Sales Growth	0.117	0.000	0.297	0.089	0.000	0.357	0.001
Dividends	0.581	1.000	0.495	0.517	1.000	0.475	0.005

Panel B. Pre-assignment firm characteristics

	Bandwidth ±50			Bandwidth ±150		
	Russell	Russell	Diff	Russell	Russell	Diff
	1000	2000	(p-value)	1000	2000	(p-value)
Size	7.503	7.409	0.731	7.513	7.377	0.111
Leverage	0.257	0.251	0.358	0.264	0.255	0.109
ROA	0.113	0.108	0.754	0.109	0.104	0.159
M/B	1.761	1.759	0.966	1.795	1.791	0.537
Cash Holdings	0.143	0.146	0.887	0.139	0.148	0.105
Advertising	0.009	0.009	0.964	0.008	0.008	0.896
R&D Intensity	0.038	0.037	0.512	0.039	0.036	0.153
Sales Growth	0.086	0.083	0.746	0.093	0.085	0.113
Dividends	0.575	0.577	0.975	0.561	0.558	0.684

Panel C Main Variables	in Shareholde	r Distraction				
	Mean	StDev	Q1	Median	Q3	N
CSR	-0.095	2.183	-1	0	1	27,243
Strengths	1.406	2.082	0	1	2	27,243
Concerns	2.280	2.139	1	2	3	27,243
Com	0.177	0.511	0	0	0	27,243
Div	0.572	1.021	0	0	1	27,243
Emp	0.339	0.722	0	0	0	27,243
Env	0.242	0.635	0	0	0	27,243
Pro	0.095	0.312	0	0	0	27,243
Monitoring intensity	0.164	0.045	0.133	0.160	0.191	27,243
IO	0.425	0.362	0	0.493	0.754	27,243
Size	7.314	1.673	6.087	7.248	8.425	27,243
Leverage	0.224	0.196	0.045	0.204	0.340	27,243
ROA	0.116	0.125	0.076	0.125	0.179	27,243
M/B	2.037	1.380	1.197	1.563	2.306	27,243
Cash Holdings	0.168	0.200	0.025	0.085	0.239	27,243
Advertising	0.012	0.030	0	0	0.008	27,243
R&D Intensity	0.037	0.071	0	0	0.042	27,243
Sales Growth	0.105	0.237	0	0	0	27,243
Dividends	0.512	0.500	0	1	1	27,243

#### Table 2. IO and CSR: Baseline Results

This table studies the effect of institutional ownership on firms' CSR investments and the economic significance through SG&A expenses. Panel A provides estimates of our two-stage least-squares regressions. Model (1) is based on a sharp regression discontinuity (RD) design, which estimates institutional ownership as a function of the Russell index reconstitutions:

$$IO_{i,t} = \alpha + \tau D_{i,t} + f(R_{i,t}) + \beta_1 X_{i,t} + \beta_2 FloatAdj_{i,t} + u_i + v_t + \epsilon_{i,t}$$
 (1)

Model (2) presents of the effect of institutional ownership, instrumented by Russell 2000 index membership, on firms' total CSR performance measured by *CSR*, the CSR strengths measured by *Strengths*, and the CSR concerns measured by *Concerns*, respectively:

$$Y_{i,t} = \beta_0 + \beta_1 \widehat{10}_{i,t} + g(R_{i,t}) + \beta_2 X_{i,t} + \beta_3 FloatAdj_{i,t} + u_i + v_t + \xi_{i,t}$$
 (2)

The function f (and likewise for g) is parameterized as  $\kappa$ -order polynomials as follows:

$$\sum\nolimits_{j = 0}^k {{\delta _j}\,R_{i,t}^j} + \,\sum\nolimits_{j = 0}^k {{\gamma _j}\,D_{i,t}R_{i,t}^j}$$

The models are estimated over the 2003-2006 period using different bandwidths ( $\pm 50$ ,  $\pm 150$ , and  $\pm 250$ ) and varying polynomial orders ( $\kappa = 2$ , and 3).Panel B presents estimated coefficients from OLS regressions of Selling, General, and Administrative (SG&A) expenses on *CSR*. The dependent variable is the natural log of SG&A expenses. Panel C shows summary statistics of SG&A expenses and net income. All regressions are controlled for industry and year fixed effects. Control variables include *Size*, *Leverage*, *ROA*, *M/B*, *Cash Holdings*, *Advertising*, *R&D Intensity*, *Sale Growth*, and *Dividends*. *FloatAdj*is the difference between the rank implied by the end-of-May market capitalization and the actual rank assigned by Russell in June. Standard errors are clustered at the firm level and reported in parentheses. Definitions for all variables are provided in the Appendix. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5% and 1% levels, respectively.

	Bandwi	dth ±50	Bandwid	dth ±150	50 Bandwidth ±250		
	(1)	(2)	(3)	(4)	(5)	(6)	
Model (1)	Ю	Ю	IO	Ю	Ю	Ю	
$D_{i,t}$	0.089***	0.077***	0.087***	0.076***	0.086***	0.074***	
	(0.019)	(0.023)	(0.019)	(0.021)	(0.018)	(0.021)	
Adj. R^2	0.279	0.274	0.279	0.273	0.277	0.271	
Model (2)	CSR	CSR	CSR	CSR	CSR	CSR	
$\widehat{IO}_{i,t}$	3.789*	3.617*	3.435**	3.241*	3.151**	2.901**	
	(2.004)	(2.020)	(1.559)	(1.771)	(1.465)	(1.343)	
Adj. R^2	0.372	0.353	0.385	0.360	0.457	0.404	
Model (2)	Strengths	Strengths	Strengths	Strengths	Strengths	Strength	
$\widehat{IO}_{i,t}$	0.473	0.341	0.425	0.402	0.394	0.362	
	(0.705)	(0.884)	(0.672)	(0.819)	(0.601)	(0.760)	
Adj. R^2	0.329	0.301	0.352	0.329	0.371	0.348	
Model (2)	Concerns	Concerns	Concerns	Concerns	Concerns	Concern	
$\widehat{IO}_{i,t}$	-3.247**	-3.064**	-2.917***	-2.740**	-2.792***	-2.225*	
	(1.472)	(1.553)	(1.255)	(1.342)	(1.167)	(1.049)	
Adj. R^2	0.411	0.406	0.438	0.419	0.447	0.430	
Polynomial order, κ	2	3	2	3	2	3	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	
FloatAdj.	Yes	Yes	Yes	Yes	Yes	Yes	
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	
Obs.	314	314	972	972	1,595	1,595	
Panel B: Relation be	tween CSR a	nd SG&A exp	enses				
CSR			0.0	72**			
			(0.	011)			
Firm Controls			Y	'es			
Industry FE			Y	'es			
Year FE	Yes						
Adj. R^2			0.4	419			
Obs.			8,	078			
Panel C: Summary s	statistics of S	G&A expense	s and Net Inc	ome			
	Mea	an	Median		Std		
SG&A expenses	61	4	176		2103		
Net Income	18	9	61		1751		

## Table 3. IO and CSR: Analysis of CSR Dimensions

This table provides estimates of our second-stage regression of the effect of institutional ownership, instrumented by Russell 2000 index membership, on the five dimensions in CSR using polynomial order  $\kappa$ =2, by controlling for industry and year fixed effects between 2003 and 2006: Community (Com), Diversity (Div), Employee Relations (Emp), Environment (Env), and Product quality (Pro). Panel A, B, and C report the regression results over bandwidth of  $\pm 50$ ,  $\pm 150$ , and  $\pm 250$ , respectively. Control variables include Size, Leverage, ROA, M/B, Cash Holdings, Advertising, R&D Intensity, Sale Growth, and Dividends. Standard errors are clustered at the firm level and reported in parentheses. Definitions for all variables are provided in the Appendix. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5% and 1% levels, respectively.

	Com	Div	Emp	Env	Pro
Panel A. Bandw	ridth ±50				
$\widehat{IO}_{i,t}$	-0.003	0.058	2.074**	0.658**	0.377**
	(0.059)	(0.038)	(1.071)	(0.304)	(0.195)
Controls	Yes	Yes	Yes	Yes	Yes
FloatAdj.	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.223	0.354	0.523	0.410	0.391
Obs.	314	314	314	314	314
Panel B. Bandw	ridth ±150				
$\widehat{\text{IO}}_{i,t}$	-0.007	0.051	1.901**	0.575***	0.327**
	(0.031)	(0.032)	(0.849)	(0.237)	(0.144)
Controls	Yes	Yes	Yes	Yes	Yes
FloatAdj.	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.222	0.354	0.524	0.410	0.397
Obs.	972	972	972	972	972
Panel C. Bandw	ridth ±250				
$\widehat{IO}_{i,t}$	-0.012	0.039*	1.812**	0.484***	0.319***
	(0.035)	(0.023)	(0.836)	(0.202)	(0.117)
Controls	Yes	Yes	Yes	Yes	Yes
FloatAdj.	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.223	0.355	0.524	0.411	0.401
Obs.	1,595	1,595	1,595	1,595	1,595

#### Table 4. IO and CSR: Cross-sectional Tests (using $\kappa$ =2 and Bandwidth $\pm$ 250)

This table presents the subsample analysis of the effect of institutional ownership, instrumented by Russell 2000 index membership, on firms' CSR performance between 2003 and 2006, in consumer oriented industries vs. other industries, conditional on financial constraints, and corporate governance. In Panel A, firms in the industries with SIC between 55200-5999 belong to *Consumer Oriented Industries*; and *Other Industries* otherwise. In Panels B, firms that did not have dividend payout before the index assignment belong to financially *Constrained* firms; and *Unconstrained* otherwise. In Panel C, firms with board independence or analyst coverage before the index assignment below the cross-sectional median belong to *low* corporate governance (CG); and *high* CG, otherwise. Control variables include *Size*, *Leverage*, *ROA*, *M/B*, *Cash Holdings*, *Advertising*, *R&D Intensity*, *Sale Growth*, and *Dividends*. Standard errors are clustered at the firm level and reported in parentheses. Definitions for all variables are provided in the Appendix. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5% and 1% levels, respectively.

Panel A. Consumer orien	ted industrie	s vs. other indust	ries	
		Dependent	Variable	
		CSR	Co	oncerns
	Consumer		Consumer	
	Oriented		Oriented	
	Industries	Other Industries	Industries	Other Industries
	(1)	(2)	(5)	(6)
$\overline{\widehat{10}_{i,t}}$	2.971***	0.892	-2.616***	-0.915
	(1.076)	(0.615)	(1.120)	(0.379)
Test "Consumer oriented		4.070**	4	F00***
industries = Other industries"		1.873**	1.	.592***
Controls	Yes	Yes	Yes	Yes
FloatAdj.	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R^2	0.425	0.312	0.523	0.420
Obs.	164	1,431	164	1,431

		Dependent Variable							
	CS	SR	CSR		Cond	erns	Cond	Concerns	
	Investment Grade		e Dividends		Investme	Investment Grade		ends	
	No	Yes	No	Yes	No	Yes	No	Yes	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
$\widehat{\mathrm{IO}}_{\mathrm{i,t}}$	2.085***	0.994	2.658***	-1.062	-2.537***	0.790	-3.275***	-1.068	
	(0.852)	(0.612)	(1.025)	(0.850)	(1.009)	(0.692)	(1.143)	(1.973)	
Test									
"Constrained	1.007**		2.417***		4 405**		2.022***		
=Unconstrain			2.41	1	1.43	1.435**		2	
ed"									

Panel B. Conditional on Financial Constraints

Yes

Controls

Yes

Yes

Yes

Yes

Yes

Yes

Yes

FloatAdj.	Yes							
Industry FE	Yes							
Year FE	Yes							
Adj. R^2	0.404	0.512	0.403	0.335	0.452	0.485	0.563	0.436
Obs.	1,155	440	864	730	1,155	440	864	730

**Panel C. Conditional on Corporate Governance** 

	Dependent Variable								
	CS	SR	CS	SR	Conc	erns	Concerns		
	Board Inde	ependence	Analyst C	Analyst Coverage		pendence	Analyst C	Coverage	
	Low	High	Low	High	Low	High	Low	High	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
$\widehat{IO}_{i,t}$	3.390***	1.001	4.006***	1.920	-2.658***	-1.062	-3.618***	-1.501	
	(1.371)	(0.662)	(1.619)	(1.305)	(1.025)	(0.850)	(1.461)	(1.255)	
Test "Low									
CG= High	1.94	7***	2.440***		1.206***		1.69	1.693***	
CG"									
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
FloatAdj.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Adj. R^2	0.441	0.432	0.461	0.447	0.535	0.468	0.511	0.457	
Obs.	669	926	864	730	669	926	864	730	

## Table 5. IO and CSR: Robustness Tests

This table provides various robustness tests for the effect of institutional ownership, instrumented by Russell 2000 index membership, on firms' total CSR performance measured by *CSR* and the CSR concerns measured by *Concerns*, by controlling for year fixed effects between 2003 and 2006. Panel *A* presents results by controlling for the firm fixed effects, only considering the holdings by quasi-indexers, and using End-of-May Russell market capitalizations. Panel B presents results from falsification tests, in which we choose placebo thresholds of 500, 750, 1250, and 1500 in Russell 3,000 index. Panel *C* presents results using alternative estimation models: two-stage IV estimation method as in Appel et al. (2016), and Sharp RD estimation method as in Boone and Whited (2015). Control variables include *Size*, *Leverage*, *ROA*, *M/B*, *Cash Holdings*, *Advertising*, *R&D Intensity*, *Sale Growth*, and *Dividends*. Standard errors are clustered at the firm level with t-statistics reported in parentheses. Definitions for all variables are provided in the Appendix. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5% and 1% levels, respectively.

CSR	Concerns
00.1	0011001110

Firm FE	3.192* (1.651)	-2.985** (1.365)
Quasi-indexer only	3.071** (1.540)	-2.399*** (1.041)
End-of-May market capital by Russell	2.373* (1.215)	-2.391*** (0.799)
Panel B. Placebo Thresholds (using κ=2 and Bandwidth ±250)		
500	-1.028 (1.201)	-0.093 (0.186)
750	0.957 (1.064)	0.071 (0.169)
1,250	-1.813 (1.144)	-0.089 (0.175)
1,500	0.846 (1.472)	0.062 (0.173)
Panel C. Alternative methods		
IV estimation method as in Appel et al. (2015)	3.647*** (1.505)	-3.453***(1.261)
Sharp RD design with Rule of Thumb bandwidth	1.056*** (0.449)	-1.022*** (0.385)

## Table 6. Shareholder Attention and CSR Investments: Baseline Results

This table presents the effect of shareholder attention on CSR investments. The primary sample is drawn from KLD database from 1991 to 2012. Panel A reports the baseline regression results. The dependent variables are CSR, strengths and concerns. We use an inverse measure of monitoring intensity, i.e. shareholder distraction, which is the weighted average exposure of firm shareholders to the shock industries. Institutional ownership is the fraction of the firm's stock owned by institutional investors. Panels B and C are to help with the interpretation of the economic significance in Panel A. All other variables are defined in Appendix A. Heteroskedasticity-consistent standard errors clustered at the firm level are reported in brackets. \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5%, and 1% levels, respectively.

	•			
Panel	Δ	Raceline	e regressi	On.
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	Dependent Variable					
	CSR	Strengths	Concerns	CSR	Strengths	Concerns
	(1)	(2)	(3)	(4)	(5)	(6)
Distraction	-7.280***	-3.933***	7.208***	-12.847***	-12.216***	4.152***
	(1.611)	(1.444)	(1.468)	(1.593)	(1.316)	(1.432)
Institutional ownership	0.186**	-0.109	-0.222***	-0.095	-0.470***	-0.288**
	(0.087)	(0.077)	(0.065)	(0.170)	(0.147)	(0.147)
Size	0.256***	0.742***	0.759***	-0.001	0.198***	0.378***
	(0.031)	(0.031)	(0.026)	(0.061)	(0.050)	(0.050)
Leverage	-0.449***	-0.747***	-0.397***	0.084	0.140	0.050
	(0.144)	(0.127)	(0.121)	(0.163)	(0.143)	(0.148)
ROA	1.579***	0.936***	-0.499***	0.329	0.061	-0.493**
	(0.238)	(0.208)	(0.184)	(0.215)	(0.178)	(0.204)
M/B	0.111***	0.124***	0.059***	0.007	0.005	0.010
	(0.021)	(0.018)	(0.016)	(0.018)	(0.016)	(0.015)
Cash Holdings	0.154	0.486***	0.558***	0.113	0.345**	0.144

	(0.155)	(0.132)	(0.122)	(0.162)	(0.145)	(0.146)
Advertising	7.105***	6.345***	-0.094	0.216	0.413	0.389
	(1.225)	(1.087)	(0.778)	(1.495)	(1.314)	(1.104)
R&D Intensity	2.690***	3.714***	1.427***	-0.177	0.049	0.518
	(0.533)	(0.455)	(0.371)	(0.600)	(0.520)	(0.541)
Sales Growth	-0.267***	-0.354***	-0.297***	0.118*	0.022	-0.254***
	(0.079)	(0.071)	(0.061)	(0.062)	(0.050)	(0.056)
Dividends	0.228***	0.277***	-0.106**	0.165**	0.142**	-0.101
	(0.070)	(0.059)	(0.050)	(0.084)	(0.071)	(0.071)
Industry × year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes	Yes	Yes
Adj. R^2	0.150	0.342	0.386	0.600	0.718	0.638
Obs.	27,243	27,243	27,243	27,243	27,243	27,243

# Panel B. Relation between CSR and SG&A expenses

	Dependent Variable		
	Log (SC	G&A Expenses)	
	(1)	(2)	
CSR	0.041***	0.002*	
	(0.005)	(0.001)	
Firm controls	Yes	Yes	
Industry x year FE	Yes	Yes	
Firm FE	No	Yes	
Adj. R^2	0.815	0.970	
Obs.	23,155	23,155	

# Panel C. Summary statistics of SG&A expenses and net income

	Mean	Median	Standard deviation	N
SG&A expenses	897.887	210.046	2764.910	23,155
Net income	259.504	42.663	1481.389	23,155

Table 7. Shareholder Attention and CSR: Analysis of CSR Dimensions

This table presents the effect of shareholder distraction on CSR investments, as in five dimensions of CSR. The primary sample is drawn from KLD database from 1991 to 2012. We use an inverse measure of monitoring intensity, i.e. shareholder distraction, which is the weighted average exposure of firm shareholders to the shock industries. All other variables are defined in Appendix A. Heteroskedasticity-consistent standard errors clustered at the firm level are reported in brackets. \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent Variable					
	Community	Diversity	Employee	Environment	Product	
	(1)	(2)	(3)	(4)	(5)	
Distraction	-1.450***	-5.792***	0.004	-8.601***	-0.656**	
	(0.378)	(0.704)	(0.602)	(0.749)	(0.301)	
Institutional ownership	-0.091**	-0.099	-0.174***	-0.195***	-0.018	
	(0.037)	(0.071)	(0.053)	(0.053)	(0.024)	
Size	0.040***	0.072***	0.059***	-0.002	0.003	
	(0.014)	(0.024)	(0.018)	(0.019)	(0.010)	
Leverage	0.024	0.062	-0.010	0.068	0.013	
	(0.035)	(0.071)	(0.054)	(0.053)	(0.026)	
ROA	-0.015	0.053	0.073	-0.071	-0.015	
	(0.050)	(0.095)	(0.072)	(0.066)	(0.037)	
M/B	-0.005	0.010	-0.002	-0.008	0.005	
	(0.004)	(800.0)	(0.006)	(0.006)	(0.003)	
Cash Holdings	0.004	0.087	0.051	0.218***	0.038	
	(0.036)	(0.073)	(0.059)	(0.055)	(0.029)	
Advertising	0.510	0.208	0.073	-0.402	-0.584*	
	(0.398)	(0.638)	(0.439)	(0.433)	(0.315)	
R&D Intensity	0.191	0.225	-0.238	-0.201	-0.004	
	(0.147)	(0.238)	(0.224)	(0.199)	(0.088)	
Sales Growth	-0.010	-0.015	0.007	0.068***	0.003	
	(0.013)	(0.026)	(0.020)	(0.018)	(0.009)	
Dividends	0.012	0.052	0.020	0.038	0.006	
	(0.020)	(0.034)	(0.028)	(0.025)	(0.012)	
Industry × year FE	Yes	Yes	Yes	Yes	Yes	
Firm FE	Yes	Yes	Yes	Yes	Yes	
Adj. R^2	0.602	0.689	0.484	0.494	0.500	
Obs.	27,243	27,243	27,243	27,243	27,243	

Table 8. Shareholder Attention and CSR: Cross-sectional Tests

This table presents the subsample analysis of the effect of shareholder attention on CSR investments, in consumer oriented industries vs. other industries, conditional on financial constraints, and corporate governance. The primary sample is drawn from KLD database from 1991 to 2012. The dependent variables are CSR, strengths and concerns. We use an inverse measure of monitoring intensity, i.e. shareholder distraction, which is the weighted average exposure of firm shareholders to the shock industries. Panel A reports the results in terms of consumer oriented industries vs. other industries, while Panels B and C report the subsample results conditional on financial constraints and corporate governance, respectively. All other variables are defined in Appendix A. Heteroskedasticity-consistent standard errors clustered at the firm level are reported in brackets. \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5%, and 1% levels, respectively.

			Depender	nt Variable		
	CS	SR	Strer	ngths	Concerns	
	Consumer		Consumer		Consumer	
	Oriented	Other	Oriented	Other	Oriented	Other
	Industries	Industries	Industries	Industries	Industries	Industries
	(1)	(2)	(3)	(4)	(5)	(6)
Distraction	-20.487***	-12.010***	-21.155***	-10.965***	-2.296***	-1.569***
	(4.668)	(1.679)	(3.957)	(1.386)	(0.873)	(0.333)
Institutional ownership	-0.151	-0.053	-0.484	-0.473***	1.187***	1.197***
	(0.469)	(0.183)	(0.303)	(0.165)	(0.372)	(0.166)
Size	-0.080	0.013	0.295	0.187***	1.337***	0.888***
	(0.233)	(0.063)	(0.190)	(0.052)	(0.211)	(0.050)
Leverage	0.799	0.021	0.580	0.100	-0.494	-0.095
	(0.747)	(0.163)	(0.499)	(0.147)	(0.723)	(0.170)
ROA	1.666	0.263	1.843*	-0.045	-1.566	-0.538**
	(1.287)	(0.217)	(0.969)	(0.179)	(1.248)	(0.235)
M/B	0.042	0.007	0.004	0.006	0.003	0.019
	(0.101)	(0.018)	(0.088)	(0.016)	(0.087)	(0.016)
Cash Holdings	-0.225	0.137	0.368	0.322**	1.728**	0.639***
	(0.763)	(0.164)	(0.634)	(0.149)	(0.764)	(0.171)
Advertising	-1.091	0.834	2.464	0.140	8.796***	-1.222
	(2.522)	(1.734)	(2.287)	(1.524)	(3.163)	(1.445)
R&D Intensity	-7.892	-0.150	-13.601**	-0.028	-3.731	2.344***
	(7.122)	(0.604)	(5.334)	(0.523)	(5.297)	(0.576)
Sales Growth	-0.219	0.141**	-0.141	0.037	-0.160	-0.477***
	(0.194)	(0.065)	(0.152)	(0.052)	(0.174)	(0.065)

Dividends	0.241	0.160*	0.237	0.131*	-0.258	-0.298***
	(0.269)	(0.086)	(0.211)	(0.074)	(0.272)	(0.086)
Test "Consumer oriented						
industries = Other	3.40	O*	6.88	***	5.45	5**
industries"						
Industry x year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.562	0.604	0.715	0.718	0.459	0.516
Obs.	2,325	24,918	2,325	24,918	2,325	24,918

Panel B. Conditional on financial constraints

	Dependent Variable				
-	CSR				
-	Investm	nent grade	Divide	nd payout	
- -	No	Yes	No	Yes	
- -	(5)	(6)	(5)	(6)	
Distraction	-5.517***	-1.449	-27.832***	-2.189	
	(1.477)	(6.321)	(3.180)	(1.430)	
Institutional	0.403	0.420	0.252	0.233	
ownership	0.193	-0.428	-0.352	0.233	
	(0.151)	(0.392)	(0.283)	(0.167)	
Size	0.112**	-0.403**	-0.309***	0.203***	
	(0.056)	(0.169)	(0.112)	(0.063)	
Leverage	-0.037	0.375	0.141	-0.085	
	(0.157)	(0.575)	(0.327)	(0.174)	
ROA	0.381*	0.403	0.692	0.264	
	(0.202)	(0.996)	(0.531)	(0.220)	
Market/book	-0.004	0.046	0.100**	-0.020	
	(0.016)	(0.063)	(0.049)	(0.017)	
Cash Holdings	-0.011	-0.456	-0.093	0.156	
	(0.144)	(0.757)	(0.374)	(0.159)	
Advertising	0.526	0.060	-0.075	0.852	
	(1.424)	(3.589)	(2.421)	(1.656)	
R&D Intensity	0.618	-5.126	-4.161*	0.638	
	(0.575)	(3.147)	(2.436)	(0.571)	
Sales Growth	0.041	0.261	0.207*	-0.026	
	(0.057)	(0.200)	(0.112)	(0.071)	
Dividends	0.017	0.317			
	(0.075)	(0.312)			
Industry x year FE	Yes	Yes	Yes	Yes	
Firm FE	Yes	Yes	Yes	Yes	
Test "Constrained =	70 (	)3***	64.0	32***	
Unconstrained"	78.0	J	64.6	) <b>∠</b>	
Adj. R^2	0.607	0.681	0.620	0.631	
Obs.	20,123	7,104	13,921	13,306	

Panel C. Conditional on corporate governance

Dependent Variable **CSR** Board independence Analyst coverage High Low High Low (1) (2) (5) (6) -24.030\*\*\* -1.136 -11.917\*\* Distraction -6.223 (4.497)(5.571)(2.317)(5.137)Institutional ownership 0.144 -0.268 0.347\* -0.131 (0.344)(0.371)(0.193)(0.383)Size -0.061 -0.166 0.048 -0.156 (0.108)(0.160)(0.071)(0.121)0.081 -0.043 -0.080 -0.378 Leverage (0.292)(0.463)(0.208)(0.368)ROA 0.791\* 0.421 -0.184 0.388 (0.475)(0.567)(0.285)(0.583)M/B -0.021 -0.073 -0.010 -0.013 (0.034)(0.063)(0.023)(0.039)Cash Holdings 0.000 0.360 0.031 -0.318 (0.334)(0.479)(0.189)(0.472)Advertising -0.482 2.005 1.022 0.217 (2.033)(4.838)(2.396)(2.731)**R&D** Intensity -0.728 1.080 0.617 0.161 (1.532)(2.014)(0.684)(1.784)Sales Growth 0.075 0.306\* -0.008 0.178 (0.127)(0.171)(0.072)(0.167)Dividends 0.219\* 0.134 0.189 -0.130 (0.130)(0.202)(0.094)(0.209)Industry x year FE Yes Yes Yes Yes Firm FE Yes Yes Yes Yes Test "Good Governance = 9.05\*\*\* 4.64\*\* Bad Governance" Adj. R^2 0.765 0.707 0.671 0.674

4,654

7,616

9,016

6,005

Obs.

## Table 9. Evidence on the CSR-related Shareholder Activism

This table presents the analysis of the effect of CSR activism. Panel A reports the regression discontinuity tests of SRI proposals around the 1000/2000 threshold by controlling for industry and year fixed effects between 2003 and 2006, using bandwidths of  $\pm 250$  and polynomial order  $\kappa = 2$ . Control variables include *Size*, *Leverage*, *ROA*, *M/B*, *Cash Holdings*, *Sale Growth*, *Advertising*, *R&D Intensity*, *and Dividends*. Panel B reports the effect of shareholder monitoring intensity on SRI proposals. Standard errors are clustered at the firm level and reported in parentheses. Definitions for all variables are provided in the Appendix. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5% and 1% level, respectively.

anel A. IO and SRI Proposals	(4)	(2)
	(1)	(2)
	SRI	Prob. (SRI)
	0.452**	0.010*
	(0.231)	(0.006)
trols	Yes	Yes
atAdj.	Yes	Yes
ustry FE	Yes	Yes
r FE	Yes	Yes
. R^2	0.071	0.125
S.	1,761	1,761
nel B. Monitoring Intensity a	nd SRI Proposals	
	SRI	Prob. (SRI)
traction	-0.276***	-0.199***
	[0.064]	[0.032]
itutional ownership	0.054***	0.062***
	[0.010]	[0.006]
е	0.079***	0.042***
	[0.006]	[0.002]
erage	-0.059***	-0.007
	[0.022]	[0.013]
A	0.204***	0.218***
	[0.044]	[0.034]
3	-0.004	-0.002
	[0.003]	[0.002]
sh Holdings	0.081***	0.017
	[0.022]	[0.019]
ertising	0.495***	0.205***
	[0.135]	[0.075]
O Intensity	0.240***	-0.148**
	[0.075]	[0.065]
es Growth	-0.016	-0.001
	[0.011]	[0.008]
ridends	0.035***	0.023***
	[0.006]	[0.005]

Industry × year FE	Yes	Yes
Adj. R^2	0.172	0.266
Obs.	15,433	15,433

Figure 1. Institutional Ownership over Russell 3000 Index Rank

This figure presents regression discontinuity plots using a fitted quadratic polynomial estimate. The shaded area represents the 95% confidence intervals. The x-axis is market capitalization rank for Russell 3000 calculated from CRSP. The y-axis is the institutional ownership for Russell 3000 firms.

