Geographic Proximity, Long-Term Institutional Ownership, and Corporate Social Responsibility

Abstract

Building on the premises that institutional ownerships vary in their impact on corporate social responsibility (CSR) decisions and that geographic proximity facilitates the valuation of benefits from CSR, we hypothesize that local long-term institutional ownership is a driver for corporate social performance (CSP), in particular positive CSR (CSR strengths). Using a panel data of S&P 500 firms over a 15-year window, we show that long-term institutional ownership that varies in geographic proximity to the focal firm does have a heterogeneous impact on CSR. Whereas both local and non-local long-term institutional ownership has a similar negative effect on CSR concerns, only local long-term institutional ownership has a positive effect on CSR strengths. The positive relation between local long-term institutional ownership and CSR is stronger in firms that are more involved in dealing with soft information which is difficult to quantify from a distance, such as those with high levels of research and development and intangible assets.

Keywords: Institutional ownership, long-term investment horizon, corporate social responsibility, geographic proximity, soft information.

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Introduction

Institutional ownership has been recognized as a powerful corporate governance device that shapes corporate policies, ranging from financial policies to social policies (Chaganti and Damanpour, 1991; Bushee 1998; Hadani, Goranova, and Khan, 2011; Chang, Kang, and Li 2016; Coffey and Fryxell, 1991). Institutional investors' investment objectives and behavior are not necessarily the same, as their characteristics can be quite different in nature, e.g., pension funds versus hedge funds, short versus long-term investment horizon, and actively managed versus index funds. Indeed, researchers show time and again that institutional investors have different impacts on corporate polices because they exert influence in a way that is consistent with their heterogeneous characteristics and interests (Brickley, Lease, and Smith, 1988; Johnson and Greening, 1999; Agrawal, 2012). Building on the premises that different institutional ownerships may have different effects on corporate social responsibility (CSR) and that geographic proximity facilitates valuation of benefits from CSR, this paper proposes that local and non-local long-term institutional ownerships have different impacts on corporate social performance (CSP), especially with respect to positive CSR (CSR strengths).

Institutional investors have gained increased dominance, reaching 67 % at the end of 2009 (Tonello and Rabimov, 2010), and have gained more power to sway corporate decisions. As potential benefits from CSR are usually long-term, uncertain, and difficult to value, institutional investors with different characteristics place a diverse valuation on costs and benefits from CSR, and thus drive CSR decisions in various directions. CSR strengths (positive CSR) and CSR concerns (negative CSR) also follow different mechanisms to influence a firm's wellbeing, so that avoidance of negative CSR, which is typically compliance to regulation or law, does not necessarily mean positive CSR (Weber, 2008; McWilliams and Siegel, 2011).

Geographic proximity (being local) facilitates valuation of CSR benefits that are due to less asymmetric information (Oliver, 1991). Geographic proximity also enables intimate social networks (Oliver, 1991; Galaskiewicz, 1997) and improves the success chances of certain tactics that long-term institutional investors use to influence managers' decision-making. Finally, besides being shareholders, local institutional investors and the focal firm share the same community and both benefit from positive CSR. We argue that, due to their geographic proximity, local long-term institutional investors are more likely to drive CSR, especially to promote CSR strengths.

We use a sample of U.S. firms that are members of the Standard and Poor's (S&P) 500 Index over a 15-year window to test our hypotheses. We show that indeed, local long-term institutional investors have a more salient positive effect on corporate social performance (CSP) than their non-local peers do. The positive relation is driven mainly by local long-term institutional investors' stronger support for CSR strengths. This relation is stronger at firms that involve the dealing of soft information, such as R&D expenses, and firms with high intangible assets.

Whereas we believe that after establishing the investment relationship, better assessment of CSR-related information leads long-term institutional investors to drive local firms' positive CSR, an alternative interpretation is that investors simply self-select into local firms with superior CSP. To evaluate this alternative explanation, we investigate the effect of local index fund ownership. We find that local index fund ownership also has a stronger relation with CSP than non-local funds do. Because index funds follow market indexes without selecting their investments, our findings lend further support to our argument that local long-term institutional ownership encourages CSR activities and alleviates the concern that our results are simply driven

by selection. We also show that higher percentage of local long-term institutional ownership is associated with higher percentage of local board of directors as well as local independent directors, suggesting that local directorship is likely the mechanism through which local long-term institutional investors exert their influence over CSR decisions.

Our findings therefore highlight the active role the local long-term institutional investors play with respect to CSP after they establish the investment relationship. Further, following Lev, Petrovits, and Radhakrishnan (2010), who establish directionality of relation using the Granger causality test, we confirm that ownership by long-term institutional investors actively improves CSP at local firms.

By focusing on the effect of local long-term institutional ownership on CSP, our work complements previous studies that examine the relation between institutional ownership and CSR (Graves and Waddock, 1994; Johnson and Greening, 1999; Cox, Brammer and Millington, 2004, Neubaum and Zahra, 2006; Mahoney and Roberts, 2007; Barnea and Rubin, 2010) by examining the moderating effect of the geography factor. Whereas long-term institutional ownership clearly avoids CSR concerns (negative CSR) (Barnea and Rubin, 2010), past literature says little with respect to its impact on CSR strengths (positive CSR) (Weber, 2008; McWilliams and Siegel, 2011). We show that heterogeneous governance constellations do have a different impact on CSR decisions, and local long-term institutional ownership is a strong driver for positive CSR because it places higher value on CSR strength due to geographic proximity.

Our findings provide new supporting evidence for a local presence effect in CSR that is documented in previous studies (Galaskiewicz, 1997; Marquis, Glynn, and Davis, 2007; Useem, 1988; Muller and Whiteman, 2009; Attig and Brockman, 2017; Puncheva-Michelotti, Hudson, and Michelotti, 2018). While previous literature suggests that local social networks and other

institutional factors encourage corporate giving and that local *individual* prosocial attitude is associated with stronger CSR, we show that local long-term *institutional* investors encourage multiple dimensions of CSR, including community-, diversity-, environment-, and product-related CSR strengths.

Most important of all, as the distance between the headquarters of institutional investors and firms pre-dates their investment relationship, our study also contributes to a fast-growing line of literature that examines the antecedents of a firm's CSR (Campbell, 2007; Ioannou and Serafeim, 2012; Husted, Jamali, and Saffar, 2016; Attig and Cleary, 2014; Attig and Brockman, 2017; among others). By identifying geographic proximity as a driver for long-term institutional ownership's push for positive CSR, we add to the factors that explain the heterogeneous levels of corporate ethical behavior.

The rest of the paper is structured as follows. We first review the literature on institutional ownership and CSR and develop hypotheses. Next, we describe the data and methodology used to conduct the tests for this study. Finally, we report empirical results, conduct robustness checks, discuss our findings and alternative stories, and conclude.

Literature Review and Hypotheses Development

Institutional Ownership's Impact on Corporate Social Responsibility

Although multiple definitions have been proposed for corporate social responsibility (CSR), they are built on overlapping and complementary terms and refer to a company's effort to foster positive relationship with key stakeholders (Hillman and Keim, 2001) or to engage in positive actions that go beyond what is legally required of a firm with respect to stakeholders (McWilliams, Siegel, and Wright, 2006). Whereas the traditional view of corporate governance

emphasizes aligning interests between managers and shareholders and creating value for shareholders, more recently scholars have recognized that governance structures should internalize the externalities their decisions impose on various stakeholders (Tirole, 2010) and that corporate governance has shifted its focus from agency conflicts to addressing issues of ethics and accountability (Gill, 2008).

Institutional ownership has grown significantly over time and institutional investors have become the most dominant shareholders of the U.S. public firms (Gillan and Starks, 2003; Ferreira and Matos, 2008). Not only is institutional ownership an important governance mechanism for shareholders, it has been documented to influence how managers treat stakeholders at large, even though the impact is ambiguous (Johnson and Greening, 1999; Neubaum and Zahra, 2006; Barnea and Rubin, 2010; Dam and Scholtens, 2013). The ambiguous relationship is likely due to the different cost-benefit analysis conducted by institutional investors with different characteristics. For example, long-term institutional investors value CSR, as it is inherently long-term-oriented (Johnson and Greening, 1999; Mahapatra, 1984) while short-term institutional investors are typically more interested in meeting a quarterly earnings target and other short-term performance goals (Eccles and Krzus, 2010).

Geography plays a significant role in CSR engagement decisions. Past research shows that it is an important factor in corporate giving decisions due to community isomorphism and social network position (Galaskiewicz, 1997; Useem, 1988; Marquis, Glynn, and Davis, 2007). More recently, Attig and Brockman (2017) demonstrated that prosocial attitudes of local residents play a significant role in determining a firm's CSR engagement.

We expect that local long-term institutional ownership is a strong driver for CSP. Geographic distance is a determinant of information asymmetry (Coval and Moskovitz, 2003;

Petersen and Rajan, 2002) and geographic proximity can change the dynamics of cost-benefit analysis for local economic agents' performance and valuation of corporate policies (Jensen, Kim, and Yi, 2015), which include policy on CSR engagement. We therefore hypothesize that as a characteristic of institutional ownership, geographic proximity leads long-term institutional investors to appreciate and promote CSR engagement more than their non-local peers.

On one hand, the long-term horizon of these investors provides stable and patient capital so that firms can adopt strategic competitive activities that are beneficial over the long run without the distraction and short-term performance pressures that come from active traders (Connelly, Hoskisson, Tihanyi, and Certo, 2010; Beyer, Larcker, and Tayan, 2014). Being local and long-term enables these investors to build relationships with top management teams and lower the unit cost of exerting influence on a firm.

On the other hand, geographic proximity further facilitates long-term institutional investors' engagement in local firms, as it helps to reduce costs involved in tactics that are often used to influence managers' decision-making. First, the transportation and opportunity costs to attend shareholder meetings and serve on a board are lower for local institutional investors (Fahlenblach, Low, and Stulz, 2010; Knyazeva, Knyazeva, and Masulis, 2013). Second, the costs of activities that engage senior management, e.g., on-site visits and discussions with executives (i.e., tactics that are essential to influence managers) (Neubaum and Zahra, 2006), are also lower. Finally, managers of local institutional investors and firms may belong to the same social networks, which help in enhancing these institutional investors' influence (Useem, 1996).

Furthermore, geographic proximity suggests that, compared with their non-local peers, local long-term institutional investors are not only shareholders but community stakeholders and are more likely to enjoy the benefits from CSR activities, which include and are not limited to

cleaner air, well-developed neighborhoods, satisfied labor force, etc. Local long-term institutional investors are also likely to share similar views with each other with respect to the value of CSR activities as many CSR needs are local (Dougherty and Olsen, 2014). The shared interests and views with respect to CSR needs lead to effective coordination among local long-term institutional investors, so that their proposals related to CSP are even more likely to command senior executives' attention. We therefore hypothesize that

Hypothesis 1: The ownership by local long-term institutional investors has a positive effect on corporate social performance (CSP).

Geographic Proximity and Soft Information Assessment

Besides location-related institutional factors, geographic proximity is associated with an easiness to gain and assess soft information. Soft information is information that cannot be directly verified by someone other than the agent who produces it (Stein, 2002). Hard information, on the contrary, is information that is easy to measure and transmit. The cost of a new CSR initiative (more likely CSR strength) is usually hard information, as it is reflected as a number on a budget. The benefits of CSR strengths, however, involve not only hard but soft information, such as the change in consumer perception, the improvement in employee morale, the fewer liability law suits, the wider community support for a diverse work force, etc. These intangible benefits are not as easily measurable or verifiable, especially from a distance.

Geographic proximity facilitates local institutions' collection and assessment of soft information and opens the door to frequent interactions between the investor. Both contribute to their improved mutual understanding. Indeed, Jensen, Kim, and Yi (2015) find that soft information such as local knowledge contributes to local auditors' superior performance compared to their non-local peers. Kang and Kim (2008) show that institutional investors achieve better returns with local merger and acquisition deals because they are more thorough

and accurate with valuing the synergies due to geographic proximity. Similarly, we argue that the possession of local knowledge by local institutional investors enables their quicker and more direct access to CSR-, especially CSR strength-related information. For an example, a local investment manager who has multiple visits to a firm and has a lot of acquaintances there may understand how diversity mitigates conflicts at the firm and actively pursues a diversity policy. But a faraway investment manager may dismiss the diversity policy as unnecessary. For another example, a local investment manager who observes how CSR activities help attract talented employees to a firm may attribute such success to the high CSR standards at the firm. It is much more difficult to convince a faraway investment manager the value of the high CSR standard without themselves witnessing it. Furthermore, the local institutional investors are also going to share the positive externality that comes from CSR activities, e.g., richer community resources, more harmonious society, etc., so that they will be more supportive of the CSR strengths. In summary, similar to other intangibles, the benefits from CSR activities are long-term and not easy to measure, so geographic proximity and long-term investment horizon both help institutional investors to assess the value of CSR activities.

Hypothesis 2: The proportion of ownership by local long-term institutional investors is positively associated with CSR strengths.

All CSR activities, especially CSR strengths, demand dealing of soft information. However, firms differ in the amount of soft information involved because of their various nature of business. For example, firms with human capital as their majority of assets will find it a top priority to stimulate the employees and enhance their creativity, which involves frequent dealing of soft information. Hence, the dealing of soft information in these firms is more crucial compared with that in firms with capital and machinery as their majority of assets. Past literature documents that CSR activities help build trust between the firm and its stakeholders (Fieseler,

2011; Mazutis and Slawinski, 2015) and lead to more inspired employees who feel proud of their employer (Collier and Esteban, 2007; Korschun, Bhattacharya, and Swain, 2014). Geographic proximity helps local long-term institutional investors to better appreciate these intangible benefits, especially at firms where dealing of soft information is important. We therefore hypothesize

Hypothesis 3: The positive relation between the proportion of ownership by local long-term institutional investors and CSR is more significant when soft information assessment is important.

Research Methods

In order to test our hypotheses, we empirically investigate the moderating effect of geography on how institutional ownership influences CSR by comparing the differential effects of local and non-local institutional ownership on CSP. Our sample covers all S&P 500 Index component firms, excluding those in regulated industries, [1] over the period from 1995 to 2009. [2]

Measures of Institutional Ownership

Previous research has used information in *Standard and Poor's Stock Report* to construct measures of institutional ownership and identified public pension funds that own at least 1% of a firm's equity as long-term institutional ownership (Johnson and Greening, 1999; Neubaum and Zahra, 2006). With the high growth in index funds and mutual funds that also have a long-term investment horizon, we need a more reliable categorization of long-term institutional investors that spans beyond public pension funds in a more comprehensive study.

[1] Financial (SIC 6000-6999) and regulated utility firms (SIC 4900-4999) are not included in our sample.
[2] KLD used ticker as an identifier for the firms it covered prior to 1995 and switched to CUSIP as firm identifiers since 1995. To minimize the possibility of misidentified firms when combining data with Compustat, which uses CUSIP as firm identifiers, we work with data starting from 1995. In 2010, KLD made significant changes caused by the change in KLD ownership. As a result, data gathered before and after 2010 data are not fully compatible. For this reason, we limit our data from 1995 to 2009, just as Harrison and Berman did (2016).

Following Chen, Harford, and Li (2007), Chang, Kang, and Li (2016), and others, we use Thompson Reuters' 13F quarterly institutional common stock holdings data for the institutional ownership variables. The 13F mandatory institutional reports are filed with the SEC on a calendar quarter basis and are compiled by Thomson Reuters (formerly known as the 13F CDS/Spectrum database). The SEC's Form 13F requires all institutions with more than $100 million under management at the end of the year to report their long positions of equity[3] in the next year. The 13F filings hence have some limitations: small institutions with less than $100 million under management are not required to report; smaller holdings that do not make the 10,000 shares or $200,000 threshold are not included; and short positions are not reported. Further, Thomson Reuters aggregates the holdings report at the management company level. Local investors of a firm are defined as those located within a short distance. As we cannot differentiate holdings by local offices of the same institutional investor, we focus on the location of the corporate headquarters of the management company as the base to identify local institutional investors. The locations of corporate headquarters and other firm-level financial variables are obtained from Standard & Poor's Compustat database. We manually check for a corporate headquarters location if it is missing from Compustat.

We follow Bushee (2001)[4] to identify the investment horizon of institutional investors. Bushee and his students track institutional investors over time and categorize them into dedicated, quasi-indexer, and transient institutions based on their past investment patterns, including portfolio turnover, diversification, and trading. According to Bushee (2001), dedicated institutional investors are characterized by large average investments in portfolio firms with

[3] The reported positions are those in which the institution owns more than 10,000 shares or with over $200,000 in market value.
[4] Brian Bushee (2001) kindly provides the institutional investor classification data (1981-2009) on his website: http://acct3.wharton.upenn.edu/faculty/bushee/.

extremely low turnover ratios, while quasi-indexers are characterized by low turnover and diversified holdings. Transient investors, on the contrary, have high portfolio turnover ratios and highly diversified portfolio holdings. Both dedicated investors and quasi-indexers provide long-term, stable ownership to firms as they are geared toward longer-term benefits, be it dividend income or capital appreciation. As both dedicated and quasi-index institutions have long-term investment horizons, we aggregate the dedicated and quasi-index ownership for a firm as long-term institutional ownership (*LTIO*). We also define short-term investors (*STIO*) as transient investors. The same classification is used in Chang, Kang, and Li (2016).

To measure ownership by long-term institutional investors that are geographically proximate, we differentiate institutional ownership based on the distance between the firm's headquarters and the institution. As with Baik, Kang and Kim (2010), we exclude cases in which the firms or institutional investors are located in Alaska, Hawaii, Puerto Rico, or the Virgin Islands. We then calculate the percentage of all long-term institutional investors whose headquarters are located within a 100-mile radius around firm headquarters and use it as a proxy for local long-term institutional ownership (*LLTIO*) and as our main measure of shareholder proximity. *LLTIO* for firm *j* is calculated as

$$LLTIO_j = \frac{\sum_{i \in L_j} V_{i,j}}{\sum_{i \in I} V_{i,j}} \qquad (1)$$

where L_j is the set of all long-term institutional investors that are headquartered within 100 miles of the headquarters of stock *j*, *I* is the universe of all institutional investors, $V_{i,j}$ is the dollar value of all institution *i*'s stake in stock *j*, and V_i is the total market value of all institutionally-held stocks by fund *i*.

Similarly, we define the ownership by non-local long-term institutional investors (*NLLTIO*) in Equation (2), where NL_j is the set of all non-local long-term institutional investors,

i.e., ownership by long-term institutional investors that are headquartered beyond 100 miles of the headquarters of stock *j*.

$$NLLTIO_j = \frac{\sum_{i \in NL_j} V_{i,j}}{\sum_{i \in I} V_{i,j}} \quad (2)$$

Measure for CSR

We rely on the KLD database for measures of CSR activities. This database covers environmental, social, and governance performances of thousands of firms from 1991. Further, KLD has always covered S&P 500 firms and expanded its corporate social performance rating coverage in 2003 to thousands more smaller firms in the Russell 2000. KLD offers the advantage of multiple ratings criteria for social performance and has been used intensely by researchers in corporate social responsibility-related studies (see Fisman, Heal, and Nair, 2005; Landier, Nair, and Wulf, 2009; El Ghoul, Guedhami, Kwok, and Mishra, 2011; Goss and Roberts 2011; Kabongo, Chang, and Li, 2013; Bae, Chang, and Yi, 2018, etc.). The data include seven major qualitative areas of social performance ratings[5] with multiple sub-dimensions. For each of the seven major qualitative areas, KLD assigns 0/1 ratings to each of the sub-dimensions for "strength" and "concern" on an annual basis, based on a wide variety of data sources, including company filings, government data, nongovernment organization data, general media sources, and direct communications with company officers (Bae, Kang, and Wang, 2011).

We use the five dimensions of CSP that are typically used in research (Hillman and Keim, 2001; Johnson and Greening, 1999; Jo and Harjoto, 2011; Jo and Harjoto, 2012). They are community-, diversity-, employee-, environment-, and product-related dimensions and represent key types of stakeholders who have legitimate claims on the firm (Hillman and Keim, 2001).

[5] The seven areas are environment, community, corporate governance, diversity, employee relations, human rights, product quality and safety.

Similar to the methods used in Jo and Harjoto (2011), we calculate combined strengths and concerns scores for each of the five dimensions. For example, the strength score for the community dimension is calculated as

$$COM\ STR\ (i,t) = \frac{\text{sum of all community strength scores for firm } i \text{ during year } t}{\text{maximum number of community strength scores during year } t} \quad (3)$$

We then calculate the net CSR strength score for each dimension by taking the difference. For example, the net CSR score for the community dimension is calculated as

NET COM (i,t) = [(sum of all community strength score for firm *i* at year *t*) - (sum of all community concern scores for firm *i* at year *t*)] / [maximum score of community strength at year *t* + maximum score of community concern at year *t*] (4)

Finally, we construct the (aggregate) CSR strength and concern measures (*CSR STR* and *CSR CON*) by summing up the strengths and concerns scores of each sub-dimension for each firm across the five dimensions, respectively. We report further details on the construction of our CSR measures in Appendix A and B. Based on our CSR measures, a higher value of *CSR STR* indicates better CSP, a higher value of *CSR CON* indicates poorer CSP, and a higher value on *NET CSR* indicates better CSP, which could be driven either by higher *CSR STR* or/and lower *CSR CON*.

Our combined sample of KLD, Compustat, and 13F data of S&P 500 firms, excluding financial and utility industries, consists of 5,144 firm-year observations with firm characteristics, institutional ownership, and KLD ratings on CSR. We report the summary statistics of firm financials, CSR measures, and six measures of institutional ownership that are based on institutions' investment horizon and the geographic proximity between headquarters of the institution and the firm (overall institutional ownership, long-term institutional ownership, short-term institutional ownership, local institutional ownership, local long-term institutional ownership, and non-local long-term institutional ownership) in Table 1. There are around 350

different firms a year for a total of 5,144 firm-year observations. To minimize the impact of outliers in our data, we winsorize all ownership and financial variables at 1% and 99% levels.

The average institutional ownership for our sample is 68.5%, with a standard deviation of 15.0%, confirming that institutional ownership is the majority for corporate America, especially for large firms that are included in a major stock index like S&P 500. About a quarter (13.5%) of the institutional ownership is short-term, while about 45.5% is long-term, thus suggesting long-term institutional ownership is the majority. Local institutional ownership is a relatively smaller portion, with a mean of 6.1% for overall local ownership and a mean of 4.6% for local long-term institutional ownership. The non-local long-term institutional ownership has a mean of 40.9%.

CSR STR falls over a range of [0, 4.8] with a mean of 0.653 and *CSR CON* falls over a range of [0, 3.8], with a mean of 0.633. *NET CSR* falls over a possible range of [-1.375, 1.960], with a mean of 0.088.

Control variables

Our control variables include overall institutional ownership (*IOR*), firm size, financial performance, and other financial variables used in previous CSR literature. The ownership data come from Thompson Reuters 13F and financial variables come from Compustat. We use the lagged measures to mitigate the endogenous concern.

LogTA is the logarithm of a firm's total assets. The mean of *LogTA* is 8.711 for the sample, with a standard deviation of 1.177. As firms become bigger, firms tend to invest more in CSR activities; at the same time, bigger firms tend to have more CSR concern items. Thus, the net effect is an empirical issue.

Leverage is the debt-to-asset ratio. The mean of *Leverage* is 0.228, with a standard deviation of 0.150. When firms are more levered, we expect firms to invest less in CSR due to lack of slack resource. Hence, we expect the coefficient estimate on *Leverage* to be negative.

ROA is the return on assets. The mean of ROA is 0.063, with a standard deviation of 0.076. As previous year's profitability is high, firms will have more resources to invest in CSR activities. We therefore expect the coefficient estimate on *ROA* to be positive.

Q is Tobin's Q, which is the ratio of market value to book value of assets, with market value of assets calculated as (book value of assets + market value of equity – book value of equity). The mean of *Q* is 2.389 with a standard deviation of 1.637. The sign of *Q* is ambiguous, as high growth firms tend to have fewer resources to invest in CSR; at the same time, however, high Q firms tend to invest more in firms' intangible assets, and CSR can be part of intangible asset investment. Therefore, the sign of coefficient estimate on *Q* in the regressions will be an empirical issue.

FA/TA is the property, plant, and equipment in total assets. The mean of PPE/asset is 0.312 with a standard deviation of 0.210. High *FA/TA* may suggest that the firm has rich resources, or the firm is in an industry with high tangible assets. While the former may imply a positive sign on the coefficient estimate of *FA/TA*, the same argument does not apply for the latter. Therefore, the sign of coefficient estimate on *FA/TA* in the regressions will be an empirical issue.

R&D/TA is the intensity of research and development, which is the ratio of R&D expenses to total assets. R&D has a mean of 0.032, with a standard deviation of 0.046. The sign of coefficient estimate on *R&D/TA* is another empirical issue. One possibility is firms with high R&D expenses are more engaged in CSR, suggesting a positive sign on the coefficient estimate

of *R&D/TA*. Another possibility is as high R&D intensive firms spend a large amount of company resources for R&D, they may be financially constrained to allocate rich resources for CSR, suggesting a negative sign on the coefficient estimate of *R&D/TA*.

Logage measures the maturity of a firm. It has a mean of 3.397, with a standard deviation of 0.623. When firms become older, the reputational capital becomes more important. Thus, we expect a positive sign on the coefficient estimate of *Logage*.

[Table 1 about here]

Variables for Sub-sample Soft Information-Related Analysis

Firms in which human capital has a relative importance are involved in the dealing of soft information. They usually are in industries that rely heavily on research and development (R&D). The future prospects of firms with R&D investments are difficult to discern (Lorek, Stone, and Willinger, 1999) so that these firms have a strong need to deal with soft information. Similarly, firms with a high proportion of intangible assets are also likely to have a strong need to deal with soft information because it is more difficult to value such assets due to their intangible nature. To test *H3*, we use two variables as a proxy for the firm-level importance of dealing with soft information. The first variable, *Positive R&D*, is a dummy variable that takes value 1 if a firm has positive R&D expenses, and 0 otherwise. The second variable, *High Intangible*, is another dummy variable that takes value 1 if a firm has above-median intangible assets, and 0 otherwise. We expect a positive and significant sign on the coefficient estimate of *LLTIO* in a subsample of firms with positive R&D investments and higher-than-median intangible assets, as soft information assessment is conducted more often and is more important in these firms.

Results

We report results of univariate analysis on the relation between measures of institutional ownership and CSR in Panels A to C of Table 2. For each panel, we calculate and compare the average CSR measures for subsamples with low and high institutional ownership measures, including measures of overall institutional ownership (*IOR*), long-term institutional ownership (*LTIO*), local long-term institutional ownership (*LLTIO*), and non-local long-term institutional ownership (*NLLTIO*). An examination of the mean comparison tests and their related *t* statistics indicates that firms with high measures of LLTIO are associated with higher net CSR, CSR strengths, and lower CSR concerns. For example, firms with a high level of *LLTIO* have an average reading of 0.142 and 0.712 for mean net CSR and CSR strength, respectively, which is much higher than the average reading of 0.036 and 0.598 for firms with a low level of *LLTIO*. The differences are highly significant, with a 99% or better confidence level. Firms with high levels of non-local institutional ownership, including *IOR*, *LTIO*, and *NLLTIO*, while associated with either lower NET CSR or CSR strengths, are also associated with lower CSR concerns. The differential relation suggests the necessity of examining the moderating effect of geography in the relation between CSR measures and institutional ownership. The findings also provide preliminary support to our hypotheses (H1 and H2).

We also construct a dummy variable *High10 LLTIO*, which is set to 1 if the *LLTIO* level at a firm is higher than 10% and 0 if otherwise.[6] As we observe from the summary statistics, the percentage of *LLTIO* is usually small with a mean of 6.1%, and the 75th percentile is 7%. It, however, can also reach a level as high as 90%. Further exploration shows that above-10%

[6] We define *High10* with an above-10% threshold to identify firms in areas with high concentration of financial institutions, our results continue to hold and are similar to what we report in the paper with the threshold being 11% and 12%.

LLTIO levels exist only in areas where financial institutions cluster, e.g., in the state of Connecticut and New Jersey, New York City, and the Boston area. Because the abnormally skewed distribution of *LLTIO* is due to the construction of the variable, and the higher-than-10% levels of *LLTIO* is atypical, we include *High10 LLTIO* to better detect the relation between typical *LLTIO* and net CSR in our analysis below.

In what follows, we control a number of variables that could affect the relation between CSR measures and institutional ownership in multivariate regression analyses to test our hypotheses. We include year and two-digit SIC industry fixed effects in all regression models that follow. Whereas models with firm fixed effects are capable of controlling time-invariant unobservable variables, we find the overall model *F*-statistic to be insignificant for the regression when firm-fixed effects are also included. This suggests that the model we employ, which uses industry and year effects, is more appropriate for our study.

[Table 2 about here]

Besides industry and year fixed effects, we include the following control variables: overall institutional ownership (*IOR*), firm size, profitability (*ROA*), leverage, R&D intensity, advertising intensity, tangible assets ratio, and firm age for all regressions with standard errors for coefficient estimates clustered at the firm level. We then add additional geography-based institutional ownership variables for individual models to gain insights of the moderating effect of geography on the relation between institutional ownership and corporate social performance (*CSP*). In Column (1) of Table 3, we observe a positive and significant relation between net CSR and firm size, ROA, tangible assets ratio, Tobin's Q, R&D intensity, and advertising intensity. The relation between *NET CSR* and overall institutional ownership (*IOR*), however, is negative and significant. When we add the long-term institutional ownership (*LTIO*) to the model

specification in Column (2), we observe a positive and significant relation between *NET CSR* and *LTIO*. The relation between *Net CSR* and *LogTA* is also positive and significant. Thus far, our findings are consistent with those documented in the previous studies that larger firms have better CSP, likely due to their richer resources (Neubaum and Zahra, 2006; Attig and Brockman, 2015). Also, there is a positive relation between long-term institutional ownership and CSP, as investors with a long-term investment horizon endorse better CSP (Neubaum and Zahra, 2006).

We then differentiate long-term institutional ownership based on the distance between the headquarters of the firm and its institution investors into local and non-local long-term institutional ownership (*LLTIO* and *NLLTIO*). We include both *LLTIO* and *NLLTIO* in models specified in Columns (3) – (6) of Table 3. In Column (3), we observe a positive and significant relation between *NET CSR* and *LLTIO*. The relation between *NET CSR* and non-local long-term institutional investors (*NLLTIO*) loses significance. The differential relation between *NET CSR* and long-term institutional ownership due to geographic proximity supports H1.

By including *High10 LLTIO* into regression specifications in Columns (4) – (6), we can disentangle the effect of typical *LLTIO* on *CSP* from which arises from being located close to financial centers, and which is documented in Husted, Jamali, and Saffar (2016). As in Column (4), we observe a positive and significant relation between *NET CSR* and *LLTIO*, with a better than 99% confidence level. The relation between *NET CSR* and *NLLTIO* remains insignificant. The coefficient estimate for *High10 LLTIO* is negative and significant, suggesting that the strong relation between *NET CSR* and *LLTIO* is much weaker in areas with a high concentration of *LLTIO*. The high concentration of *LLTIO* (at or above 10%) is atypical as it only exists in the New York City, New Jersey, Connecticut, and Boston areas where financial institutions cluster.

In summary, our results show a positive and highly significant relation between typical *LLTIO* and *net CSR*, supporting H1.

We next explore whether and how *LLTIO* is associated with CSR strengths and concerns in different ways. As past literature suggests, CSR strengths and concerns are distinct constructs and represent distinct facets of a firm's social image (McGuire, Dow, and Argheyd, 2003; Attig and Brockman, 2017; Price and Sun, 2017), we therefore use CSR strengths and CSR concerns as separate dependent variables in Specifications (5) and (6), respectively. In Column (5), we observe a positive and significant relation between *LLTIO* and CSR strengths only, with a confidence level better than 99%. Interestingly, in Column (6), we observe a negative and significant relation between *NLLTIO* and CSR concerns only, with a confidence level better than 99%. These findings provide support for H2, suggesting that geography moderates the relation between long-term institutional ownership and CSR: typical *LLTIO* favor CSR strengths but are not strongly against CSR concerns, and distant long-term institutions (*NLLTIO*) are against CSR concerns but do not favor CSR strengths.

[Table 3 about here]

CSR is a multidimensional construct (Carroll, 1979). We next concentrate on the KLD's five CSP individual dimensions like previous studies (Hillman and Keim, 2001; Johnson and Greening, 1999; Jo and Harjoto, 2011; Jo and Harjoto, 2012): community relations, diversity, employee relations, environmental performance, and product characteristics. To further drill down on the relation between *LLTIO* and the individual CSR dimensions, we use *NET CSR*, *CSR STR*, and *CSR CON* as separate dependent variables for each of the five CSR dimensions and report the results in Panels A to C in Table 4.

In Panel A, we observe a positive relation between the typical *LLTIO* and *NET CSR* for all five dimensions, but two dimensions, diversity and environmental performance, are statistically significant. There is also a positive relation between *NLLTIO* and *NET CSR* in the product characteristic dimension. In Panel B, we observe a positive and statistically significant relation between the typical *LLTIO* and *CSR STR* in the following four dimensions: community relations, diversity, environmental performance, and product characteristics. There is, however, no relation between *NLLTIO* and *CSR STR* strengths for any of the five CSR dimensions. In Panel C, we observe a negative relation between the typical *LLTIO* and *CSR CON* for the diversity dimension and a negative relation between *NLLTIO* and *CSR CON* for both diversity and environmental performance dimensions.

[Table 4 about here]

We next investigate the relation between *LLTIO* and CSR activities at subsamples of firms with and without R&D expenses and with high and low intangible assets. Only in Columns (1) of Table 5, where the *Positive R&D* dummy is equal to 1, is the relation between *NET CSR* and the typical *LLTIO* positive and significant. We do not find any relation between *NET CSR* and *NLLTIO* for the same firms. Only in Columns (3) of Table 5, where the *High Intangible* dummy is equal to 1, is the relation between *NET CSR* and the typical *LLTIO* positive with a better than 99% confidence level for firms with higher-than-median intangible assets. There is a weaker positive relation between *NET CSR* and *NLLTIO* for firms with higher-than-median intangible assets and no relation between *NET CSR* and *NLLTIO* for firms with lower-than-median intangible assets. Our findings in Table 5 support H3 and suggest that the need for dealing with soft information moderates the effect of *LLTIO* on CSP.

[Table 5 about here]

Alternative Stories and Robustness Tests

Ex-ante Selection Effect?

It is plausible that the positive relation between LLTIO and CSP we have found thus far is simply due to an *ex-ante* selection effect (reverse causality concern), which predicts that LLTIO is attracted to companies with better CSP. To address this concern, we conduct three additional tests. First, we estimate a two-stage least-squares (2SLS) regression with the help of location-based instrument(s). Specifically, we construct two instrument variables (IVs) by calculating the average local long-term institutional ownership (LLTIO) index for each state-year pair (excluding the contribution of the focal firm and those in the same industry) and industry-year pair (excluding the contribution of the focal firm). In these calculations, we consider firms with the same two-digit SIC code to belong to the same industry and name the two IVs *State LLTIO* and *Industry LLTIO*, respectively. Our construction of instruments follows the rationale that a local factor like state-level regulations and a sector factor can both influence the level of LLTIO at the focal firm so that the IVs satisfy the relevance restriction. Because we exclude the contribution of the focal firm and those in the same industry for *State LLTIO* and exclude the contribution of the focal firm for *Industry LLTIO,* our two instruments satisfy the exclusion restriction. That is, the LLTIO levels at other local firms that are not in the same industry would not be able to drive the focal firm's CSR engagement. Furthermore, with two instruments, we are able to conduct a series of tests to assess the validity of these IVs.

Results from the first-stage regression reported in Panel A of Table 6 confirm that our two IVs satisfy the relevance restriction: There is a positive relation between the two IVs, *State LLTIO* and *Industry LLTIO*, and the focal firm's LLTIO. The highly significant relation (*t*-statistic at 21.20 and 3.72, respectively) suggests our two IVs are unlikely to be weak. Results

from the weak identification test report the Kleibergen-Paap rk Wald *F*-statistic to be 268.16, higher than the critical values suggested by the Stock-Yogo test, meaning that our two IVs are indeed not weak. The Hansen *J*-statistic for overidentification test has a p-value of 0.279, which is far from rejection of the null hypothesis that the instruments are exogenous. Furthermore, the Kleibergen-Paap rk Wald *F*-statistic and Hansen *J*-statistic remain consistent when the error terms are heteroskedastic. These tests show that the set of instruments we use satisfy the condition of exogeneity and relevance, suggesting that they are appropriate.

Results from the second-stage regression show a positive relation between the *Instrumented LLTIO* and *Net CSR*, and between the *Instrumented LLTIO* and *CSR Strength*, which are both significant at 5% (*t*=2.04 and 2.02, respectively). This provides empirical evidence for both H1 and H2 that higher LLTIO leads to higher Net CSR and CSR strength.

Second, following Lev et al. (2010), we formally test for reverse causality using a Granger causality test on our sample of data, for which we do not find supporting evidence. We report the results in Table 6 Panel B. In Column (1), we regress the change in *NET CSR* between year *t*-1 and year t on the change in *LLTIO* between year *t*-2 and year *t*-1 and between year *t*-3 and year *t*-2, and the changes in other explanatory variables between year *t*-2 and year *t*-1 and between year *t*-3 and year *t*-2. In Column (2), we use the change in *LLTIO* between year *t*-1 and year *t* as the dependent variable and regress it on the changes in *NET CSR* change between year *t*-2 and year *t*-1 and between year *t*-3 and year *t*-2 and the changes in other explanatory variables between year *t*-1 and year *t*-2 and between year *t*-3 and year *t*-2.

The result in Column (1) indicates the possibility of a causal effect of *LLTIO* on *Net CSR*. Lagged changes in *LLTIO* lead to higher CSP. However, in Column (2), there is no evidence that past changes in *NET CSR* lead to a subsequent change in *LLTIO*. None of the lagged changes in

NET CSR is significantly related to the current change in *LLTIO*. Our results from Granger causality tests hence provide evidence that supports *H3*, suggesting that *LLTIO* does have an active influence on CSP rather than pure preference.

Finally, we examine the alternative "selection" story by exploring the impact on CSP by local passive long-term institutional investors who do not select firms. To do that, we separate long-term institutional investors into index funds and non-index funds because the former invest in index components and do not select firms. Following Bushee (1998), we use quasi-indexer institutional ownership (*QIO*) as a proxy for index funds; therefore, local quasi-indexer institutional ownership (*LQIO*) is a proxy for local index funds which have headquarters close to the focal firm.[7] Also following Bushee (1998), we use dedicated institutional ownership (*DIO*) as a proxy for long-term yet non-index funds; therefore, local dedicated institutional ownership (*LDIO*) is a proxy for local long-term non-index funds. We include *QIO, LQIO, DIO,* and *LDIO* together with similar control variables as those for regressions in Table 3 and report results in Table 6 Panel C. As we see in Column (1), where the dependent variable is *Net CSR*, the coefficient estimate for *LQIO* is positive and highly significant, suggesting local index funds have a positive impact on *Net CSR*. The coefficient for the other local long-term institutional ownership, *LDIO*, is also positive with a large magnitude, even though it is not statistically significant. In Column (2) where the dependent variable is CSR Strength (*CSR STR*), the coefficients for both *LDIO* and *LQIO* are positive, highly significant, and with large magnitudes (2.605 and 1.964, respectively). This is further evidence that local long-term institutional ownership promotes CSR, especially positive CSR (CSR strength). That is, local long-term

[7] Index funds belong to long-term institutional ownership because of their long investment time horizon.

institutional ownership's active influence on CSP exists after the investment relationship is established.

[Table 6 about here]

LLTIO and Local Directors

In order to exert its influence, local long-term institutional ownership needs to play an active role in corporate decision-making. Existing literature on the corporate governance function of boards show how activist investors in general install board members who represent their interest to secure the change they want. (John and Senbet, 1998; Brav et al., 2008) The literature suggests that *LLTIO* may influence a firm's CSR decisions through directors that share its interests. Because local board members share the same community and would represent local interest, the percentage of local board members could serve as a proxy for the channel of securing *LLTIO*'s impact on CSR. We explore how *LLTIO* influences the composition of board members and find a positive relation between higher *LLTIO* and higher percentage of local board members. In the exploration, we define local board directors and local independent directors as those located within 100 miles of a firm's headquarters, respectively. The data we use to identify director and independent director come from ISS (formerly known as Riskmetrics and IRRC). Using a smaller data sample that we collected with information on local directors over the period of 1994 – 2004[8], we find that higher *LLTIO* percentage is associated with higher percentage of local board members. The results are reported in Table 7 and suggest that LLTIO influences corporate decision-making through a similar channel as monitoring/corporate governance in general.

[Table 7 about here]

Changed Corporate Headquarters

[8] We thank Bin Wang for providing the data set.

Whereas most firms stay, some move headquarters due to a number of reasons: merger and acquisitions, better airport facilities, lower corporate taxes, lower wages, etc. (Strauss-Kahn and Vives, 2006). As the headquarter location changes, the makeup of a firm's stakeholders, including local long-term institutional investors, changes, which can confound the relation between *LLTIO* and CSR. We next explore whether our results continue to hold after controlling for changed corporate headquarters. As it takes time for firms to build stakeholder relationships and many of the reasons for change of headquarters are endogenous, we focus on a sample of firms that have never changed headquarters and re-estimate the relation between *LLTIO* and CSR and continue to find consistent results that support our hypotheses.[9]

We also conduct further robustness tests and find the results continue to hold.[10] These results are available upon request.

Discussion and Conclusion

We contribute to the literature by showing that geographic proximity influences long-term institutional ownership's impact on a firm's CSR-related decisions. We present another example that institutional ownership with different characteristics has a heterogeneous effect on CSP. In particular, we show that geographic proximity, when combined with a long-term investment horizon, changes the calculus of cost-benefit analysis of CSR so that local long-term institutional investors have lower cost yet enjoy higher benefits from exerting influence on CSR, especially positive CSR. We also show a positive and significant relation between local long-term institutional investors and local directorship, which serves as evidence for how *LLTIO* may

[9] We also construct another sample including all firms after adjusting for any changed headquarters and re-estimate the relation between LLTIO and CSR. All the results are available upon request.

[10] These robustness checks include alternative definition of CSP (Choi and Wang, 2009) and LLTIOs (within-state and 250-mile distance), subsample analysis (pre- and post-2002 Sarbanes-Sox periods), and controlling for time-varying industry fixed effects. We do not include these results to save space.

influence CSR decisions, given the existing literature on corporate governance functions of the board (John and Senbet, 1998). Together with other factors, geographic proximity constitutes the antecedents of a firm's CSR and leads to better appreciation of CSR strengths and stronger participation therein. Our study therefore joins a fast-growing line of literature that examines the antecedents of a firm's CSR (Campbell, 2007; Ioannou and Serafeim, 2012; Husted, Jamali, and Saffar, 2016; Attig and Cleary, 2014; Attig and Brockman, 2017; Puncheva-Michelotti, Hudson, and Michelotti, 2018, among others). The observed strong influence that local long-term institutional investors have on CSR, especially CSR strength, should be further explored with the limitations of this study in mind.

The findings of our study have important practical implications. Managers operate within the framework of corporate governance structures, and institutional ownership is an important governance mechanism that influences managerial decisions. It is therefore essential for managers to recognize that institutional investors with different characteristics have different demands for CSR; further, geographic proximity is one of the characteristics that change long-term institutional investors' demand for CSR by changing their cost-benefit analysis. Local long-term institutional investors value benefits from CSR more because they are also community stakeholders; in addition, geographic proximity helps them to better assess soft information embedded in CSR activities. Furthermore, local long-term institutional investors' shared interest, and easy cooperation means they are more likely to work in sync. Compared with their non-local peers, local long-term institutional owners are more likely to take active actions directly or indirectly over firm decisions involving CSR practices. This concentration might affect internal governance mechanisms in that with their shared community interest, the board of directors, and top

management are more likely to take the preferences and interests of local long-term institutional owners into account.

Our study has three potential limitations. First, the study depends on coded indicator variables pooled from the KLD index without more specific information (see Kabongo, Chang, and Li, 2013). Future research should focus on reliable data directly from firms to analyze the impact of local institutional ownership and CSR practices. Second, the study does not take into account the variations in the interests of institutional owners to shape social choices with regard to CSR. Besides their investment horizons and geographical locations, institutional investors vary in their motivation to influence corporate decisions. For example, as a member of long-term institutional investors, a bank trust might have no incentive to monitor aspects of an investment, other than to make sure the investment is reliable. On the other hand, a public pension fund is likely to champion the interests of its union members and push a firm toward improved employee treatment. Thus, the relation between local long-term institutional investors and CSR might vary for heterogeneous institution types. We do not address this heterogeneity in this paper, as local institutional ownership is small in absolute magnitude. Future research could build on other characteristics of local institutional owners to explore how heterogeneity influences the local long-term institution's relation with firm-level CSR. It might also be interesting to examine whether the relation between a local long-term institutional investor and a firm's CSR changes when a firm moves its headquarters, thus making the investor a non-local institutional owner. Finally, we show that the relation between local long-term institutional ownership and CSR is less salient in areas where financial institutions cluster. Attig and Brockman (2017) and Husted, Jamali, and Saffar (2016) find that firms located in urban areas and close to financial centers tend to be more socially responsible. A possible reconciliation of

these similarly contradicting findings may be that there is an optimal level of CSR and that local institutional ownership is part of the institutional factors that guide CSR in urban and rural areas to the optimum. This is yet another interesting topic for future research to explore.

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Appendix A. Definitions of Variables

Variable	Name	Variable definition
CSR related:		
CSR strength scores	*CSR STR*	Sum of adjusted Community, Diversity, Employee Relations, Environment, and Product strength scores (Source: KLD database); how adjusted strength scores are calculated are given in Appendix B
CSR concern scores	*CSR CON*	Sum of adjusted Community, Diversity, Employee Relations, Environment, and Product concern scores (Source: KLD database) ; how adjusted concerning scores are calculated are given in Appendix B
Net CSR scores	*NET CSR*	Sum of net adjusted Community, Diversity, Employee Relations, Environment, and Product strength scores (Source: KLD database); how adjusted net strength scores are calculated are given in Appendix B
Finance variables:		
Log(total assets)	*LogTA*	Log of total assets [at] (source: Compustat)
Leverage	*Leverage*	Debt to total asset ratio [(dltt+dlcc)/at] (source: Compustat)
Return on asset	*ROA*	Net income divided by total assets [(ni/at)] (source: Compustat)
Tobin's Q	*Q*	Market value of assets divided by book value of assets [(prcc_f*csho+at-ceq)/at](source:Compustat)
Fixed asset ratio	*FA/TA*	Fixed assets divided by total assets [ppent/at](source: Compustat)
R&D intensity	*R&D/TA*	R&D expense divided by total assets [xrd/at]; missing R&D expense is treated as zero (source:Compustat)
Advertising intensity	*ADV/TA*	Advertising expense divided by total assets [xad/at]; missiong advertising expense is treated as zero (source: Compustat)
Log(firm age)	*Logage*	Log(1+firm age); firm age is measured as fiscal year minus the first year that the firm is appeared in Compustat
Institutions related:		
Total institutional ownership	*IOR*	Total institutional ownership for a firm in a given fiscal year; Total institutional shares/total number of share outstanding (source: Thomson Reuters' 13F)
Long-term institutional ownership	*LTIO*	Long-term institutional share / total number of shares outstanding; Dedicated and Quasi institutions are treated as long-term institutions (source: Thomson Reuters' 13 F & Professor Brian Bushee's web site: http://acct3.wharton.upenn.edu/faculty/bushee/)
Dedicated institutional ownership	*DIO*	Dedicated institutional share / total number of shares outstanding; (source: Thomson Reuters' 13 F & Professor Brian Bushee's web site: http://acct3.wharton.upenn.edu/faculty/bushee/)
Quasi-indexer institutional ownership	*QIO*	Quasi-indexer institutional share / total number of shares outstanding; (source: Thomson Reuters' 13 F & Professor Brian Bushee's web site: http://acct3.wharton.upenn.edu/faculty/bushee/)
Local institutional ownership	*Localown*	Local institutional shares / total number of shares outstanding; Institutions are defined as "local" if the distance between the firm's and the institution's headquarters is 100 miles or less (source: Compustat; Thomson Reuters' 13 F)
Local long-term institutional ownership	*LLTIO*	Local long-term institutional shares / total number of shares outstanding; Institutions are defined as "local" if the distance between the firm's and the institution's headquarters is 100 miles or less (source: Compustat; Thomson Reuters' 13 F)
Local dedicated institutional ownership	*LDIO*	Local dedicated institutional shares / total number of shares outstanding; Institutions are defined as "local" if the distance between the firm's and the institution's headquarters is 100 miles or less (source: Compustat; Thomson Reuters' 13 F)

Local quasi-indexer institutional ownership	*LQIO*	Local quasi-indexer institutional shares / total number of shares outstanding; Institutions are defined as "local" if the distance between the firm's and the institution's headquarters is 100 miles or less (source: Compustat; Thomson Reuters' 13 F)
Non-local long-term institutional ownership	*NLLTIO*	Non-local long-term institutional shares / total number of shares outstanding; Institutions are defined as "local" if the distance between the firm's and the institution's headquarters is 100 miles or less (source: Compustat; Thomson Reuters' 13 F)
High10*LLTIO	*High10 * LLTIO*	*High10* is 1 if *LLTIO* is 10% or higher, else zero. *High10* multiplied by local long-term institutional ownership(*LLTIO*) (source: Compustat; Thomson Reuters' 13 F)

Appendix B. Detailed Definitions of KLD CSR Variables

We follow definitions in Jo and Harjoto (2011 & 2012) with a slight change.

CSR Strength and Concern scores:
Com Str(Con) (i,t) = [sum of all community strength(concern) score for firm *i* at year *t* divided by maximum number of community strength (concern) score during year *t*]
Div Str(Con) (i,t) = [sum of all diversity strength(concern) score for firm *i* at year *t* divided by maximum number of diversity strength (concern) score during year *t*]
Emp Str(Con) (i,t) = [sum of all employee relations strength(concern) score for firm *i* at year *t* divided by maximum number of employee relations strength (concern) score during year *t*]
Env Str(Con) (i,t) = [sum of all environment strength(concern) score for firm *i* at year *t* divided by maximum number of environment strength (concern) score during year *t*]
Pro Str(Con) (i,t) = [sum of all product strength(concern) score for firm *i* at year *t* divided by maximum number of product strength (concern) score during year *t*]
CSR STR(CON) (i,t) = *Com str(con)*(i,t) + *Div str(con)* (i,t) + *Emp str(con)*(i,t)+ *Env str(con)* (i,t) + *Pro str(con)* (i,t); combined CSR strength(concern) score

Net CSR scores:
Net Com(i,t) = [(sum of all community strength score for firm *i* at year *t*) - (sum of all community concern scores for firm *i* at year *t*)] / [maximum score of community strength at year(t) + maximum score of community concern at year(t)]
Net Div(i,t) = [(sum of all diversity strength score for firm *i* at year *t*) - (sum of all diversity concern scores for firm *i* at year *t*)] / [maximum score of diversity strength at year *t* + maximum score of diversity concern at year *t*]
Net Emp(i,t) = [(sum of all employee relations strength score for firm *i* at year *t*) - (sum of all employee relations concern scores for firm *i* at year *t*)] / [maximum score of employee relations strength at year *t* + maximum score of employee relations concern at year *t*]
Net Env(i,t) = [(sum of all environment strength score for firm *i* at year *t*) - (sum of all environment concern scores for firm *i* at year *t*)] / [maximum score of environment strength at year *t* + maximum score of environment concern at year *t*]
Net Pro(i,t) = [(sum of all product strength score for firm(i) at year(t)) - (sum of all product concern scores for firm(i) at year(t))] / [maximum score of product strength at year(t) + maximum score of product concern at year(t)]
***NET CSR*(i,t)** = *Net Com*(i,t) + *Net Div*(i,t) + *Net Emp*(i,t) + *Net Env*(i,t) + *Net Pro*(i,t); combined Net CSR score

Table 1. Descriptive statistics

Table 1 contains descriptive statistics for the 5,144 firm years in our data sample. Definitions of variables are presented in Appendix A and B.

Variable	N	Mean	SD	P25	P50	P75	Min	Max
NET CSR	5144	0.088	0.404	-0.143	0.056	0.333	-1.375	1.960
CSR STR	5144	0.653	0.651	0.143	0.486	1.000	0.000	4.800
CSR CON	5144	0.633	0.623	0.200	0.500	0.950	0.000	3.800
IOR	5144	0.685	0.150	0.582	0.696	0.792	0.314	1.000
STIO	5144	0.135	0.077	0.077	0.120	0.178	0.018	0.392
LTIO	5144	0.455	0.113	0.377	0.456	0.533	0.189	0.733
Localown	5144	0.061	0.081	0.004	0.023	0.090	0.000	0.346
LLTIO	5108	0.046	0.060	0.003	0.018	0.071	0.000	0.260
NLLTIO	5108	0.409	0.118	0.324	0.408	0.490	0.146	0.699
LogTA	5144	8.711	1.177	7.843	8.607	9.508	6.290	12.005
Leverage	5144	0.228	0.150	0.118	0.224	0.323	0.000	0.660
ROA	5144	0.063	0.076	0.031	0.065	0.100	-0.282	0.271
Q	5144	2.389	1.637	1.390	1.846	2.732	0.895	10.328
FA/TA	5144	0.312	0.210	0.149	0.261	0.436	0.025	0.887
R&D/TA	5144	0.032	0.046	0.000	0.008	0.047	0.000	0.206
ADV/TA	5144	0.016	0.032	0.000	0.000	0.018	0.000	0.172
Logage	5144	3.397	0.623	2.944	3.638	3.892	1.099	4.094

Table 2. Univariate tests

Table 2 univariate tests of NET CSR, CSR strengths, and CSR concerns by different types of institutional ownership. *IOR* measures total institutional ownership, *LTIO* measures long-term institutional ownership, *LLTIO* measures local long-term institutional ownership, and *NLLTIO* measures non-local long-term institutional ownership, respectively. Low (High) means NET CSR, CSR strengths, and CSR concerns scores when different types of institutional ownership is low(high).

Panel A. NET CSR by different types of institutional ownership

	IOR	*LTIO*	*LLTIO*	*NLLTIO*
Low	0.135	0.124	0.036	0.131
High	0.041	0.052	0.142	0.048
Difference (Low-High)	0.093***	0.072***	-0.106***	0.083***

Panel B. CSR Strengths by different types of institutional ownership

	IOR	*LTIO*	*LLTIO*	*NLLTIO*
Low	0.799	0.716	0.598	0.737
High	0.507	0.591	0.712	0.572
Difference	0.292***	0.125***	-0.114***	0.165***

Panel C. CSR Concerns by different types of institutional ownership

	IOR	*LTIO*	*LLTIO*	*NLLTIO*
Low	0.707	0.643	0.695	0.646
High	0.558	0.623	0.569	0.618
Difference	0.149***	0.020	0.127***	0.029

*** $p<0.01$, ** $p<0.05$, * $p<0.1$ (based on the unequal variance t-tests)

Table 3. The effect of institutional ownership on NET CSR, CSR strengths, and CSR concerns

Table 3 reports the estimates of the relation between various institutional ownership and CSR. The dependent variable is *NET CSR* for Columns (1) to (4), *CSR STR* for Column (5) and *CSR CON* for Column (6). All explanatory variables are lagged one year to mitigate endogeneity concerns. All equations include year and industry (SIC 2-digit) fixed effects. Standard errors are clustered at the firm level. Definitions of variables are presented in Appendix A and B.

Variables	(1) *NET CSR*	(2) *NET CSR*	(3) *NET CSR*	(4) *NET CSR*	(5) *CSR STR*	(6) *CSR CON*
$LogTA_{t-1}$	0.068***	0.066***	0.065***	0.066***	0.304***	0.201***
	(4.050)	(3.871)	(3.842)	(3.897)	(12.445)	(10.483)
$Leverage_{t-1}$	-0.037	-0.034	-0.031	-0.038	-0.079	0.025
	(-0.382)	(-0.352)	(-0.325)	(-0.390)	(-0.527)	(0.225)
ROA_{t-1}	0.533***	0.529***	0.534***	0.534***	0.383**	-0.778***
	(4.633)	(4.594)	(4.597)	(4.600)	(2.154)	(-4.611)
Q_{t-1}	0.012*	0.013*	0.011*	0.011	0.018	0.002
	(1.764)	(1.878)	(1.665)	(1.631)	(1.628)	(0.233)
FA/TA_{t-1}	0.170*	0.164*	0.176**	0.183**	0.445***	0.097
	(1.928)	(1.847)	(1.999)	(2.078)	(3.405)	(0.868)
$R\&D/TA_{t-1}$	1.535***	1.561***	1.592***	1.570***	2.623***	0.060
	(4.491)	(4.568)	(4.629)	(4.590)	(4.995)	(0.144)
ADV/TA_{t-1}	2.545***	2.536***	2.573***	2.606***	2.935***	-1.596***
	(5.064)	(5.036)	(5.061)	(5.119)	(4.246)	(-2.730)
$Logage_{t-1}$	-0.013	-0.016	-0.018	-0.020	0.078**	0.096***
	(-0.582)	(-0.690)	(-0.789)	(-0.840)	(2.200)	(3.487)
IOR_{t-1}	-0.218**	-0.355***	-0.368***	-0.344***	-0.550***	0.111
	(-2.132)	(-2.982)	(-3.043)	(-2.858)	(-3.201)	(0.702)
$LTIO_{t-1}$		0.214*				
		(1.716)				
$LLTIO_{t-1}$			0.462*	1.310***	2.224***	-0.596
			(1.792)	(2.715)	(3.210)	(-0.961)
$High10\ LLTIO_{t-1}$				-0.867**	-1.958***	-0.234
				(-2.209)	(-3.355)	(-0.443)
$NLLTIO_{t-1}$			0.196	0.192	-0.035	-0.583***
			(1.583)	(1.553)	(-0.196)	(-3.489)
Year fixed	Yes	Yes	Yes	Yes	Yes	Yes
SIC2 fixed	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,144	5,144	5,108	5,108	5,108	5,108
Adj. *R*-squared	0.234	0.235	0.236	0.238	0.405	0.385
Model *F*-statistic	10.66	9.941	8.831	8.229	19.98	14.51

Robust *t*-statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 4. The effect of institutional ownership on individual CSR component

Table 4 reports the estimates of the relation between overall institutional ownership (*IOR*), local long-term institutional ownership that is less than 10% (*LLTIO*), non-local long-term institutional ownership (*NLLTIO*) and CSR. All explanatory variables are lagged one year to mitigate endogeneity problem. All equations include year and industry (SIC 2-digit) fixed effects. Standard errors are clustered at the firm level. Definitions of variables are presented in Appendix A and B.

Panel A. Net CSR

The dependent variable is NET CSR score for each component of five major CSR dimensions (*NET COM*, *NET DIV*, *NET EMP*, *NET ENV*, and *NET PRO*).

Variables	(1) *NET COM*	(2) *NET DIV*	(3) *NET EMP*	(4) *NET ENV*	(5) *NET PRO*
$LogTA_{t-1}$	0.029***	0.073***	0.016***	-0.011**	-0.042***
	(5.672)	(13.184)	(3.016)	(-2.334)	(-6.839)
$Leverage_{t-1}$	-0.030	0.044	-0.036	0.015	-0.031
	(-1.069)	(1.009)	(-1.103)	(0.577)	(-0.902)
ROA_{t-1}	0.045	0.058	0.289***	0.065**	0.077*
	(1.282)	(1.183)	(6.499)	(2.131)	(1.766)
Q_{t-1}	0.003	0.004	0.004*	0.001	-0.000
	(0.976)	(1.107)	(1.827)	(0.578)	(-0.161)
FA/TA_{t-1}	-0.026	0.051	0.102***	-0.024	0.080**
	(-0.907)	(1.372)	(2.826)	(-0.730)	(2.443)
$R\&D/TA_{t-1}$	0.282**	0.784***	0.598***	0.160*	-0.254*
	(2.521)	(4.961)	(5.526)	(1.794)	(-1.901)
ADV/TA_{t-1}	0.805***	0.998***	0.193	0.473***	0.138
	(3.617)	(5.467)	(1.273)	(3.536)	(0.626)
$Logage_{t-1}$	0.010	0.009	-0.001	-0.020***	-0.016**
	(1.306)	(0.894)	(-0.157)	(-2.708)	(-1.968)
IOR_{t-1}	-0.042	-0.112**	-0.062	-0.050	-0.078*
	(-1.113)	(-2.392)	(-1.418)	(-1.573)	(-1.804)
$LLTIO_{t-1}$	0.203	0.519**	0.056	0.290**	0.241
	(1.257)	(2.571)	(0.343)	(2.322)	(1.344)
$High10\ LLTIO_{t-1}$	-0.142	-0.382**	-0.036	-0.146	-0.161
	(-1.093)	(-2.388)	(-0.271)	(-1.320)	(-1.090)
$NLLTIO_{t-1}$	0.001	0.003	0.059	0.045	0.085*
	(0.015)	(0.058)	(1.200)	(1.360)	(1.912)
Year fixed	Yes	Yes	Yes	Yes	Yes
SIC2 fixed	Yes	Yes	Yes	Yes	Yes
Observations	5,108	5,108	5,108	5,108	5,108
Adj. *R*-squared	0.208	0.388	0.182	0.311	0.290
Model *F*-statistic	5.586	23.97	8.330	3.266	6.124

Robust *t*-statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Panel B. CSR strengths

The dependent variable is CSR strength score of five major CSR dimensions *(COM STR, DIV STR, EMP STR, ENV STR, and PRO STR).*

VARIABLES	(1) *COM STR*	(2) *DIV STR*	(3) *EMP STR*	(4) *ENV STR*	(5) *PRO STR*
LogTA $_{t-1}$	0.069***	0.096***	0.047***	0.063***	0.030***
	(8.653)	(13.625)	(5.995)	(8.321)	(3.434)
Leverage $_{t-1}$	-0.018	0.052	-0.074	-0.019	-0.021
	(-0.435)	(0.952)	(-1.589)	(-0.398)	(-0.404)
ROA $_{t-1}$	0.092*	0.034	0.120**	0.023	0.115
	(1.815)	(0.596)	(1.965)	(0.401)	(1.627)
Q $_{t-1}$	0.003	0.006	0.008**	-0.005	0.007
	(0.764)	(1.451)	(2.106)	(-1.396)	(1.600)
FA/TA $_{t-1}$	0.007	0.061	0.190***	0.174***	0.013
	(0.161)	(1.368)	(3.956)	(3.348)	(0.277)
R&D/TA $_{t-1}$	0.461***	0.968***	0.939***	0.056	0.200
	(2.640)	(5.417)	(5.155)	(0.351)	(0.931)
ADV/TA $_{t-1}$	1.180***	1.135***	0.158	0.519*	-0.057
	(3.636)	(4.921)	(0.683)	(1.785)	(-0.233)
Logage $_{t-1}$	0.025**	0.008	0.005	0.027**	0.012
	(2.279)	(0.698)	(0.436)	(2.293)	(0.937)
IOR $_{t-1}$	-0.087	-0.121**	-0.105	0.007	-0.244***
	(-1.602)	(-2.215)	(-1.623)	(0.117)	(-3.994)
LLTIO $_{t-1}$	0.450*	0.483**	0.045	0.576**	0.671**
	(1.853)	(1.966)	(0.190)	(2.459)	(2.579)
High10 LLTIO $_{t-1}$	-0.382**	-0.406**	-0.153	-0.487**	-0.529**
	(-1.976)	(-2.083)	(-0.778)	(-2.453)	(-2.358)
NLLTIO $_{t-1}$	-0.033	-0.063	0.033	-0.066	0.094
	(-0.530)	(-1.129)	(0.542)	(-1.099)	(1.641)
Year fixed	Yes	Yes	Yes	Yes	Yes
SIC2 fixed	Yes	Yes	Yes	Yes	Yes
Observations	5,108	5,108	5,108	5,108	5,108
Adj. *R*-squared	0.277	0.412	0.230	0.265	0.139
Model *F*-statistic	9.598	25.38	8.724	10.32	3.446

Robust *t*-statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Panel C. CSR Concerns

The dependent variable is CSR concern score of five major dimensions of CSR Concerns *(COM CON, DIV CON, EMP CON, ENV CON, and PRO CON).*

VARIABLES	(1) *COM CON*	(2) *DIV CON*	(3) *EMP CON*	(4) *ENV CON*	(5) *PRO CON*
$LogTA_{t-1}$	0.037***	0.002	0.024***	0.056***	0.082***
	(7.310)	(0.204)	(3.959)	(7.721)	(10.782)
$Leverage_{t-1}$	0.052	-0.016	-0.004	-0.045	0.038
	(1.602)	(-0.312)	(-0.100)	(-1.202)	(0.897)
ROA_{t-1}	0.037	-0.138*	-0.529***	-0.093**	-0.055
	(0.819)	(-1.877)	(-7.726)	(-2.128)	(-0.962)
Q_{t-1}	-0.002	0.002	0.000	-0.003	0.005
	(-0.969)	(0.531)	(0.066)	(-1.080)	(1.344)
FA/TA_{t-1}	0.079**	-0.015	0.019	0.131***	-0.117***
	(2.285)	(-0.250)	(0.402)	(3.214)	(-2.709)
$R\&D/TA_{t-1}$	0.007	-0.118	-0.101	-0.239*	0.511***
	(0.079)	(-0.552)	(-0.694)	(-1.873)	(3.131)
ADV/TA_{t-1}	-0.135	-0.533***	-0.230	-0.456**	-0.241
	(-0.905)	(-2.906)	(-1.432)	(-2.362)	(-0.828)
$Logage_{t-1}$	0.014*	-0.010	0.010	0.050***	0.033***
	(1.872)	(-0.781)	(0.903)	(5.457)	(3.140)
IOR_{t-1}	-0.029	0.061	0.005	0.084*	-0.010
	(-0.734)	(0.801)	(0.087)	(1.956)	(-0.182)
$LLTIO_{t-1}$	0.268	-0.656**	-0.083	-0.104	-0.021
	(1.324)	(-2.265)	(-0.397)	(-0.533)	(-0.093)
$High10\ LLTIO_{t-1}$	-0.313*	0.320	-0.108	-0.105	-0.028
	(-1.812)	(1.381)	(-0.636)	(-0.627)	(-0.149)
$NLLTIO_{t-1}$	-0.057	-0.223***	-0.094	-0.126***	-0.083
	(-1.240)	(-2.675)	(-1.346)	(-2.808)	(-1.418)
Year fixed	Yes	Yes	Yes	Yes	Yes
SIC2 fixed	Yes	Yes	Yes	Yes	Yes
Observations	5,108	5,108	5,108	5,108	5,108
Adj. *R*-squared	0.263	0.108	0.184	0.511	0.391
Model *F*-statistic	7.403	2.300	10.70	9.029	13.02

Robust *t*-statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 5. Local long-term institutional ownership, CSR and soft information

Table 5 shows the relevance of soft information for the relation between local long-term institutional ownership and CSR. The dependent variable is *NET CSR*. All explanatory variables are lagged one year to mitigate endogeneity problem. *Positive R&D* is a dummy that takes value 1 if the firm has positive R&D intensity and 0 otherwise. *High Intangible* is another dummy that takes value 1 if the firm has above-median intangible assets and 0 otherwise. All equations include year and industry (SIC 2-digit) fixed effects. Standard errors are clustered at the firm level. Definitions of variables are presented in Appendix A and B.

Variables	(1) *NET CSR*	(2) *NET CSR*	(3) *NET CSR*	(4) *NET CSR*
	Positive R&D		High Intangible	
	=1	=0	=1	=0
LogTA $_{t-1}$	0.098***	-0.003	0.063***	0.079***
	(4.124)	(-0.180)	(2.800)	(3.486)
Leverage $_{t-1}$	-0.015	-0.057	-0.081	0.125
	(-0.107)	(-0.597)	(-0.731)	(0.916)
ROA $_{t-1}$	0.407***	0.664***	0.769***	0.407**
	(2.659)	(4.509)	(4.971)	(2.442)
Q $_{t-1}$	0.013	0.011	0.017*	0.007
	(1.520)	(0.889)	(1.662)	(0.738)
FA/TA $_{t-1}$	0.106	0.198	0.368***	-0.102
	(0.731)	(1.510)	(2.697)	(-0.808)
R&D/TA $_{t-1}$	1.564***		1.969***	0.867
	(3.854)		(4.434)	(1.644)
ADV/TA $_{t-1}$	2.731***	1.933***	2.573***	3.199***
	(3.970)	(2.853)	(3.891)	(3.594)
Logage $_{t-1}$	0.009	-0.082***	-0.011	-0.043
	(0.268)	(-2.866)	(-0.400)	(-1.355)
IOR $_{t-1}$	-0.259	-0.301*	-0.576***	-0.142
	(-1.508)	(-1.952)	(-3.309)	(-0.811)
LLTIO $_{t-1}$	1.346**	0.581	1.579***	1.128
	(2.217)	(0.860)	(2.730)	(1.587)
High10 LLTIO $_{t-1}$	-1.031**	-0.176	-0.994**	-0.654
	(-2.136)	(-0.308)	(-1.993)	(-1.164)
NLLTIO $_{t-1}$	0.206	0.113	0.310*	0.040
	(1.155)	(0.715)	(1.947)	(0.241)
Year fixed	Yes	Yes	Yes	Yes
SIC2 fixed	Yes	Yes	Yes	Yes
Observations	3,007	2,098	2,283	2,287
Adj R-squared	0.252	0.271	0.251	0.291
Model *F*-statistic	5.837	4.960	9.267	2.999

Robust *t*-statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 6. Causality of CSR and local long-term institutional ownership

All explanatory variables are lagged one year to mitigate endogeneity problem. All equations include year and industry (SIC 2-digit) fixed effects. Standard errors are clustered at the firm level. All other definitions of variables are presented in Appendix A and B.

Panel A: 2SLS Instrumental variable regressions for *NET CSR* and *CSR STR*

Dependent variables are *NET CSR* in Column (2) and *CSR STR* in Column (3). Column (1) shows the first stage regressions for *LLTIO* using two instruments. The two instrumental variables are *State LLTIO* and *Industry LLTIO*, which are the average local long-term institutional ownership (LLTIO) index for each state-year pair (excluding the contribution of the focal firm and those in the same industry) and industry-year pair (excluding the contribution of the focal firm), respectively.

VARIABLES	(1) *Frist Stage*	(2) *Second Stage* *NET CSR*	(3) *Second Stage* *CSR STR*
Instrumented LLTIO $_{t-1}$		0.691**	1.054**
		(2.041)	(2.016)
LogTA $_{t-1}$	-0.001	0.056***	0.298***
	(-0.900)	(3.465)	(12.827)
Leverage $_{t-1}$	-0.007	-0.079	-0.200
	(-0.790)	(-0.771)	(-1.336)
ROA $_{t-1}$	0.002	0.532***	0.386**
	(0.140)	(4.202)	(2.028)
Q $_{t-1}$	0.001	0.012	0.019
	(1.050)	(1.578)	(1.603)
FA/TA $_{t-1}$	-0.008	0.094	0.415***
	(-0.950)	(1.105)	(3.305)
R&D/TA $_{t-1}$	-0.044	1.447***	2.973***
	(-1.290)	(3.921)	(5.295)
ADV/TA $_{t-1}$	-0.091**	2.400***	2.829***
	(-2.150)	(5.154)	(3.882)
Logage $_{t-1}$	0.003	-0.005	0.084**
	(1.210)	(-0.210)	(2.418)
Instruments:			
State LLTIO$_{t-1}$	0.887***		
	(21.200)		
Industry LLTIO$_{t-1}$	0.353***		
	(3.720)		
Kleibergen-Paap rk Wald *F*-statistic	268.16***		
Hansen *J*-statistic	1.170		
	(p=0.279)		
Year fixed	Yes	Yes	Yes
SIC2 fixed	Yes	Yes	Yes
Observations	4,948	4,948	4,948
Adj R-squared	0.567	0.164	0.343
Model *F*-statistic	66.27	9.611	26.89

Robust *t*-statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Panel B. Granger causality test

Panel B. shows Granger causality test to estimate the direction of causality. The dependent variable in Column (1) is $\Delta NET\ CSR_t$, which is measured as ($NET\ CSR_t$ - $NET\ CSR_{t-1}$). The dependent variable in Column (2) is $\Delta LLTIO_t$, which is measured as ($LLTIO_t$ - $LLTIO_{t-1}$).

VARIABLES	(1) $\Delta NET\ CSR_t$	(2) $\Delta LLTIO_t$
$\Delta NET\ CSR_{t-1}$	-0.120***	0.001
	(-6.230)	(0.546)
ΔIOR_{t-1}	-0.022	0.028***
	(-0.397)	(2.968)
$\Delta LLTIO_{t-1}$	0.266**	-0.262***
	(2.303)	(-6.412)
$\Delta NLLTIO_{t-1}$	0.018	-0.030***
	(0.360)	(-3.003)
$\Delta LogTA_{t-1}$	0.015	-0.000
	(0.971)	(-0.182)
$\Delta Leverage_{t-1}$	0.006	0.004
	(0.135)	(0.492)
ΔROA_{t-1}	0.056	-0.001
	(1.153)	(-0.110)
ΔQ_{t-1}	0.003	-0.001
	(1.040)	(-1.274)
$\Delta FA/TA_{t-1}$	-0.042	-0.009
	(-0.520)	(-1.004)
$\Delta R\&D/TA_{t-1}$	0.373*	-0.023
	(1.775)	(-0.736)
$\Delta ADV/TA_{t-1}$	-0.160	0.083*
	(-0.515)	(1.837)
$\Delta NET\ CSR_{t-2}$	-0.084***	0.000
	(-5.189)	(0.182)
ΔIOR_{t-2}	-0.024	0.012
	(-0.461)	(1.394)
$\Delta LLTIO_{t-2}$	0.062	-0.177***
	(0.532)	(-4.217)
$\Delta NLLTIO_{t-2}$	0.059	-0.024***
	(1.158)	(-2.725)
$\Delta LogTA_{t-2}$	0.023	-0.003
	(1.567)	(-1.177)
$\Delta Leverage_{t-2}$	-0.024	0.003
	(-0.563)	(0.283)
ΔROA_{t-2}	0.043	-0.003
	(0.888)	(-0.457)
ΔQ_{t-2}	0.002	-0.000
	(0.726)	(-0.844)

$\Delta FA/TA_{t-2}$	0.079	-0.015
	(1.130)	(-1.398)
$\Delta R\&D/TA_{t-2}$	0.270	0.022
	(1.184)	(0.688)
$\Delta ADV/TA_{t-2}$	-0.563**	0.058
	(-2.480)	(1.164)
$Logage_{t-1}$	-0.010*	-0.001**
	(-1.776)	(-2.165)
Year fixed	Yes	Yes
SIC2 fixed	Yes	Yes
Observations	3,418	3,395
Adj. *R*-squared	0.0349	0.0575
Model *F*-statistic	3.393	3.918

Robust *t*-statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Panel C. Passive quasi-indexers and CSR activities

Panel C shows the impact on CSP by local passive institutional investors (*LQIO*). The dependent variables in Columns (1) and (2) are *NET CSR* $_t$ and *CSR STR*$_t$, respectively.

VARIABLES	(1) *NET CSR*	(2) *CSR STR*
LogTA$_{t-1}$	0.066***	0.304***
	(3.886)	(12.414)
Leverage $_{t-1}$	-0.035	-0.078
	(-0.364)	(-0.517)
ROA $_{t-1}$	0.527***	0.377**
	(4.523)	(2.112)
Q $_{t-1}$	0.011	0.019*
	(1.645)	(1.685)
FA/TA $_{t-1}$	0.179**	0.443***
	(2.030)	(3.370)
R&D/TA $_{t-1}$	1.585***	2.611***
	(4.586)	(4.909)
ADV/TA $_{t-1}$	2.603***	2.906***
	(5.102)	(4.202)
Logage $_{t-1}$	-0.020	0.078**
	(-0.850)	(2.223)
IOR$_{t-1}$	-0.347***	-0.588***
	(-2.864)	(-3.437)
DIO $_{t-1}$	0.125	0.035
	(0.773)	(0.164)
QIO $_{t-1}$	0.236	0.013
	(1.547)	(0.062)
LDIO $_{t-1}$	0.986	2.605**
	(1.468)	(2.351)
LQIO $_{t-1}$	1.039**	1.964***
	(2.176)	(2.862)
High10 LLTIO $_{t-1}$	-0.770**	-1.769***
	(-2.016)	(-3.113)
Year fixed	Yes	Yes
SIC2 fixed	Yes	Yes
Observations	5,108	5,108
Adjusted R-squared	0.238	0.404
Model F-statistic	7.213	17.64

Robust t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table 7. Local Long-term Institutional Ownership and Local Directors

Table 7 presents results from panel firm fixed effects regressions in which we regress the percentage of local director in a board on firm size, business and geographic segments, and local institutional ownership. (Independent) local directors are defined as (independent) directors who reside within 100 miles of corporate headquarters. The sample consists of 2362 firm-year observations with information on all variables over the period of 1994 - 2004. All equations include year and industry (SIC 2-digit) fixed effects. Standard errors are clustered at the firm level. Definitions of main variables are presented in Appendix A.

	(1)	(2)
VARIABLES	Local director	Independent Local director
LogTA $_{t-1}$	-0.059***	-0.042***
	(-4.791)	(-4.577)
Leverage $_{t-1}$	0.001	0.094
	(0.020)	(1.495)
ROA $_{t-1}$	-0.018	0.015
	(-0.175)	(0.171)
Q $_{t-1}$	0.013**	0.002
	(2.038)	(0.370)
FA/TA $_{t-1}$	-0.007	-0.055
	(-0.066)	(-0.658)
R&D/TA $_{t-1}$	0.145	0.514**
	(0.453)	(1.995)
ADV/TA $_{t-1}$	-0.167	-0.163
	(-0.425)	(-0.474)
Logage $_{t-1}$	-0.010	0.020
	(-0.397)	(0.997)
IOR $_{t-1}$	-0.105	0.015
	(-0.958)	(0.156)
LLTIO $_{t-1}$	0.920**	0.652*
	(2.232)	(1.782)
High10 LLTIO $_{t-1}$	0.035	0.039
	(0.101)	(0.126)
NLLTIO $_{t-1}$	0.064	0.066
	(0.529)	(0.597)
Year fixed	Yes	Yes
SIC2 fixed	Yes	Yes
Observations	2,362	2,362
Adj. *R*-squared	0.267	0.232
Model *F*-statistic	6.750	4.907

Robust *t*-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1