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The geography of CSR

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ABSTRACT

We regress socio-economic indicators against firm level CSR scores using a sample of over 26,000 firm year observations from 1991 through 2009. We find that a firm's CSR profile is linked to the socio-economic conditions of the firm's geographic headquarters (HQ) location. The study documents that the legal, cultural, economic, and demographic differences across geography significantly explain the variation in CSR means between metropolitan statistical areas, states, and regions. We also find that the relation between CSR and firm performance is conditional on socio-economic factors, which highlight the endogeneity concerns inherent in CSR studies. Lastly, we show that firms that cluster along a CSR continuum experience an increase in firm value.

1. Introduction

Corporate Social Responsibility (CSR) has been gaining increasing attention from finance academics. Among several alternative definitions available in the literature, CSR has been defined by McWilliams and Siegel (2001) as "actions that appear to further some social good, beyond the interests of the firm and that which is required by law." It is considered as a corporate strategy/investment that can enhance a company's competitive advantage in the long run. While the relationship between CSR and firm performance currently receives much academic scrutiny (especially among the ethics and management fields of business studies), little attention has been paid to the effect of location (geography) on CSR. We argue that much of the cross-sectional variation contained within CSR can be explained by the local culture and community traits inherent at a firm's headquarters. Consistent with the emerging literature that examines the relationship between geography and corporate strategy (see, e.g., John, Knyazeva, and Knyazeva (2011); Loughran and Schultz (2005); Sorenson and Baum (2003)) geography/proximity has recently been shown to explain much of the cross-sectional variation of corporate finance characteristics. In the context of CSR, Jiraporn, Jiraporn, Boeprasert, and Chang (2013) argue that the observable nature of CSR makes it likely that firms are influenced by their geographic peers when formulating their own CSR policy. They show a significant CSR correlation between surrounding firms and, as a result, use zip codes as an exogenous proxy to evaluate CSR's impact on credit ratings.

Similarly, Di Giuli and Kostovetsky (2014) show that firms headquartered in Democratic-leaning states tend to score higher in CSR than Republican-leaning states. Recent findings by Parsons, Sulaeman, and Titman (2014) show that financial misconduct is also influenced by a firm's geographic peers. We build on these findings and show that while peer influence does impact on a firm's CSR profile, socio-economic factors may be driving the location effect to a larger extent. We expand our study beyond zip codes to more socially meaningful aggregates like the Metropolitan Statistical Area (MSA), State, and Region.

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The literature clearly documents a relationship between firm HQ location and corporate behavior. However, the mechanism through which geography affects corporate policies is not well understood. Stulz and Williamson (2003) address the possibility that geography might proxy for the cultural effect in the finance world. They argue that the religion of a country has a significant effect on the protections afforded to creditors, and that geographic variation in financial characteristics is a manifestation of the cultural differences between areas. Brown, Ivkovic, Smith, and Weisbenner (2008) document the effect of culture on finance and present evidence that individual stock ownership is driven by community pressure, which is ultimately a function of the culture of the area.

In the current study, we evaluate what socio-economic factors may be responsible for inducing certain CSR profiles at certain locations. We identify whether the local culture places a greater emphasis on the common good; if advocates are responsible for pressuring management to consider the firm's social impacts; or if managers, who are more connected with their employees and community, are directing corporate policy for social perquisites. Notwithstanding the social or cultural motivations, legal or geographic obstructions may also affect a firm's CSR, of which we attempt to disentangle the various effects.

Direct investigations of the impact of proximity within the U.S. on CSR are limited and focus on "metro" versus "non-metro" comparisons. Boeprasert (2012) finds that firms locating further away from metropolitan areas are more likely to engage in CSR activities as a way to reduce distance-related information asymmetry and agency conflict problems. On the other hand, Husted, Jamali, and Saffar (2016) documented that firms located in CSR-active cities or near major U.S. cities and financial centers are involved in more positive CSR activities. The authors mainly attribute this finding to the spill-over of knowledge/learning regarding CSR practices (e.g., reduction of CSR cost in the context of CSR cost-benefit framework) within CSR-active communities. Our study expands the current literature by documenting the importance of the underlying socio-economic factors when considering the impact of a firm's location on CSR. Specifically, we show that better educated and sophisticated societies with a propensity for the common good and a low tolerance of illegal behavior are likely to have resident firms with higher levels of strength behavior (social responsibility) and lower levels of concern behavior (irresponsible behavior).

Finally, we document the tendency for firms to conform within geographic locales but provide counter evidence that firms which differentiate along CSR within their community tend to be more valuable. Furthermore, we find that some cities (Austin, Hartford, Minneapolis-St. Paul, Portland, and Seattle) as well as some states (California and District of Columbia) tend to house firms with significantly higher levels of socially responsible behavior. We also find that some regions tend to house firms that engage in more socially destructive behavior (the West South Central region as identified by the U.S. Census Bureau). We show that, when evaluating Tobin's Q, the city location and even the state location of firms' HQ could proxy for CSR due to the relationship between socio-economic factors and CSR. We also find that firm value is positively associated with firms that cluster with respect to CSR within a city (MSA).

The remainder of this article is organized as follows. Section 2 discusses the related pertinent literature. Section 3 describes the data used in the study along with the variable construction and methodologies employed. Section 4 presents the results of the study, with the subsections expanding on our findings over various robustness concerns. Finally, section 5 offers some conclusions and implications of our results.

2. Literature review

The geographic effect on corporate behaviors is not limited to Corporate Social Responsibility. Gao, Ng, and Wang (2011) show that firms exhibit conformity in their financing policies to those of their geographically proximate firms and that the location of firms' headquarters explains some cross-sectional differences of capital structures in the U.S. Similarly, a geographic lens is used by Granovetter (1985) for corporate decisions, Kedia and Rajgopal (2009) for compensation policy, Mizruchi, Stearns, and Marquis (2006) for corporate borrowing, Haunschild (1993) for acquisitions, and Marquis, Glynn, and Davis (2007) on charitable actions. Pirinsky and Wang (2006) find that stock returns experience co-movement in geographic clusters. Bebchuk and Cohen (2002) document that U.S. states that offer stronger anti-takeover protection are more successful in retaining in-state firms and in attracting out-of-state incorporations. Finally, Card, Hallock, and Moretti (2010) find that attracting and attaining the headquarters of traded firms increase charitable donations to resident charities.

It is conceivable that the location effect is simply a reflection of a firm's propensity to satisfy local investor preference. Coval and Moskowitz (1999) show that geographic proximity explains a significant part of the portfolio allocation decision, as there is a relative information advantage when investing in local firms. Similarly, U.S. money managers have a home bias preference, which is observed for individual investors (Ivkovic & Weisbenner, 2005; Seasholes & Zhu, 2010), and internationally (Grinblatt & Keloharju, 2000). The clustering of local investors with a specific investment appetite could have an influence on firm policies, creating a clientele effect (Becker, Ivković, and Weisbenner, 2011). Similarly, a clientele effect might contribute to the location effect on CSR. If investor preference for local firms is strong enough, firms may structure their corporate actions to satisfy the desires of those investors who, in turn, would be conditioned by the culture present in that community, indirectly creating a link between the cultural values of the locale and firms located within. In the current study, our results support the notion that the level of CSR across firms relates to their geographic location.

Due to the subjective nature of CSR, it is plausible that the culture of geography could affect a firm's CSR decisions based on the cultural norms that dictate the common good and taboo. Stulz and Williamson (2003) draw on religion and language to proxy for culture, explaining the cross-sectional differences in investor protections. Grinblatt and Keloharju (2000) study the cultural effect on stock market investment behavior and find that firms' official language and the cultural background of their chief executives affect stock selections of both institutional and household investors. Barro and McCleary (2003) find that macroeconomic development has a negative correlation with church attendance across countries, while Guiso, Sapienza, and Zingales (2003) find that, across countries, religious beliefs are associated with "good" economic attitudes, where good is defined as conducive to higher per capita income and

growth.

The U.S. is a geographically large and diverse country. Culture and other socioeconomic factors vary substantially across regions. Thus, it is plausible that the location effect is potentially related to the immediate institutional environment or the social context of a firm's location. Firms, in fact, do not make decisions but people do, and what they do outside of work is likely to affect how they make these decisions at work (Hilary & Hui, 2009). While culture and other social factors can fundamentally shape the value and behavior of corporate managers, social interaction can facilitate cultural transmission within a social context. Firm managers' immersion in social networks serves as a major channel of conveying information and ideas about firm behavior (Granovetter, 1985). Hence, corporate decision-making is, to a certain degree, rooted in firm managers' background.

Corporate managers, through both market and nonmarket interactions with peers, can be influenced by network contacts in decision-making. Social scientists suggest that analogy plays an important role in perceiving and framing the decision situation, as well as in comparison of the alternatives. When operating in an uncertain environment, firm officials may look to their peers for ideas about appropriate strategies or mimic one another's behavior through direct contact. Recent studies suggest that social interaction with peers has tangible effects on a wide range of firm activities from adoption of anti-takeover protections (Davis & Greve, 1997), corporate borrowing (Mizruchi et al., 2006), acquisition decisions (Haunschild, 1993); to charitable actions and political contributions (Marquis et al., 2007). John and Kadyrzhanova (2008) document robust evidence for peer effects in corporate governance. They find that firms are more likely to adopt anti-takeover protections if other firms headquartered in the same geographic area adopt them and that good governance matters the most for corporate performance and policies when peers have good governance.

The social interaction effect can also play an important role in the geography of CSR because geographic proximity facilitates face-to-face interaction and makes contact/relationship easier to start and maintain. Furthermore, geographic proximity facilitates observational learning even without direct contact. Simple exposure to the strategies of other CSR-active firms may prompt firms to adopt similar strategies and to align their activities with those of other firms (and other players in the area such as news media, NGOs, and universities, among others (see Taylor, 2005) in the local geographic community. These knowledge spillovers in CSR are acknowledged by Husted et al. (2016) as the primary mechanism that alters the cost-benefit functions of CSR allowing firms with closer proximity to CSR-active cities to enjoy the lower cost of CSR activities. The authors also document the reduction in cost of equity as the major benefit of "positive/strength" CSR activities. They show that lowering of the cost of equity related to CSR is more pronounced in high CSR density areas. Thus, we posit that social interaction matters for CSR; that is, firm managers may receive some input from their peers and consider this information when making their firm's CSR decision. Extending this train of thought, the value of CSR might potentially depend on knowledge spillovers.

We broaden the reach of this literature by studying peer effects on CSR. Peer effect has two distinct impacts on firm's decision to engage in CSR. Firstly, if CSR functions as a channel through which management could extract social perquisites or increase firm value, then they would have the incentive to increase the firm's CSR relative to neighboring firms. Such an effect would lend itself to geographic clustering based on the value society places on CSR. Societies in which CSR is highly valued would provide significant benefits to managers and/or firms to justify the expense of engaging in CSR. As one firm increases its CSR, other firms in the community would see a drop-off in value extracted from CSR, inducing a pressure on other firms to increase their level of CSR.

The second peer effect impact works on a similar basis but with different results. We assume that there is no discernible geographic cross-sectional difference in stakeholders' multi-attribute utility functions but that the bias toward local firms is significantly strong. Firms would then have the incentive to diversify along a CSR continuum within a local community. As the value extracted from CSR is finite, it is plausible that few firms would capture the extreme ends of the CSR spectrum, while most firms would compete for the attention of the majority stakeholders with a moderate appetite for CSR. Therefore, not only would geographic *clustering* not occur, but that a geographic *scattering* might occur, as CSR firms spread geographically to absorb the local appetite for CSR.

3. Data and methodology

3.1. Data

This study is based principally on the Environmental Social and Governance (ESG) ratings developed by Kinder, Lydenberg, and Domini (KLD). KLD is a proprietary database that rates securities from 1991, and the Russell 3000 from 2003, according to various measures. The ratings fall within seven categories relating to community, corporate governance, diversity, employee relations, environment, human rights, and product. The KLD data also rates securities in the Alcohol, Gambling, Firearms, Military, Nuclear Power, and Tobacco industries according to exclusionary screening criteria. Each category has several subcategories representing possible *strength* or responsible behavior (positive points) and *concern* or negative behavior (negative points). KLD analysts rate firms on their various CSR characteristics annually by assigning a binary point to several subcategories within each aforementioned category. It is important to note that the *strength* and *concern* scores within each category are not perfect opposites, nor are there equal amounts of possible *strength* and *concern* within each category or across categories. We exclude stocks that have been marked as controversial and stocks that were examined by KLD but failed to receive a score,[1] in line with the literature.

The KLD data are matched with data from the Center for Research in Securities Prices (CRSP) for the period beginning 1991 through 2009. We average volume (volume), adjusted price (price), and adjusted number of shares outstanding (shares outstanding) for each calendar year end *t*. Furthermore, income statement and balance sheet items are obtained by matching the CRSP data with Compustat

[1] We also include these for robustness, with no discernible impact on our results.

through CRSPlink.

We define a firm's location as the metropolitan statistical area (MSA) where the firm is headquartered (John et al., 2011; Pirinsky & Wang, 2006). To classify location, we obtain data on state and zip code of companies' headquarters from Compustat. Using the zip code, we merge the sample firms with the Metropolitan Areas and Components data defined by the Office of Management Bureau (OMB) as of 2005. The OMB defines an MSA according to the degree of social and economic integration between a core population nucleus and adjacent communities. This results in the creation of MSAs that span multiple counties and sometimes multiple states. When controlling for location we include only firms from MSAs with at least 10 sample firms per year, for at least 5 years, allowing no less than 50 firm-year observations per MSA. We obtain demographic information, at the county level and aggregate to the MSA, from the U.S. Census Bureau Census 2000, as it falls exactly in the middle of our sample period. Cultural variables are obtained from World Value Surveys (WVS) at the regional level. Information relating to charities and charitable receipts are obtained from the Urban Institutes' National Center for Charitable Statistics at county level and aggregated to MSA. Tax data are obtained from the Chief Financial Officer of the District of Columbia's Annual Tax Rates and Tax Burdens Report for the largest city in each state. We apply the information to all firms that are resident within the state. Crime data are obtained from the U.S. Department of Justice for each district court and aggregated to state level.

3.1.1. Dependent variables

In the first part of our study, where responsible behavior (*strength)* and irresponsible behavior (*concern*) (as the constituent parts of CSR) function as our dependent variables, we proxy for CSR using the KLD STATS database. The KLD data have been extensively covered in the literature, being the basis of many studies relating to CSR.[2] The usual aggregation method of KLD takes the sum of *strength* net of *concern* for each category

$$CSR_t^j = \sum_{s=1}^{u_t^j} strength_s^j - \sum_{r=1}^{k_t^j} concern_r^j \tag{1}$$

and aggregates this into an overall score

$$CSR_t = \sum_{j=1}^{7} CSR_t^j \tag{2}$$

where CSR_t^j is the aggregated CSR score for category *j* in year *t*. Similarly, $strength_s^j$ is equal to 1 if the firm meets *strength s* in category *j*, otherwise 0; $concern_r^j$ is equal to 1 if the firm meets *concern r* in category *j*, otherwise 0. As KLD data are binary with a heterogeneous amount of *strength* and *concern* criteria allocated across various sub-categories, it could be misleading to look at a firm's ultimate score. First, the result of the "netting off" process would obscure information, as *concern* and *strength* are not perfect opposites. Netting off erroneously assumes all binary points are equal and opposite. The number of possible points varies not only across *strength* and *concern* categories but also over subcategories; it then becomes difficult to interpret the meaning of a whole number. Furthermore, comparing and ranking CSR scores across firms proves difficult if the range of possible CSR scores is confined to only several integers. In this study, each firm is assigned a percentage of possible points for both *strength* and *concern*, referred to as their level of CSR. This allows us to compare a firm's performance across subcategories, between *strength* and *concern*, and across years. For example, if a firm scored one 1 of the possible 4 for the *strength* section of the environmental category, it would be modified to 0.25, as there were four possible points available, but only one point was awarded. Following, if the firm also scored 2 from a possible 10 points for the *concern* section of the environmental category, a percentage score of 0.2 would be awarded. Under the binary system, the firm would have a net score of −1 (one *strength* less two *concerns*), while as a percentage the firm would have a Net CSR score of 0.05 (0.25 *strengths* less 0.2 *concerns*). Formally, our aggregation takes the following form

$$CSR_t^j = \frac{\sum_{s=1}^{u_t^j} strength_s^j}{u_t^j} - \frac{\sum_{r=1}^{k_t^j} concern_r^j}{k_t^j} \tag{3}$$

with an overall score of

$$CSR_t = \sum_{j=1}^{7} \frac{CSR_t^j}{7} \tag{4}$$

We employ Tobin's Q as a measure of performance in the second part of the study. Tobin's Q aims to incorporate the market's adjustment to the firm's value with respect to CSR's effect on the present value of future cash flows and the value generated from the asset base. In line with the literature (Bebchuk & Cohen, 2005), we compute Tobin's Q as the market value of assets over book value of assets, where market value is equal to book value of assets plus market value of common stock less sum of book value of common stock.

[2] See (Chatterji, Levine, & Toffel, 2009), (Galema, Plantinga, & Scholtens, 2008), (Statman & Glushkov, 2009), (Jiao, 2010), (Servaes & Tamayo, 2013), (Cho, Lee, & Pfeiffer Jr., 2013), and (El Ghoul, Guedhami, Kwok, & Mishra, 2011) for the use of the KLD dataset.

Concerns have been raised regarding measurement errors contained in Tobin's Q (for an enlightening discussion, see Almeida, Campello, & Galvao, 2010; Erickson & Whited, 2000; and Erickson & Whited, 2012). However, given that Tobin's Q is the dependent variable in our analysis and Greene's (2007, p. 326) assertion that "… measurement error in the dependent variable can be absorbed in the disturbance of the regression and ignored …," we believe that, in the absence of an accessible and well established alternative, any measurement errors, if present, should not materially impact our analysis (Jiao, 2010).

3.1.2. Control variables

Drawing on previous work linking Tobin's Q and CSR we include the following control variables in our analysis. Firm size is calculated as the natural logarithm of total assets, leverage is calculated as total liabilities over total assets, and turnover is calculated as the natural logarithm of average monthly volume over shares outstanding at the end of each year *t*. Return on assets (ROA) is calculated as earnings before interest and tax (EBIT) to total assets. Advertising is calculated as advertising expense over sales, research and design (R&D) is R&D expenditure over sales, capital expenditure (CAPEX) is CAPEX over total assets. Finally, sales growth is calculated as the change in sales at time *t* with respect to *t-1*.[3] Cash ratio is calculated as cash and marketable securities to total assets at the end of each year *t*.

3.1.3. Geographic variables

To account for any location based CSR peer effect we construct two measures. We test whether firms' CSR profile is affected by the CSR activities of their peers. Firstly, we examine the effect firms with high levels of CSR have on their peers. We posit that the presence of a firm with high levels of *strength* or *concern* might encourage other firms in the community to increase their level of CSR. We construct the variable CSR_D_{10} to indicate the proportion of firms within an MSA that are ranked in the 10th decile nationally (D_{10} being a dummy indicating the tenth decile) and above for either *strength* or *concern* regardless of geographic location. To determine the decile, we rank each firm within an industry for each year across all locations and aggregate firms in the 10th decile across all industries in each year. Specifically, CSR_D_{10} is the incidence of D_{10} in geographic area x (excluding firm i). We exclude the incidence of firm i being D_{10} when computing the variable. Specifically:

$$CSR\_D_{10} = \widehat{E}_{-i}(D_{10}|x) \tag{5}$$

where

$$\widehat{E}_{-i}(D_{10}|x) = \frac{\sum_{j \in x/[i]} D_{10}}{N_x - 1} \tag{6}$$

CSR_D_{10} is the incidence of D_{10} in geographic area x (excluding firm i). Secondly, we model the effect of the average level of *strength* and *concern* (*Group_CSR)* within an MSA, again not including the score of firm *i*. Specifically,

$$Group_{CSR} = \widehat{E}_{-i}(CSR|x) \tag{7}$$

where

$$\widehat{E}_{-i}(CSR|x) = \frac{\sum_{j \in x/[i]} CSR_j}{N_x - 1} \tag{8}$$

To account for investor clientele in a location, we construct three variables *Education*, *Wealth*, and *Sophistication* in line with Gao et al. (2011) and Pirinsky and Wang (2006). We proxy for local economic development with personal income where *Wealth* is the per capita personal income at the MSA level. We proxy for the financial sophistication of local residents with investment income where *Sophistication* is the per capita investment income at the MSA level. We obtain income data from the Bureau of Economic Analysis. Next, we obtain education data, at the county level and aggregate to MSA level, from the U.S. Census Bureau Census 2000. The percent of the population over 25 with a bachelor's degree or more proxies for the level of education in an area (*Education)*.

In line with Stulz and Williamson (2003), Grinblatt and Keloharju (2000), and Guiso et al. (2003), we account for the cultural difference across locations. We define two variables *Protestant* and *Trust*. *Protestant* is the percentage of people who belong to Protestant religions based on the question: "Do you belong to a religious denomination? If yes, which one?" *Trust* proxies for interpersonal and is defined as the percentage of respondents who answered "yes" to the question: "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" The data are obtained from the World Values Survey. We take the average survey responses conducted in 1990, 1995, and 2000 for each U.S. Census region.

Similar to Card et al. (2010) and Marquis et al. (2007) we include five variables to account for the effect charities might have on the community. *#Charities* is the number of non-profit organizations registered within an MSA. *Char.Rev/Pop* is the per capita charitable revenue, specifically, the natural logarithm of the total revenue raised by nonprofit organizations in an MSA to the resident population within the MSA. *Rev/Char* is the total charitable revenue within an MSA to the number of nonprofit organizations. Nonprofit organizations are defined as those registered with the IRS that filed Form 990 within 24 months of the database date selected. This information

[3] Coded missing values to zero to ensure robust sample size (Himmelberg, Hubbard, & Palia, 1999).

is obtained from the IRS Business Master Files (1995–2009) available through the National Center for Charitable Statistics. Resident population is obtained at the zip code level and aggregated to MSA level from the U.S. Census 2000. Lastly, we include *Giving*, defined as charitable giving to adjusted gross income by county, aggregated to MSA, as reported on IRS tax return Form 1040, Schedule A, by households that itemize deductions, from IRS Tax Return Summary Files (1997–2008), obtained from the National Center for Charitable statistics.

Furthermore, we include tax-related data from the annual Tax Rates and Tax Burdens report prepared by the Office of the Chief Financial Officer for the District of Columbia for the years 1997 through 2009. Specifically, we compute the tax regressivity or *Tax Burden*, for each state as the ratio of the estimated burden of major taxes for a hypothetical family of three earning $25,000 to the estimated burden of major taxes for a hypothetical family of three earning $75,000 in the largest city in each state. We posit that tax burdens would indicate the community's propensity to sacrifice personal wealth in the interest of the common good. Specifically, a more regressive local tax structure would be indicative of a community where individuals in lower socio-economic circumstances bear a greater share of the tax burden, perhaps signaling the community's unwillingness or inability to constrain the behavior of the wealthier, more powerful, members of the community. Ultimately, such a cultural context could influence firms' CSR decisions.

Lastly, drawing on Case and Katz (1991) we include crime data to account for the community's tolerance of illegal or socially undesirable behavior. *Fraud* is the number of fraud related prosecutions to total prosecutions filed for all U.S. Federal Judicial district courts within a state. *Regulatory* is the number of regulatory related offenses prosecuted to total prosecutions filed for all U.S. Federal Judicial district courts within a state. *Tax Offenses* is the number of tax related prosecutions to total prosecutions filed for all U.S. Federal Judicial district courts within a state. *Environmental* is the number of environment related prosecutions to total prosecutions filed for all U.S. Federal Judicial district courts within a state. They are obtained from Bureau of Justice statistics where we utilize the broad

Table 1
Descriptive statistics.

Panel A: Financial Descriptive Statistics					
Variable	Obs.	Mean	Std. Dev.	Min	Max
Adjusted Price	26,562	$28.66	$58.06	$1	$3561
Adjusted Shares ('000)	26,562	204,401	588,845	372	22,900,000
Average Monthly Volume ('000)	26,562	1,317,066	5,372,910	189	484,000,000
Market Capitalization ('000)	26,562	$5,925,838	$19,900,000	$5831	$602,000,000
Tobin's Q	26,160	2.00	1.80	0.34	56.98
Ln(Total Assets)	26,166	7.43	1.72	3.89	12.14
Ln(Turnover)	26,562	1.65	1.09	−4.43	7.74
Book to Market (%)	25,503	55.45	43.63	4.41	275.77
EBIT to Assets (%)	26,149	6.80	11.91	−50.20	35.64
Cash to Total Assets (%)	26,162	16.03	20.01	0.00	99.95
Leverage (%)	26,098	57.46	27.83	0.21	771.17
R&D over Sales (%)	26,057	8.99	39.25	0.00	331.75
CAPEX over Total Assets (%)	26,166	4.49	5.35	0.00	29.38
Advertising over Sales (%)	8694	3.35	7.05	0.00	332.23
Sales Growth (%)	17,365	25.34	46.70	−63.53	260.90
Panel B: Demographic Variable Descriptive Statistics					
Strength	26,565	0.03	0.05	0.00	0.49
Concern	26,565	0.06	0.06	0.00	0.51
Strength CSR_D_{10}	18,904	0.0936	0.0943	0	1
Concern CSR_D_{10}	18,904	0.0928	0.1014	0	1
Strength Group_CSR	18,926	0.0436	0.0211	0	0.2954
Concern Group_CSR	18,926	0.0703	0.0253	0	0.3925
Strength Difference	18,926	−0.0101	0.0488	−0.2726	0.4319
Concern Difference	18,926	−0.0109	0.0615	−0.3925	0.4250
Education	20,416	27.7421	8.1008	6.5022	57.1333
Wealth	20,364	$40,199	$9838	$14,515	$80,139
Sophistication	20,364	$7094	$2551	$1568	$39,645
Protestant %	20,538	30.8835	7.1390	21.3178	44.8980
Trust %	20,538	37.4726	3.5794	24.1791	40.2961
# Charities	20,362	3.1230E-04	3.8530E-04	1.4500E-05	4.5461E-03
Revenue per Charity	20,362	1.2400E-05	1.6100E-05	2.3900E-07	4.1310E-04
Revenue per Charity	20,362	4.3363E-02	1.6998E-02	1.2483E-03	1.9082E-01
Average giving %	15,257	1.9513	0.5067	0.0000	6.3804
Tot. Char. Rev. (‘000)	20,362	$28,700,000	$34,300,000	$1748	$132,000,000
Tax Regressivity	18,790	1.1532	0.3687	0.4409	2.5366
Fraud Prosecutions %	18,456	3.2586	1.4479	0.7318	20.6272
Regulatory offenses %	18,456	0.1974	0.3172	0.0000	7.3419
Tax Offenses %	18,456	0.2089	0.1066	0.0000	1.7015
Environmental Offenses %	18,456	0.0307	0.0503	0.0000	0.8213

Panel A reports the financial descriptive statistics for the pooled sample spanning calendar years 1991 through 2009. (‘000) indicate figures presented in thousands and (%) indicate figures in a percentage or ratio. EBIT is earnings before interest and tax, Ln(Total Assets) is the natural logarithm of Total Assets, ln(Turnover) is the natural logarithm of volume to shares outstanding, leverage is Total Liabilities over Total Assets. Panel B reports the demographic variables descriptive statistics for the pooled sample spanning calendar years 1991 through 2009. (‘000) indicate figures presented in thousands and (%) indicate figures in a percentage or ratio.

categories defined by the Bureau of Justice statistics and code all withheld prosecutions in a district court to five. The appendix displays the list of geographic variables used in this study to reference for convenience.

3.1.4. Descriptive statistics

Table 1, Panel A, presents the financial descriptive statistics for the pooled sample spanning years 1991 through 2009. In addition, Panel B presents the demographic variable descriptive statistics for the pooled sample spanning calendar years 1991 through 2009, as defined in the appendix. The incidence of a CSR leader (CSR_D_{10}) is around 10 percent while the average level of CSR within MSAs (Group_CSR) that qualify is slightly higher than the pooled averages at 0.04, for strength and 0.07, for concern. Alternatively, the average difference between firm *i*'s level of CSR and the average within the MSA is negative −0.01, for both strength and concern. The combination for these statistics indicate that the average level of CSR within each city is skewed by the presence of a CSR leader.

Moreover, on average 27 percent of residents within the MSAs have an education (bachelor's degree or higher), with an average income of $40,000, and $7000 to invest. Around 30 percent of the MSAs are home to individuals who identify as Protestant and 37 percent of individuals would trust "most" people. On average, there are 30 charities per 100,000 people, raising $1235 per person on average each year. However, the total amount of charitable revenues raised within an MSA to the number of charities is $4,000,000, on average. Furthermore, individuals contributed around 2 percent of earnings to charity each year, with the average total amount of charitable receipts within an MSA topping $28 bn. with the lowest being $1.7 mil. and highest being $132 bn. The average MSA has a regressive tax structure with the tax burden being 15 percent greater on families earning $25,000 compared to families earning $75,000. Lastly, fraud prosecutions present the largest share of offenses reported in our study with 3 percent of total filings; environmental offenses the lowest at 0.03 percent. Lastly, Table 2, Panel A, presents the descriptive statistics of the strength and concern scores for each of the 12 MSAs with at least 10 resident firms per year for at least 10 years.[4] In addition, the averages across the MSAs are presented in Fig. 1 and Fig. 2. As can clearly be seen, Minneapolis-St. Paul has significantly more strength than the other MSAs, followed by San Jose. Alternatively, the southern cities of Atlanta and Houston have quite low levels of strength. The CSR profile of Houston and Minneapolis are quite interesting as both reverse course, in terms of concern, with Houston having some of the highest levels of concern, and Minneapolis-St. Paul with some of the lowest. To aid understanding, we show the geographic clustering of CSR visually in Fig. 3 and Fig. 4. As Fig. 3 shows, average CSR seems to be higher on the coasts, specifically the Northeast and Northwest, with Midwestern and Southern states generally showing lower levels of CSR. When considered at the MSA (city) level, the clustering in the Northeast and Northwestern portions of the contiguous states are still present.

Table 2
CSR scores across metropolitan statistical areas.

Panel A: CSR Scores Across Metropolitan Statistical Areas

MSA	Strength		Concern		
	Mean	Std. Dev.	Mean	Std. Dev.	Freq.
Atlanta	0.0281	0.0419	0.0663	0.0611	499
Boston	0.0295	0.0368	0.0430	0.0369	916
Chicago	0.0372	0.0492	0.0627	0.0620	1064
Cincinnati	0.0484	0.0600	0.0742	0.0659	261
Dallas-Fort Worth	0.0342	0.0488	0.0825	0.0752	671
Houston	0.0244	0.0288	0.0786	0.0693	923
Minneapolis-St. Paul	0.0535	0.0590	0.0499	0.0511	575
New York	0.0407	0.0592	0.0653	0.0661	2333
Philadelphia	0.0325	0.0431	0.0601	0.0677	679
San Francisco	0.0381	0.0480	0.0627	0.0594	788
San Jose	0.0465	0.0632	0.0579	0.0392	964
Washington	0.0405	0.0514	0.0422	0.0409	548
Average	0.0375	0.0515	0.0623	0.0608	10,221

Panel B: Tests For The Homogeneity of Variances and Means

Test	Strength	Concern
ANOVA: Equality of means	20.10	30.89
	(0.00)	(0.000)
Levene's test: Homogeneity of variances	8.99	7.086
	(0.00)	(0.00)
Brown-Forsyth modification (medium)	5.49	5.21
	(0.00)	(0.00)
Brown-Forsyth modification (10% trim)	5.85	5.37
	(0.00)	(0.00)
N	18,359	18,359

[4] We focus on the largest MSAs for parsimony.

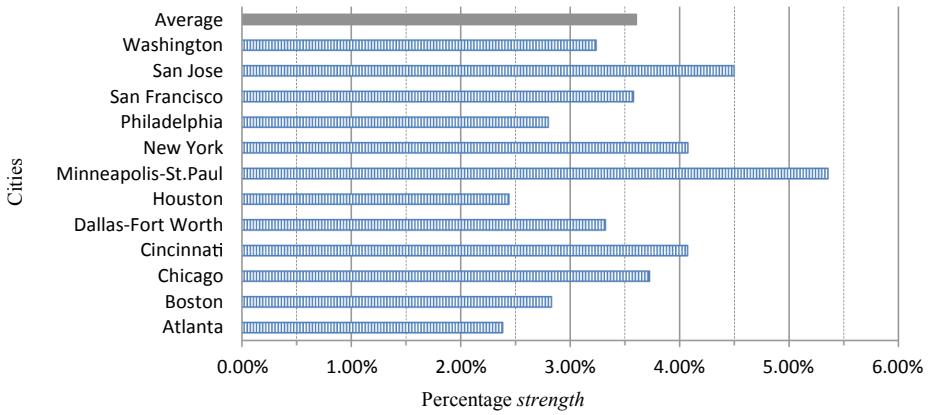

Fig. 1. Percentage Strength Per Metropolitan Statistical Area. This figure illustrates the differences in strength across the 12 metropolitan statistical areas with at least ten firms resident for ten years during the sample period.

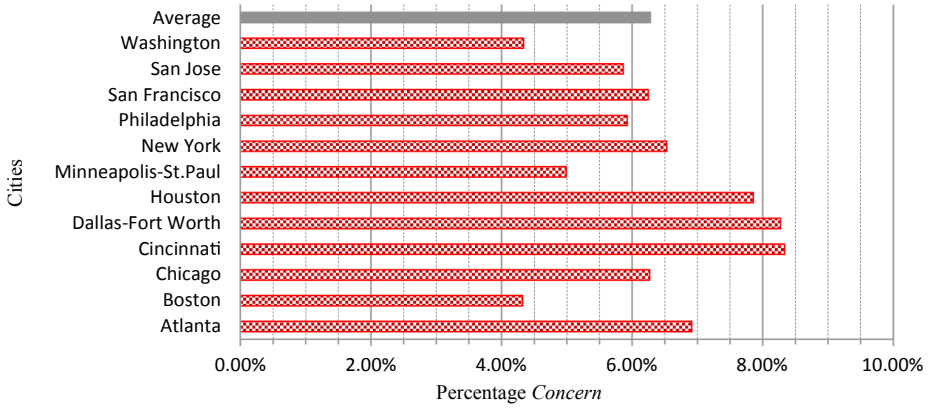

Fig. 2. Percentage Concern Per Metropolitan Statistical Area. This figure illustrates the differences in strength across the 12 metropolitan statistical areas with at least ten firms resident for ten years during the sample period.

3.2. Methodology

We perform a baseline regression by regressing each CSR variable on year end fixed effects, industry fixed effects and control variables. We then include location fixed effects of headquarters and examine the joint significance and explanatory power of firm locations. Specifically, we estimate the following regression in line with Gao et al. (2011):

$$y_{it} = \alpha + \beta_1' X + \beta_2' L + \delta_{it} + \gamma_{it} + \varepsilon_{i,t} \tag{9}$$

where y_{it} represents the CSR variable, $\beta_1'X$ is the vector of firm-level control variables, $\beta_2'L$ is the vector of location fixed effects, δ_{it} and γ_{it} are the year and industry[5] fixed effects, respectively. represents the fixed effects of location, accounted for by a dummy for each sample MSA (Metropolitan Statistical Area), State, or Region, taking the value of 1 if a firm is headquartered there and 0 otherwise. $\varepsilon_{i,t}$ is an error term. In each model we cluster standard errors at the firm level to account for within firm correlation over time.

4. Results

Table 2, Panel B, reports the results of the equality of 'means' and 'variances' tests. Specifically, we test whether the mean *strength* and *concern* scores are jointly equal for all MSAs across our sample. The result of the ANOVA regression strongly rejects this, with the joint F-test significant at $p < 0.01$ or more for both *strength* and *concern*. This confirms the intuition that the level of CSR varies among firms located in different metropolitan areas of the U.S., with at least one MSA's average CSR statistically different from the other MSAs'

[5] Following Jiraporn et al. (2014), we control for possible industry effects in two ways. The primary way is to include industry dummies corresponding to the first two digits of the standard industrial classification (SIC) code in the regressions. The second way is to take the average level of CSR within an industry and uses that variable as a control in the regression as opposed to dummies. The latter gives qualitatively similar results and is not reported in the manuscript for brevity.

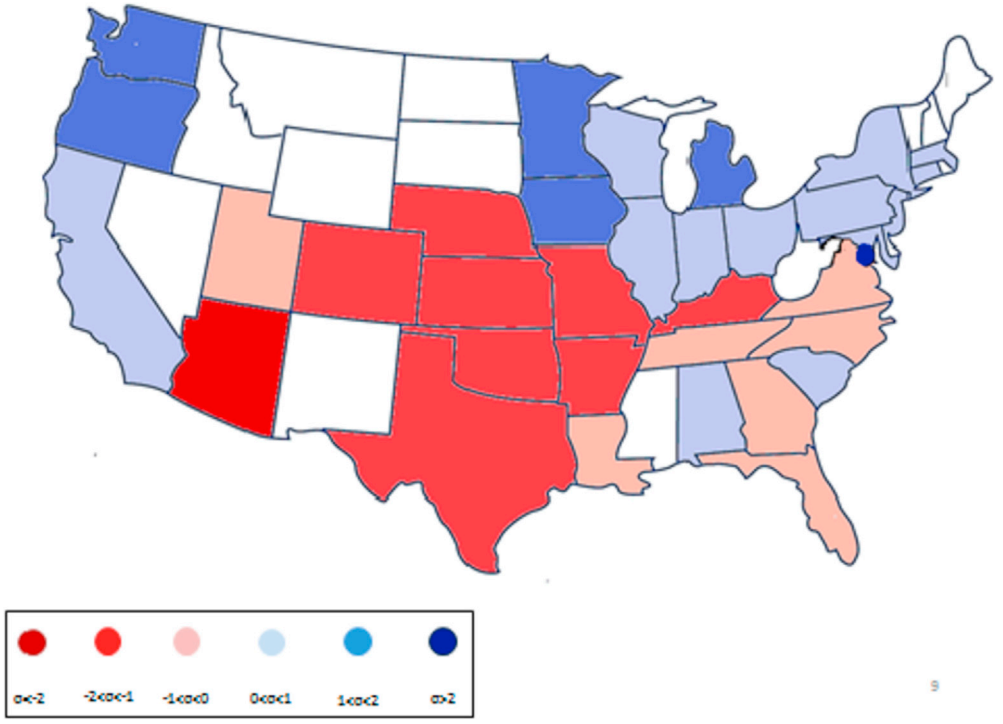

Fig. 3. Net CSR Per State. This figure illustrates the differences in CSR across states within our sample. As the legend indicates, each state is assigned a color gradient corresponding to the standard deviation from the mean level of CSR over the sample period.

average. Next, we test whether the variance around the mean for *strength* and *concern* are homogenous. Specifically, we employ Levene's test for homogeneity around variances (Levene, 1960) and find the F-test results to be significant at *p0.01* for both *strength* and *concern*, rejecting the null hypothesis of homogenous variance across MSAs. Next, we adjust the Levene test according to Brown and Forsythe (1974) and replace the mean with the medium or a 10% trim, to compensate for non-normality. Again, we comfortably reject the null hypothesis of homogeneity across MSAs. Our results indicate that firms headquartered in at least one MSA experience a statistically different level of CSR and/or variance around the CSR compared to firms located in other MSAs. This finding differentiates our work from Boeprasert (2012) and Husted et al. (2016),[6] as we extend the geography of CSR by emphasizing on possible variations among CSR levels across different metropolitan areas in the U.S.A.

For a formal test, we regress MSA level location fixed effects in accordance with equation (9) and control for other determinants of CSR activities[7] known in literature. Table 3, Panel A, presents our results. Models (1) and (2) present the results with *strength* and *concern* as the dependent variables, respectively. In addition, we also include *Net CSR* and *No_Gov* as dependent variables in models (3) and (4). Although we have expressed some concern around Net CSR measures, we believe Net CSR is less sensitive to firm size and is included for robustness. Similarly, we also include a CSR measure that excludes the governance category; some criticism has been levied around the KLD Governance category and the differences with conventional corporate governance concepts (Chang, Kim, & Li, 2014; Jo & Harjoto, 2011). Lastly, although we already include industry fixed effects in first four models, for additional robustness, we restrict our sample for each industry. For parsimony, we include the results for the manufacturing and service industries in models (5) and (6) respectively. It should be noted that we selected these two industries to determine whether high intangible asset industries (service) could drive some of our results relative to other industries or those with a significant reliance on tangible assets (manufacturing).

Overall, as expected, the variables indicating a firm's size and ability to access funds *(Size* and *Cash ratio*) are positively and significantly associated with all CSR measures. The positive regression coefficients on firm size are consistent with the interpretation by Chih, Chih, and Chen (2010); Udayasankar (2008). Firm size creates different economic motivations due to visibility, resource access (e.g., cash), and scale of operations. That is, strategic value of CSR is dependent on the size of the company. Specifically, Udayasankar (2008) predicts that CSR activities should be particularly valuable for firms that are either extremely large or extremely small. Given that KLD data used in our study (as well as Boeprasert (2012); Husted et al. (2016); and others) cover rather larger companies, it is the positive relationship between firm size and CSR activities that are captured in our sample.

The variables, *Turnover and Leverage*, are significant and negative for responsible behavior, while growth (*Sales growth*) is negative for both *strength, concern,* and overall CSR. As described by Neubaum and Zahra (2006), short-term institutional investors are more active in

[6] Husted et al. (2016) focus on only 'strength' CSR in their study. We also consider 'concerns' and 'net' CSR throughout our study.

[7] A comprehensive review of determinants of corporate CSR activities can be found in Campbell (2007) and Chih et al. (2010).

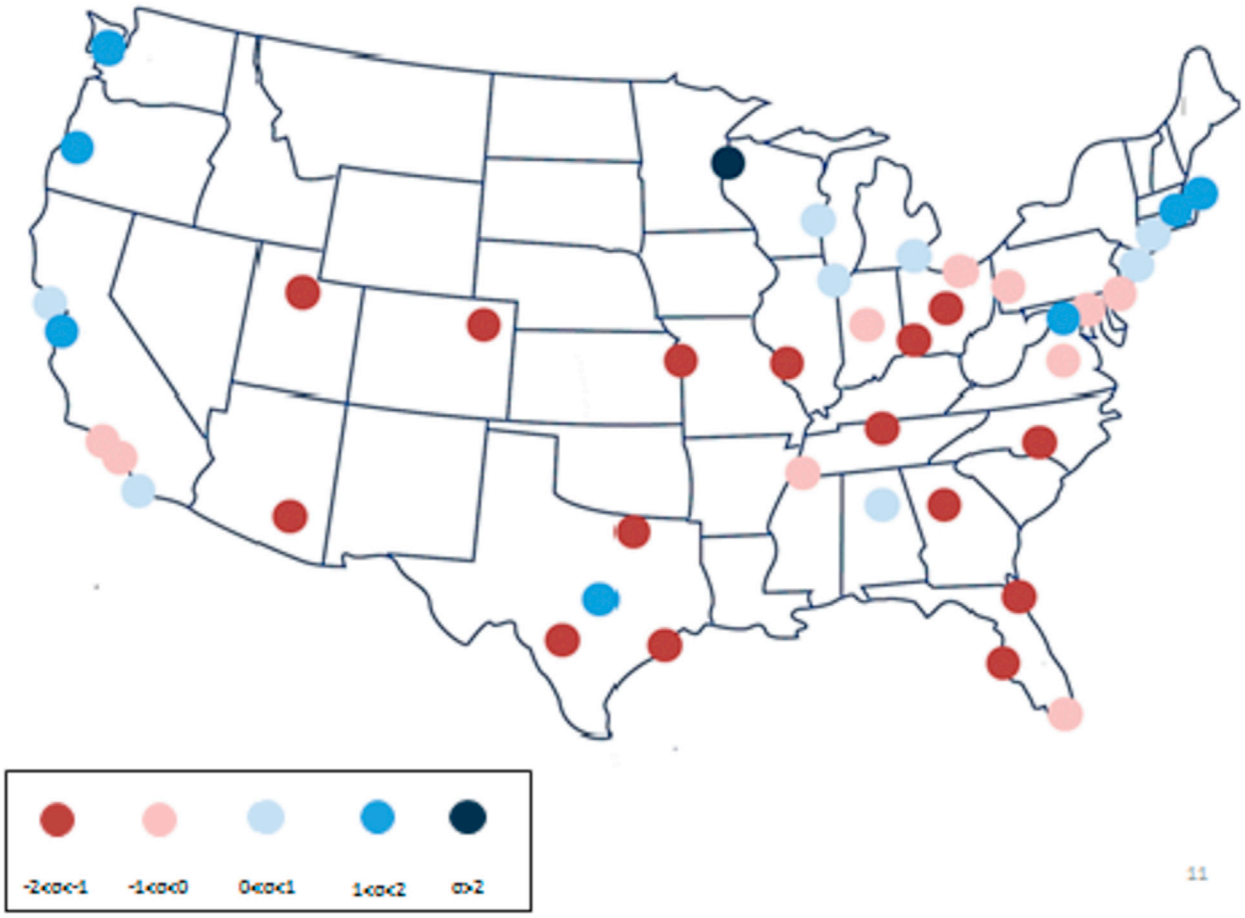

Fig. 4. Net CSR Per Metropolitan Statistical Area. This figure illustrates the differences in CSR across metropolitan statistical areas within our sample. As the legend indicates, each city is assigned a color gradient corresponding to the standard deviation from the mean level of CSR over the sample period.

their trading. Their shorter investment horizon shifts their focus on creating short-term value. Generally, CSR activities are long-term corporate strategies aiming to establish long-term competitive advantages, these investors will be less enthusiastic about encouraging CSR activities of the company that do not add value in the short term. Thus, the negative relationship between CSR and turnover reflects the short-term institutional investors' preference. Sales growth may indirectly proxy for growth opportunities or competition. As noted by Campbell (2007) and Shleifer (2004) firms operating in an extremely competitive business environment may be motivated to act irresponsibly due to narrow profit margin that puts shareholder value at risk.

In line with research, *CAPEX* and *R&D* are positively associated with responsible behavior (Servaes & Tamayo, 2013) and Net CSR. Inversely, R&D and CAPEX are negatively, but not significantly, associated with respect to *concern*. It would seem that R&D and CAPEX might provide firms with the technical capacity and resources to positively engage stakeholders. Based on resource-based view (RBV) theory, McWilliams and Siegel (2000) establish the positive correlation between R&D intensity and CSR. The rationale is that both R&D and CSR are activities that uniquely add to the competitive advantage of the company. Both emphasize on special intangible resources that are relatively difficult to imitate and substitute. It follows, therefore, that companies which highly value R&D would also highly value CSR activities. Padgett and Galan (2010) formally verify the causal effect of R&D on CSR activities, especially among manufacturing industries, as can be seen in our model (5) results. As expected, ROA is significantly associated with all measures of CSR. It would seem that profitability, like cashflow, allows firms to tackle CSR concerns with a reduction in negative behavior and an increase in positive behavior overall. In Campbell (2007)'s quote, "Corporations will be less likely to act in socially responsible ways where they are currently experiencing weak financial performance."

The location fixed effects indicate that firms' headquarter location is significantly related to levels of CSR. The joint test of significance for the location fixed effect dummies is significant at the $p < 0.01$ or less for all measures of CSR. Location is associated with firm level CSR whether we consider *strength*, *concern* or *Net CSR* measures. These results are robust to concerns around KLD's governance category. Notably, our results are robust to the inclusion of industry level controls as well as restricting our results to specific industries. Even within industries, whether high or low intangible assets, the location effects are highly significant.

Evaluating the location specific levels of CSR could be problematic, as any interpretation is relative to the level of CSR in New York (the omitted fixed effect). Nevertheless, Minneapolis-St. Paul (MN), San Jose (CA), Seattle (WA), and Washington (DC) stand out as some

Table 3
Geography and CSR.

Panel A: Metropolitan Statistical Area and Firm Head Quarter Location

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Cash Ratio	0.0265***	0.0277***	0.5000**	0.6296***	0.8711**	1.0741**
	(0.0048)	(0.0054)	(0.2540)	(0.2393)	(0.3972)	(0.4771)
Size	0.0155***	0.0188***	0.0976**	0.2921***	0.2167**	0.1365*
	(0.0011)	(0.0012)	(0.0493)	(0.0472)	(0.0983)	(0.0824)
Turnover	−0.0062***	0.0008	−0.2755***	−0.1575***	−0.2614***	−0.1051
	(0.0009)	(0.0011)	(0.0491)	(0.0462)	(0.0804)	(0.0940)
Leverage	−0.0082***	−0.0023	−0.2781	−0.3289*	−0.4257	−0.3538
	(0.0030)	(0.0039)	(0.1799)	(0.1714)	(0.3053)	(0.3101)
R&D	0.0032**	−0.0026	0.2222***	0.2881***	0.3781***	0.0659
	(0.0016)	(0.0020)	(0.0860)	(0.0807)	(0.1160)	(0.1920)
CAPEX	0.0716***	−0.0021	2.6590***	2.5698***	−0.8514	−0.3338
	(0.0166)	(0.0212)	(0.9551)	(0.9313)	(2.0619)	(1.4202)
Advertising	0.0846***	0.0175	3.5694***	3.7494***	9.2324***	0.9395
	(0.0252)	(0.0228)	(1.2379)	(1.1781)	(2.8109)	(1.9853)
ROA	0.0199***	−0.0162**	1.3996***	1.5960***	2.0183***	2.3365***
	(0.0063)	(0.0074)	(0.3407)	(0.3289)	(0.5879)	(0.6404)
Sales Growth	−0.0007***	−0.0004*	−0.0187**	−0.0309***	−0.0186	−0.0016
	(0.0001)	(0.0002)	(0.0077)	(0.0074)	(0.0125)	(0.0191)
Atlanta-Sandy Springs-Marietta	−0.0077	0.0033	−0.5773**	−0.6979***	−1.2461**	0.0552
Austin-Round Rock-San Marcos	0.0216	−0.0080	0.8648	0.6642	0.2871	0.8106*
Baltimore-Towson	−0.0074	0.0033	−0.5415	−0.5929	−1.3290	0.9157*
Birmingham-Hoover	−0.0109	−0.0126	−0.2629	−0.3493	0.5954	−3.6352***
Boston-Cambridge-Quincy	0.0023	−0.0145***	0.4170**	0.3393*	−0.0425	0.9044**
Bridgeport-Stamford-Norwalk	0.0097	−0.0143**	0.8082	0.7407	1.1491	−0.4166
Charlotte-Gastonia-Rock Hill	−0.0089	0.0011	−0.7140	−0.9835*	−0.0514	−2.8672***
Chicago-Joliet-Naperville	−0.0028	−0.0015	−0.2093	−0.2383	−0.5513	0.8551
Cincinnati-Middletown	0.0018	0.0030	−0.2743	−0.5360	−0.5207	0.3252
Cleveland-Elyria-Mentor	−0.0157**	−0.0113**	−0.5025	−0.3979	−0.6612	0.0459
Columbus	−0.0208**	−0.0071	−0.7840	−0.8321*	−0.3487	–
Dallas-Fort Worth-Arlington	−0.0073	0.0103	−0.6455*	−0.7516**	−1.5002**	−1.4030***
Denver-Aurora-Broomfield	−0.0107**	−0.0004	−0.5236*	−0.5451**	−0.3042	−0.0744
Detroit-Warren-Livonia	0.0076	0.0037	0.0368	−0.2051	−1.3462**	2.8302***
Hartford-West Hartford-East	0.0131	−0.0145	0.9924**	1.0554***	0.1566	0.0000
Houston-Sugar Land-Baytown	−0.0098**	0.0075	−0.7790***	−0.8695***	−1.5797***	−0.1849
Indianapolis-Carmel	0.0023	0.0066	−0.0260	0.0251	0.6610	−0.1101
Jacksonville	−0.0214***	0.0088	−1.4811**	−1.3330**	−1.5786***	−0.0328
Kansas City	−0.0087	0.0026	−0.5374	−0.5784*	−1.4705**	0.9018*
Los Angeles-Long Beach	0.0003	−0.0004	−0.0507	−0.1140	−0.3772	0.1588
	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Memphis	0.0108	0.0111	−0.2183	−0.5331	−1.3210**	–
Miami-Fort Lauderdale	−0.0022	0.0072	−0.3694	−0.4996*	−0.5593	0.6227
Milwaukee	−0.0012	−0.0133*	0.1085	−0.1833	−0.2030	0.5112
Minneapolis-St.Paul	0.0149*	−0.0120**	0.8486**	0.8504**	1.1608**	0.3587
Nashville	−0.0090	0.0130	−0.9326**	−0.8853**	−1.7586***	−0.7784
Oxnard-Thousand Oaks-Ventura	−0.0060	−0.0105	0.0625	0.0631	−0.2573	−1.4856***
Philadelphia	−0.0013	−0.0007	−0.2022	−0.3397	−1.0381**	0.0036
Phoenix-Mesa-Glendale	−0.0078	0.0069	−0.6121	−0.6345*	−0.1971	0.5405
Pittsburgh	−0.0049	−0.0008	−0.5345	−0.6170	−1.3110**	0.8856*
Portland-Vancouver-Hillsboro	0.0114	−0.0156**	0.8768*	0.8148*	−0.0219	1.4099*
Richmond	−0.0097	−0.0091	−0.4515	−0.7400*	−0.1616	–
Salt Lake City	−0.0013	0.0042	−0.5407	−0.6564*	−1.0455	−1.7391***
San Antonio-New Braunfels	−0.0159	0.0079	−1.1640**	−1.2173**	−1.9946***	−1.5626**
San Diego-Carlsbad-San Marcos	−0.0020	−0.0130**	0.3200	0.3959*	0.1171	0.8276
San Francisco-Oakland-Fremont	0.0063	0.0010	0.1673	0.2025	−0.6452	1.4359***
San Jose-Sunnyvale-Santa Clara	0.0126**	−0.0113**	0.8537***	0.8870***	0.5246	0.8641**
Seattle-Tacoma-Bellevue	0.0164*	−0.0068	0.6819*	0.3947	−0.6539	0.4509
St. Louis	−0.0085	0.0061	−0.7288***	−0.7896***	−1.4768***	0.4726
Tampa-St. Petersburg	−0.0178**	−0.0060	−0.8171**	−0.9278**	−1.4084***	−0.9586
Washington DC	0.0122**	−0.0150***	0.8676***	0.7705**	0.8656**	0.4193
Intercept	−0.0617***	−0.0881***	−0.4044	−1.769***	−1.4235*	−2.2278**
	(0.0088)	(0.0097)	(0.4219)	(0.4080)	(0.8124)	(1.0468)
N	14,272	14,272	14,272	14,272	5646	2263
R^2	0.311	0.285	0.150	0.183	0.184	0.228

(*continued on next page*)

Table 3 (*continued*)

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
adj. R^2	0.307	0.282	0.146	0.179	0.174	0.206
MSA_F	2.154	1.857	2.874	3.429	7.183	19.6032
MSA_p	0.0000	0.0009	0.0000	0.0000	0.0000	0.0000
Industry Effects	YES	YES	YES	YES	YES	YES
Year Effects	YES	YES	YES	YES	YES	YES
Cluster S.E (Firm)	Firm	Firm	Firm	Firm	Firm	Firm
Panel B: State and Firm Head Quarter Location						
Cash Ratio	0.0322***	0.0258***	0.8296***	0.8296***	1.1730***	1.4635***
	(0.0048)	(0.0053)	(0.2522)	(0.2522)	(0.3993)	(0.4735)
Size	0.0146***	0.0169***	0.1236**	0.1236**	0.2588**	0.1367
	(0.0011)	(0.0012)	(0.0484)	(0.0484)	(0.1043)	(0.0839)
Turnover	−0.0047***	0.0030***	−0.2890***	−0.2890***	−0.2156***	−0.1333
	(0.0009)	(0.0012)	(0.0478)	(0.0478)	(0.0821)	(0.0890)
Leverage	−0.0127***	−0.0112***	−0.1418	−0.1418	−0.4166	−0.2547
	(0.0037)	(0.0041)	(0.1797)	(0.1797)	(0.3124)	(0.3211)
R&D	0.0072***	0.0036	0.1625*	0.1625*	0.3595***	0.1102
	(0.0018)	(0.0024)	(0.0926)	(0.0926)	(0.1181)	(0.1883)
CAPEX	0.0741***	0.0880***	−0.3540	−0.3540	−0.8514	−0.3983
	(0.0146)	(0.0187)	(0.7618)	(0.7618)	(2.1572)	(1.4093)
Advertising	0.1088***	0.0524**	3.5075***	3.5075***	8.5772***	−0.0770
	(0.0275)	(0.0244)	(1.2412)	(1.2412)	(2.8115)	(2.1127)
ROA	0.0320***	0.0028	1.2802***	1.2802***	1.6824***	2.1545***
	(0.0067)	(0.0076)	(0.3427)	(0.3427)	(0.5791)	(0.6525)
Sales Growth	−0.0007***	−0.0004*	−0.0192**	−0.0192**	−0.0184	−0.0052
	(0.0002)	(0.0002)	(0.0077)	(0.0077)	(0.0123)	(0.0178)
	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
AL	−0.0224**	−0.0211	−0.3631	−0.3631	0.4436*	−4.4178***
AZ	−0.0155***	0.0137	−1.1136**	−1.1136**	−0.1956	−0.2457
CO	−0.0234***	0.0007	−1.0280***	−1.0280***	−0.2284	−0.9079*
CT	0.0074	−0.0080	0.5668	0.5668	0.9525	−1.0949**
DC	0.0345***	−0.0273***	2.1368***	2.1368***	1.6019***	−0.2504
DE	0.0184	0.0526	−1.1415	−1.1415	−3.8431***	−2.6264***
FL	−0.0181***	0.0059	−1.0168***	−1.0168***	−0.8839**	−0.4482
GA	−0.0122**	0.0094	−0.9096***	−0.9096***	−1.2009**	−0.7664**
IL	−0.0078	0.0018	−0.4641*	−0.4641*	−0.5757	0.0322
IN	−0.0063	0.0074	−0.4664	−0.4664	0.6402	−1.0151
KS	−0.0162	0.0093	−0.9011*	−0.9011*	−1.8206***	0.8117
KY	−0.0327***	0.0203*	−2.6273***	−2.6273***	−3.0128***	−1.5401***
MA	−0.0045	−0.0094**	0.0355	0.0355	−0.2233	−0.0048
MD	−0.0130***	−0.0102	−0.2347	−0.2347	−0.8691	0.2344
MI	0.0028	0.0077	−0.2410	−0.2410	−1.3833**	1.9706***
MN	0.0128*	−0.0048	0.5704*	0.5704*	1.2447**	−0.5001
MO	−0.0151***	0.0065	−0.9657***	−0.9657***	−1.3880***	−0.3460
NC	−0.0091	0.0115	−1.0011	−1.0011	−0.0085	−3.6750***
NH	0.0752**	−0.0056*	2.8739**	2.8739**	3.7037***	−0.0548
NJ	−0.0092	0.0000	−0.3797*	−0.3797*	−0.1722	−0.7775**
NY	−0.0050	0.0020	−0.1853	−0.1853	0.1049	−0.8582**
OH	−0.0120*	0.0010	−0.6787**	−0.6787**	−0.3578	−0.2722
OR	0.0066	−0.0143	0.6442	0.6442	0.0859	1.2055**
PA	−0.0092**	0.0000	−0.5631**	−0.5631**	−1.0208***	−0.4338
TN	−0.0062	0.0151*	−0.8589**	−0.8589**	−1.5044***	−1.5760**
TX	−0.0142***	0.0142***	−1.1087***	−1.1087***	−1.3044***	−1.4744***
UT	−0.0091	0.0059	−0.8709**	−0.8709**	−0.9223	−2.7798***
VA	−0.0076	−0.0053	−0.2459	−0.2459	0.0744	−0.7612**
WA	0.0098	−0.0024	0.3586	0.3586	−0.6964	−0.4649
WI	−0.0002	−0.0020	−0.1571	−0.1571	−0.0725	−0.2709
_cons	−0.0548***	−0.0794***	−0.4474	−0.4474	−1.6987**	−1.5587
	(0.0089)	(0.0100)	(0.3865)	(0.3865)	(0.7455)	(1.1114)
N	14,272	14,272	14,272	14,272	5646	2263
R^2	0.285	0.236	0.130	0.130	0.183	0.206
adj. R^2	0.282	0.233	0.126	0.126	0.175	0.185
State_F	7.2078	2.8192	3.9929	3.9929	20.358	25.769
State_p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Industry Effects	YES	YES	YES	YES	YES	YES
Year Effects	YES	YES	YES	YES	YES	YES

(*continued on next page*)

Table 3 (*continued*)

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Cluster S.E (Firm)	Firm	Firm	Firm	Firm	Firm	Firm
Panel C: Region and Firm Headquarter Location						
Cash Ratio	0.0328***	0.0263***	0.8669***	0.8669***	1.0908***	1.3191***
	(0.0050)	(0.0054)	(0.2532)	(0.2532)	(0.3930)	(0.4900)
Size	0.0147***	0.0170***	0.1266**	0.1266**	0.2180**	0.0949
	(0.0011)	(0.0012)	(0.0496)	(0.0496)	(0.1044)	(0.0832)
Turnover	−0.0051***	0.0031***	−0.3058***	−0.3058***	−0.2583***	−0.1218
	(0.0009)	(0.0012)	(0.0474)	(0.0474)	(0.0832)	(0.0988)
	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Leverage	−0.0122***	−0.0110***	−0.1267	−0.1267	−0.4831	−0.3611
	(0.0036)	(0.0041)	(0.1797)	(0.1797)	(0.3247)	(0.3276)
R&D	0.0074***	0.0038	0.1624*	0.1624*	0.4268***	0.0266
	(0.0018)	(0.0024)	(0.0959)	(0.0959)	(0.1174)	(0.1916)
CAPEX	0.0709***	0.0881***	−0.5026	−0.5026	−1.0612	−0.2891
	(0.0149)	(0.0186)	(0.7604)	(0.7604)	(2.2124)	(1.4779)
Advertising	0.1074***	0.0535**	3.5444***	3.5444***	9.2910***	−0.4299
	(0.0267)	(0.0247)	(1.2096)	(1.2096)	(2.7413)	(2.1168)
ROA	0.0343***	0.0032	1.3683***	1.3683***	2.3127***	2.0390***
	(0.0070)	(0.0076)	(0.3532)	(0.3532)	(0.5893)	(0.6579)
Wsalesgrowth2	−0.0008***	−0.0003*	−0.0221***	−0.0221***	−0.0299**	−0.0109
	(0.0001)	(0.0002)	(0.0076)	(0.0076)	(0.0125)	(0.0184)
New England	−0.0010	−0.0081**	0.1741	0.1741	0.2476	−0.2320
Middle Atlantic	−0.0086**	0.0019	−0.4023**	−0.4023**	−0.2860	−0.7160**
East North Central	−0.0084**	0.0032	−0.5421***	−0.5421***	−0.4977	0.3683
West North Central	−0.0012	0.0014	−0.1768	−0.1768	0.3724	−0.2889
South Atlantic	−0.0099***	0.0032	−0.5967***	−0.5967***	−0.6264*	−0.6381**
East South Central	−0.0130**	0.0089	−0.9566***	−0.9566***	−1.6627***	−1.8569***
West South Central	−0.0155***	0.0151***	−1.1732***	−1.1732***	−1.2619***	−1.4476***
Mountain	−0.0195***	0.0067	−1.0797***	−1.0797***	−0.4375	−0.8357*
_cons	−0.0530***	−0.0822***	−0.3359	−0.3359	−1.2865*	−1.1218
	(0.0093)	(0.0101)	(0.3982)	(0.3982)	(0.7552)	(1.1393)
N	14,272	14,272	14,272	14,272	5646	2263
R^2	0.264	0.225	0.103	0.103	0.132	0.142
adj. R^2	0.262	0.223	0.101	0.101	0.126	0.129
Region_F	5.0041	3.1603	6.0409	6.0409	3.8174	3.7587
Region_p	0.0000	0.0015	0.0000	0.0000	0.0002	0.0003
Industry Effects	YES	YES	YES	YES	YES	YES
Year Effects	YES	YES	YES	YES	YES	YES
Cluster S.E (Firm)	Firm	Firm	Firm	Firm	Firm	Firm

This table reports the regression coefficients for the relationship between CSR and firm Head Quarter location from calendar year 1991 through 2009. We control for year fixed effects, industry fixed effects, and cluster standard errors at the firm level. The dependent variable for model (1) is *strength*, for model (2) is *concern*, for model (3) is *Net CSR* and for Model (4) is *No_Gov*. We restrict our sample to manufacturing firms only for model (5) and service firms only for model (6), using 2-digit SIC codes (see., e.g. Jiraporn et al., 2014). We also report the joint test of significance for the location dummies. We exclude the standard errors of the location dummies for parsimony. Panel A reports the regression coefficient results when controlling for firm headquarters location at the metropolitan statistical area (MSA), Panel B for State Location and Panel C for U.S Census Bureau Region location. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

of the locations where firm level CSR is significantly higher. For example, on average, firms located in Minneapolis would have significantly higher levels of *strength* (0.0149), lower levels of *concern* (−0.0120), and higher levels of *Net CSR* (0.8486) than firms located in the New York MSA. Alternatively, Dallas (TX), Nashville (TN), San Antonio (TX), and Jacksonville (FL) are locations where firm level CSR is significantly lower. Firms located in San Antonio have *Net CSR* levels significantly lower (−1.1640) than those in New York, these results are more pronounced for the Manufacturing and Service industries (−1.9946 and −1.5626, respectively). We caution the interpretation of the fixed effects, as they are very sensitive to the omitted location in each model. Omitting Minneapolis-St Paul (MN), for example, would generate extremely negative and significant coefficients for most locations.

Table 3, Panel B, shows the results when State headquarters location is used as the fixed effect. Again, *strength, concern, Net CSR, No_Gov* are the dependent variables for models (1) through (4), respectively, while *Net CSR* is the dependent variable in models (5) and (6) for the manufacturing and service industries, respectively. The location fixed effects indicate that firms' headquarters location (State) is significantly related to levels of CSR. The joint test of significance for the location fixed effect dummies is significant at the $p < 0.01$ or less for all measures of CSR. Location is associated with firm level CSR whether we consider *strength*, *concern* or *Net CSR* measures. These results are robust to concerns around KLD's governance category and are robust to the inclusion of industry level controls as well as restricting the results to specific industries with high or low intangible assets.

Looking at specific State location effects the District of Columbia, Minnesota (typically labeled as a philanthropy hub, Hopfensperger (2016)) and New Hampshire have significantly higher levels of CSR relative to California (the omitted fixed effect). Firms headquartered

in New Hampshire have significantly higher levels of *strength* (0.0752), lower levels of *concern* (−0.0056), and higher levels of *Net CSR* (2.8739) than those in California. Alternatively, Florida, Georgia, Kentucky, Pennsylvania, Tennessee, and Texas have significantly lower levels of CSR relative to California. Firms located in Kentucky have significantly lower levels of *strength* (−0.0327), higher levels of *concern* (0.0203), and lower levels of *CSR* (−2.6273).

Table 3, Panel C, shows the results when Regional headquarters location is used as the fixed effect. Again, *strength, concern, Net CSR, Net No_Gov* are the dependent variables for models (1) through (4), respectively, while *Net CSR* is the dependent variable in models (5) and (6) for the manufacturing and service industries, respectively. The results show regional location effects are significantly related to levels of CSR. The joint test of significance for the location fixed effect dummies is significant at the $p < 0.01$ or less for all measures of CSR. Location is associated with firm level CSR whether we consider *strength*, *concern* or *Net CSR* measures. These results are robust to concerns around KLD's governance category and are robust to the inclusion of industry level controls as well as restricting our results to specific industries with high or low intangible assets.

With the exception of the New England region, most regions tend to have lower levels of CSR relative to the Pacific region (omitted fixed effect). For example, firms located in the West South Central region of the U.S. have significantly lower levels of *strength* (−0.0155), higher levels of *concern* (0.0151), and lower levels of *CSR* (−1.1732) than those in the Pacific region.

Drawing on this information, it is clear that firms located in different areas engage CSR at different levels or variances, even over large geographic areas. These results are robust whether CSR is netted off or considered separately in its constituent parts. The results are also robust to the inclusion of industry effects even across industries with high or low levels of intangible assets. The latter is particularly important in the context of Padgett and Galan (2010) as they implicitly state that CSR may be valuable among industries with relatively higher intangible assets (e.g., manufacturing industries).

4.1. Locale characteristics

4.1.1. Peer effect

Given the evidence that location could influence or perhaps even drive firms' CSR decisions, we explore potential impacting factors. We test whether firms' CSR profile is affected by the CSR activities of their peers. We specify a pooled OLS model that identifies if a firm headquartered in a given MSA is likely to change their CSR engagement in the presence of firms with extremely high levels (CSR_D_{10}) of CSR (John & Kadyrzhanova, 2008). We also include the average level of *CSR* in a city (*Group_CSR*),; specifically we model:

$$y_{it} = \alpha + \beta_1' X + \beta_2 CSR\_D_{10} + \beta_3 Group\_CSR_{it} + \delta_{it} + \gamma_{it} + \varepsilon_{i,t} \tag{10}$$

where y_{it} represents the particular CSR variable (either *strength, concern, CSR,* or *No_Gov*), for firm *i*, and CSR_D_{10} is the incidence of firms in the tenth decile of our CSR measures nationally. $Group\_CSR_{it}$ is the average level of our CSR measures in a city, is the set of firm-level control variables, δ_{it} and γ_{it} are the year and industry[8] fixed effects, respectively, and $\varepsilon_{i,t}$ is an error term. In each model, we cluster standard errors at the firm level to account for within-firm correlation over time.

Table 4, models (1) and (2) present the results with *strength* and *concern* as the dependent variables, respectively. We also include *Net CSR* and *No_Gov* as dependent variables in models (3) and (4). For continued robustness against the impact of industry and the prevalence of intangible assets, we restrict our sample for each industry. We include the results for the manufacturing and service industries in models (5) and (6), respectively.

We see in Table 4, Panel A, that the joint test of significance for the peer effect variables are significant at $p < 0.01$ or less for all measures of CSR. Taking a closer look, the presence of firms with high levels of CSR (CSR_D_{10}) within an MSA appears not to affect the level of any of our CSR measures. Our results suggest that firms with extreme levels of CSR do not seem to significantly alter the level of CSR behavior of other firms within their community. Next, we examine the impact of the average level of CSR (*Group_CSR*) within an MSA on a firm's level of CSR. The results suggest that the average level of peer CSR could inform a firm's CSR decisions. Our results show a significant correlation between the average level of CSR within a MSA location and the level of a firm's CSR. All three measures of CSR (*strength*, *concern*, and *CSR*) in models (1) through (3) are significantly correlated (0.8535, 0.7271, and 0.9182, respectively) with *Group_CSR* significant at the 1% level.

Our results are robust to the exclusion of the governance category when calculating CSR (model (4)) or the inclusion of industry controls, and are highly significant when considering each industry separately (models (5) and (6)). These results allow us to posit that firms might adjust their CSR in an effort to mimic the CSR of their peers or, alternatively, respond to inherent cultural and legal factors present in their community. The exact socio-demographic factors within an MSA might induce certain types of responsible or irresponsible behavior. Our results would suggest that the conformity of CSR profiles within locations are materially associated with the CSR profiles of other firms within an area. This is also consistent with the view that CSR is costly and firms have the tendency to stick to CSR practice within their area due to facilitation of the flow of information, values, and norms (e.g., advantages from proximity as suggested by Oliver (1991). However, further consideration has to be given to other factors that might induce these results beyond firms mimicking each other's CSR profile.

4.1.2. Socio-economic indicators

To shed further light on the local factors that might induce certain CSR activities within a community, we specify a pooled OLS model

[8] 2 digit SIC code.

Table 4
Demographics and CSR.

Panel A: Peer effect

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Cash Ratio	0.0308***	0.0266***	0.5901**	0.8212***	0.7483**	1.2639***
	(0.0043)	(0.0049)	(0.2323)	(3.77)	(0.3770)	(0.4836)
Size	0.0150***	0.0183***	0.0878*	0.2880***	0.1981**	0.0601
	(0.0011)	(0.0012)	(0.0482)	(6.28)	(0.0984)	(0.0846)
Turnover	−0.0056***	0.0002	−0.2326***	−0.1132***	−0.2277***	−0.1065
	(0.0009)	(0.0011)	(0.0455)	(-2.68)	(0.0742)	(0.0960)
Leverage	−0.0078***	−0.0034	−0.2329	−0.3133**	−0.4384	−0.4690
	(0.0028)	(0.0036)	(0.1668)	(-1.96)	(0.2927)	(0.3238)
R&D	0.0027*	−0.0014	0.1642**	0.2206***	0.3811***	0.0504
	(0.0015)	(0.0020)	(0.0816)	(2.85)	(0.1051)	(0.1929)
CAPEX	0.0651***	0.0009	2.5204***	2.3615***	−0.5220	−0.2244
	(0.0148)	(0.0221)	(0.9455)	(2.59)	(2.0258)	(1.6532)
Advertising	0.0798***	0.0139	3.3466***	3.6016***	9.1197***	0.1824
	(0.0239)	(0.0229)	(1.1778)	(3.24)	(2.5610)	(1.8639)
ROA	0.0166***	−0.0115	1.1262***	1.3058***	2.1632***	2.2143***
	(0.0061)	(0.0071)	(0.3204)	(4.20)	(0.5674)	(0.6443)
Sales Growth	−0.0006***	−0.0003	−0.0170**	−0.0289***	−0.0178	−0.0064
	(0.0001)	(0.0002)	(0.0078)	(-3.81)	(0.0134)	(0.0204)
CSR_D_{10}	−0.0116	0.0033	0.0432	0.2804	0.3514	1.6336
	(0.0135)	(0.0145)	(0.4910)	(0.59)	(0.7415)	(1.1348)
Group_CSR.	0.8535***	0.7271***	0.9182***	0.8838***	1.1499***	0.4253**
	(0.0961)	(0.0684)	(0.0732)	(12.50)	(0.1238)	(0.1809)
Intercept	−0.1068***	−0.1199***	−0.9907**	−2.4558***	−2.4921***	−2.3540**
	(0.0107)	(0.0109)	(0.4132)	(-6.12)	(0.8028)	(1.0370)
N	14,629	14,629	14,639	14,639	5614	2310
R^2	0.3238	0.3013	0.1697	0.202	0.1933	0.1110
adj. R^2	0.3220	0.2995	0.1675	0.200	0.1891	0.0996
F	13.2715	22.9117	18.2447	16.89	10.5835	3.4331
p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Peer_F	65.5388	77.5086	96.8966	98.7683	52.1937	9.2201
Peer_p	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Clustered S.E. (Firm)	Yes	Yes	Yes	Yes	Yes	Yes

Panel B: Clientele Effect

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Cash Ratio	0.0283***	0.0266***	0.594***	0.802***	0.759**	1.463***
	(6.61)	(5.52)	(2.60)	(0.215)	(2.04)	(3.21)
Size	0.0141***	0.0189***	0.0323	0.233***	0.102	0.0548
	(13.85)	(15.89)	(0.70)	(0.044)	(1.10)	(0.64)
Turnover	−0.0063***	0.00050	−0.260***	−0.139***	−0.267***	−0.169*
	(-7.41)	(0.48)	(-5.77)	(0.042)	(-3.42)	(-1.74)
Leverage	−0.0051*	−0.00392	−0.123	−0.198	−0.391	−0.421
	(-1.84)	(-1.17)	(-0.79)	(0.147)	(-1.45)	(-1.39)
R&D	0.00224	−0.00233	0.179**	0.240***	0.458***	0.0120
	(1.58)	(-1.22)	(2.23)	(0.076)	(4.45)	(0.06)
CAPEX	0.0684***	0.00957	2.300***	2.206***	0.948	−0.173
	(4.50)	(0.51)	(2.65)	(0.836)	(0.46)	(-0.12)
Advertising	0.0878***	0.0178	3.855***	4.032***	9.715***	0.617
	(3.57)	(0.78)	(3.20)	(1.130)	(4.00)	(0.33)
ROA	0.0193***	−0.0141**	1.357***	1.608***	2.741***	2.283***
	(3.10)	(-2.05)	(4.25)	(0.307)	(4.93)	(3.53)
Sales Growth	−0.0007***	−0.000163	−0.0253***	−0.035***	−0.0316***	−0.00466
	(-5.64)	(-0.97)	(-3.68)	(0.007)	(-2.74)	(-0.24)
Education	0.0007***	−0.0004	0.0462***	0.048***	0.0432**	0.0438**
	(3.01)	(-1.64)	(3.92)	(0.011)	(2.14)	(2.12)
Wealth	−0.00001**	0.000001*	−0.00003**	−0.000*	−0.00005*	−0.00004*
	(-2.01)	(1.89)	(-2.42)	(0.000)	(-1.81)	(-1.74)
Sophistication	0.000002*	−0.00000**	0.00008**	0.0000**	0.00017**	0.000101
	(1.78)	(-2.11)	(2.49)	(0.000)	(2.09)	(1.61)
Intercept	−0.0639***	−0.0887***	−0.752*	−2.465***	−1.594*	−2.317*
	(-6.78)	(-9.11)	(-1.77)	(0.413)	(-1.90)	(-1.93)

(*continued on next page*)

Table 4 (*continued*)

Panel B: Clientele Effect

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
N	17,885	17,885	17,885	17,885	7025	2520
R^2	0.265	0.266	0.112	0.140	0.110	0.0922
adj. R^2	0.263	0.265	0.110	0.138	0.106	0.0812
F	12.66	22.27	15.55	13.462	8.650	3.436
p	0.000	0.000	0.000	0.000	0.000	0.000
Clientelle_F	6.31	2.51	10.83	15.52	4.59	2.70
Clientelle_p	0.000	0.054	0.000	0.000	0.003	0.045
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Clustered S.E (Firm)	Yes	Yes	Yes	Yes	Yes	Yes

Panel C: Culture Effect

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Cash Ratio	0.0319***	0.0261***	0.819***	1.109***	0.998***	1.448***
	(7.64)	(5.45)	(3.66)	(0.210)	(2.80)	(3.20)
Size	0.0141***	0.0190***	0.0340	0.242***	0.0972	0.0489
	(13.50)	(16.08)	(0.72)	(0.045)	(1.03)	(0.60)
Turnover	−0.0062***	0.00051	−0.248***	−0.121***	−0.253***	−0.158*
	(-7.31)	(0.50)	(-5.61)	(0.042)	(-3.29)	(-1.71)
Leverage	−0.00538*	−0.00412	−0.138	−0.229	−0.423	−0.359
	(-1.94)	(-1.24)	(-0.90)	(0.148)	(-1.56)	(-1.19)
R&D	0.00260*	−0.00251	0.205**	0.272***	0.506***	0.00802
	(1.82)	(-1.30)	(2.48)	(0.078)	(4.65)	(0.05)
CAPEX	0.0669***	0.00954	2.201**	2.045**	0.608	0.216
	(4.46)	(0.52)	(2.57)	(0.827)	(0.29)	(0.15)
Advertising	0.0916***	0.0151	4.158***	4.416***	10.11***	−0.234
	(3.73)	(0.67)	(3.46)	(1.131)	(4.19)	(-0.12)
ROA	0.0198***	−0.0147**	1.398***	1.641***	2.825***	2.184***
	(3.18)	(-2.12)	(4.31)	(0.313)	(5.05)	(3.42)
Sales Growth	−0.0007***	−0.000172	−0.0244***	−0.034***	−0.0333***	−0.00449
	(-5.61)	(-1.03)	(-3.55)	(0.007)	(-2.86)	(-0.24)
Protestant	−0.0261	0.0232	−2.134**	−2.258***	−1.740	−0.541
	(-1.62)	(1.46)	(-2.47)	(0.833)	(-1.01)	(-0.45)
Trust	0.0242	−0.0270	1.992	2.385	6.335**	8.945***
	(0.85)	(-0.86)	(1.31)	(1.508)	(2.20)	(3.19)
Intercept	−0.0534***	−0.0906***	−0.0333	−1.662**	−2.590	−4.471**
	(-3.38)	(-5.07)	(-0.04)	(0.833)	(-1.52)	(-2.57)
N	18,035	18,035	18,035	18,035	7082	2527
R^2	0.260	0.266	0.105	0.128	0.105	0.107
adj. R^2	0.258	0.265	0.103	0.126	0.101	0.0962
F	12.72	22.81	16.29	13.602	9.088	3.860
p	0.000	0.000	0.000	0.000	0.000	0.000
Culture_F	4.121	2.851	9.399	11.820	8.060	8.062
Culture_p	0.010	0.048	0.000	0.000	0.000	0.000
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Clustered S.E (Firm)	Yes	Yes	Yes	Yes	Yes	Yes

Panel D: Goodwill

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Cash Ratio	0.0339***	0.0251***	0.948***	1.193***	1.281***	1.576***
	(8.05)	(5.22)	(4.15)	(0.211)	(3.45)	(3.11)
Size	0.0152***	0.0177***	0.101**	0.301***	0.202**	0.128
	(14.67)	(15.54)	(2.16)	(0.044)	(2.11)	(1.49)
Turnover	−0.0056***	0.000135	−0.233***	−0.084**	−0.217***	−0.163
	(-6.73)	(0.13)	(-5.15)	(0.042)	(-2.77)	(-1.64)
Leverage	−0.00574**	−0.00404	−0.158	−0.239*	−0.345	−0.497
	(-2.18)	(-1.27)	(-1.06)	(0.142)	(-1.29)	(-1.51)
R&D	0.00168	−0.00159	0.114	0.162**	0.438***	−0.0630
	(1.18)	(-0.85)	(1.35)	(0.080)	(3.91)	(-0.31)

(*continued on next page*)

Table 4 (*continued*)

Panel D: Goodwill

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
CAPEX	0.0560***	0.0232	1.538*	1.449*	−0.464	−0.627
	(4.11)	(1.28)	(1.89)	(0.782)	(-0.23)	(-0.44)
Advertising	0.0821***	0.0126	3.690***	3.845***	9.827***	0.498
	(3.47)	(0.58)	(3.08)	(1.107)	(3.61)	(0.25)
ROA	0.0150**	−0.0109	0.990***	1.124***	2.318***	2.108***
	(2.58)	(-1.61)	(3.18)	(0.296)	(4.25)	(3.10)
Sales Growth	−0.0008***	−0.000024	−0.0257**	−0.035***	−0.0317*	0.00783
	(-4.50)	(-0.09)	(-2.49)	(0.009)	(-1.65)	(0.27)
# Charities	14.53***	−11.70***	1020.0***	867.848***	1727.3***	1406.3***
	(2.58)	(-3.53)	(3.79)	(247.311)	(2.88)	(4.44)
Char.Rev./Pop.	−166.9	35.25	−9524.0*	−7875.27*	−23102*	−22728***
	(-1.61)	(0.45)	(-1.84)	(4618.83)	(-1.88)	(-3.12)
Revenue per Charity	0.155**	−0.0925	10.52***	12.617***	12.38**	26.65***
	(2.46)	(-1.59)	(3.31)	(2.948)	(2.03)	(4.42)
Giving	0.0315	0.298	−4.040	−4.618	−15.65	−40.91*
	(0.17)	(1.38)	(-0.39)	(10.145)	(-0.75)	(-1.68)
Intercept	−0.0640***	−0.0675***	−0.681*	−2.094***	−1.485*	−1.499
	(-7.31)	(-7.86)	(-1.80)	(0.354)	(-1.70)	(-1.45)
N	13,720	13,720	13,720	13,720	5071	2081
R^2	0.261	0.258	0.0913	0.119	0.0968	0.104
adj. R^2	0.259	0.256	0.0893	0.117	0.0930	0.0945
F	14.85	19.84	13.87	14.777	8.023	4.272
p	0.000	0.000	0.000	0.000	0.000	0.000
Goodwill_F	2.500	7.313	6.548	8.107	2.879	7.653
Goodwill_p	0.041	0.000	0.000	0.000	0.022	0.000
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Clustered S.E (Firm)	Yes	Yes	Yes	Yes	Yes	Yes

Panel E:Tax Effect

	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Cash Ratio	0.0338***	0.0255***	0.984***	1.297***	1.266***	1.788***
	(8.00)	(5.32)	(4.36)	(0.211)	(3.50)	(3.83)
Size	0.0145***	0.0189***	0.0535	0.268***	0.133	0.0828
	(13.86)	(15.78)	(1.12)	(0.045)	(1.36)	(0.96)
Turnover	−0.0059***	0.000112	−0.230***	−0.093**	−0.197**	−0.191*
	(-7.27)	(0.10)	(-5.14)	(0.042)	(-2.53)	(-1.96)
Leverage	−0.00567**	−0.00415	−0.164	−0.263*	−0.441	−0.491
	(-2.06)	(-1.24)	(-1.06)	(0.149)	(-1.57)	(-1.54)
R&D	0.00201	−0.00207	0.159**	0.220***	0.434***	−0.0169
	(1.46)	(-1.09)	(1.99)	(0.076)	(4.32)	(-0.09)
CAPEX	0.0624***	0.0125	2.093**	1.933**	0.863	−0.493
	(4.26)	(0.68)	(2.47)	(0.813)	(0.39)	(-0.36)
Advertising	0.0872***	0.0186	3.930***	4.250***	9.746***	0.462
	(3.57)	(0.83)	(3.23)	(1.151)	(3.64)	(0.24)
ROA	0.0160***	−0.0124*	1.137***	1.342***	2.499***	1.903***
	(2.65)	(-1.83)	(3.59)	(0.304)	(4.51)	(3.02)
Sales Growth	−0.0009***	−0.000298	−0.0258***	−0.035***	−0.0364***	−0.00300
	(-6.41)	(-1.60)	(-3.43)	(0.007)	(-2.68)	(-0.15)
Tax Burden	−0.00485**	0.00764***	−0.489***	−0.536***	−0.822***	−0.580**
	(-2.16)	(2.74)	(-3.86)	(0.117)	(-3.04)	(-2.06)
Intercept	−0.0452***	−0.0896***	0.666*	−0.758**	0.159	−0.0453
	(-5.70)	(-9.85)	(1.76)	(0.355)	(0.20)	(-0.05)
N	16,566	16,566	16,566	16,566	6233	2440
R^2	0.257	0.265	0.0902	0.119	0.0885	0.0772
adj. R^2	0.256	0.263	0.0885	0.117	0.0853	0.0688
F	13.99	24.97	16.11	14.470	9.143	3.438
p	0.000	0.000	0.000	0.000	0.000	0.000
Tax_F	4.653	7.522	14.92	20.959	9.240	4.223
Tax_p	0.0311	0.0061	0.0001	0.000	0.0024	0.0404
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Clustered S.E (Firm)	Yes	Yes	Yes	Yes	Yes	Yes

Panel F: Crime Effect						
	(1)	(2)	(3)	(4)	(5)	(6)
	Strength	Concern	Net CSR	No Gov.	Man	Service
Cash Ratio	0.0346***	0.0255***	1.015***	1.320***	1.301***	1.772***
	(8.19)	(5.32)	(4.51)	(0.210)	(3.59)	(3.89)
Size	0.0146***	0.0189***	0.0585	0.272***	0.139	0.0839
	(14.10)	(15.77)	(1.23)	(0.045)	(1.42)	(0.99)
Turnover	−0.00591***	−0.0000387	−0.226***	−0.087**	−0.193**	−0.187*
	(-7.31)	(-0.04)	(-5.03)	(0.042)	(-2.43)	(-1.91)
Leverage	−0.00596**	−0.00398	−0.183	−0.280*	−0.453	−0.473
	(-2.18)	(-1.19)	(-1.18)	(0.148)	(-1.64)	(-1.49)
R&D	0.00195	−0.00183	0.150*	0.210***	0.425***	−0.0144
	(1.41)	(-0.95)	(1.81)	(0.078)	(4.08)	(-0.08)
CAPEX	0.0595***	0.0135	1.945**	1.736**	0.917	−1.013
	(4.09)	(0.72)	(2.29)	(0.812)	(0.42)	(-0.75)
Advertising	0.0900***	0.0138	4.147***	4.453***	10.45***	0.607
	(3.68)	(0.62)	(3.39)	(1.159)	(3.79)	(0.31)
ROA	0.0152**	−0.0120*	1.090***	1.284***	2.424***	1.958***
	(2.53)	(-1.78)	(3.44)	(0.305)	(4.37)	(3.13)
Sales Growth	−0.0009***	−0.000302	−0.0241***	−0.033***	−0.0353***	0.00264
	(-6.18)	(-1.61)	(-3.21)	(0.007)	(-2.59)	(0.14)
Fraud	−0.0495	0.259***	−8.451***	−7.067**	−12.61**	−11.18*
	(-0.87)	(4.17)	(-2.78)	(2.922)	(-1.98)	(-1.81)
Regulatory offenses	0.815***	−0.582***	47.79***	41.299***	57.49***	14.33
	(3.14)	(-2.67)	(3.67)	(13.476)	(2.82)	(0.80)
Tax Crime	0.792	−1.205	70.40*	75.123**	0.526	−9.593
	(1.10)	(-1.16)	(1.89)	(35.596)	(0.01)	(-0.14)
Environmental offenses	1.777*	0.676	36.47	0.892	−85.24	−5.019
	(1.96)	(0.71)	(0.74)	(47.775)	(-0.72)	(-0.04)
Intercept	−0.0530***	−0.0869***	0.190	−1.289***	−0.242	0.0343
	(-6.09)	(-9.21)	(0.49)	(0.372)	(-0.32)	(0.04)
N	16,258	16,258	16,258	16,258	6068	2417
R^2	0.259	0.267	0.0876	0.114	0.0826	0.0754
adj. R^2	0.258	0.265	0.0857	0.113	0.0789	0.0662
F	13.61	23.79	14.97	13.130	8.726	3.109
p	0.000	0.000	0.000	0.000	0.000	0.000
Crime_F	3.598	5.272	5.462	4.349	5.386	0.931
Crime_p	0.006	0.0003	0.0002	0.002	0.0003	0.445
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Clustered S.E (Firm)	Yes	Yes	Yes	Yes	Yes	Yes

This table reports the regression coefficients for the relationship between CSR socio-demographic indicators from calendar year 1991 through 2009. We control for year fixed effects, industry fixed effects, and cluster standard errors at the firm level. The dependent variables are *strength* for model (1), *concern* for model (2), *Net CSR* for models (3), (5), and (6), and our non-governance net CSR measure: *No_Gov.* for model (4). We restrict our sample to manufacturing firms only for model (5) and service firms only for model (6), using 2-digit SIC codes (see., e.g. Jiraporn et al., 2014). We also report the joint test of significance for the socio-demographic variables. Panel A, shows the results for our Peer effect variables; Panel B, shows the results for our Clientele effect variables; Panel C, shows the results for our Culture effect variables; Panel D, shows the result for our Goodwill variables; Panel E shows the results for our Tax effect variables; and finally Panel F. shows the results of our Crime variables. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

that identifies whether a firm headquartered in a given area is likely to alter their CSR engagement in the presence of a number of local socio-economic characteristics that could potentially explain the geographic effect present in our study. This is largely motivated by the clientele based explanation for the clustering of CSR activities among locals. In a cross-country setting, Dam and Scholtens (2008) show that multinational firms with poor environmental standards are more likely to operate in countries that are poor, corrupt, and loose in environmental regulations. Within the context of the 'Pollution Haven Hypothesis,' multinational firms with dirty operations choose to operate in such an environment and the opposite is true for multinational firms with a strong CSR. In other words, demographic and socio-economic factors within a country formulate regulations and social attitudes toward CSR and these, in turn, can affect the CSR aggregate of culture/norm within the country. We extend this concept in the context of geography within a large country as in the U.S. Specifically,

$$y_{it} = \alpha + \beta_1' X + \beta_2' Y + \delta_{it} + \gamma_{it} + \varepsilon_{i,t} \tag{11}$$

where is a vector of variables controlling for different characteristics of the local area. Specifically, for Table 4, Panel B (Clientele), represents *Education*, *Wealth*, and *Sophistication*; for Panel C (Culture), represents *Protestant* and *Trust*; for Panel D (Goodwill), represents *#Charities, Char.Rev/Pop., Rev./#Char.,* and *Giving*; for Panel E (Tax), represents *Tax Burden*; and for Panel F (Crime), represents *Fraud, Regulatory, Tax,* and *Environmental.*

Table 4, Panel B (Clientele) shows the results of the impact of potential clienteles within a community, where all three clientele variables are designated at the MSA level and document the impact education, wealth, and sophistication (investment income) might

have on the level of CSR. Firstly, the F-test for joint significance rejects the null hypothesis for all models, indicating at least one of the variables has a significant impact on CSR. The evidence suggests that communities that are more educated are associated with firms that engage in higher levels of responsible behavior (model (1)). This result is also supported by the net CSR measures in models (3)–(6). It would seem firms engage in more responsible behavior in communities with higher education (*Education*), regardless of the industry. Surprisingly, wealthier communities (*Wealth*) tend to associate with firms with lower levels of CSR. These results are significant across all our model specifications. Lastly, more financially sophisticated communities (*Sophistication*) with larger amounts of investment income, are significantly associated with greater levels of CSR, the only exception being firms in the service industry. Given investors' preference for local firms, our results suggest that communities where local investors are better educated and have greater access to investment funds tend to house firms that engage in more responsible behavior and less irresponsible behavior. Perhaps, in areas where local investors represent a significant portion of firm financing, firms are more sensitive to the impact they might have on the local community. However, wealthier communities do not share this phenomenon, perhaps because wealthier individuals are able to insulate themselves from negative phenomena in their environment. Our findings add to the limited literature that emphasizes the impact of socio-economic factors on CSR activities. For example, studying 520 financial firms in 34 countries during the 2003–2005 period, Chih et al. (2010) find that sample firms are more socially responsible in countries with a better macroeconomic environment, higher quality management schools, and a more cooperative employer-employee relationship.

Panel C (Culture) of Table 4 documents the impact of local culture on the level of CSR within a community. Both *Protestant* and *Trust* are designated at the regional level. Although not all coefficients are significant in all model specifications, the F-test for joint significance rejects the null hypothesis for all models, indicating that at least the sum of the variables have a significant association with CSR. The joint significance is consistent with the literature. Furthermore, if we control for location, the results become even more significant.[9] Model (3) of Panel C shows that firms located in communities with a more Protestant culture, one where individuals take more personal responsibility, are significantly associated with less CSR (-2.134 at 5% significance). Conversely, our results tangentially show that communities which are inherently trustworthy are more likely to associate with higher levels of CSR.

The link between charities and corporate behavior is documented. Card et al. (2010) show that charities are able to extract more donations from firms that are resident within their community. Whether firms increase donations to local charities due to lobbying, the threat of activism, or to the perquisite benefits management extract from being agents of the benefactor, is unclear. However, along with Marquis et al. (2007), it is apparent that the presence of charities within a community can have a notable impact on the behavior of managers and their firms. Panel D (Goodwill) of Table 4 includes four variables to account for charitable actions within each MSA. We control for the number of charities in the community (*#Charities*), the ability of those charities to extract donations from the resident population (*Char.Rev/Pop*), the size of the charities (*Revenue per Charity*), and the generosity of the community (*Giving*). It is evident that the number of charities has a profound impact on the CSR behavior that firms exhibit. Charities seem to increase the level of responsible behavior within a community, while also decreasing the level of irresponsible behavior at the same time. This result is significant at the 1% level for all models, and robust to different CSR measures and industry specifications. Furthermore, larger charities tend to also associate with communities with higher levels of CSR, with all results significant at the 5% level or less. Whether charities and high CSR firms are drawn to the same communities, or whether charities truly affect CSR, is unclear, but it is obvious that an association exists. However, the charitability of the community (*Giving*) and the efficiency of the charities (*Char.Rev/Pop*) are less important, with the F-test for joint significance of the goodwill variables rejecting the null hypothesis for all models.

Next, we consider the taxation policies of individual communities. Steven Pinker (1996) makes a convincing argument linking our propensity for the common good, altruistic behavior, and our political beliefs. Briefly, the value we place on an egalitarian society and the public good could manifest in the taxation policies we implement. Table 4, Panel E, shows the results when we include the tax regressivity of state and local taxes (*Tax Burden*). The results suggest that, as the tax burden becomes more regressive, a greater tax burden in placed on the lower socio-economic class, and the level of responsible behavior of firms goes down. The level of irresponsible behavior in communities exhibited by firms, however, is positively related to tax regressivity. These results are also present when considering net levels of CSR and different industries. It would appear that in communities where the wealthy are able to reduce their tax burden at the expense of the poor, firms would engage in less CSR. Individuals in lower socio-economic circumstances bearing a greater share of the tax burden might be indicative of communities unwilling or unable to constrain the behavior of the wealthier and more powerful members of the community.

Lastly, Herrmann, Thöni, and Gächter (2008) provide evidence that societies, where laws are respected and violence is ceded to the government, are more likely to have a propensity toward the common good. In line with this research, and following Case and Katz (1991), we include, as shown in Panel F, crime data at the state level documenting prosecutions (not convictions) for non-violent crimes that relate most to trust and respect of the environment and the legal system. Firstly, the joint test of significance for the crime variables are significant at $p < 0.01$ or less for all models except model (6). Turning to individual variables, it becomes clear that fraud and regulatory offenses have the most significant association with the level of CSR. It is important to note that we consider cases prosecuted, not whether those cases where convicted. As with all crime studies and data, one has to be careful to infer causation. One cannot absolutely differentiate between communities where more crimes are perpetrated compared to communities that are more likely to prosecute crime. We will thus refrain from discussing any causative relationships, but assert that crime and a community's propensity to prosecute is significantly associated with CSR. We believe that our results support the conjecture that, as a society's desire to maintain the common and public good increases, its tolerance of corporate behavior that comes at the expense of the public good would decrease.

[9] Results not reported for reasons of parsimony.

Table 5
Effect of geography on Tobin's Q.

	(1)	(2)	(3)
	Tobin's Q	Tobin's Q	Lagged Tobin's Q
Size	−1.006***	−1.004***	−0.776***
	(0.101)	(0.101)	(0.088)
Turnover	0.357***	0.356***	0.061**
	(0.039)	(0.039)	(0.030)
Leverage	−0.072	−0.061	0.204
	(0.217)	(0.216)	(0.153)
R&D	0.445***	0.446***	0.530***
	(0.134)	(0.134)	(0.171)
Capex	0.911	0.946*	−0.080
	(0.559)	(0.557)	(0.507)
Advertising	−2.311	−2.207	0.130
	(1.789)	(1.799)	(1.268)
ROA	3.244***	3.254***	1.783***
	(0.322)	(0.322)	(0.380)
Sales growth	0.011	0.011	0.005
	(0.007)	(0.008)	(0.005)
Deviation Strength	−8.401***	–	–
	(3.003)		
Deviation Concern	−0.613	–	–
	(1.872)		
Deviation Net CSR	–	−0.005**	−0.004**
		(0.002)	(0.002)
Intercept	8.354***	8.355***	6.841***
	(0.684)	(0.686)	(0.604)
N	14,193	14,193	11,503
R^2	0.228	0.227	0.189
Adj. R^2	0.226	0.225	0.187
F	34.941	36.119	28.892
p	0.000	0.000	0.000
Industry Effects	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes

This table reports the regression coefficients for the relationship between CSR and deviating from the CSR norm within an MSA from calendar year 1991 through 2009. We control for year fixed effects, industry fixed effects, and firm level fixed effects. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

4.2. *Impact of geography and CSR on Tobin's Q*

The financial impact of geography on CSR is examined next. We focus on the firm value (rather than cost of equity as in Husted et al. (2016)). Gregory, Tharyan, and Whittaker (2014) closely examine the benefit of CSR and conclude that the positive valuation effect primarily arises from improved future growth prospects (rather than reduced risk, e.g., lower cost of equity) of CSR-active firms. Building on this, we aim to better understand the value impact of clustering or diversifying along a CSR continuum within a locality. Our previous results indicate heterogeneity around means and variances of CSR across MSAs. Moreover, we find that firms tend to adjust their level of CSR in accordance with other local firms. However, is there a financial benefit to mimicking peers' CSR levels? Does clustering or diversifying along a CSR continuum in a locale offer any financial benefits?

We specify a pooled OLS model that identifies whether a firm's value is affected by the deviation from the group mean within a locality:

$$y_{it} = \alpha + \beta_1' X + \beta_2 Deviation_{it} + \delta_{it} + \gamma_{it} + \varepsilon_{i,t} \tag{12}$$

where y_{it} represents the value measure for firm i, and

$$Deviation_{it} = \left(1 + \left(CSR_{it} - Group_{CSR_{it}}\right)\right)^2 \tag{13}$$

where *Deviation* is a vector of the difference between the set of $Group\_CSR_{it}$ (from equation (7)) and the actual CSR of firm i at time t (CSR_{it}). Again, $Group\_CSR_{it}$ is the average level of CSR in an MSA, not including the score of firm i.

Table 5 presents the results of equation (13).[10] We see in model (1) that the effect of deviating from the group average for *strength* is significant and negative (−8.401 at 1% significance). Firms that deviate from the mean CSR within a locality are associated with a decrease in value. Specifically, a one standard deviation increase or decrease in the level of *strength*, beyond the MSA average, is

[10] We also performed sub-sample analyses before and after 2003, with our results remaining qualitatively similar.

associated with a 21% percent decrease in Tobin's Q at 1% significance. The differences in CSR quality within each MSA between firms could translate to considerable effects on value. Furthermore, the average level of *strength* varies greatly across cities, with Minneapolis-St. Paul having twice the *strength* than Houston or Atlanta. Conversely, Houston has twice the level of *concern* than Washington D.C. In model (2), we consider the impact of deviating from *Net CSR*. The results continue to support the notion that firms that deviate from the average level of CSR within a locale are associated with decreased value. Specifically, a one standard deviation increase or decrease in the level of *Net CSR*, beyond the MSA average, is associated with a 2.8% percent decrease in Tobin's Q at 1% significance. These results establish the economic significance of the geography of CSR.

Finally, we lag all the independent variables in model (3) to mitigate some endogeneity concerns. Again, our results are robust to this treatment. Building on our results thus far, it seems that firms that do not conform to a community's CSR expectation risk being penalized financially. The exact process is unknown but we posit that if investors have a significant preference for local firms, and if investment decisions are influenced by socio-demographics within a community, then firms that do not target their CSR profile toward their local community of investors could face financial penalties.

4.3. CSR instruments

The relationship between firm performance and CSR is fraught with endogeneity issues. It is difficult to determine if better performance allows firms to engage in CSR or if CSR impacts firm performance. An appropriate exogenous CSR proxy would help to alleviate some of the endogeneity concerns. Flammer (2015) uses "close call" proposals as a casual estimate of the CSR-CFP (Corporate Financial Performance) relationship. Secondly, Jiraporn et al. (2013) show a significant CSR correlation between surrounding firms and, as a result, use zip codes as an exogenous proxy to evaluate CSR's impact on credit ratings. Our results thus far have indicated that the CSR profiles of firms are significantly associated with the socio-economic environment in which a firm is headquartered. The results

Table 6
Two-stage least squared analysis of the effect of CSR on firm value.

	MSA		State		Region	
	1st Stage	(1)	1st Stage	(2)	1st Stage	(3)
	Net CSR	Tobin's Q	Net CSR	Tobin's Q	Net CSR	Tobin's Q
Cash Ratio	0.081***	−0.245***	0.086***	−0.254***	0.083***	−0.435***
	(0.018)	(0.018)	(0.018)	(0.020)	(0.018)	(0.162)
Size	−0.229***	0.256***	−0.227***	0.281***	−0.219***	0.757*
	(0.021)	(0.030)	(0.021)	(0.035)	(0.021)	(0.423)
Turnover	−0.525***	0.269*	−0.524***	0.335**	−0.561***	1.599
	(0.100)	(0.155)	(0.100)	(0.164)	(0.100)	(1.143)
Leverage	0.377***	1.179***	0.385***	1.133***	0.399***	0.249
	(0.045)	(0.088)	(0.045)	(0.095)	(0.045)	(0.789)
R&D	1.946***	0.836*	1.872***	0.624	1.806***	−3.424
	(0.435)	(0.455)	(0.433)	(0.512)	(0.432)	(3.725)
CAPEX	4.002***	1.200	4.193***	0.704	4.273***	−8.737
	(0.598)	(0.965)	(0.609)	(1.064)	(0.609)	(8.509)
Advertising	1.152***	4.299***	1.177***	4.167***	1.151***	1.656
	(0.180)	(0.280)	(0.181)	(0.302)	(0.181)	(2.289)
ROA	−0.019**	0.036***	−0.019**	0.038***	−0.018**	0.078*
	(0.007)	(0.011)	(0.007)	(0.011)	(0.007)	(0.042)
Net CSR		0.565***		0.681***		2.887
		(0.101)		(0.135)		(1.957)
MSA	0.000***					
	(0.000)					
State			−0.008***			
			(0.001)			
Region					0.010	
					(0.007)	
Intercept	−0.448*	2.946***	0.190	2.943***	−0.032	2.879***
	(0.239)	(0.172)	(0.230)	(0.192)	(0.238)	(0.679)
Observations	14,272	14,272	14,272	14,272	14,272	14,272
R^2	0.103	−0.172	0.102	−0.391	0.099	−13.027
Adjusted R^2	0.101	−0.175	0.099	−0.394	0.096	−13.063
F	45.478	56.532	44.738	48.906	43.605	8.046
p	0.000	.	0.000	.	0.000	.
HansenJ_F		–		–		–
HansenJ_p						
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes	Yes	Yes

This table reports the coefficients for the two-stage least squared regression analyzing the relationship between CSR and Tobin's Q from calendar year 1991 through 2009. In model (1), we instrument *Net CSR* with firm MSA headquarter location. In model (2), we instrument *Net CSR* with firm State headquarter location. In model (3), we instrument *Net CSR* with firm U.S Census Bureau Region headquarter location. We control for year fixed effects, industry fixed effects. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

suggest that zip codes could simply be a proxy for these indicators. Our results have also shown that the location effect could be in significantly large areas, such as in census bureau regions. We test to see if alternative location instruments exist to proxy for CSR. Specifically, equation (14) takes the following form:

$$y_{it} = \alpha + \beta_1' X + \beta_2 CSR\_Instrument_{it} + \delta_{it} + \gamma_{it} + \varepsilon_{i,t} \tag{14}$$

where y_{it} represents the value measure for firm i, and $CSR\_Instrument_{it}$ is derived in equation (15):

$$y_{it} = \alpha + \beta_1' X + \beta_2 Location + \delta_{it} + \gamma_{it} + \varepsilon_{i,t} \tag{15}$$

where y_{it} represents the CSR variable for firm *i*. *Location* indicates the location of the firm (either MSA, State, or Census Region).

The results of equations (14) and (15) are presented in Table 6. Model (1) contains the results from equation (15) where MSA location is used as the instrument. Our results indicate that, using MSA to instrument for *Net CSR,* CSR is positively and significantly related to Tobin's Q at the 1% level. As the instruments are exactly identified, the Hansen J test is omitted. Next, we instrument *Net CSR* with the location State of the firms. The results, reported in model (2), show a positive and significant association between CSR and firm value at the 1% level. Lastly, we use the geographical region that a firm is located as an instrument for *Net CSR*. The results indicate that regional location is not significantly correlated with CSR and that the second stage regression does not produce a significant result.

Importantly, the results show that location, even at the city or state level, is significantly associated with firm value and future studies could employ location, even at the state level, to proxy for CSR. This would be very convenient for researchers. In fact, a firm changing its headquarter address within a city or state would not significantly affect the viability of these proxies.

5. Conclusion

In this study, we posit that a firm's headquarter location is indicative of the socio-economic factors that affect a firm's CSR profile. The results offer strong evidence that location has a significant effect on the CSR profile of resident firms. We find that firms' CSR levels not only vary significantly across geography, but that each metropolitan statistical area (MSA) is significantly associated with a resident firm's level of CSR. Houston has a *strength* standard deviation half that of San Jose, while San Jose has a *concern* standard deviation half that of Dallas-Fort Worth. We find that location has a significant impact on the level of a firm's strength and concern, although the effect is more pronounced for *strength* than *concern*.

We document that the economic, legal, regulatory, and charitable demographic differences across geography explain some of the variation in CSR means between metropolitan statistical areas where charitable behavior is the most significant. Our results indicate that Tobin's Q is affected by firms clustering along a CSR continuum within their locale. The economic impact of this CSR clustering tends to be positive, with firms experiencing increases in value as they move toward the locale mean. More importantly, we document the impact of culture on CSR and show that better educated and sophisticated societies with a propensity for the common good and a low tolerance of illegal behavior are likely to have resident firms with higher levels of strength behavior and lower levels of concern behavior.

Lastly, we use knowledge of the local socio-economic indicators as exogenous proxies for CSR. Our results add fresh evidence to the literature, indicating the need to consider the geography of CSR in evaluating its value impact across corporations. The findings also provide an opportunity for researchers to further study CSR and use location as a proxy, with little concern for the availability of historic location data or changes. Our results add to the literature regarding charities and CSR by highlighting that the actions or presence of charities are responsible for the link and not necessarily the charitability of the local population. We also highlight the need for further study on the interaction between crime and CSR.

Conflicts of interest

The authors declare that they have no conflict of interest. This study was partially funded by MURF grant RM16530, Massey University, New Zealand.

Appendix A. Demographic variables definitions

Variable	Definition
CSR_D_{10} Strength	Proportion of firms within each firm's MSA with levels of industry-adjusted strength in the top decile nationwide. The proportion excludes current firm's level of strength.
CSR_D_{10} Concern	Proportion of firms within the MSA with levels of industry adjusted concern in the top decile nationwide. The proportion excludes current firm's level of concern.
$Group\_CSR_{it}$ Strength	Average level of strength present per MSA, excluding firm *i*.
$Group\_CSR_{it}$ Concern	Average level of concern present per MSA, excluding firm *i*.
Deviation Strength	Difference between firm *i*'s level of strength and the *Group Strength* of firm *i*.
Deviation Concern	Difference between firm *i*'s level of concern and the *Group Concern* of firm *i*.

(*continued on next page*)

(*continued*)

Variable	Definition
Education	Percentage of population over 25 with a bachelor's degree or more per MSA. Obtained from the U.S census Bureau for the year 2000.
Wealth	Per Capita personal income at the MSA level. Obtained from the Bureau of Economic Analysis.
Sophistication	Per Capital investment income at the MSA level. Obtained from the Bureau of Economic Analysis.
Protestant	Percentage of people who belong to Protestant based on the question: "Do you belong to a religious denomination? If yes, which one?" Obtained from the World Values Survey. Average per U.S Census region over Survey, conducted on 1990 1995, and 2000.
Trust	Interpersonal trust is defined as the percentage of respondents who answered "yes" to the question: "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" Obtained from the World Values Survey. Average per U.S Census region over Survey conducted on 1990 1995, and 2000.
# Charities	The number of non-profit organizations registered with the IRS by county aggregated to MSA level that filed Form 990 within 24 months of the BMF database date selected, from IRS Business Master Files (1995–2009). Obtained from the National Center for Charitable statistics.

Continued

Appendix A *(Continued)*

Variable	Definition
Revenue per Charity	The total charitable revenue within an MSA to number of nonprofit organizations registered with the IRS by county aggregated to MSA level that filed Form 990 within 24 months of the BMF database date selected, from IRS Business Master Files (1995–2009). Obtained from the National Center for Charitable statistics.
Giving	Charitable giving to adjusted gross income by county as reported on IRS tax return Form 1040, Schedule A, by households that itemize deductions, from IRS Tax Return Summary Files (1997–2008). Obtained from the National Center for Charitable statistics.
Tax Burden	The ratio of the estimated burden of major taxes for a hypothetical family of three earning $25,000 to the estimated burden of major taxes for a hypothetical family of three earning $75,000. Obtained from the annual Tax Rates and Tax Burdens report prepared by the Office of the Chief Financial Officer for the District of Columbia for the years 1997 through 2009.
Fraud	Number of Fraud related prosecutions to total prosecutions filed for all U.S Federal Judicial district courts within a state. Obtained from Bureau of Justice statistics.
Regulatory	Number of Regulatory related prosecutions to total prosecutions filed for all U.S Federal Judicial district courts within a state. Obtained from Bureau of Justice statistics.
Tax	Number of Tax related prosecutions to total prosecutions filed for all U.S Federal Judicial district courts within a state. Obtained from Bureau of Justice statistics.
Environmental	Number of Environment related prosecutions to total prosecutions filed for all U.S Federal Judicial district courts within a state. Obtained from Bureau of Justice statistics.

This table reports the definitions and sources of the main demographic and geographic variables employed in the study, for the pooled sample spanning calendar years 1991 through 2009.

Panel A presents the descriptive statistics of the Strength and Concern scores for each of the twelve metropolitan statistical areas with at least ten resident firms per year for at least ten years. The scores presented are transformed from binary points used by KLD and instead represent a percentage of possible points obtained. The statistics are calculated on the pooled sample, spanning calendar years 1991 through 2009. Panel B reports the joint significance tests for both strength and concern across a number of tests. Specifically, Anova tests for equality of means across all metropolitan statistical areas, by strength and concern. Levene tests for homogeneity of variances within each metropolitan statistical area across all the metropolitan statistical areas. Brown Forsyth modifies the Levene test by substituting mediums and ten percent trims. The statistics reported are the joint F-tests, with critical p values in parentheses.

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